Bunker Hill Community College

## 2021-2023 College Catalog



## MESSAGE FROM THE PRESIDENT

Welcome to Bunker Hill Community College (BHCC)! We are happy you've chosen us in your education journey.

As we emerge from the COVID-19 pandemic, we are here to support students on campus and online. It is our number one priority to create a safe learning environment for everyone - one that nurtures a deep sense of place and prepares you for further education and a fulfilling career.

Convenient and affordable, BHCC offers flexible course schedules and start times to help you make the most of your time and schedule. Full time or part-time, choose an option that works for you. In addition to fall and spring semester start dates, BHCC offers many opportunities for you to stay on track with your degree. These include two mini sessions each semester that allow students to complete an accelerated course in seven weeks, six-week summer sessions and an online winter session.

Academic experiences at BHCC are designed to introduce new ideas, concepts, and techniques while maximizing your current skill sets and taking them to the next level. Whether you're pursuing your first career, advancement in your current career, or looking for an entirely new career, BHCC has a certificate or degree program that will help you meet your individual goals.

At BHCC, you will be challenged to think critically and to carefully evaluate information presented in various formats. Our talented and dedicated faculty and staff are passionate about your future and will help guide you

through the coursework that makes up your program. In and beyond the classroom, your BHCC education will provide you with the knowledge, skillset, and real-world experience to thrive in your chosen field of study.

As a BHCC student, you'll gain free access to tutoring and academic resources through our Tutoring and Academic Support Center (TASC), Language Lab, MathSpace, and The Writing Place, where staff will support you in reaching your educational goals. And, our commitment to you goes well beyond the classroom with access to our on-campus food pantry - the DISH, and the Single Stop office that will connect you with various resources and opportunities to assist with food, housing, technology, financial support, and more.

We know you can meet this challenge with hard work, persistence, and support, and we are looking forward to being with you every step of the way. Welcome to Bunker Hill Community College!


Pam Y. Eddinger, Ph.D.

President
Bunker Hill Community College

## ABOUT THE BUNKER HILL COMMUNITY COLLEGE CATALOG

This publication serves the purpose of providing information about Bunker Hill Community College to persons who may be interested in applying for admission; to parents, teachers, counselors and people who work and study at the College; and to the general public.

## College Catalog Statement

This publication is neither a contract nor an offer to make a contract. While every effort is made to ensure accuracy, the College reserves the right to make changes at any time with respect to course offerings, degree and program requirements, services provided, cost of attendance or any other subject addressed in this publication. This publication provides information solely for the convenience of the reader, and the College disclaims any liability that may otherwise be incurred.

For the most up-to-date Catalog information including changes to curricula, course descriptions and tuition and fees, visit the BHCC website at bhcc.edu/catalog. Information on the College website supersedes the published PDF version of the 2021-2023 BHCC Catalog.


## TABLE OF CONTENTS

About the College ..... 1
Message from the President .....  1
About the Bunker Hill Community College Catalog .....  2
Bunker Hill Community College Goals .....  4
Bunker Hill Community College Board of Trustees ..... 5
Massachusetts Board of Higher Education .....
System and Institutional Mission, Vision and Values Statements ..... 6
Equity and Inclusion ..... 7
Accreditation Statements .....  9
Institutional Policy Statements .....  9
System-Wide Student Policies ..... 11
Academic Calendar ..... 12
Admissions ..... 14
Student Central: Financial Aid, Student Payment and Academic Records ..... 16
BHCC Student Central ..... 16
Financial Aid and Scholarships ..... 16
Financial Aid Policies ..... 17
Scholarships and Awards ..... 18
Grants ..... 18
Work Study Program ..... 18
Cost of Attendance ..... 18
Academic Records. ..... 21
Campuses and Instructional Sites ..... 21
Charlestown Campus ..... 21
Chelsea Campus ..... 21
Satellites and Instructional Sites ..... 22
Parking and Security ..... 23
Directions to BHCC Locations ..... 23
Academic Policies and Information ..... 24
Satisfactory Academic Progress Policy ..... 28
Educational Records ..... 29
Grading and Notation System ..... 30
Graduation and Alumni Engagement ..... 31
Graduation Information ..... 31
The Bunker Hill Community College Alumni Association . 3 ..... 31
The Bunker Hill Community College Foundation, Inc.. ..... 31
Advising and LifeMap ..... 32
Advising: Academic, Career and Transfer ..... 32
Placement Testing and Assessment. ..... 35
Internships and Career Development ..... 35
Educational Opportunities ..... 36
Academic Innovation \& Distance Education (AIDE) ..... 36
The Commonwealth Honors Program at BHCC ..... 36
BHCC Learning Communities. ..... 36
Alternative Learning ..... 36
Office of Community Engagement ..... 37
Partnerships with Secondary Schools ..... 38
Summer Transition Program ..... 38
Student Success Program (TRiO) ..... 38
Workforce and Community Education ..... 38
Adult Education and Transitions to College Programs ..... 39
Academic Resources ..... 39
College Connection ..... 39
Language Lab ..... 39
Library \& Learning Commons ..... 39
MathSpace ..... 39
Tutoring and Academic Support Center (TASC). ..... 40
The Writing Place. ..... 40
Student Affairs and Student Programs ..... 40
Athletics and Wellness ..... 40
Counseling, Prevention and Wellness ..... 40
Dean of Students. ..... 40
Disability Support Services ..... 40
DISH Food Pantry ..... 41
Health Services ..... 41
International Center. ..... 41
Single Stop ..... 41
Student Activities, Clubs and Organizations ..... 41
Student Handbook ..... 42
Study Abroad. ..... 42
The Mary L. Fifield Endowed Student Emergency Assistance Fund ..... 42
Veterans Center ..... 42
Virtual LGBTOIA+ Center at BHCC ..... 42
Degree and Certificate Programs ..... 43
General Education Program ..... 44
Elective Courses ..... 49
Programs of Study ..... 50
Course Descriptions ..... 244
Program Advisory Committees ..... 300
Administrative Divisions ..... 302
Faculty, Staff and Administrators ..... 303
Glossary of Academic Terms ..... 324
Index ..... 326
Class Schedule Form ..... 330

## BUNKER HILL COMMUNITY COLLEGE GOALS

Bunker Hill Community College's Goals and Strategies were developed through a collaborative process, engaging more than 200 campus members and more than 150 community, educational and industry partners. To view current College Initiatives associated with the College's goals, visit bhcc.edu/initiatives

## Foster Student Success

Promote data-informed, high impact innovations in teaching, learning and student development that lead to increased rates of engagement, persistence, retention, completion and transfer.

## Strategies

- Expand co-requisite models and acceleration of developmental education and English language instruction.
- Implement learner-centered curricular and co-curricular practices, including culturally relevant, collaborative, experiential and multi-modal learning.
- Integrate holistic student development into the curriculum and co-curriculum.
- Deepen student learning outcomes and competencybased assessment models.
- Enhance instructional technology to support digital teaching, learning, and student development online and on-ground.
- Support faculty and staff professional development aimed at fostering the success of all students.


## Strengthen Career, Transfer and Workforce Readiness

Prepare students for fulfilling 21st century careers that meet Greater Boston's workforce needs through credentialed, non-credit, stackable and transferable programs.

## Strategies

- Design programs that promote transfer and workforce readiness, including non-credit to credit pathways.
- Institutionalize demand-driven program development, including the high-growth fields of STEM, health care and the creative economy.
- Expand internship and apprenticeship programs in partnership with businesses, industries and community organizations.
- Create seamless transfer opportunities through alignment and articulation with baccalaureate institutions.
- Support students in developing transferable 21st century skills and capacities.


## Advance Diversity, Inclusion and Equity

Advance diversity, inclusion and equity in all areas of the College and integrate the cultural wealth of our students, faculty, staff and communities into the life of the institution.

## Strategies

- Promote diversity in all areas of the College workforce.
- Build a campus community rooted in collaboration, inclusivity and engagement.
- Design culturally relevant and community-engaged curricular and co-curricular learning environments.
- Identify and address disparities in academic achievement among student groups.
- Increase access, persistence and completion rates for underserved student populations.


## Build Partnerships and Pathways

Foster reciprocal, sustainable relationships with civic, educational and community partners to increase access, promote college readiness and facilitate seamless pathways to post-secondary study.

## Strategies

- Increase opportunities for enrollment in early college, dual enrollment and bridge programs.
- Deepen partnerships with civic, educational and community-based organizations.
- Design guided educational pathways through metamajors programming and curricular mapping.
- Leverage the resources and scholarship of local museums and cultural institutions to enrich the College curriculum and expand student access.
- Broaden partnerships with industry and business leaders.


## Develop the College's Infrastructure

Develop the College's capacity to support student success through learner-centered facilities, strategic communication, enhanced information technology and fiscal stewardship.

## Strategies

- Stabilize technology to support teaching, learning and student success; improve data integrity and analysis; and facilitate evidence-based decision-making throughout the College.
- Maximize college and community-based resources to ensure facilities well-suited to the needs of students, faculty and staff.
- Closely monitor the sources of funding supporting teaching and learning, general operations and capital projects to ensure long-term sustainability and financial health.
- Support the development of new instructional sites.
- Integrate print and web communications to disseminate accurate, consistent, transparent information to internal and external audiences.


## BUNKER HILL COMMUNITY BOARD OF TRUSTEES


R. Kelly Cameron Vice Chair


Stephen Chan


Cynthia Keliher

List current as of July 1, 2021

* BHCC Alumnus


William J. Walczak Chair


Trinh Nguyen Secretary


Leslie Griffin


Sanjeev P. Yadav


Cathy Guild*


Robert Hartnett Student Trustee

MASSACHUSETTS

## BOARD OF HIGHER EDUCATION

## Chris Gabrieli

Chairman
Sheila M. Harrity, Ed.D. Vice Chair

Ann Christensen
Veronica Conforme
Alex Cortez
Patty Eppinger
Bill Walczak
Community College Trustee
Representative
Paul Mattera, J.D.
State University Trustee Representative
Judy Pagliuca
James Peyser
Ex Officio
Michael O'Brien
University of Massachusetts Trustee Representative
Paul F. Toner, J.D.
Charles Bianchi
Massachusetts Maritime Academy), Student Member

Non-Voting Student Advisors
Jorgo Gushi
(Quinsigamond Community College), Community College Segmental Advisor
Kush Patel
(UMass Boston), UMass Segmental Advisor

List current as of July 1, 2021

## System and Institutional Mission, Vision and Values Statements

Three separate but cohesive mission statements guide Bunker Hill Community College. The first is a comprehensive, system-wide mission statement for Public Higher Education in the Commonwealth of Massachusetts. The second is a mission statement of general characteristics common to all Massachusetts community colleges. The third mission statement contains the specialized and focused component that identifies Bunker Hill Community College's distinctive characteristics and priorities.

## Mission of the Massachusetts of Public Higher Education

Massachusetts Public Higher Education is a system with a distinguished past, increasing and measurable accomplishments, and dedicated to being recognized as having one of the nation's most outstanding array of institutions. It comprises 15 community colleges, nine state colleges, and five campuses of the University of Massachusetts. The system exists to provide accessible, affordable, relevant, and rigorous programs that adapt to meet changing individual and societal needs for education and employment. The public system is committed to continuous improvement and accountability in all aspects of teaching and learning. The Board of Higher Education, together with each respective Board of Trustees, expects all students, faculty, and staff to be held to exacting standards in the performance of their roles and responsibilities.

## Mission of the Massachusetts Community Colleges

The fifteen Massachusetts Community Colleges offer open access to high quality, affordable academic programs, including associate degree and certificate programs. They are committed to excellence in teaching and learning and provide academic preparation for transfer to four-year institutions, career preparation for entry into high-demand occupational fields, developmental coursework, and lifelong learning opportunities.

Community colleges have a special responsibility for workforce development and through partnerships with business and industry, provide job training, retraining, certification, and skills improvement. In addition, they assume primary responsibility, in the public system, for offering developmental courses, programs, and other educational services for individuals who seek to develop the skills needed to pursue college-level study or enter the workforce.

Rooted in their communities, the colleges serve as community leaders, identifying opportunities and solutions to community problems and contributing to the region's intellectual, cultural, and economic development. They collaborate with elementary and secondary education and work to ensure a smooth transition from secondary to postsecondary education.

Through partnerships with baccalaureate institutions, they help to promote an efficient system of public higher education.

The community colleges offer an environment where the ideas and contributions of all students are respected. Academic and personal support services are provided to ensure that all students have an opportunity to achieve academic and career success. No eligible student shall be deprived of the opportunity for a community college education in Massachusetts because of an inability to pay tuition and fees.

## Mission of Bunker Hill Community College

Bunker Hill Community College serves as an educational and economic asset for the Commonwealth of Massachusetts by offering associate degrees and certificate programs that prepare students for further education and fulfilling careers. Our students reflect our diverse local and global community, and the College integrates the strengths of many cultures, age groups, lifestyles and learning styles into the life of the institution. The College provides inclusive and affordable access to higher education, supports the success of all students and forges vibrant partnerships and pathways with educational institutions, community organizations and local businesses and industries.


## Vision of Bunker Hill Community College

Bunker Hill Community College empowers and inspires students, faculty and staff diverse in identities, experiences and ideas to make meaningful contributions to our local and global communities. The College embodies a spirit of inquiry, critical thought, inclusive excellence and lifelong learning.

## Institutional Values

Bunker Hill Community College Trustees, Faculty, Staff and Students embody the highest academic and institutional integrity through their commitment to:

- Access and Success
- Excellence and Innovation
- Economic and Social Justice
- Inclusiveness and Equity
- Civic Engagement and Service
- Kindness and Respect
- Accountability and Transparency

The Vision, Mission and Values statements were approved by Board of Trustees, Massachusetts Department of Higher Education and Massachusetts Secretary of Education, October 2014.

## Institutional Learning Outcomes (ILOs)

BHCC is a learning institution, and we enact our mission, vision and values individually and collectively through a set of Institutional Learning Outcomes.

INQUIRE with intention

- Reflect and think critically
- Explore and define compelling questions
- Locate and integrate information from diverse contexts
- Think creatively
- Synthesize findings

COMMUNICATE with purpose

- Listen actively
- Express ideas and arguments with intention
- Consider audience, situation and intercultural context
- Engage diverse forms of media
- Facilitate inclusive dialogue

ACT to integrate knowledge and practice

- Advance justice and equity
- Collaborate in diverse teams
- Facilitate reciprocal and sustainable partnerships
- Enact innovative solutions to significant problems
- Contribute to community and civic wellness

GROW through continuous learning

- Identify and leverage individual and collective strengths
- Cultivate resilience and agency
- Develop intercultural competence and critical consciousness
- Form personal and global identities
- Empower oneself and others


## College Assessment

Implementation, assessment and continuous program improvement are an integral part of the College's Strategic Plan. Assessment in academics and student development occurs within the learning environment, and is framed by our Student Learning Outcomes (SLOs). Faculty and staff anchor the assessment of student learning with the Student Learning Outcomes Assessment Program (SLOAP). The College's Institutional Learning Outcomes, adopted in 2016, and General Education Outcomes, adopted in 2018, inform the design of academic Program Learning Outcomes, academic course SLOs, and the SLOs for co-curricular and student development activities. Assessment activities do not affect a student's grade, academic standing, ability to transfer or ability to graduate. The College considers student privacy to be of the utmost importance and takes all necessary steps to ensure the confidentiality of student records and student work reviewed through this process in accordance with FERPA regulation...

## Student Learning Outcomes Assessment Program (SLOAP)

In order to coordinate assessment activities at BHCC, the Student Learning Outcomes Assessment Program (SLOAP) was designed and implemented by full-time faculty during the 2003-2004 academic year. The SLOAP Taskforce, currently composed of faculty and professional staff representatives from each academic and cocurricular department, oversees ongoing assessment of student learning outcomes on the course, program and institutional levels. Faculty and professional staff submit outcome development and assessment proposals to the Taskforce for approval and, once the proposed project is complete, submit a report of their findings to the Taskforce. Participants use data from SLOAP projects to improve learning where assessment projects indicate improvement is needed. All SLOAP data is maintained by individual departments and on the SLOAP ePortfolio page. https:// bhcc.digication.com/sloap/home

## Equity and Inclusion

## Center for Equity and Cultural Wealth (CECW)

BHCC's Center for Equity and Cultural Wealth draws on the College's nationally recognized work to design culturally inclusive learning environments that value the strengths of our diverse students, faculty, staff and local communities. The Center engages the campus in culturally relevant scholarship, practice and advocacy focused on achieving equitable outcomes for all students. Through a multifaceted and intersectional campus-wide conversation, the Center explores the ways in which meaningful community partnerships, equity-minded practices and culturally grounded pedagogies can be enacted to foster the success of all students and members of the College community. Learn more at bhcc.edu/cecw

## Halting Oppressive Pathways through Education (HOPE)

The HOPE initiative is designed to examine and eliminate the social, institutional and academic barriers that often prevent males of color from achieving their full potential at BHCC and beyond. This Asset-Based, Student-Centered initiative is run by a group of faculty, staff, and students who are focused on three main areas: qualitative and quantitative data collection, analysis and dissemination; assessing and addressing gaps in College programs and services; and affinity-based mentoring. Learn more at bhcc.edu/hope

## Undocumented Students

Bunker Hill Community College welcomes applications from Deferred Action for Childhood Arrivals (DACA) and undocumented students. While Undocumented and DACA students are not eligible for state or federal financial aid, they are eligible to apply for institutional scholarships. DACA students are eligible for in-state tuition and fees. Learn more at bhcc.edu/admissions/undocumenteddacastudents

## The Mary L. Fifield Art Gallery

## Mary L. Fifield Art Gallery

bhcc.edu/artgallery
artgallery@bhcc.edu
The Bunker Hill Community College Art Gallery provides the College and the local community opportunities to view high caliber art exhibitions, exposure to diverse ideas and artistic media and access to forums with emerging and established Boston-based artists. Through its scheduled programming, the Gallery offers an innovative backdrop to teaching and learning.

## Statement on Inclusion

The Bunker Hill Community College Board of Trustees endorsed and approved for adoption on June 9, 1997, the American Association of Community Colleges Statement on Inclusion as follows:

Bunker Hill Community College strongly endorses the continued use of admissions policies and employment practices that promote broad diversity in the community college system. The College will be free to pursue standards and policies that allow it to fulfill its diversity mission and vision. The students who are educated will help provide tomorrow's leaders, and their college experience will demonstrate the richness and substance of our diverse, multicultural, and global environment. The College environment will promote understanding and appreciation of others, while encouraging students to grow as individuals.

Bunker Hill Community College reaffirms its commitment to diversity. In accord with this philosophy, the College will evaluate its hiring, admissions, and financial aid policies to ensure diversity and equal access within the institution. The College will ensure that the results of these evaluations conform to the concept of open access - the cornerstone of the College's mission.

Bunker Hill Community College believes that diversity in education is crucial to a democratic society. Community colleges are, in effect, microcosms of our greater society.
As such, Bunker Hill Community College will encourage and enhance the fullest understanding of human rights and responsibilities and will teach the skills that allow its students to effectively participate in a democratic society. The College will be responsible for shaping an environment that mirrors the general culture and creates opportunities for all within the college community to interact with understanding, tolerance, and respect for others. In this way, diversity in education not only serves as a model for the world at large, but it also perpetuates social harmony for the future.

## BHCC Statement on Civility

Bunker Hill Community College believes that civility in the workplace and classroom is everyone's right and responsibility. This statement is consistent with the Student Handbook, all collective bargaining agreements and the College's personnel policies. We understand "civility" to mean respectful language and behavior toward everyone at all times, regardless of the circumstances. These qualities are intrinsic to excellence in teaching and learning, and contribute to the maintenance of a productive workplace and an overall positive campus climate.

Further, we affirm our commitment to behavior that is courteous and respectful in all interactions with members of the BHCC community as well as with members of the larger communities we serve.


## Accreditation Statements

Bunker Hill Community College is accredited by the New England Commission of Higher Education (NECHE).

Inquiries regarding accreditation status by the New England Commission should be directed to the administrative staff of the institution. Individuals may also contact: New England Commission of Higher Education, 3 Burlington Woods Road, Suite 100, Burlington, MA 01803; telephone: 781-425-7700; fax: 781-425-1001; email: info@neche.org; URL: neche.org

The Certified Nurse Assistant Program is accredited by the Commonwealth of Massachusetts Executive Office of Health and Human Services, Department of Public Health, Division of Health Care Facility Licensure and Certification, 99 Chauncy Street, Boston, MA, 02111; telephone: 617-7538000; URL: mass.gov/dph

## The Diagnostic Medical Sonography Program

 accredited by the Commission on Accreditation of Allied Health Education Programs (caahep.org) upon the recommendation of The Joint Review Committee on Education in Diagnostic Medical Sonography. Commission on Accreditation of Allied Health Education Programs, 9355-113th St. N \#7709, Seminole, Fl 33775-7709, Phone: 727-210-2350, Fax: 727-210-2354;URL: caahep.org.
The Medical Laboratory Technician Program is accredited by the National Accrediation Agency for Clinical Laboratory Sciences (NAACLS), 5600 North River Rd. Suite 720, Rosemont, IL 60018; telephone 773-714-8880. URL: naacls.org.

The Medical Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 North Wacker Drive, Suite 2850, Chicago, IL 60606-3182; telephone: 312-704-5300; fax: 312-704-5304; email: mail@jrcert.org; URL: jrcert.org.

The Paramedic Studies Certificate and Associate Degree Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), which can be contacted at: Commission on Accreditation of Allied Health Education Programs, 25400 US Highway 19 North, Suite 158, Clearwater, FL 33763; telephone: 727-210-2350; URL: caahep.org. The Emergency Medical Services/Paramedic program was last granted continuing accreditation upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP), which can be contacted at: Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions, 8301 Lakeview Parkway, Suite 111-312, Rowlett, TX 75088; telephone: 214-703-8445.

The Pharmacy Technician Certificate Program is approved by the Massachusetts Board of Registration in Pharmacy. The Board of Registration in Pharmacy is located at 239 Causeway Street, Suite 500, 5th Floor, Boston, MA 02114; telephone: 800-414-0168; URL: mass.gov/eohhs/gov/ departments/dph/programs/hcq/dhpl/pharmacy/about.

The Associate Degree Registered Nursing Program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; telephone: 404-975-5000; fax: 404-9755020; email: info@acenursing.org; URL: acenursing.org, and approved by the Massachusetts Board of Registration in Nursing, 239 Causeway Street, Suite 500, 5th Floor, Boston, MA 02114; telephone: 617-973-0900; or 1-800-414-0168; fax: 617-973-0984 URL: mass.gov/dph/boards/rn.

The Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs 25400 U.S. Highway 19 North, Suite 158; Clearwater, FL 33763; Phone: 727-210-2350; Fax: 727-2102354. Please contact Mail@caahep.org if you have any general questions about CAAHEP.

## Institutional Policy Statements

## Affirmative Action and Equal Opportunity Guidelines

Bunker Hill Community College is an affirmative action/

## Office of Equity, Diversity and Inclusion

(1) bh
8
N
A
(0) 6
8
(8) 6
bhcc.edu/diversityinclusion
Nahomi Carlisle, Esq., Associate Vice President, Chief Equity and Compliance Officer, Affirmative Action Officer, and Section 504/ADA Coordinator
(9) 617-228-3311
nahomi.carlisle@bhcc.edu
Carl Marcelin, Deputy, Title IX Coordinator 617-228-2127 carl.marcelin@bhcc.edu
equal opportunity institution and does not discriminate on the basis of race, creed, religion, color, sex, sexual orientation, gender identity, age, disability, genetic information, maternity leave, and national origin in its education programs or employment pursuant to Massachusetts General Laws, Chapter 151B and 151C, Titles VI and VII, Civil Rights Act of 1964; Title IX, Education Amendments of 1972; Section 504, Rehabilitation Act of 1973; Americans with Disabilities Act, and regulations promulgated thereunder, 34 C.F.R. Part 100 (Title VI), Part 106 (Title IX) and Part 104 (Section 504). All inquiries concerning application of the above should be directed to Nahomi Carlisle, Esq., Associate Vice President, Chief Equity and Compliance Officer, Affirmative Action Officer, and Section 504/ADA Coordinator.
When a student or employee believes s /he has been discriminated against based on race, creed, religion, color, national origin, age, sex, gender identity, genetic information, maternity leave, sexual orientation or disability status, the College's Policy on Affirmative Action, Equal Opportunity \& Diversity provides an informal complaint process and a formal complaint process which may be accessed by any member of the College community. Whether a complaint/grievance is formal or informal, the College will conduct a prompt, thorough, fair and objective investigation, and will take such corrective

## About the College

action as is appropriate under the circumstances. No student or employee shall be retaliated against for filing a discrimination complaint/grievance or for cooperating with the College's investigation thereof.

For more information, to file a complaint/grievance, or for a copy of the plan and/or complaint/grievance procedure, contact the Office of Equity, Diversity and Inclusion.

## Sexual Harassment Guidelines

Sexual harassment of a student, an employee or any other person in the College is unlawful, unacceptable, impermissible and intolerable.

Sexual harassment is a form of sex discrimination. It occurs in a variety of situations which share a common element: the inappropriate introduction of sexual activities or comments into the work or learning environment. Often, sexual harassment involves relationships of unequal power and contains elements of coercion, as when compliance with requests for sexual favors becomes a criterion for granting work, study or grading benefits. However, sexual harassment may also involve relationships among equals, as when repeated sexual advances or demeaning verbal behaviors have a harmful effect on a person's ability to study or work in the academic setting.

For general purposes, sexual harassment may be described as unwelcome advances, requests for sexual favors and other physical or verbal conduct of a sexual nature when: (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education; (2) submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual or (3) such conduct has the purpose or effect of substantially interfering with an individual's academic or professional performance or creating an intimidating, hostile or demeaning employment or educational environment.

A student, an employee, or any other person in the College who is found to have engaged in sexual harassment is subject to discipline up to and including termination of employment or expulsion from the College.

When a student, an employee or any other person in the College believes s/he has been the subject of sexual harassment, the complaint/grievance process is a

mechanism for redress. Whether a complaint/grievance is formal or informal, the College will conduct a prompt, thorough, fair and objective investigation, and will take such corrective action as is appropriate under the circumstances. Reasonable efforts are made to maintain confidentiality during the grievance process No student or employee shall be retaliated against for filing a discrimination complaint/ grievance or for cooperating with the College's investigation thereof. For more information, for a copy of the Affirmative Action Complaint/Grievance Procedure, or to file a complaint/grievance, contact the Office of Equity, Diversity and Inclusion.

Sexual harassment is forbidden by both federal and state regulations. In keeping with these regulations, a concerted effort will be made to protect employees, students and others from sexual harassment as defined.

For the full text of the College's policy concerning sexual harassment, refer to the Bunker Hill Community College Policy on Affirmative Action, Equal Opportunity \& Diversity.

## Guidelines Concerning Sexual Violence

Committing an act of sexual violence upon a student, an employee or any other person in the College constitutes a violation of state and federal laws, and a major violation of the College's Affirmative Action Policy. Sexual violence is absolutely intolerable and totally unacceptable.

Sexual violence is generally defined as any sexual activity where consent is not obtained or able to be freely given, and includes rape (vaginal, oral or anal penetration without consent), acquaintance rape (rape committed by someone who is known by the victim), or any unwanted sexual activity that is forced or coerced by one person on another. It is a criminal offense to have sex with someone who is incapable of giving consent due to being intoxicated, unconscious, mentally incompetent or under 16 years of age.

An employee or student who commits an act of sexual violence may be subject to criminal prosecution and will be subject to disciplinary action by the College, up to and including expulsion and/or termination of employment.

Victims of sexual violence are encouraged to contact the College's Department of Public Safety at 617-2282222 or 228-2053, as soon as is practicable under the circumstances. If a victim is more comfortable reporting the alleged sexual violence to a College employee with whom s/he is better acquainted, such as a dean, administrator or faculty member, s/he may do so. Any employee to whom an incident of sexual violence is reported, however, is required to notify the College's Department of Public Safety and the Affirmative Action Officer and Title IX Coordinator forthwith.

If any student or employee believes that he or she has been the victim of sexual violence, the student or employee also has the right to file an Affirmative Action Discrimination Grievance with the College. For a copy of the Affirmative Action Grievance Procedure or assistance with filing a complaint, please contact Cheryl Cephas, the College's Interim Affirmative Action Officer and Title IX Coordinator.

Reporting the incident to the College's Department of

Public Safety, the Affirmative Action Officer and Title IX Coordinator, or another College employee does not commit the victim to filing charges. Federal and state laws, however, require the College to investigate such reports. The matter will be investigated both by BHCC Police and separately by the Affirmative Action Officer and Title IX Coordinator. Although every reasonable effort will be made to protect a victim's privacy, individuals with a need to know may be contacted and information may be shared as necessary to investigate and adjudicate the matter or as public safety requires. A report of the incident will be filed with local police in the event public safety is at risk even if the victim does not intend to report the incident to police or cooperate in an investigation.

The College prohibits retaliation against any person who presents a formal or informal complaint of sexual violence or who testifies or offers evidence connected with a complaint. Retaliation is a violation of the College's Affirmative Action and Diversity Policy whether or not the underlying claim of sexual violence is confirmed. For the full text of the College's policy concerning sexual violence, refer to Bunker Hill Community College's Policy on Affirmative Action, Equal Opportunity \& Diversity.

## System-Wide Student Policies

## Bathroom and Locker Room Use

All students may use bathroom or locker room facilities on campus that are designated as gender-neutral or that are consistent with a student's sincerely held gender identity. Use of a bathroom or locker room by any student for an improper purpose will result in disciplinary action, up to and including expulsion.

## Changing Biographical Data

The following process is followed when any student seeks to change his or her biographical data as provided and maintained in College records.

Legal Name. A student's legal name shall be used on all College documents, systems and communications external to the College and/or where a legal name is required. Examples include, but are not limited to:

- Financial Aid records;
- Student Accounts records;
- Student Personally Identifiable Information;
- Student Directory information;
- Payroll records;
- Health records;
- Official transcripts;
- Federal immigration documents; and
- Interactions with government agencies.

In order for any student to change their legal name on College records, a student must present a certified copy of a court order or other legal document indicating a legal name change has been granted.

Preferred First Name. The College recognizes that some students may prefer to use a first name other than their legal name to identify themselves. As long as the use of a preferred first name is not for an improper purpose, the College acknowledges that a preferred first name can and should be used where possible in the course of College business and education. Students may use a preferred first name wherever a legal name is not required on internal documents, communications, systems and web portals. Examples include, but are not limited to:

- Student identification cards;
- Email and calendar entries;
- Class rosters and advisor lists;
- Learning Management Systems; and
- Diplomas, awards and recognitions.

To request a preferred first name, a student should complete the Preferred First Name Change Form available in BHCCselfservice or on the Dean of Students page at bhcc.edu/dos.

Sex Designation. In order for any student to change their sex designation in official College records, a student must provide a certified copy of a court order, or other legal identification, such as a Massachusetts driver's license, reflecting the change in sex.

## Hazing

The Massachusetts Legislature enacted a law in 1985 that prohibits hazing on all college campuses. Students may obtain copies of the law (MGLc269s17-19) from the Student Activities Office.

## Annual Security Report Notice of Availability

Bunker Hill Community College's Office of Public Safety is responsible for issuing crime alerts in compliance with the Clery Act. In the event a situation arises on or about the campus, an alert is issued to keep the campus community informed.

The Annual Security Report Notice of Availability report includes statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings or property owned or controlled by Bunker Hill Community College; and on public property within, or immediately adjacent to and accessible from, the campus. The report also contains information regarding campus security and personal safety, including topics such as: crime prevention, law enforcements practices and authority, crime reporting policies, and other matters of importance related to security on campus.
As required by law, Bunker Hill Community College's Office of Public Safety and Campus Police publishes and distributes this report annually by October 1. To obtain a copy, visit bhcc.edu/PublicSafety/ASR.

## ACADEMIC CALENDAR

FALL 2021 SEMESTER

| September 6 | Labor Day - College Closed |
| :---: | :---: |
| September 7 | Classes Begin - Full Semester, Web courses |
| September 13 | Classes Begin - Mini Session I, Web Late-Start (WBL) |
| September 13 | Last day for adjusting schedules (add/drop) Full Semester, Web (WB) courses. <br> CSDL courses may be dropped or cancelled during the scheduled adjustment period, or within five (5) working days from the date of registration - More info. |
| September 15 | Last day for adjusting schedule (add/drop) for Mini Session I and Web Late-Start (WBL) |
| October 1 | Last day to register for CSDL classes |
| October 11 | Columbus Day Observed - College Closed BHCC recognizes Indigenous Peoples Day |
| October 18 | Fall 2021 Graduation Applications due |
| October 22 | Last day to withdraw from course with 'W' grades - Mini Session I |
| October 25 | Continuing Student Registration Begins Spring 2022 |
| October 26 | Fall Professional Day - No Classes 1-3:55 p.m. |
| October 31 | Mini Session I Ends |
| November 1 | Mini Session II Begins |
| November 1 | Spring 2022 Graduation Application opens |
| November 3 | Last day for adjusting schedules (add/drop) Mini Session II |
| November 11 | Veterans Day Observed - College Closed |
| November 25 | Thanksgiving Day - College Closed |
| November 26-28 | Thanksgiving Recess - College closed for scheduled maintenance (Friday-Sunday) |
| December 10 | Last day to withdraw from course(s) with 'W' grades - Full semester, Mini Session II, Web, CSDL, Web Late-Start |
| December 19 | Last Day of Mini Session II |
| December 21 | Last Day of Classes - <br> Full semester, Web, CSDL, Web Late Start |
| December 22, 23 | Assessment Days |
| December 27 | Final grades due by 11:59 p.m. |
| December 28 | Final grades visible in BHCC SelfService |

FALL MINI SESSION II 2021

| September 13 | Classes Begin - Fall Mini Session I |
| :--- | :--- |
| September 15 | Last day for adjusting schedules (add/drop) |
| October 22 | Last day to withdraw with 'W' grades from <br> Mini Session I |
| October 31 | Classes End - Mini Session I |
| November 2 | Final grades due by 11:59 p.m. |
| November 3 | Final grades visible in BHCC SelfService |

FALL MINI SESSION II 2021

| November 1 | Classes Begin - Fall Mini Session II |  |
| :--- | :--- | :---: |
| November 3 | Last day for adjusting schedules (add/drop) |  |
| December 10 | Last day to withdraw with 'W' grades from <br> Mini Session II |  |
| December 19 | Classes End - Mini Session II |  |
| December 21 | Final grades due by 11:59 p.m. |  |
| December 22 | Final grades visible in BHCC SelfService |  |
| WINTER SESSION 2022 |  |  |


| January 3 | Classes Begin - Winter Sesssion |
| :--- | :--- |
| January 5 | Last day for adjusting Winter Session schedules <br> (add/drop) |
| January 14 | Last day to withdraw with 'W' grades from <br> Winter Session |
| January 23 | Classes End - Winter Session |
| January 25 | Final grades due by 11:59 p.m. |
| January $\mathbf{2 6}$ | Final grades visible in BHCC SelfService |

SPRING SEMESTER 2022

| January 17 | Martin Luther King Jr. Day - College Closed |
| :---: | :---: |
| January 24 | Classes Begin - Full Semester, Web |
| January 31 | Classes Begin - Mini Session I, Web Late-start (WBL) |
| January 31 | Last day for adjusting schedules (add/drop) Full Semester, Web (WB) courses <br> CSDL courses may be dropped or cancelled during the scheduled adjustment period, or within five (5) working days from the date of registration - More info. |
| February 2 | Last day for adjusting schedule (add/drop) Mini Session I, Web Late-start (WBL) |
| February18 | Last day to register for CSDL classes |
| February 21 | Presidents Day - College Closed |
| March 14-20 | Spring Break - No Classes |
| March 21 | Last day to withdraw from course with 'W' grades - Mini Session I |
| March 21 | Spring 2022 Graduation Applications due |
| March 27 | Mini Session I End |
| March 28 | Mini Session II Begin |
| March 28 | Continuing Student Registration Begins Summer 2022, Fall 2022 |
| March 30 | Last day for adjusting schedules (add/drop) Mini Session II |
| April 4 | Summer 2022 Graduation Application open |
| April 14 | Spring Professional Day - No Classes 1-3:55 p.m. |


| April 18 | Patriots Day - College Closed |  |
| :--- | :--- | :---: |
| May 6 | Last day to withdraw from course(s) with 'W' <br> grades - Full semester, Mini Session II, Web, <br> CSDL, Web Late-Start |  |
| May 16 | Classes End - Full Semester, CSDL, Web, <br> Web Late-Start, Mini Session II |  |
| May 17, 18, 19 | Assessment Days |  |
| May 23 | Final grades due by 11:59 p.m. |  |
| May 24 | Final grades visible in BHCC SelfService |  |
| May 26 | Commencement |  |
| May 30 | Memorial Day Observed - College Closed |  |
| SPRING MINI SESSION I 2022 |  |  |
| January 31 | Classes Begin - Spring Mini Session I |  |
| February 2 | Last day for adjusting schedules (add/drop) |  |
| March 21 | Last day to withdraw with 'W' grades from <br> Mini Session I |  |
| March 27 | Mini Session I Ends |  |
| March 29 | Final grades due by 11:59 p.m. |  |
| March 30 | Final grades visible in BHCC SelfService |  |
| SPRING MINI SESSION II 2022 |  |  |


| March 28 | Classes Begin - Spring Mini Session II |
| :---: | :---: |
| March 30 | Last day for adjusting schedules (add/drop) |
| May 6 | Last day to withdraw with 'W' grades from Mini Session II |
| May 16 | Mini Session II Ends |
| May 18 | Final grades due by 11:59 p.m. |
| May 19 | Final grades visible in BHCC SelfService |
| SUMMER SESSION I 2022 |  |
| June 6 | Classes Begin - Session 1, Bridge Session, Web, CSDL |
| June 8 | Last day for adjusting schedules (add/drop) for Session 1, Bridge session, Web classes <br> CSDL courses may be dropped or cancelled during the scheduled adjustment period, or within five (5) working days from the date of registration - More info |
| June 20 | Juneteenth Observed - College Closed |
| June 20 | Summer Graduation Applications due |
| July 1 | Last day to register for CSDL classes |
| July 4 | Independence Day - College Closed |
| July 4 | Fall 2022 Graduation Application open |
| July 8 | Last day to withdraw from course with W grades from Session I |


| July $\mathbf{1 5}$ | Last day to register for Session II |  |
| :--- | :--- | :---: |
| July $\mathbf{1 6}$ | Session I Ends |  |
| July $\mathbf{1 8}$ | Final grades for Session I due by 11:59 p.m. |  |
| July $\mathbf{1 9}$ | Final grades for Session I visible in BHCC <br> SelfService |  |
| SUMMER SESSION II 2022 |  |  |


| July 18 | Classes Begin - Session II |
| :--- | :--- |
| July 20 | Last day for adjusting schedules (add/drop) for <br> Session II |
| July 22 | Last day to withdraw from courses with W grade <br> from Bridge session |
| July 30 | Bridge Session Ends |
| August 1 | Final grades for Bridge Session due by <br> 11:59 p.m. |
| August 2 | Final grades for Bridge Session visible in BHCC <br> SelfService |
| August 19 5 | Last day to withdraw from course with W grade <br> - CSDL, Web |
| August 18 | Last day to withdraw from course with W grades <br> -Session II |
| August 27 | Classes End - CSDL |
| August 29 | Classes End - Session II, Web |
| August 30 | Final grades for Session II and Web courses due <br> by 11:59 p.m. |
|  | Final grades for Session II and Web courses <br> visible in BHCC SelfService |



## ADMISSIONS

## Office of Admissions

(1) bhcc.edu/admissions
(3) 617-228-3398 (o) admissions@bhcc.edu

Bunker Hill Community College is committed to an open admission policy. This policy enables any person who has earned a high school diploma or HiSET (formerly the GED) and expresses a desire to pursue a college education to be admitted to BHCC. To enroll in a degree or certificate program, students must apply for admission and be accepted to the College. Students choosing this option are referred to as "degree-seeking students."

To support an optimal environment for learning, BHCC admits students who demonstrate the academic skills needed to fulfill the requirements of their courses and programs, and the ability to adhere to the Student Code of Conduct. Students under the age of 18 may be required to sign a release form supplied by the College detailing the responsibilities of a minor taking courses at BHCC. All documents submitted to the College become the property of Bunker Hill Community College and will not be returned to students.

Prospective students may obtain information about information sessions, tours and applying to a degree program or general college information by contacting Admissions or via the College website at bhcc.edu/admissions.

## Deferment Policy

Applicants who have completed the Bunker Hill Community College application process, and are accepted into a program of study, may choose to defer their acceptance. In order to defer acceptance, applicants must not have enrolled in any courses, or attended the college as a matriculated student. Deferment is allowed for a maximum of one year from the semester, or summer session in which acceptance was granted. Applicants who choose to defer their acceptance for one year, will not be considered eligible for the Catalog Year in which they applied and were accepted. The Deferment Form must be completed when the student makes the decision to defer. Applicants who apply and are accepted into any of the college's


Selective Programs are not eligible to use this Deferment Policy. Selective Program applicants should contact selectiveadmissions@bhcc.edu for more information.

NOTE: This deferment policy does not prevent a student from returning early to take classes.

## International Admissions

International Center

(9) 6bhcc.edu/internationalcenter/guidetoadmissions 617-228-2460 (B) international@bhcc.edu

Bunker Hill Community College is certified by the Student and Exchange Visitor Program (SEVP) certified school eligible to enroll F-1 students. The college offers three start dates per academic year: January, June and September. International applicants who wish to attend Bunker Hill Community College must complete the free online application for admission. Applicants must submit proof that they have completed at least high school, have a required language proficiency in English and sufficient funding to support themselves during the first year of study at the College.

To review the list of admission requirements and ways to meet each requirement, applicants are encouraged to contact the International Center.

## Criminal Offender Record Information (CORI) and Sex Offender Registry Information (SORI) Checks

For a student to be eligible to participate in an academic, community or clinical program that involves potential unsupervised contact with children, the disabled, or the elderly, the student may be required to undergo a criminal background check, which could include a Criminal Offender Record Information (CORI) check and/or a Sex Offender Registry Information (SORI) check. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible to participate in such activities. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access CORI records. In addition, for clinical placement in some programs, a National County Background Check may be required in addition to the CORI check.
Sex Offender checks shall be performed pursuant to Massachusetts General Laws, Chapter 6, Sections 178C-178P. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193. In accordance with federal law, the College is required to advise the campus community where information concerning registered sex offenders may be obtained. To access public information pertaining to registered sex offenders enrolled or employed at the College, please contact the Commonwealth of


Massachusetts Sex Offender Registry Board, located at P.O. Box 4547, Salem, MA 01970-4647, 978-740-6400, or the BHCC Office of Public Safety and Campus Police.

## Deferred Action for Childhood Arrivals (DACA) Process

On June 15, 2012, the Secretary of Homeland Security announced that certain people who came to the United States as children and meet several key guidelines, may request consideration of deferred action for a period of two years, subject to renewal, and would then be eligible for work authorization. Deferred action is a discretionary determination to defer removal action of an individual as an act of prosecutorial discretion. Deferred action does not provide an individual with lawful status. The College requires proof of the C33 card as part of the application process to qualify for in-state tuition rates. For further information please go to U.S. Citizenship and Immigration Services at uscis.gov/childhoodarrivals.

## Homeschooling Policy

All home-schooled students without a high school diploma, HiSET or GED are eligible to apply for admission to a degree or certificate program provided they have successfully completed an approved homeschool program in accordance with Massachusetts General Laws or the laws of their home state.
The College determines whether students have participated in an approved home-school program. To determine whether a student has participated in an approved program, the student shall submit, with the application for admission, evidence that the home-school program was approved by the student's school district's superintendent or school committee. Additionally, if the home schooled student is under the age of compulsory attendance, which is sixteen (16) years old in Massachusetts, a letter from the student's school district's superintendent or school committee is required stating that the student is not considered truant and would not be required to attend further schooling or continue to be home-schooled if the student has completed his/her home school program before the age of sixteen (16). Home-schooled students who have not completed an approved home-school program will not be eligible to enroll in a BHCC degree or certificate program until they have obtained a HiSET or GED.
The College reserves the right to limit or deny enrollment of any student under the age of sixteen (16) in a course or program based on a case-by-case consideration of a variety of factors, including but not limited to the student's maturity, life experience, placement test scores, prior
education, course content, instructional methodology and potential risks associated with participation in a particular course or program.

## Immunization

The Commonwealth of Massachusetts, General Law 105CMR 200.600 requires proof of immunizations from the following students:
(a) All full-time students in a Degree or Certificate program (12 or more credits), and
(b) All health science students - both full-time and parttime (note that health profession programs will require additional health records and requirements*) and
(c) All students on a student or other visa - both full-time and part-time (including foreign exchange students and those students visiting or attending classes while on academic visitation or exchange program).
All of the student groups noted must submit proof of immunizations for the following: MRR - measles, mumps, rubella, Hepatitis B, Varicella (chickenpox), Tetanus, diphtheria and pertussis: (TdaP) and Meningococcal.
*Students in the health profession programs must also present evidence of immunity to Meningitis, Influenza Vaccination, screening for Tuberculosis, Physical Exam, and American Heart Associate CPR certification. Health students must submit immunizations and health documents before attending clinical.
Students who fail to present the required information within 30 days of the date of registration may not be allowed to register for subsequent semesters until the immunization form is received by Student Central. Immunization forms become part of the student's permanent file and cannot be copied, transferred or returned.

## Guest Students (Non-Matriculating or Non-Degree Students)

Bunker Hill Community College welcomes Guest Students to enroll in courses at the College. You are a Guest Student (also known as a non-matriculated or non-degree student) if you fall into one or more of the following categories:

- You want to take a course or courses to transfer back to your institution;
- You want to take a course or courses in order to fulfill prerequisites for another college or university's undergraduate or graduate program; or
- You want to take a course or courses for your own personal enrichment.

Guest students matriculating at other colleges should have their course selections approved by their home institution prior to registration to insure credit transfer. Transferability of courses to a degree program either at Bunker Hill Community College or elsewhere is determined solely by the degree program from the home academic institution.
For additional information visit bhcc.edu/admissions/ gueststudents.

## Valor Act Credit Evaluation Policy

In accordance with the Valor Act, Bunker Hill Community College uses the American Council on Education (ACE) military program guidelines to the evaluation of educational experience in the Armed Services as the primary method for evaluating and awarding academic credit for military occupation, training, experience, and coursework.

Section 702 of the Choice Act. Section 702 of the Veterans Access, Choice and Accountability Act of 2014 ("Choice Act"), requires VA to disapprove programs of education
for payment of benefits under the Post-9/11 GI Bill and Montgomery GI Bill-Active Duty at public institutions of higher learning if the schools charge qualifying Veterans and dependents tuition and fees in excess of the rate for resident students for terms beginning after July 1, 2015.

These new requirements will ensure that our Nation's recently discharged Veterans, and their eligible family members, will not have to bear the cost of out-of-state charges while using their well-deserved education benefits.

# STUDENT CENTRAL: FINANCIAL AID, STUDENT PAYMENT AND ACADEMIC RECORDS 

## BHCC Student Central

BHCC Student Central
bhcc.edu/studentcentral
(9) 617-228-2370 (o) studentcentral@bhcc.edu

BHCC Student Central offers centralized student services related to Financial Aid, Student Payment, Registration and Academic Records. In addition to a physical Student Central location in the Charlestown Campus second floor B-Lobby, students may also visit the Chelsea Campus Student Services Office, or access the Virtual Student Central, providing access to services from home or after business hours. For more information, please visit bhcc.edu/studentcentral.

## Financial Aid and Scholarships

Financial Aid Office<br>(1) bhcc.edu/fa<br>(9) 617-228-2275 (B) finaid@bhcc.edu

## Financial Aid Office

The Financial Aid Office at Bunker Hill Community College assists students and their families with meeting the costs of
a college education. BHCC participates in a wide variety of federal, state and private financial aid programs.

Students must be aware that all institutions, including Bunker Hill Community College, are subject to changes in funding allocations from both the Commonwealth of Massachusetts and the United States Department of Education. For more detailed information, visit the financial aid section of the College's website at bhcc.edu/fa.

Through the online services system, students can see and print their Financial Aid award letters, view their current and previous years' Financial Aid records and check the status of their current Financial Aid application.

## Financial Aid General Eligibility Requirements

To be eligible for financial aid, applicants must be United States citizens or eligible non-citizens, possess valid social security numbers, be enrolled in or accepted for enrollment in an eligible academic program and working toward a degree or certificate. Additionally, applicants must maintain satisfactory academic progress (see Satisfactory Academic Progress, listed under Academic Policies and Procedures), comply with Federal Selective Service Law and not be in default on any educational loans or owe a refund on any federal grants or loans to any institution.


Students who have previously obtained a bachelor's degree or equivalent at any U.S. or foreign institution are not eligible for financial aid grants, but may be eligible for loans. It is important to know that students may lose their financial aid eligibility if they have attempted 150 percent of the credits needed for a certificate or a degree. The College strongly advises students to consult with the Financial Aid Office if they are contemplating a change in enrollment status. For information, go to the Financial Aid Office, or call 617-228-2275.

## Financial Aid Application Process: FAFSA

Financial Aid applications must be completed for each new academic year. To apply for financial aid, students must complete the Free Application for Federal Student Aid (FAFSA) and supply all requested documentation in accordance with the priority deadlines. This form can be completed online at fafsa.ed.gov. When completing the application, please note that the BHCC Title IV code is 011210. Students should retain and keep in an accessible place a copy of their FAFSA as well as all other documents used to complete their FAFSA.

Applicants are notified in writing if additional documentation such as tax returns is needed. Returning students and applicants for admission should contact the Financial Aid Office if they have any questions about this process.

## Priority Deadlines for Financial Aid

Priority 1, 2 and 3 deadlines are posted online at bhcc.edu/fa. These dates outline financial aid application deadlines to ensure that you are notified of your award in time for registration.

Summer financial aid funds are available on a first-come, first served basis. Summer financial aid applications are available at the Financial Aid Office, at the time of summer course registration.

## Financial Aid Policies

## Satisfactory Academic Progress for Financial Aid

Students are considered to be achieving academic progress if they complete at least 66 percent or more of the total number of credits that they have attempted at BHCC and are meeting the following minimum cumulative grade point average:
Cumulative
Credits Attempted . . . . . . . . . . . . . . . Grade Point Average
Fewer than 12. . . . . . . . . . . . . . . . . . . . . . . . . . . no minimum
12-30 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.79
More than 30 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.00
Finally, you must successfully complete the credits required for your degree within 150 percent of the standard length of your academic major. For example, if you are majoring in an associate degree that requires 60 credits for completion, you must complete your degree requirements by the time you have attempted 90 credits or you would lose your financial aid eligibility.

## Unofficial Withdrawals

Per federal regulations, students who stop attending all of their classes without formally withdrawing from the College will be identified and may lose a percentage of or their entire financial aid award for that semester. If a student fails all of his or her attempted credits for a semester, the federal regulations require that the College assume the student stopped attending the College. If the Financial Aid Office cannot obtain proof that the student completed at least 60 percent of the semester, the Financial Aid Office will then prorate and recalculate the student's financial aid award, which may result in the student owing a balance to the College. For more details, see the Financial Aid Refund Policy.

## Withdrawal/Graduation

Students who receive loan funds while enrolled at Bunker Hill Community College must complete an exit loan interview session before leaving the College. The Financial Aid Office notifies graduating students prior to their anticipated graduation date. This notice provides information regarding loan repayment. Students can make individual arrangements for a personal exit interview by contacting the Financial Aid Office.

## Appeals Process for Academic Progress

Students have the right to request a one-time, unsatisfactory academic progress appeal if they fail to attain a satisfactory GPA and/or course completion rate and are denied financial aid consideration. If financial aid recipients experience extenuating circumstances that affect their schoolwork, they have the right to appeal the decision. Reasons to appeal may involve, for example, a documented illness of a student or of a spouse. Because it is difficult to define all the possible reasons that could lead to unsatisfactory academic progress, students should contact the Financial Aid Office, for instructions on how to submit a written appeal.

## Appeals Process for Financial Reasons

A student's family's financial situation may change from that reported on the FAFSA application. At the request of the student, the Financial Aid Office, will review a change in the financial situation of the student to determine if adjustments should be made to the calculation of the student's financial aid eligibility. Examples of typical appeals include a loss of employment, a reduction of income of a parent and/or spouse or uninsured medical expenses.

## Federal Financial Aid Refund Policy

The calculation of the return of Title IV Funds is determined by the date that the student withdraws. Title IV aid and all other aid is earned during the time a student is attending Bunker Hill Community College. The percentage of aid earned, up to a maximum of 60 percent, is determined by dividing the number of days a student was enrolled by the number of days in the semester. If the student withdraws from all courses after 60 percent of the semester is completed, Title IV aid is viewed as 100 percent earned.


Return of Title IV funds is no longer required beyond that point. If a student withdraws before 60 percent of the semester is completed, however, the student may owe a portion of his or her financial aid, if the Financial Aid Office determines that the student has received an amount larger than the earned amount.

The term "Title IV Funds" includes the following programs:

- Federal Pell Grant.
- Federal Supplemental Educational Opportunity Grant (SEOG).
- Subsidized Federal Stafford Loan.
- Unsubsidized Federal Stafford Loan.
- Federal PLUS Parent Loan.
- Federal Perkins Loan.

In accordance with federal regulations, financial aid funds are returned and allocated in the following order:

1. Unsubsidized Stafford Loan.
2. Subsidized Stafford Loan.
3. FFEL PLUS.
4. Federal Pell Grant.
5. Federal SEOG Program.
6. Other Title IV programs.
7. Other state, private, and institutional aid.
8. The student.

Bunker Hill Community College will return any funds necessary to Title IV based upon the calculation. Based upon the return of Title IV Funds calculation, students are responsible to repay to the Title IV or state programs any funds that were disbursed directly to them and for which the student was determined to be ineligible. The procedures and policies listed above supersede those published previously and are subject to change. Please contact the Student Central, Room B202 if. you have any questions about the policy.

## Scholarships and Awards

Students applying for scholarships must be:

- Matriculated and enrolled full time (12 credits or more) at BHCC at the time of application, unless otherwise noted in the scholarship eligibility criteria;
- Attending BHCC during the semester they are receiving the scholarship;
- Have no In-Progress (IP) grades at the time of the scholarship application deadline; and,
- Have earned the minimum number of credits and/or cumulative GPA as specified for each scholarship.

When scholarship eligibility criteria require a minimum number of credits or grade point average earned, only college level courses (numbered 100 and above) taken at Bunker Hill Community College and applicable toward a degree or certificate program will be considered.

All students are welcome to apply regardless of status. For a full list of scholarships, deadlines and application forms, please visit the scholarship website at bhcc.edu/scholarships.

## Grants

Grants are sponsored by the federal and/or state government and need not be paid back. For a complete list of the grant programs in which BHCC participates, visit bhcc.edu/financialaid/typesoffinancialaid.

## Work Study Program

Bunker Hill Community College participates in the Federal College Work Study Program. Eligible students may receive funds from this program as a result of the financial aid application process. Federal program regulations require that a percentage of these funds be earmarked to community service- related work. Check with Student Central for a listing of available Work Study positions.

## Cost of Attendance

## Student Payment Office

(1) bhcc.edu/studentpayment
(9) 617-228-2150 (ㄹ) bursar@bhcc.edu

## Tuition \& Fees

The Board of Higher Education sets tuition and the College sets fees. Both are subject to change. For current tuition and fees, visit bhcc.edu/costofattendance.
Health Insurance. Massachusetts state law requires that all students taking nine or more credits in the fall semester or nine or more credits in the spring semester have medical insurance. There are no exceptions. For current rates, visit bhcc.edu/costofattendance.

Other fees associated with attendance may include: Special Cost Course Fee; Liability Insurance Fee; Photo ID Replacement Fee; Returned Check Fee; Transcript Fee
(paper request); Transcript Fee (electronic request); Refund Check Replacement Fee. These rates can be found at bhcc. edu/costofattendance.

The Veterans Benefits and Transition Act of 2018. Sec. 103 of the Veterans Benefits and Transition Act of 2018 prohibits schools from imposing a late fee, denying access to facilities, or other penalties against a veteran or eligible dependent due to a late payment of tuition and/or fees from VA..

## Open Educational Resources (OER)

Bunker Hill Community College offers a number of courses that do not require the purchase of textbooks or course materials. Instead, these courses use Open Educational Resources (OER)—educational materials that reside in the public domain or have been released under a copyright license that permits anyone to freely use and repurpose them. OER courses are available in a variety of subjects.

## MA Residency Tuition

Students registering for classes at Bunker Hill Community College who are eligible for in-state tuition must complete the Massachusetts Community College In-state Tuition Eligibility Form. An eligible person is defined by law as a U.S. Citizen, lawful immigrant, permanent resident, or holder of another legal immigration status who has satisfied the duration residency requirement of six months prior to the start of the semester of enrollment, but not more than one year prior to that date and can demonstrate his/her intent to remain in Massachusetts. A member of the armed forces (or spouse or child) on active duty in Massachusetts or any individual using educational a assistance under either Chapter 30 (Montgomery GI Bill®-Active Duty Program), Chapter 31 (Vocational Rehabilitation\}, or Chapter 33 (Post$9 / 11$ GI Bill $($ ), of Title 38, United States Code, and/or the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311 (b)(9)) with the intent to live in Massachusetts while attending Bunker Hill Community College will be charged in-State tuition rate.

The college reserves the right to make any additional inquiries regarding the applicant's status and to require submission of any additional documentation it deems necessary. Questions concerning residency requirements should be directed to Student Central.

Gl Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill.

## Tuition Waivers

Several kinds of tuition waivers are available to Bunker Hill Community College students. These waivers include, but are not limited to, National Guard, veterans, senior citizens, Native Americans, state employees and wards of the state. To receive a tuition discount, students must present the waiver at the time of registration.

The Commonwealth of Massachusetts does not fund all courses; therefore, the use of certain waivers for those unfunded courses will be restricted. Students eligible for waivers should obtain clarification from Student Central before making course selections..

## Outstanding Financial Obligations

Bunker Hill Community College is responsible for making "diligent efforts" to collect amounts due to the state. Diligent efforts shall include e-bills or written bills at your request, dunning notices and subsequent assignments to a collection agency. The student is responsible for all collection costs and any fees incurred in the collection of debt and for informing the College of any dispute regarding the debt.

The College advises students that their debts may be discharged through the intercept of any Commonwealth and Federal payments that are due to them or scheduled to be paid to them including tax refund. Please be advised


that your student account debt constitutes an "educational benefit overpayment or loan" as defined pursuant to 11 U.S.C section 523(a)(8), and therefore is not dischargeable in bankruptcy.

## Payments

Students can register for classes before the semester's payment due date. At the time of registration, students receive online registration information including their bill, class schedule and information about payment and insurance waiver deadlines. BHCC will send all follow-up communications and statements to your BHCC e-mail address and subsequently to the address on file. Students are required to make payments on time; failure to receive these notices does not excuse late payments. After the payment due date has passed, students must pay for courses at the time of registration.

The College accepts payments online at at https:// selfservice.bhcc.edu/Student/Finance. You may pay by credit/debit card, or from a checking or savings account. Money orders, company, or scholarship checks must be mailed to Student Central. International students also have the benefit of making payments in the currency of their choice through the PayMyTuition and Western Union links at selfservice.bhcc.edu/Student/Finance.

The College processes electronic checks through ACl Payments, Inc. When you provide a check you are authorizing conversion the check to an electronic form to be submitted as an ACH debit entry to your account.

The College offers a tuition payment plan to students and families who have needs that cannot be met with federal or state financial aid. You can learn more about the payment
plan options and how to sign up at bhcc.edu/autopay. For specific information about the payment plan, contact ACl Payments at 1-866-964-4020 or bhcc.edu/autopay.

Students can access their financial account summaries online at selfservice.bhcc.edu. The account shows both current semester payments received and balances due.

## Refund Policy

Students dropping or withdrawing from classes should log into Self-Service and navigate to Academics from the menu in the top left corner. The Withdrawal Form and upload page are located there. Please follow the instructions exactly to submit a valid form.
Failure to officially withdraw results in a grade of F or NA in the course and an obligation to pay in full. The schedule of refunds for tuition and
general college fees applies only when proper withdrawal or class drop procedures, as established by the Academic Records Office, are followed. Lack of attendance or course abandonment does not constitute a drop or withdrawal. For specific
refund deadlines please refer to the course schedule for the semester or session.

## Student Comprehensive Health Insurance Plan

Chapter 23 of the Massachusetts Acts of 1988 requires that all students registered for nine or more credit hours must participate in a comprehensive health insurance plan unless they certify that they are participating in a health insurance plan with comparable coverage. If a student has comparable coverage and wishes to waive participation in the Massachusetts Community Colleges insurance plan, the student must submit waiver information via the Internet by the published due date or at the time of registration. For more information, visit bhcc.edu/healthinsurance. All questions regarding the Student Health Insurance Program (SHIP) should be directed to MAhealthconnector@ state.ma.us or call 1-877-623-6765. Students already on MassHealth should call 855-273-5903.

Health Insurance Refund Policy Except for medical withdrawal due to covered injury or sickness, students withdrawing from the College during the first 30 days of the period for which coverage is purchased shall not be covered under the policy and a full refund of the premium will be made. Students withdrawing after 30 days will remain covered under the policy for which the premium was paid and no refund will be allowed. Students who do not withdraw completely, but who drop below nine credit hours within the first 30 days, may apply to Gallagher Student Health and Special Risks for a refund of health insurance premiums. Registering for mini- sessions, web courses, and Center for Self-Directed Learning courses later in the fall or spring semester may restore the student's obligation to carry health insurance

## Academic Records

## Academic Records

bhcc.edu/studentcentral/academicrecords
(917-228-2403 (0) academicservices@bhcc.edu
The Academic Records Office maintains student academic records, ensures that student rights are protected under the Family Education Rights and Privacy Act (FERPA), and provides many services including registration, schedule adjustment, withdrawals, processing grades, transcript requests, program changes, graduation, personal information changes and verification requests.

## Final Examination Schedule

Final examinations take place during a student's last class for each course enrolled during the semester. The final examination Assessment Period is usually scheduled the next two days after the last day of classes. Students who have more than two exams scheduled in one day may request to reschedule the exam. Students who miss final examinations must notify the appropriate Academic Dean of their program area immediately, stating the reason. The individual faculty member makes the decision regarding makeup of final exams.

## CAMPUSES AND INSTRUCTIONAL SITES

## Charlestown Campus

Built in 1973, Bunker Hill Community College's Charlestown Campus is situated on approximately 42 acres in the historic Charlestown neighborhood of Boston. The campus is conveniently located at the MBTA Community College stop. As BHCC's main campus, the Charlestown location features state-of-the-art classrooms, labs and other facilities for all of the College's programs, including domestic and international business, hospitality and culinary arts, early childhood development, electronics, and computer applications.

The Charlestown Campus features the 48,000 squarefoot LEED Gold Certified Health and Wellness Center constructed in 2009 under version 2.2 of the United States Green Building Council's green building program. The Center includes the College's Fitness Center, Gymnasium and locker rooms, which are open to all students, faculty and staff.
The Charlestown Campus also includes the College Bookstore, Food Services, and The Mary L. Fifield Art Gallery.


## Bookstore

BHCC Bookstore
(1) bhcc.edu/bookstore
(G) 617-241-5161

The college bookstore is operated by Follett Higher Education Group as a service to the students, faculty, and staff. The bookstore is located on the fourth floor, E-Building, and operates all year round. The bookstore offers a large selection of textbooks in a wide variety of formats: Rental, Digital, Used and New to save students money and give them choice. In addition to the bookstore's multiple textbook options, it has everything from school supplies and reference materials to backpacks, college apparel and snacks to go.

## Food Services

## Aladdin Food Services <br> bhcc.edudine.com <br> 617-228-2335

The Thomas A. Kershaw Culinary Arts Dining room features lunch and dinner options served in a full-service dining room or to-go from the BHCC Culinary Arts program students. In addition, the campus includes a cafeteria and a café operated by Aladdin.

## Chelsea Campus

Providing higher education and job training opportunities to residents of Chelsea, Revere, Everett, East Boston, Winthrop and other surrounding communities, the BHCC Chelsea Campus is actively involved in the community through partnerships with community based organizations, social service organizations, Chambers of Commerce, the City of

Chelsea and the Chelsea Public Schools. Visit bhcc.edu/ chelsea for more information and directions to the campus.

The Chelsea Campus offers laboratory science courses in human biology, anatomy and physiology, environmental science and nutrition, and a full array of foundation and elective courses, including mini session courses, which can be completed in just seven weeks. Accelerated certificate programs are scheduled in seven-week mini sessions allowing for completion in half the length of time. Current certificates available in this accelerated format include Early Childhood Education, Entrepreneurship, Computer Support Specialist and PC Hardware.

The Chelsea Campus Health Sciences certificate programs include Medical Assistant, Patient Care Technician, Central Processing and Pharmacy Technician. Courses are also offered in Certified Nurse Assistant (CNA) and Emergency Medical Technician and Emergency Medical Technician (EMT). The Paramedic Studies and Surgical Technology programs offer students an Associate in Science degree.

Several MBTA bus lines as well as the MBTA commuter rail stop within a few blocks of the campus, making it easily accessible by public transportation. The College also provides free shuttle service between the Charlestown and Chelsea Campuses. Approximately 30 designated student parking spaces are also available. The campus also includes a student lounge and easy access to a café.

Chelsea is also home to the College's Adult Education (AE) program which offers Spanish GED and English GED (through our partner, LARE) as well as Basic English for English Language Learners (ELL)classes during the weekday, evening and on weekends. The program is funded by the Massachusetts Department of Elementary and Secondary Education.

Students are also urged to check the website for the new seven-week mini sessions that allow for the completion of accelerated certificate programs.

Visit bhcc.edu/chelsea for more information and directions to the campus.

## Student Services and Support

The Chelsea Campus Student Services Office is the hub where students may register for courses, complete course placement assessments and access advising. The advising staff also offers students a diverse set of workshops that support student success. The Office can be reached at 617-228-2101.

## Student Access and Success Center (SASC)

The Tutoring Center offers tutoring primarily in mathematics, English, biology and more. The Center may also offer open lab time and facilitated study groups for laboratory based science classes. Assistive technology, including the Kurzweil Reading System that assists students who are visually impaired or who have reading and related learning disabilities, is available at the Center. Visit bhcc. edu/Chelsea/SASC TC for hours.

## Laboratories

The Health Skills Laboratory and the Surgical Technology and Central Processing Laboratory offer simulated settings in which students enrolled in Allied Health and Surgical Technology programs learn and practice specific required skills. A state-of-the-art Paramedic Studies Laboratory with an ambulance simulator offers a simulated setting in which students enrolled in the EMT and Paramedic Studies programs practice specific required skills..

Three science laboratories provide equipment and materials for students enrolled in lab courses delivered at the Chelsea Campus, including human biology, anatomy and physiology, environmental science and nutrition.

A large open computer lab is also available on an extended schedule, including Saturdays, for any student enrolled in a BHCC course.

## Satellites and Instructional Sites

## BHCC Locations

bhcc.edu/locations

## Malden Satellite

The Malden satellite is located at Malden High School, 77 Salem Street, Malden. Established in the fall of 2009, the Malden Satellite offers introductory and college level courses in the day and evening during the fall and spring semesters. Placement testing, advising and registration for these courses are conducted on the BHCC Charlestown Campus. Malden High School is accessible from the Orange Line, Malden Center transit station.

## South End Satellite

The South End Satellite, operating in partnership with IBA - Inquilinos Boricuas en Acción, is located at 630 Tremont Street and is a nationally replicable model of a local community college (BHCC) working hand-in-hand with a community based organization (IBA) to establish a college campus directly in the heart of an affordablehousing community (Villa Victoria). The South End Satellite provides Boston residents with the opportunity to complete the HiSET (formerly the GED), take ESL and Basic English courses and to enroll in college-level classes. Free child care services and financial coaching are also available at this location. Prior to the beginning of each semester and throughout the year, the satellite offers a range of student services including academic support, success coaching, financial aid assistance, academic advising, placement testing and admissions and enrollment assistance.

## Boston Chinatown Neighborhood Center Instructional Site in North Quincy

Students can also enroll in a limited number of classes at the Boston Chinatown Neighborhood Center's Quincy site in North Quincy.

## East Boston Instructional Site

The East Boston Instructional Site is located at 250 Sumner Street, East Boston. This instructional site offers a limited number of introductory and allied health courses.

## Everett High School Instructional Site

BHCC students can enroll in courses in allied health at Everett High School. While a number of seats in at the Everett instructional site are reserved for Everett High School students as part of the College's Dual Enrollment/ Early College program, additional seats are open to all BHCC students.

## Freedom House Instructional Site in Dorchester

BHCC partners with Freedom House, located at 5 Crawford Street in Dorchester, to offer a limited number of courses for dual enrollment students, as well as those that are open to all BHCC students.

## Pao Arts Center in Chinatown Instructional Site

BHCC partners with Boston Chinatown Neighborhood Center (BCNC) on the Pao Arts Center, an arts, culture and education space for the community to convene to preserve and celebrate the cultural and creative assets of Boston's Chinatown. The center, housed within the distinctive One Greenway building, is Chinatown's first communitybased arts center and Boston's newly dedicated Asian American and Asian immigrant cultural space. A range of BHCC classes are offered at the Pao Arts Center, including
theater, visual and media arts and business. Students and community partners also have access to the BHCC mobile language lab at this location. bhcc.edu/pao

## Parking and Security

Office of Public Safety and Campus Police<br>(1: bhcc.edu/publicsafety<br>(9) Charlestown: 617-228-2053<br>Chelsea: 617-228-3359<br>Emergencies: 617-228-2222<br>BHCCPublicSafety@bhcc.edu

Parking. Student parking is available in Lots 1 and 2 on the Charlestown Campus, 7 days per week, from 6 a.m. -11 p.m. These lots are owned by City of Boston and managed by ABM Parking Services. A limited number of spaces are available at the Chelsea Campus for BHCC Students, marked by brown signs with white lettering that read "RESERVED BHCC Student/Sticker PARKING ONLY." A valid parking permit is required for all student parking lots.
Students have the option to purchase a semester-long parking permit valid for Lots 1-2 on the Charlestown Campus and for designated student parking spaces on the Chelsea Campus from ABM online through ParkWhiz. Daily parking in Lots 1-2 is also available to students, faculty/staff and visitors for a daily fee, to be paid via the ParkMobile mobile app. More information and the link to purchase a parking pass is available at bhcc.edu/parking.
Security. The Office of Public Safety and Campus Police is dedicated to protecting students, faculty, staff, visitors and property of Bunker Hill Community College. Campus Police

## Directions to BHCC Locations

For directions to BHCC's campuses, satellite campuses and instructional sites, please refer to the information below, or visit bhcc.edu/locations. For a map of the Charlestown Campus, visit bhcc.edu/campusmap

Charlestown Campus
250 New Rutherford Avenue
Boston, Massachusetts 02129-2995
617-228-2000; TTY: 617-242-2365
bhcc.edu/charlestowndirections
H-Building - Charlestown
Campus
570 New Rutherford Avenue
Boston, Massachusetts 02129-2994
617-228-2000; TTY: 617-242-2365
bhcc.edu/hbuilding
Chelsea Campus
70 Everett Avenue
Chelsea, Massachusetts 02150-2917
617-228-2101; TTY: 617-884-3293
bhcc.edu/chelseadirections

Malden Satellite
Malden High School
77 Salem Street
Malden, Massachusetts 02148
617-228-3319; TTY: 617-242-2365
South End Satellite
Inquilinos Boricuas en Accion (IBA)
Villa Victoria
405 Shawmut Avenue
Boston, Massachusetts 02118
617-927-1707; TTY: 617-242-2365
Boston Chinatown Neighborhood
Center Instructional Site in North Quincy
275 Hancock Street, 2nd Floor
Quincy, Massachusetts 02171

East Boston Instructional Site
250 Sumner Street and
20 Maverick Square
East Boston, Massachusetts 02128
617-568-6492; TTY: 617-242-2365
Everett High School Instructional Site
100 Elm Street
Everett, Massachusetts 02149
Freedom House Instructional Site in Dorchester
5 Crawford Street
Dorchester, Massachusetts
617-445-3700

## Pao Arts Center in Chinatown

99 Albany Street
Boston, Massachusetts 02111
bhcc.edu/pao
officers are armed, sworn-in Special State Police of the Commonwealth of Massachusetts. As such, the department conducts itself as any other Municipal Police Department
and has full arresting powers on College grounds (state laws Chapter 22C, section 63). An additional contracted security staff ensures the security of the building 24 hours a day.

## ACADEMIC POLICIES AND INFORMATION

Absence Due to Religious Beliefs<br>1985 Regular Session<br>STUDENTS ABSENCE DUE TO RELIGIOUS BELIEFS Chapter 375<br>\section*{AN ACT EXCUSING THE ABSENCE OF STUDENTS FOR THEIR RELIGIOUS BELIEFS.}

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

Chapter 151C of the General Laws is hereby amended by inserting after section 2A the following section:

Section 2B. Any student in an educational or vocational training institution, other than a religious or denominational educational or vocational training institution, who is unable, because of his religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day shall be excused from any such examination or study or work requirement, and shall be provided with an opportunity to make up such examination, study, or work requirement which he may have missed because of such absence on any particular day; provided, however, that such makeup examination or work shall not create an unreasonable burden upon such school. No fees of any kind shall be charged by the institution for making available to the said student such opportunity. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section.

A copy of this section shall be published by each institution of higher education in the catalog of such institution containing the list of available courses.

Approved October 8, 1985.

## Attendance

Because poor attendance generally results in poor grades, students must attend all regularly-scheduled classes and laboratory sessions. Students having attendance difficulties should discuss this matter with their course instructors and advisors.

Students who know they will be absent for three or more consecutive class sessions because of a family emergency or personal illness should report the extended absence to the Office of the Dean of Students. The Associate Vice President will notify the course instructors of the absence. Upon returning to class, students are responsible for discussing completion of all course requirements with their course instructors. If the course instructor and student find it impossible to complete all assigned work, the student may
need to withdraw from the course.
Students who do not attend classes during the first two weeks of the semester will be withdrawn from the course and may receive an NA (non-attendance) grade. The grade appears on the transcript and is counted toward credits attempted but is not computed in the grade point average. The NA grade designation is not used during the summer semester.

## Auditing a Course

Students who want to audit a course must obtain permission from the Registrar or designee. Audit students must pay full tuition and fees. The audit request must be made at the time of registration, and once approved may not be changed to a graded course. An audit course may not be transferred or used toward graduation requirements.

## Catalog Year

The term "catalog year" refers to the academic year in which students are admitted and attended the College. Students must fulfill the program requirements listed in the College Catalog in effect for their catalog year. When students reapply to the College after an absence of five or more years, they must fulfill the catalog year/program requirements in effect at the beginning of the semester of re-application. Students may change their program in a given semester, but should do so prior to the end of the schedule adjustment period. If an exception is made to allow students to change their program after the schedule adjustment period, students must fulfill the catalog year program requirements in effect at the beginning of the semester following the date of the change..

## Readmission Policy

The readmission policy applies to students who applied and declared a program of study, attended classes, but stopped out for less than five years. Access to the college email system, and myBHCC will be inactivated after two semesters of being inactive. Upon returning to the college, students who declare a new program of study or retain their original program of study with the current catalog year have to be readmitted. Students must complete the Readmission Form. Student whose last enrollment was in any of the college's Selective Programs are not eligible to use this Readmission Policy. Selective Program students should contact selectiveadmissions@bhcc.edu for more information.

## Reactivation Policy

Reactivation applies to students who were in a program of study, attended classes, but stopped out for less than five

years from their original start date and have returned to the college under the same program of study and Catalog Year that they were accepted into. Access to the college email system, and myBHCC will be inactivated after two semesters of being inactive. Students will need to complete the Reactivation Form. Students whose last enrollment was in any of the college's Selective Programs are not eligible to use this Reactivation Policy. Selective Program students should contact selectiveadmissions@bhcc.edu for more information.

## Change of Grades

Students should direct all questions regarding grades to the course instructor. The instructor will change final grades only if a clerical error exists. Students must submit a written request to the instructor for re-evaluation if they feel that an error exists. The final decision regarding grades rests with the instructor. Students may initiate grade appeals no later than 30 calendar days following the last day of the instructional period for which the grade was granted. Please refer to the Bunker Hill Community College Student Handbook at bhcc.edu/handbook for more information.

## Clinical Experience Responsibilities

Students enrolled in programs that require clinical experience must adhere to all stated objectives and course competencies including those required for the clinical experience. Students are responsible for their own transportation to and from the clinical sites. Students are accountable for their behavior and demeanor during all clinical experiences and must conduct themselves in a manner that is in keeping with the College Code of Conduct, all professional conduct and regulations outlined by the regulating body, all conduct and behavioral expectations set forth by the clinical site, and additional specific requirements as are outlined in the programspecific student handbook.
Due to the competitive nature of placing students in clinical sites, students may have to travel long distances. It is important to note that some of the clinical sites are located
in suburban or rural areas and are not accessible by public transportation. Therefore, students should consider this increase in time and cost in planning their transportation and finances for programs requiring clinical experiences.
The College reserves the right to suspend and/or remove students from the clinical experience whose behavior is considered inappropriate. Removal may adversely affect prospects for completing the requirements of these programs. Students so removed may appeal in writing to the Office of Nurse Education and Medical Imaging. Students participating in clinical experiences should refer to the Criminal Offender Record Information (CORI) and the Sex Offender Registry Information (SORI) requirements listed in the Admissions section of this catalog.

## Behavior Policies, Discipline and Grievance Procedures

Bunker Hill Community College expects students to behave in a manner that is appropriate to a collegiate environment. Students are expected to assume responsibility for their own behavior and learning and to respect the learning environment of others. Bunker Hill Community College advocates a learning environment that enhances the academic, intellectual, cultural and social enrichment of its students, faculty, staff and the community at large. To guarantee that no member of the College community is deprived of this collegiate environment, student rights and responsibilities are clearly stated and behavior and discipline codes have been established. Please refer to the Bunker Hill Community College Student Handbook at bhcc. edu/handbook for more information

## Course Load

Students who carry 12 or more credit hours in a fall or spring semester or 6 credit hours in a summer or mini session are considered full-time students. Students must enroll in a minimum of 15 credit hours per semester of college level course work in order to complete an associate degree program in two years. Students who wish to carry more than 18 credits during a fall or spring semester or 9 credits during
a summer or mini session must obtain written permission from the Dean of their program of study or designee.

## Course Prerequisites

Some courses require that students meet certain conditions prior to registering. These conditions are known as prerequisites. Prerequisites include completion of lower-level courses with a passing grade, completion of computerized placement tests (CPTs) or formal admission to a specific program of study. To count a course from another college or university as a prerequisite at BHCC, students must bring evidence of completion of that course at the time of registration.

## Dean's and Merit Lists

Students with a grade point average of at least 3.00 are named to the Dean's List, provided that no grade lower than $C$ was earned in any course that semester. Grades lower than C include D, F, NA, W, WA, and IP. For Dean's List computation, P is not considered a letter grade. Only courses numbered 100 or higher are considered in determining eligibility for the Dean's List.

Students who are enrolled in at least 6 but less than 12 credits in a given semester, but otherwise have met the same performance level as those on the Dean's List, are named to the Merit List. The Merit List has the same performance requirements as the Dean's List. Students must have a GPA of at least 3.00 and no grade lower than a C, and only courses numbered 100 or above are considered.

## Degree and Certificate-seeking Students

All students admitted to degree or certificate programs may be required to take Computerized Placement Tests (CPTs) in English, reading and mathematics, or may be required to take the ESL placement tests if English is their second language. The tests determine the levels at which students will begin their study. Based upon test results,
the College may require developmental or ESL courses, or limit a student's enrollment in an effort to enhance that student's ability to succeed. Applicants to health careers and technical programs must comply with specific program entrance requirements and application deadlines.

## Dropping or Adding a Course

Students may adjust their schedules either during the registration period or during the schedule adjustment period if a seat is opened in the course, all the course prerequisites are completed, and payment is made at the time of registration. After the schedule adjustment period, students may add only those courses offered through the Center for Self- Directed Learning. Refer to the College's academic calendar for published deadlines at bhcc.edu/ academic-calendar. Students registering for courses that have already started must check with the faculty regarding the course attendance policy.

## Credit Hour Policy

In accordance with the United States Department of Education, Bunker Hill Community College follows the Carnegie Unit for credit. Students are expected to spend a minimum of 45 hours of work for each credit. The most common breakdown for one credit is one hour of class instruction and two hours of homework for 15 weeks each semester. A three credit course demands nine hours each week.

## Appeals Process for Grades

The Grade Appeal Process is for a student who believes that a recorded final grade does not accurately reflect his/her academic performance in a course. Grades can be appealed in instances where a student believes that an inaccurate final grade has been issued such as arbitrary grade issuance, inconsistent grading practice, or calculation error. For more information visit the Dean of Students at bhcc.edu/dos/ gradeappealprocess


## Fresh Start Policy

Under the Fresh Start Policy, students may enroll withouthaving to carry a very poor GPA record or low completion rate from years back that could prevent them from ever earning a GPA or completion rate sufficient to lead to graduation or completion of a program. The following conditions apply to the Fresh Start Policy:

1. The student must be a former Bunker Hill Community College student who has credits from BHCC. The students are eligible for Fresh Start if they are returning to BHCC after being away for 5 years or more. Students currently enrolled at BHCC or whose last term of enrollment is within 1-4 years are not eligible for Fresh Start.
2. The credits held by the student must be at least 5 years old. No credits shall have been earned with an assigned grade at BHCC within the past five years. Grades include, W, WA, NA, and A-F, IP, and P.
3. All these credits will be treated as the College treats credits transferred from other colleges. Credit will be granted for a course where a grade of $C$ or better was earned. The courses from the earlier registration that received a grade of $C$ or better will be counted as free electives or as courses fulfilling requirements depending upon the program requirements of the student who is re-entering, just as transfer credits from other colleges are counted. Only grades earned at BHCC after Fresh Start is granted are counted in the GPA. Likewise, only the completion rate of grades earned after Fresh Start is granted will be used to determine progress.
4. This process can be used only once. If the student drops out again and then returns, the student cannot start again with a new GPA or a new completion rate.
5. This process does not affect the need to repeat courses in certain programs where the earlier completion maybe considered out of date (this is frequently the case in science, computer technology, or health programs such as nursing).
6. In all cases where these policies are at variance with federal financial aid policies, the federal policies will determine eligibility for such aid.

## Withdrawal from a Course

Students may withdraw from a course or the semester only during the semester in which they are registered for coursework and only by the deadline specified for each semester, according to the academic calendar.

The College does not process course or semester withdrawals after the withdrawal deadline date. The College issues no refunds for students who withdraw from a course or the semester.

To withdraw from a course or a semester, students must complete and submit a withdrawal form, which is available at Student Central or online. After students officially withdraw from a course or semester, their transcript will

show a grade of W for coursework. The College designates course withdrawals as "uncompleted courses," which may adversely affect academic standing and financial aid eligibility. Failure to attend or ceasing to attend a class or classes does not constitute official withdrawal and results in grades of F or NA for the course or courses. Failure to withdraw formally may affect students' academic standing and eligibility to receive financial aid (see Satisfactory Academic Progress).

## Withdrawal from the Semester or the College

Students may withdraw from the College at any time; however, if currently enrolled, students will abide by the semester withdrawal deadline specified for each semester. If the College withdrawal is received after the semester withdrawal deadline, the withdrawal will not be processed until the semester has ended and final grades have been entered. Students who withdraw from the College are not entitled to a refund. To withdraw from the College, students must complete and submit a withdrawal form available at Student Central or online. Students who are enrolled and withdraw from the College, prior to the semester withdrawal deadline, receive W grades on their transcript.

Failure to attend or ceasing to attend a class or classes does not constitute official withdrawal from the College and results in grades of $F$ or NA for the course or courses. Failure to withdraw formally may affect students' academic standing and eligibility to receive financial aid (see Satisfactory Academic Progress). Students desiring to be readmitted to the College must submit a new application.

A student can withdraw for any reason according to the posted schedule UNLESS their account is on hold
due to an Interim Suspension, Suspension, Expulsion or Hospitalization. For more information, please see the Dean of Students website, bhcc.edu/dos, or call the Dean of Students Office at 617-228-2408.

## Satisfactory Academic Progress Policy

In order to continue at Bunker Hill Community College and/or receive financial aid, students must make satisfactory academic progress toward a degree or certificate. Satisfactory academic progress is the calculation of the cumulative course completion rate* and grade point average of a student. The College considers students to be achieving satisfactory academic progress if they complete 67 percent or more of the total number of credits attempted and meet the following minimum cumulative grade point average:

CUMULATIVE CREDITS ATTEMPTED . . . CUMULATIVE GRADE POINT AVERAGE
Fewer than 12. . . . . . . . . . . . . . . . . . . . . . . . . . . no minimum
12-30........................................................ . . . . 1.79
More than 30 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.00

* This includes credits taken at BHCC as well as those officially transferred in.


## Academic Warning

The College places students on Academic Warning if they do not meet the criteria for satisfactory academic progress.

## Academic Improvement

The College places students on Academic Improvement if they meet the criteria for satisfactory academic progress during their Academic Warning semester or Academic Probation semester, and their cumulative

GPA and completion rates do not meet the criteria for Good Academic Standing.

## Academic Probation

The College places students on Academic Probation if they do not meet the criteria for satisfactory academic progress during their Academic Warning semester and their cumulative GPA and completion rates do not meet the criteria for Good Academic Standing.

## Academic Suspension

The College places students on Academic suspension if during any probationary semester, they do not meet cumulative SAP requirements and one of the following circumstances occur during that semester:

- Student's semester grade point average is below 1.79. (Student has attempted between 12 and 30 credits to date, including transfer credit accepted and those earned at BHCC$) \mathrm{OR}$
- Student's semester grade point average is below 2.00. (Student has attempted more than 30 credits to date including transfer credit accepted and those earned at BHCC) OR
- Student has completed less than $67 \%$ of the total number of credits attempted in an Academic Probation semester, at BHCC. (Please note that grades of F, IP, N, NA, W and WA count as credits attempted).

Students on Academic Suspension are prohibited from attending the college for a minimum of one semester unless the suspension status is successfully appealed. Following a minimum leave of one semester, students may appeal their academic suspension by meeting with the Associate Dean of Academic Affairs or designee.


## Appeals Process for Probation and Suspension

Students placed on academic probation or suspension from the College for unsatisfactory academic progress have the right to appeal. Students who successfully appeal their academic suspension will be placed on academic probation when they return to BHCC. Students should contact the Associate Dean of Academic Affairs for more information. Academic reinstatement does not automatically re-establish eligibility for Financial Aid. Students should follow the Financial Aid appeals process separately from the academic appeals process. See the Financial Aid section of this catalog for information on the appeals process.

## Educational Records

## The Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. Students are informed of their rights under this act through the College Catalog and the Student Handbook.

They are:

- The right to inspect and review the student's educational records within 45 days of the day the College receives a request for access. Students should submit to the Registrar, dean, head of the academic department or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
- The right to challenge records and request the amendment of the student's educational record that the student believes is inaccurate or misleading. Students may ask the College to amend a record by writing to the College official responsible for the record, clearly identifying the part of the record they want changed and specifying why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- The right to consent to record disclosure of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College
in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor or collection agency); a person serving on the Board of Trustees or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her task. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility.
- The right of complaint, to file a complaint with the U.S. Department of Education concerning alleged failures by Bunker Hill Community College to comply with the requirements of FERPA.

The name and address of the office that administers FERPA is:

> Family Policy Compliance Office
> U.S. Department of Education
> 600 Independence Avenue, SW
> Washington, DC 20202-4605

## Directory Information

Bunker Hill Community College has designated the following items as directory information: student name, academic program, semesters of attendance, current enrollment status, Dean's and Merit Lists, degrees or certificates awarded and dates of graduation.

The College may release directory information to a third party requesting such student information without first obtaining the student's consent.

A student has the right to refuse to permit the College to release directory information. To facilitate this, a student must request that a privacy code be placed on his/her directory information by completing the Request for NonDisclosure of Directory Information form and submitting to Academic Records. If a privacy code is placed on a student's record, no directory information will be released in College publications or to third parties, excluding cases in which the Solomon Amendment or lawful subpoenas require the College to release such information by law.
Notwithstanding the College's definition of directory information, the Department of Defense, pursuant to the Omnibus Consolidated Appropriations Act of 1997, identifies the following additional student information as directory information for Department of Defense purposes: student's address, age and level of education. This information is available and accessible from student records. Non-consensual release of directory information may be submitted to the Department of Defense in accordance with the Solomon Amendment.

## Grading and Notation System

(effective January, 1990)

| Grades <br> and <br> Notations | Definitions of Grades and Notations $\begin{array}{r}\text { Quality } \\ \text { points Per } \\ \text { Credit Hour }\end{array}$ |
| :---: | :---: |
| A | Equivalent to a numerical grade of 94-100 ........ 4.00 |
| A- | Equivalent to a numerical grade of 90-93 .......... 3.70 |
| B+ | Equivalent to a numerical grade of 87-89 .......... 3.30 |
| B | Equivalent to a numerical grade of 83-86 .......... 3.00 |
| B- | Equivalent to a numerical grade of 80-82 ........... 2.70 |
| C+ | Equivalent to a numerical grade of 77-79 .......... 2.30 |
| C | Equivalent to a numerical grade of 70-76 .......... 2.00 |
| D | Equivalent to a numerical grade of 60-69 .......... 1.00 |
| F | Equivalent to a numerical grade of 0-59 ............ none |
| P | Indicates satisfactory completion of coursework where no letter grade is given, or award of credits for a course by special examination. It is equivalent to a grade of $C$ or higher and carries no quality points. Credit hours will be given equivalent to the number of credit hours normally assigned to the course $\qquad$ none |

IP Required work in the course is in progress. The method and time for completion of work must be agreed upon in writing by student and instructor; no credit is earned until the course is completed. IPs not completed by the end of the following semester are automatically changed to a grade of $F$ unless an IP extension is agreed upon in writing by student and instructor and submitted to the Academic Records Office ............none AU Audit; no credit earned .......................................... none
NA NA Students who register for a specific course and who have not attended class meetings during the first two weeks of the semester will be withdrawn from the course and receive the grade designation NA (nonattendance) which will appear on the transcript and be counted toward credits attempted but not computed in the grade point average. The NA grade designation is not used during the summer semester .............. none
W Official withdrawal from a course; no credit earned. none
WA Administrative withdrawal from a course; no credit earned .................................................................... none

## Midterm Warning Grades

Faculty may issue midterm warning grades during week 7-8 of the semester to students who may be in jeopardy of not successfully completing their course. Grades of D or F may be issued to students whose course work is below requirements to earn a grade of $C$ or better in the course. A grade of $F X$ is issued to students who may be in jeopardy of failing the course due to attendance concerns. Midterm warning grades are found in the Grades section under the Academic Profile menu of WebAdvisor on the Portal. Students should speak with their professor immediately to develop a plan to get back on track. A variety of support services are also available to students; please stop by the LifeMap Commons for a referral.

## Computation of GPA

The Cumulative Grade Point Average (CGPA) is computed by dividing the total number of quality points by the total number of credit hours attempted at Bunker Hill Community College. Grades of AU, IP, P, NA, W and WA are not calculated in the semester, cumulative or graduation grade point average. All grades are used in determining satisfactory academic progress, suspension and probation.

## Program Changes

Students wishing to change from one program of study to another should consult with their advisors. Students then must complete a change of program form, available at Student Central. A program change may increase the time needed for students to complete program requirements for graduation. Students who receive financial aid should consult with the Financial Aid Office regarding the fiscal implications of program changes. Students may change their program in a given semester, but should do so prior to the end of the schedule adjustment period. If an exception is made to allow students to change their program after the schedule adjustment period, students must fulfill the catalog year program requirements in effect at the beginning of the semester following the date of the change.

## Repeat Course Policy

This policy addresses courses taken at Bunker Hill Community College.

Students may repeat courses in which they earn a grade of $D$, F, W, WA, or NA without petitioning. Students can petition to repeat a course when they have obtained a C grade or better. The petition will then be passed on to the appropriate Academic Dean for approval. The process may be used no more than three times for courses with a letter grade of $C$ or better. Repeating a course when the earlier attempt is a C or better is allowed only if the higher course grade is a course prerequisite or program requirement to continue in or enter a specific academic program. The highest grade automatically becomes the official grade for purposes of calculating grade point average and for determining eligibility for graduation. However, students should note that other institutions may have different policies when determining which course to use to calculate transfer credit or grade point average. The grades for each attempt, however, are recorded and always remain on the student's transcript. Repeating a course may not be allowed in specific programs with outside accreditation.

| Course | Credits <br> Attempted | Grade |  | Quality <br> Points | Quality Points <br> earned |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENG112 | 3 | A- | $=$ | $(3.70)$ | 11.10 |
| MAT196 | 3 | C + | $=$ | $(2.30)$ | 6.90 |
| BIO102 | 4 | B | $=$ | $(3.00)$ | 12.00 |
| SPN201 | 3 | F | $=$ | $(0.00)$ | 0.00 |
| TOTAL | 13 |  |  |  | 30.00 |

Cumulative Grade Point Average (CGPA): $30 \div 13=2.31$
Graduation Grade Point Average is calculated in the same manner but excludes developmental course work (i.e. courses numbered below 100).

## Student Right-to-Know Graduation Rate

Graduation rates data are available online for all colleges that are required to report this information. This information is reported by colleges and published by the United States Government and available for Bunker Hill Community College at nces.ed.gov/collegenavigator/?id=165112

## GRADUATION AND ALUMNI ENGAGEMENT

## Graduation Information

## Application

During their final semester, students who expect to graduate must apply for graduation. To graduate, students must:

- Complete a minimum of 60 credit hours (exclusive of developmental courses) with a minimum cumulative grade point average of 2.00 .
- Attain a minimum of 15 credits of the total number of credit hours through courses enrolled in and successfully completed at Bunker Hill Community College.
- Complete all program requirements.
- Meet all requirements of the College, including payment of any outstanding financial obligations and submission of state-mandated immunization requirements.


## Second and Subsequent Degrees

Students may apply to earn additional associate degrees. To qualify, students must complete the required courses for each degree, as well as a minimum of 15 credit hours beyond the first and any subsequent degrees.


## Certificates

To qualify for a BHCC certificate, students must complete all course requirements for the certificate with a minimum of 25 percent of the required credit hours successfully completed at the College with a cumulative minimum GPA of 2.00 (exclusive of developmental courses).

## Graduation with Honors

Highest Honors: Students who have completed degree requirements with a Cumulative Grade Point Average of 3.90-4.00, less developmental credits.

High Honors: Students who have completed degree requirements with a Cumulative Grade Point Average of 3.50-3.89, less developmental credits.

Honors: Students who have completed degree requirements with a Cumulative Grade Point Average of 3.30-3.49, less developmental credits.

The College gives honors awards for the highest grade point average, less developmental credits, in each program.

## The Bunker Hill Community College Alumni Association

Established in 1988, the Bunker Hill Community College Alumni Association contributes to the continued growth of the College by sharing the educational, professional and personal experiences of alumni with the College community.

The Alumni Association provides opportunities for alumni to connect with their alma mater, one another and BHCC students through sponsored programs, networking opportunities and events.

## The Bunker Hill Community College Foundation, Inc.

Foundation Office
(1) bhcc.edu/foundation
2. Marilyn K. Kuhar, Executive Director of
Development and of the Foundation

| (4) $617-228-3290$ | (e) mkkuhar@bhcc.edu |
| :--- | :--- |

The Bunker Hill Community College Foundation, Inc., is a non-profit 501(c)(3) organization established to obtain resources to support the College, thereby enabling students with diverse educational, ethnic and cultural backgrounds to benefit from a high-quality, affordable, post-secondary education. The mission is realized by building constituencies and obtaining financial resources from groups and individuals including alumni, business, civic and community leaders.
The Foundation Board of Directors is committed to advancing the mission of the College and works to secure private contributions, planned gifts and other donations from individuals, foundations and corporations through personal solicitations, grant applications and fundraising events.

The Foundation accepts donations of any amount and designated to any purpose that advances the goals and mission of the college. Funding priorities are programs that contribute to student success, including scholarships, emergency assistance, and basic needs. Gifts for current use provide immediate assistance while contributions to the Foundation's endowment help ensure excellence and accessibility to future generations of students.

## ADVISING AND LIFEMAP

LifeMap<br>(1) bhcc.edu/lifemap<br>D. 617-228-2230

Bunker Hill Community College is committed to supporting students in achieving their educational, career and life goals. LifeMap re-imagines the student experience by enabling students to develop an individualized pathway (plan) for goal completion. In partnership with faculty and staff, students use LifeMap tools to create educational, transfer or career plans, connect with support services, participate in social networking and reflect on their learning. By centralizing resources and enlisting faculty and staff in their use in and beyond the classroom, LifeMap enables students to make informed decisions and become more self-sufficient while they create a personalized plan for realizing their goals In addition to the LifeMap related activities students participate in within the classroom, the LifeMap Commons serves as a central location on campus to support students throughout their journey with academic, career and transfer advising and referrals to other college support services. Learn more at bhcc.edu/lifemap..

## Advising: Academic, Career and Transfer

## Academic Advising

(.| bhcc.edu/studentlife/advising
(6) 617-228-2230

Embracing the diversity of its college community, Bunker Hill Community College recognizes the individual needs of its students. Our academic, career and transfer advisors are dedicated to providing continuous service to strengthen, nurture, empower and assist students with making sound and responsible decisions throughout their educational career at the College.

Academic, career and transfer advising and resources are available for all BHCC students in a variety of formats that include individualized advising, group advising, workshops, online advising as well as online resources and assessments.


Advising \& LifeMap staff assist students with choosing or changing a major, building an academic schedule, developing an educational plan for degree completion, planning for transfer, utilizing online resources, understanding campus policies and procedures and referring students to additional support services or resources. Information about group advising sessions and student-focused workshops is on the events calendar on the BHCC website and goes out by email to students throughout the year; students should check their BHCC email daily. For more information, please visit the LifeMap Commons or bhcc.edu/studentlife/advising.

## Academic Services

Academic advisors are available for all currently accepted certificate and degree-seeking students at BHCC.

New students receive an advisor assignment after the start of their first semester. The advisor assignment depends on class enrollment and program of study (major). :

- Faculty Advisor
- Staff Advisor
- an Academic Department, or
- Advising \& LifeMap Department.

The name of the assigned advisor or department is on the Advising tab on the Plan \& Schedule section of BHCCselfservice.

## BHCCselfservice

All registered students have an online services account known as BHCCselfservice, at selfservice.bhcc.edu. This account allows students to print a current course schedule or unofficial transcript, view placement test results and grades, search for course availability, access financial aid and student payment information, register for or drop courses (during the posted registration and add/drop periods), pay for courses, create a payment plan and waive health insurance. The My Progress features allow students to determine what courses are needed for program completion and use the course catalog to make informed decisions about course selection. In addition, the Plan \& Schedule feature allows students to create a plan for completing program requirements and even register from that plan. Students requiring assistance can visit the LifeMap Commons.

## Career Advising

## Career Advising

bhcc.edu/careeradvising
617-228-2245 CareerAdvising@bhcc.edu
Career Advisors help prospective, new and continuing student with aligning their career goals with their program of study. When deciding on their program of study, a career advisor will help students in exploring and focusing their
career options and can show how the program at Bunker Hill Community College can lead to achieving career goals.

Students have access to career assessments through Career Coach and MassHire CIS. Taking these assessments will help clarify interests, skills and values and the results will suggest career areas for exploration. After taking career assessments, students should discuss their results with a career advisor. During the advising appointment, students can learn how to research day-to-day duties in their chosen field, what skills or training will be necessary for the career, and future employment trends.

Career Coach bhcc.emsicc.com Students can use Career Coach to match careers of interest with Bunker Hill Community College specific Programs of Study, complete self-assessments, and build their knowledge of career skills, common work activities, and level of education required related to their career of interest.

Massachusetts Career Information System (MASSCIS)
The MassHire Career Information System, or MassHire CIS, is a free online career resource through the State of Massachusetts. Students can use MassHire CIS to find employment data, learn about average wages, watch videos about daily responsibilities, and more! Students can also use MassHire CIS to complete self-assessments and learn about which Massachusetts colleges and universities offer educational programs that match their career interests.

## Transfer Services

## Transfer Services

(1) bhcc.edu/transfer
(9) 617-228-2230 (a) transferservices@bhcc.edu

Transfer Services assists new, current and graduating BHCC students with the transfer process and transfer opportunities to and from the college.

## Transfer In

Students who have attended another college may apply for transfer credit and advanced standing at Bunker Hill Community College. Official transcripts from all previous colleges should be sent directly to the Academic Records Office at the time the student applies to BHCC. Once the student is accepted and becomes a matriculated (or degree-seeking) student, college transcripts will be evaluated.
Transfer Credit may be awarded if:

- the courses are comparable to those offered at BHCC;
- a grade of $C$ or better is earned from a regionally accredited college or university (programs requiring a C+ or higher are noted on the program curriculum sheet located in the BHCC College Catalog);
- computer courses are not more than five years old;
- Anatomy and Physiology I and II courses are not more than 10 years old for some selective health program applications.


You can use a maximum of 45 transfer credits toward the BHCC associate degree and a maximum of 75 percent of the total number of credits required for certificate programs.
Once an official transcript has been evaluated and you have registered for classes, transferred in courses will appear on your BHCC transcript with a letter grade of TR. TR grades are not counted in your BHCC GPA (Grade Point Average) and are not used to calculate your completion rate. BHCC uses both completion rates and GPA to calculate your academic standing at the College.

Credits earned at colleges that follow a quarter system will be converted to semester-hour equivalents resulting in an adjustment in the number of credits transferred.

## Transfer Appeal Process

If you disagree with the transfer credit award decision, request a meeting with a Transfer Counselor by emailing transferservices@bhcc.edu. The purpose of this meeting is to give you an opportunity to present evidence such as course descriptions and syllabi to demonstrate that the course(s) in question are either the equivalent or comparable and meet the criteria listed above. The Transfer Counselor will contact relevant Faculty, Department Chair and or the Academic Dean to review course documentation as needed. If the matter is not resolved with the Transfer Counselor, you can appeal in writing to the appropriate Associate Provost of Academic Affairs requesting that the Associate Provost review the materials and findings. The decision of the Associate Provost is final.

## Transfer Out

Transfer advisors provide students with an overview of the transfer planning process and assistance with completing applications to other colleges.

## Transfer Fairs

Each semester BHCC hosts Admissions representatives from over 40 colleges and universities. This is your opportunity to collect information and ask questions from a number of colleges all in one place.

## Workshops

Transfer Services offers workshops on transfer related topics for BHCC students planning to apply to four-year colleges. A transfer advisor facilitates each session and students will have opportunities to ask questions. Upon registering for a workshop, students will receive an email with a web-link to access and participate during the workshop's designated time and date. Students may use a computer device with a microphone and internet access or dial in by phone. It is necessary that students with 30 credits or less attend a Transfer 101 Workshop prior to meeting with a transfer counselor.

## Virtual College Visits

Virtual college visits are events that allow Bunker Hill students to meet with transfer admission representatives from bachelor degree granting institutions. During these one-hour sessions, students learn about each institution's academic programs, student engagement opportunities, and the process for applying and transferring to these institutions. Students also have the opportunity to ask their own questions.
Visit bhcc.edu/transfer for upcoming workshops and college visits and additional information

## Transfer Partnerships

Bunker Hill is dedicated to developing partnerships with colleges, universities and community-based organizations. Transfer Services offers information sessions, workshops, and individual transfer advising appointments to support students in achieving their academic goals.

## Transfer Articulation Agreements

Students complete an Associate's degree at BHCC, meet all eligibility and admissions requirements, and receive guaranteed admissions into the specified major. All eligible BHCC credits transfer toward the specific Bachelor's degree

For a list of current agreements, please visit https:// www.bhcc.edu/admissions/transferpartnerships/ articulationagreements/

## MassTransfer

MassTransfer is a collaboration between the Commonwealth's community colleges, state universities and the University of Massachusetts. System-wide resources and policies allow for students to transfer seamlessly, stay on track and minimize the time it takes to earn a bachelor's degree.

General Education Foundation. MassTransfer provides any student in the Massachusetts public higher education system who completes the General Education Foundation with the benefit of satisfying the general education/ distribution/core requirements at any other public higher education institution (with the receiving institution able to add no more than six additional credits or two courses). Visit mass.edu/masstransfer/gened/home.asp to learn more about the MassTransfer Gen Ed Foundation. In addition, please visit bhcc.edu/programsofstudy/ generaleducationrequirements for Bunker Hill Community


College's General Education requirements.
A2B (Associate to Bachelor's). Beginning your college career at a community college is a smart choice. MassTransfer seeks to reward community college students who complete associate degrees at Massachusetts community colleges before they enroll in mapped or linked bachelor's programs at Massachusetts state universities or University of Massachusetts campuses. Not only does MassTransfer guarantee full transfer of a minimum of 60 credits but, depending on their final GPA and/or prerequisite coursework, students who complete A2B programs may also receive guaranteed admission and tuition discounts. Visit mass.edu/masstransfer/a2b/home.asp

Commonwealth Commitment. A2B Degree students who attend full-time and earn a 3.00 GPA or higher also have the opportunity to participate in the Commonwealth Commitment. The Commonwealth Commitment (available in "A2B Mapped" programs only) further rewards students with a freeze on tuition and fees for all four years, and $10 \%$ end-of-semester rebates. For more information including a complete list of pathway programs and qualifications for eligibility please visit bhcc.edu/ commonwealthcommitment or speak with a Transfer Counselor in the LifeMap Commons.

## Transfer and Articulation Information for Baccalaureate Programs

Bunker Hill Community College is dedicated to creating partnerships with four-year colleges and universities. Articulation agreements outline the transfer pathway between academic programs at BHCC and other institutions. Articulation agreements are designed to help students make a smooth transition when transferring from BHCC to another institution by ensuring that they understand if and how coursework taken at BHCC will transfer into other programs.
Transfer Services offers a variety of services to students interested in transferring from BHCC to four-year institutions. Students are encouraged to plan early and research and meet with transfer admissions representatives
from the four-year institutions to properly assess each college or university's requirements, minimums and expectations, which will help make the best curriculum choices at BHCC.

For a list of current articulation agreements please visit bhcc.edu/admissions/articulationagreements.

## Placement Testing and Assessment

## Assessment Center

bhcc.edu/assessment
(4) Charlestown Campus: 617-228-2377
(9) Chelsea Campus: 617-228-2101

## College Placement:

New students may be required to take English and math assessments before registering for classes.

Students can also obtain placements using high school GPA, or scores from SAT, ACT, GED, HiSET, and other tests.
For complete information on all placement options, or to make an appointment for testing, please visit www.bhcc. edu/assessment.

CLEP: CLEP exams allow students to save time and money by earning credit for what they already know. CLEP testing is available on the Charlestown campus. For complete information visit https://www.bhcc.edu/clepexams/.

TEAS: Test of Essential Academic Skills (TEAS) The Test of Essential Academic Skills (TEAS) is required for admission to BHCC's Nursing Program and many of the Allied Health programs. For complete information visit https://www.bhcc. edu/assessment/atiteasexam/

HiSET: The HiSET exam is available at BHCC for those who need to earn a Massachusetts high school equivalency credential. For complete information please visit: https://www.bhcc.edu/assessment/ highschoolequivalencytestinghisetandged/

## Internships and Career Development

## Internships

BHCC offers a variety of internship opportunities for students. Find out more at bhcc.edu/internships.

Learn and Earn Internships provide students with paid opportunities in top corporations, small businesses, nonprofits and cultural and civic organizations. In addition to working in the field, students take a class that supports their career development and success in their internships.
Academic Internships are those that are required to complete a program of study. These can be paid or unpaid and help students gain relevant experience in their field of study. In addition to working in the field, students take a class that supports their career development and success in their internships.

Research Internships give students in Science, Engineering, Technology and Math (STEM) fields the opportunity to conduct research with top researchers at other colleges and research institutions. Research Experiences for Undergraduates (REUs) are paid opportunities that often happen over the summer and students receive room and board in addition to their stipend.

Career Internships are opportunities students pursue in order to gain more experience in the field. These may be paid or unpaid opportunities. Students who participate in career internships do not take a class, and therefore do not receive academic credit for their internship.

## Career Development

BHCC offers all students access to job postings from employers interested in hiring BHCC students and graduates. Students should log in to Handshake at bhcc.edu/internships to view available positions.

In addition to the online system, BHCC hosts employers for career fairs, recruiting events, and other events in order to connect employers with BHCC students and graduates.

## Handshake

Handshake is BHCC's exclusive online career portal where students and alumni can search and apply for jobs, internships and volunteer opportunities, as well as manage the full spectrum of their career search needs. Students and alumni can use Handshake to register for career events and workshops, access our library of workshop materials and sample resumes, easily create resumes, upload cover letters and portfolio documents, search and apply for positions, and sign-up for job or event alerts. Visit bhcc. edu/internships to complete your profile.


## EDUCATIONAL OPPORTUNITIES

## Academic Innovation \& Distance Education (AIDE)

AIDE Support<br>bhcc.edu/aide<br>617-228-3427 (0) onlinehelp@bhcc.edu

The mission of Academic Innovation \& Distance Education at Bunker Hill Community College is to advance the College's goals by providing innovative and effective instructional design, digital teaching and learning resources and timely support that helps students and instructors succeed. AIDE promotes inclusive, accessible and collaborative teaching and learning solutions to the BHCC community.

## Distance Education

Bunker Hill Community College offers several alternatives to classroom instruction that allow students to complete all or part of their course work online. These alternative modes of instruction include full asynchronous online courses, as well as hybrid courses that are part online and part in class. Academic departments can provide information about their online and hybrid course offerings.

## The Commonwealth Honors Program at BHCC

Honors Program Office<br>bhcc.edu/honors<br>chp@bhcc.edu

The Commonwealth Honors Program at Bunker Hill Community College is a statewide program overseen by the Honors College at the University of Massachusetts at Amherst. Bunker Hill is one of many of the Commonwealth's colleges and universities that is a member of this program.

Within the Commonwealth Honors Program, students will find and create opportunities to excel academically in a rich and challenging environment and to become a member of a diverse and inclusive community of scholars, building on the strengths of the college community's diversity. For admission requirements and benefits, including transfer opportunities and scholarships, visit bhcc.edu/honors.

## BHCC Learning Communities

## Learning Communities

bhcc.edu/learning-communities
617-228-3248
BHCC Learning Communities provide students with the opportunity to explore contemporary issues in a challenging and supportive environment. Learning Communities foster stronger relationships among students, faculty and staff and offer culturally relevant and active learning experiences.

First-time to-college students pursuing associate degrees and enrolled in nine or more credits are required to take a Learning Community Seminar or a Learning Community Cluster within their first year.

Learning Community Seminars are three-credit college level courses designed to help incoming students identify academic goals and pathways. Seminars engage students in early career exploration and feature integrated support services, including peer mentors and success coach advisors. Most programs of study recommend or require specific Learning Community Seminar courses; for example, students in the Liberal Arts take HUM-120. Students may check their program maps to find recommended seminar courses.

Learning Community Clusters enable students to take two or more courses together organized around a common academic theme. Clusters prepare students to work together in collaborative environments and provide opportunities for students to accelerate progression through developmental English and math.

For more information about BHCC Learning Communities, visit bhcc.edu/learning-communities.

## Alternative Learning

Bunker Hill Community College provides a variety of alternative learning options for students who are selfdirected learners.

These options address individual learning styles or provide flexible options for those constrained by time and/or distance. Online, weekend, individualized courses through the Center for Self-Directed Learning, and independent studies through the Contract Learning Program provide these types of non-traditional learning opportunities.

## Boston Welcome Back Center for Internationally Educated Nurses

## Welcome Back Center

(1) bhcc.edu/welcomeback
(Q) 617-228-ICAN (4226)
welcomeback@bhcc.edu

The Boston Welcome Back Center assists immigrant nurses in obtaining their Massachusetts nursing licensure and re-entering the nursing workforce. Many internationally educated nurses come to Massachusetts and find it difficult to obtain a license to practice here. The process can be complicated and involves working with several different agencies, and sometimes meeting additional educational requirements. The Center incorporates educational case management services, career guidance and group activities to address the educational and vocational needs of our population. The Welcome Back Center's main office is located at Bunker Hill Community College's H-Building.

The Welcome Back Center addresses several pressing and systemic needs in healthcare delivery in the Greater Boston region:

- Creating new pipelines into the nursing field to relieve regional workforce shortages.
- Enhancing the racial, ethnic and linguistic diversity of the area's nursing workforce.
- Building cultural competencies in the nursing workforce and college environment.

The Welcome Back Center offers a range of specially designed, customized and accelerated educational interventions that address participants' English proficiency needs and nursing/ educational skill gaps, thus expediting re-entry into the nursing profession.

## Center for Self-Directed Learning (CSDL)

## Center for Self-Directed Learning

bhcc.edu/csdl
617-228-2225 (®) csdl@bhcc.edu
Students may enroll in college credit courses available through the Center for Self-Directed Learning (CSDL). Students have the flexibility to make their own schedules, and complete assignments and tests according to their unique learning needs. The CSDL provides multi-media resources for individualized, independent instruction under the supervision of professional learning specialists and professional tutors.

Students are always active participants in the learning process, solving problems, answering questions and developing skills. In order to ensure that effective learning takes place, student progress is evaluated on a continuous basis. Courses can extend over the entire semester, or be completed in a few weeks, depending on the student's needs.
Course facilitators and tutors are available to guide and assist students at all times during scheduled hours of operation. For schedule information, see the posted schedule or ask a staff member for help. Refer to the CSDL website at bhcc.edu/csdl for a detailed listing of course offerings.


## Independent Learning Contracts

A Learning Contract is an opportunity for students to complete coursework under the individual supervision of a faculty member under specific circumstances including the need for a learning experience to extend beyond the academic program curricular offerings. Learning contracts are generally approved when in the professional opinion of the Dean and Department Chair the student needs this contract in order to complete their degree in the present semester through no fault of their own and there is no other way to meet the requirement.

## Prior Learning Assessment (PLA)

## Prior Learning Assessment Office

(1) bhcc.edu/priorlearningassessment
$\begin{array}{ll}\text { (9) 617-228-2350 } & \text { (e) pla@bhcc.edu }\end{array}$

The Prior Learning Assessment program (PLA) provides a process for evaluation and, when appropriate, awards academic credits for learning acquired outside the traditional college environment. In order to receive PLA credits, students must provide evidence that their prior learning is equivalent to college-level learning and it must correspond to the courses offered at BHCC. The PLA Coordinator assists students in preparing portfolios and documenting credits.

Methods for assessing prior college-level learning include: Advanced Placement examination (AP); military education and experience evaluation; College Level Examination Program (CLEP); credential evaluation; departmental examinations; and portfolio evaluation. Students may apply a maximum of 45 credits toward an associate degree at BHCC.

## Office of Community Engagement Office of Community Engagement <br> (1) bhcc.edu/community-engagement <br> (9) 617-228-3485 (0) engagement@bhcc.edu

Bunker Hill Community College's Office of Community Engagement provides multiple pathways for students to engage as active and responsible members of their communities. BHCC students work with communitybased organizations as assigned through their courses, contemplate civic and ethical issues with each other on campus, or simply volunteer in their local communities. The College partners with a range of Greater Boston community-based organizations, including after-school programs, community centers, environmental advocacy groups, food pantries, and refugee and immigration centers. The College's Office of Community Engagement supports faculty integration of community engagement projects into the curriculum, coordinates co-curricular volunteer programs, and provides a pathway for local community-based organizations to partner with the College.


Partnerships with Secondary Schools Dual Enrollment and Early College Program

Dual Enrollment Office
(1) bhcc.edu/dualenrollment
(G) 617-228-3319 617-228-3216
(a) dualenroll@bhcc.edu

High school students from Greater Boston area schools can earn high school and college credits simultaneously while gaining familiarity with the college experience through BHCC's dual enrollment programs. Students may enroll individually, or through partnerships with area schools or districts. The program includes dual enrollment and early college programs offered in partnership with area school districts such as Boston, Cambridge, Chelsea, Everett, Malden, Medford and Revere.

## High School Articulation Agreements and Curricular Alignment

BHCC shares articulation agreements with many local high schools, awarding college credit for certain advanced courses taught at high schools. BHCC faculty in Mathematics and English are working with their colleagues in several area high schools to align high school and college curriculum, ensuring students arrive at college ready to take college-level courses.

## Massachusetts Distributive Education Clubs of America (DECA)

Massachusetts DECA is a co-curricular career technical high school student organization that operates in over 60 comprehensive and technical high schools in Massachusetts. DECA has been operating on a continuous basis at BHCC since September 1993. madeca.org

## Summer Transition Program

Launched in 2012, the Summer Transition Program enables new, transfer, or readmitted students with an assessed need for English Language Learning (ELL), developmental English or math coursework to receive intensive instruction in order to get a head start prior to fall entry (at no cost). The program consists of bridge courses in ELL, developmental writing, and math. Textbooks are provided to students enrolled in the program at no additional cost. Bridge classes enable students to benefit from intensive instruction over the summer, so that they can progress to college-level or upper developmental level courses in the fall.

## Student Success Program (TRiO)

Student Success Program (TRiO)<br>(1) bhcc.edu/studentsuccessprogram<br>(6) 617-228-2303<br>(D) trio.successprogram@bhcc.edu

BHCC Students must apply and be selected to participate in the Student Success Program. The program's goal is to assist students in their efforts to be successful in their studies, graduate, and transfer to a four-year college or university by providing comprehensive academic and student support services and transfer assistance. Program participants are known for having an average GPA of 3.0 or higher, successful program completion rates, and strong leadership skills. TRiO Student Support Services Grant is funded by the United States Department of Education.

## Workforce and Community Education

Workforce and Economic Development<br>bhcc.edu/workforce<br>617-228-2498 (o) Commed@bhcc.edu

The Vision seeks to empower diverse learners with quality education that will advance career achievement and personal goals.

The Mission is to provide opportunities for education and training leading to professional advancement and lifelong learning while meeting the workforce needs of the communities we serve

Beginner English Language Learning (BELL) programs are offered through our English Language Institute. Basic English Language Studies (BESL) supports students who are preparing to study at the college or require more English language skills to succeed in their lives. Intensive English Program (IEP) supports international learners who need to acquire English skills quickly in order to pursue college studies in the United States.

## Community Education and Adult Learning Pathways

 empower personal advancement through market-driven courses designed to achieve students' personal and professional goals.
## Corporate Learning and Professional Development

programs provide high quality, industry demand-driven programming to emerging, transitional, and incumbent workers in a corporate setting. Training is customized for businesses, emerging entrepreneurs and to support the professional development needs of individuals.

Small Business and Entrepreneurship partners with businesses, chambers and local government to offer training for small businesses in multiple languages.

The Language Institute offers English Language Learning programs and foreign language learner courses..

## ACADEMIC RESOURCES

## College Connection

College Connection<br>bhcc.edu/collegeconnection<br>(9) 617-228-2165 (0) scurranc@bhcc.edu

The College Connection is an academic and intrusive advising support service available to students enrolled in sections of RDG-090, RDG-095 and ENG-090. Some classes have a dedicated Literacy Coach who visits the class on a regular basis and provides individualized tutoring outside of class time, follows up with absent students, connects students to appropriate college resources, and provides advising services. The goal of the program is to improve the retention, pass rates, and reading levels of students enrolled in developmental reading and writing classes, as well as to prepare students to meet college expectations.

## Language Lab

Language Lab<br>bhcc.edu/languagelab<br>617-228-3440 (0) langlabs@bhcc.edu

The Language Lab provides students a high-tech learning environment along with a knowledgeable tutoring staff to guide them with any aspect of language learning, from speaking, listening and pronunciation to reading, writing, grammar and punctuation. The Lab has several language learning software programs, support staff members and 37 workstations.

## Adult Education and Transitions to College Programs

Adult Education
bhcc.edu/adulted
617-228-2286 (0) mrojassu@bhcc.edu
The Adult Education programs at the Chelsea Campus and through our Boston Consortium Partners in the South End of Boston support the adult learner needs of our Greater Boston community. These programs develop English language proficiency, content skills to acquire a high school credential and pathways to post-secondary education or jobs.

Through the Transitions to College program, adult learners are offered a no-cost option to begin their college career. All of these programs are supported by grant funds from the Massachusetts Department of Elementary and Secondary Education (MADESE).

## Library \& Learning Commons

Library \& Learning Commons<br>(1) bhcc.edu/library<br>(9) 617-228-2213 (®) BHCCLibrary@bhcc.edu

The BHCC Library \& Learning Commons delivers services that include information literacy instruction, quality resources, and an academic learning environment. The library, located on the Charlestown Campus on the third floor of the E-Building, serves all BHCC locations.

For detailed information about the library's resources for students and faculty, hours, ID cards and more, visit bhcc.edu/library.

## MathSpace

MathSpace
bhcc.edu/mathspace
(9) 617-228-3286 617-228-2283
(2) mathlab@bhcc.edu

The MathSpace is a mathematics resource center that is available to all students enrolled in developmental mathematics courses at BHCC. The primary goal of the MathSpace is to assist students to become independent learners and in achieving academic success in mathematics. For more information and hours, visit bhcc.edu/mathspace.

## Tutoring and Academic Support Center (TASC)

The TASC<br>(1) bhcc.edu/tasc<br>617-228-3467 (0) tasc@bhcc.edu

The Tutoring and Academic Support Center (TASC) supports and enhances student learning and academic success by offering a variety of traditional and nontraditional services to all BHCC students who are currently enrolled in credit-bearing courses. The TASC provides tutorial assistance, small group workshops and academic support to improve and enhance academic success.
Students are offered a wide range of services to support
their work in basic academic skills as well as on coursespecific work in their programs.

The Writing Place<br>The Writing Place<br>(1) bhcc.edu/writingplace<br>(C) 617-936-1948

The Writing Place is a tutoring service sponsored by the English Department. Students come to the Writing Place to work with peer tutors on specific writing tasks, including brainstorming ideas for college writing assignments, organizing rough drafts, revising, editing and doing library research.

## STUDENT AFFAIRS AND STUDENT PROGRAMS

## Athletics and Wellness



Athletics Department<br>bhcc.edu/athletics<br>617-228-3443<br>sfenerci@bhcc.edu

Bunker Hill Community College's Athletic Department has developed a program of varsity, intramural and fitness programs to support all students at the College. BHCC supports student athletes by providing professional coaches and staff, state-of-the-art facilities, safe equipment and opportunities for student athletes to compete in varsity-level programs with other intercollegiate athletic programs. The Athletic Department sponsors varsity level sports programs in Men's and Women's Basketball, Men's and Women's Soccer, and Esports. The College varsity programs compete in Region 21, Division III of the National Junior College Athletic Association (NJCAA). Intramurals, open gyms and fitness activities, including a fitness center, are offered on a regular basis to all students.

## Counseling, Prevention and Wellness

## Counseling, Prevention and Wellness <br> bhcc.edu/studentlife/ <br> counselingpreventionandwellness

The BHCC personal counselors are available to students needing emotional support and guidance during difficult times.

With empathy and compassion, personal counselors address concerns related to stress, anxiety, depression, loneliness, and other interpersonal issues affecting the student's personal college experience and overall wellbeing. Services offered include mental health assessment, crisis intervention, psychoeducation, wellness and prevention education, community resource referrals, etc.

## Dean of Students

## Dean of Students Office <br> bhcc.edu/dos 617-228-2408

The Dean of Students Office is the primary advocate for students at the College. Located on the Charlestown Campus, the office is here to assist members of the BHCC community in identifying and achieving their education goals. The Division of Student Affairs includes departments and services that support learning outside of the classroom.

## Disability Support Services

## Disability Support Services

(1. bhcc.edu/disabilitysupportservices
(9.) 617-228-2327 (TTY 617-242-2365)
(a) disabilitysupport@bhcc.edu

Bunker Hill Community College has developed a program of support services specifically for students who have learning disabilities, sensory impairments, psychological disabilities or physical conditions. Services may include, but are not limited to, academic and testing accommodations, faculty notification, assistance with adaptive computer technology and accessibility issues, academic/career advising, student support groups, professional literacy instruction and personalized educational coaching. The program is designed to promote interaction among several existing campus resources and personnel. Students are actively involved in decision making regarding their specific needs and are encouraged to work toward increased
independence and self-sufficiency.
Eligibility. Students with documented disabilities are eligible for services through BHCC's Disability Support Services Office (DSS). In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disability Act (ADA), students seeking reasonable accommodations for a disability are responsible for self-identifying and self-advocating. If you have a documented disability and anticipate needing accommodations, please contact Disability Support Services. Requests for accommodations require dialogue with DSS, medical documentation review and registration with DSS prior to receipt of an accommodation. Accommodations are not retroactive. Students are required to meet each semester with DSS staff to discuss and determine reasonable and effective accommodations and are strongly encouraged to do so prior to the start of each semester.

## DISH Food Pantry

```
DISH Food Pantry
    bhcc.edu/dishfoodpantry
    617-228-2045
    dish@bhcc.edu
```

DISH Food Pantry is to Deliver Information, Sustenance, and Health to the Bunker Hill Community College campus community. The DISH aims to empower those in need to obtain resources so that they may focus on being healthy, happy, and successful at Bunker Hill Community College without the barrier of fighting hunger. The DISH is a studentdriven and supported resource that is committed to being a safe, dignified, and stigma-free environment.

## Health Services

Health Services<br>bhcc.edu/healthservices<br>617-228-2274

The Health Services Office promotes wellness through health awareness and education. The Health Services Coordinator provides assistance to the College community through emergency first aid, referrals for individual health concerns, and review of immunization clearances for the College's health related programs.

International Center<br>International Center<br>bhcc.edu/internationalcenter<br>(9) 617-228-2460 (B) international@bhcc.edu

The International Center provides programs, services and activities supporting the internationalization of the College community.

The Center also assists BHCC students in integrating study abroad experiences into their academic programs, and assists prospective international students with the admission
process and issues immigration documents required for $\mathrm{F}-1$ visa application.

International Student Advisors provide programs and individual assistance to international students from more than 100 countries each year. Advisors assist students in maintaining legal immigration status, transferring to other colleges, obtaining work authorizations, addressing academic concerns and/or personal issues such as adjustment to life in the United States. Orientation, social and cultural programs sponsored by the Center help international students learn more about U.S. culture and the educational system.

The Center coordinates the international delegations visits to Bunker Hill Community College.

## Single Stop

```
Single Stop
    bhcc.edu/singlestop
    617-228-3330
```

Single Stop is an initiative at Bunker Hill Community College, connecting students to state and federal financial resources and local community services. The aim is to help students surmount economic barriers, continue with their education, and move towards economic mobility with the ultimate goal toward ending cycles of poverty. For a list of services and partners, visit the Single Stop office.

## Student Activities, Clubs and Organizations

## Office of Student Engagement and Leadership bhcc.edu/activities 617-228-2260 © studentactivities@bhcc.edu

Bunker Hill Community College offers a variety of cocurricular activities that provide students with opportunities to develop leadership skills and to engage in social interaction. Students can serve as leaders of a wide array of clubs and organizations, and work with College staff to administer the programs. The activities are designed to promote intellectual development and cultural awareness and understanding.

The Student Government Association (SGA) is an elected body of Bunker Hill Community College student representatives. Members work in collaboration with the College administration to enhance the quality of student life on campus. The SGA develops a proposed annual budget, derived from student fees, with the Director of Student Leadership and Engagement, which is reviewed by the Dean of Students and approved by the College President. The SGA Is also responsible for formally approving student lubs and organizations. Learn more about the SGA at bhcc.edu/SGA.

Clubs and organizations provide the opportunity for students to meet other students, have fun, learn, and
develop organizational skills. Visit bhcc.edu/clubs for a full list of all clubs and organizations.

## Student Handbook

The Student Handbook includes information about College policies, student disciplinary procedures, student rights and responsibilities and student services. The student grievance procedure for complaints regarding College policies, practices or personnel is detailed in the Student Handbook. Copies are available online through the BHCC website. Direct all inquiries related to College regulations, student conduct and the student grievance procedure to the Office of Dean of Students. View the Student Handbook at bhcc.edu/handbook.

## Study Abroad

The International Center assists BHCC students in integrating study abroad experiences into their academic programs. Through this program, students have participated in a variety of study and travel experiences in countries around the globe: Argentina, Belize, Costa Rica, the Czech Republic, France, Germany, Greece, Italy, Japan, Senegal, Spain and PR. China. Scholarship opportunities are available to qualified students. For more information, visit the International Center or visit bhcc.edu/studyabroad.

## The Mary L. Fifield Endowed Student Emergency Assistance Fund

Bunker Hill Community College has established the Mary L. Fifield Endowed Student Emergency Assistance Fund. The purpose of the fund is to provide monetary relief to students for emergencies that occur during the semester and that may cause a student to drop out. Applications will be accepted after the end of the schedule adjustment period for the fall and spring semesters. The fund does not support tuition, fees and books. URL: bhcc.edu/ emergencyassistancefund

## Veterans Center

Veterans Center

D bhcc.edu/veterans
(6) 617-228-3213 (3) veteranscenter@bhcc.edu

The Veterans Center is dedicated to serving studentveterans, active duty military, Guard/Reservists and their eligible dependents within the college community. The office provides specialized support in academic advising, military and VA educational benefits assistance, VA Educational Benefit Certification, referrals to College resources and other agencies, verification of pursuit of training, assistance with credit for prior learning, admissions assistance and support and advocacy for the veteran and military affiliated population.

Students who wish to apply for educational benefits must contact the Veterans Center and the VA Certifying Official. Student's receiving educational benefits are required to attend classes and maintain satisfactory academic progress in order to continue receiving education benefits. Furthermore, students must notify the Veterans Center of any changes made to their enrollment status.

## Virtual LGBTOIA+ Center at BHCC

## Virtual LGBTOIA+ Center at BHCC

bhcc.edu/virtuallgbtqiacenter
617-228-2012 (®) wjcribby@bhcc.edu
To support and celebrate the diversity of the Bunker Hill Community College community that is represented within our students, faculty and staff on BHCC's multiple campus locations, the Dean of Student's office has worked to provide accessible information and resources for all members of our community.


# Degree and Certificate Programs 

 General Education Requirements
## DEGREE AND CERTIFICATE PROGRAMS

Bunker Hill Community Colleges offers more than 100 associate degree and certificate programs.

The Associate Degree is an undergraduate academic credential which includes coursework from three areas: general education requirements, career and/or liberal arts electives, and program requirements. BHCC offers two types of associate degrees:

The Associate in Arts (A.A.) degree is designed to prepare students to transfer to baccalaureate colleges and universities.

The Associate in Science (A.S.) degree is designed to prepare students to enter the workforce. In addition, many associate in science degree programs transfer to baccalaureate colleges and universities.

Associate Degree programs are generally equivalent to the first four semesters of a bachelor's degree. To facilitate transfer to a baccalaureate college or university, work with an academic advisor to plan your BHCC curriculum.

Certificate programs are designed to provide students with knowledge and skills to enhance their careers. Many certificate programs are "stackable," allowing students to apply courses completed in the certificate program to an associate's degree.

## First Year Learning Community Requirement

Completion of a Learning Community Seminar or Cluster within the first year is a graduation requirement for Associate in Arts and Associate in Science degree students who are enrolled in nine or more credits in their first semester of matriculation. For more information about Learning Community options, speak with an advisor or contact the Office of Learning Communities.

## World Studies Emphasis Certification

Students enrolled in Associate in Arts Degree Programs can obtain the World Studies Emphasis certification with no

additional coursework through careful selection of general education and elective courses needed to fulfill their degree requirements. Learn more at bhcc.edu/worldstudies

## GENERAL EDUCATION PROGRAM

To better prepare students to thrive in the twenty-first century workforce and to become engaged and informed citizens, the College provides all associate degreeseeking students with a wide-reaching set of General Education Outcomes, which align with our Institutional Learning Outcomes (Inquire, Communicate, Act, Grow) and Mass Transfer General Education Foundation requirements. At BHCC, these skills are incorporated into the curriculum to provide a cohesive education that prepares students to succeed in their chosen fields, in further study and in the roles and responsibilities they take on within their communities.
individual Program of Study Curriculum Map for General Education course requirements specific to their major. Some General Education requirements are met by concentration courses. Such instances are noted in Program of Study Curriculum Maps.

To learn more about the General Education and Institutional Learning Outcome alignment, as well as review the "Guiding Questions" for General Education, visit our General Education page in the College Initiatives section on the BHCC website: bhcc.edu/initiatives/ generaleducationinitiative

Students fulfill their General Education Requirements by completing one course from each of the seven General Education areas below. Students should consult their

## Academic Discourse

## College Writing \& Composition

- INQUIRE: Connect experiences, insights, and education
- COMMUNICATE: Construct meaning through active listening, reading, speaking and writing
- ACT: Create work of personal and/or public value
- GROW: Develop intercultural knowledge and competence


## Course Menu

ENG-111

## Research Writing

## College Writing \& Composition

- INQUIRE: Practice information literacy in diverse applications
- COMMUNICATE: Express ideas with intention
- ACT: Apply theory to practice and practice to theory
- GROW: Demonstrate agency as a learner and contributor to society


## Course Menu

ENG-112

## Quantitative Problem Solving

## Mathematics \& Quantitative Reasoning

- INQUIRE: Develop problem-solving skills
- COMMUNICATE: Demonstrate digital and media literacy
- ACT: Apply theory to practice and practice to theory
- GROW: Construct knowledge independently and collaboratively


## Course Menu

MAT-171, MAT-172, MAT-181, MAT-194

## Community \& Cultural Contexts

## Behavioral \& Social Sciences

- INQUIRE: Connect experiences, insights and education
- COMMUNICATE: Engage in inclusive interpersonal dialogue
- ACT: Apply concepts of justice and wellness to knowledge and practice
- GROW: Demonstrate agency as a learner and contributor to society


## Course Menu

ECO-201, ECO-202, GEO-101, GOV-101, GOV-103, HIS-103 (formerly HIS-101), HIS-102, HIS-111, HIS-112, HIS-151, HIS152, PHL-103, PSY-101, PSY-107, REL-111, SOC-101, SOC-109, SOC-227, VMA-111

## Scientific Reasoning

## Natural \& Physical Sciences

- INQUIRE: Develop problem-solving skills
- COMMUNICATE: Demonstrate digital and media literacy
- ACT: Use data to pose solutions to real-world challenges
- GROW: Construct knowledge independently and collaboratively


## Course Menu

AST-102, BIO-105, BIO-108, BIO-115, ENV-105, ENV-110, ENV-111, ENV-113, ENV-115, ENV-120

## Creative Work

## Humanities \& Fine Arts

- INQUIRE: Define and investigate relevant questions
- COMMUNICATE: Express ideas with intention
- ACT: Create work of personal and/or public value
- GROW: Demonstrate resilience in response to change


## Course Menu

ARB-102, CHN-102, ENG-203, ENG-231, ENG-232, COM101, COM-102,, FRN-102, GER-102, INT-110, ITL-102, JPN-102, LIT-201, LIT-203, LIT-204, LIT-206, LIT-207, LIT-211, LIT-212, LIT-217, LIT-218, LIT-219, LIT-220, LIT-221, LIT-223, LIT-224, LIT-225, LIT-227, LIT-229, LIT-230, LIT-231, LIT-233, LIT-241, LIT-242, LIT-250, MUS-101, MUS-130, MUS-141, MUS-144, MUS-147, PHL-101, RUS-102, SPN-102, SPN-280, THE-107, VMA-104, VMA-112, VMA-113, VMA-122, VMA-123, VMA-124, VMA-161

## General Education Elective

## Behavioral \& Social Sciences OR Humanities \& Fine Arts OR Natural \& Physical Sciences

Courses listed in the General Education Elective category have aligned with one outcome for each Outcome area (Inquire, Community, Act and Grow).

## Course Menu

INT-101, MAN-112, any course listed under Community and Cultural Contexts, Creative Work, or Scientific Reasoning


## ASSOCIATE DEGREE \& CERTIFICATE PROGRAMS, LISTED ALPHABETICALLY

The table of contents below lists the academic programs offered by BHCC in alphabetical order. A comprehensive overview of academic programs is included on the pages that follow, organized by department. Refer to the page numbers listed below for the program of interest.

| OPTION/PROGRAM | $\begin{array}{\|l\|} \hline \text { DEGREE } \\ \text { PROGRAM } \end{array}$ | PAGE |
| :---: | :---: | :---: |
| Accounting Information Certificate Program | CT | 115 |
| Accounting Option | AS | 116 |
| Administrative Support Specialist | CT | 118 |
| Android Mobile App Certificate Program | CT | 220 |
| Baking and Pastry Arts Option | AS | 182 |
| Biological Sciences: Biotechnology Option | AS | 208 |
| Biological Sciences: <br> Medical Professions Option | AS | 211 |
| Biology Transfer Option | AS | 214 |
| Biomedical Engineering Option | AS | 216 |
| Business Transfer Option | AA | 119 |
| Cardiac Sonography Option* | AS | 75 |
| Central Processing Certificate Program* | CT | 94 |
| Chemistry Concentration | AA | 217 |
| Cisco Systems CCNA (Fast-Track) Certificate Program | CT | 137 |
| Communication Concentration | AA | 97 |
| Computed Tomography Certificate Program* | CT | 78 |
| Computer Information Systems Concentration | AA | 138 |
| Computer Science Concentration | AA | 221 |
| Computer Support Specialist Certificate Program | CT | 140 |
| Computer Support Specialist Option | AS | 141 |
| Criminal Justice Career Option | AS | 166 |
| Criminal Justice Transfer Option | AS | 168 |
| Culinary Arts Certificate Program | CT | 184 |
| Culinary Arts Option | AS | 185 |
| Cybersecurity Option | AS | 143 |
| Data Analytics Certificate Program | CT | 145 |
| Data Analytics Option | AS | 146 |
| Data Management (Fast-Track) Certificate Program | CT | 148 |
| Early Childhood Development Certificate Program | CT | 173 |
| Early Childhood Development Program | AS | 175 |
| Early Childhood Development with Child Development <br> Associate Credential <br> Certificate Program* | CT | 178 |
| Education Concentration | AA | 180 |
| Electric Power Utility Technology Program* | AS | 149 |
| Electrical Engineering <br> Transfer Option | AS | 229 |
| Energy and Sustainability Management Certificate Program | CT | 231 |
| Engineering Transfer Option | AS | 232 |
| English Concentration | AA | 100 |
| English: Creative Writing Option | AA | 102 |
| Entrepreneurship Certificate Program | CT | 121 |
| Entrepreneurship Option | AS | 122 |


| Environmental Science | AS | 234 |
| :---: | :---: | :---: |
| Excel Applications Support Specialist Certificate Program | CT | 151 |
| Finance Option | AS | 124 |
| Fire Protection and Safety Certificate Program | CT | 170 |
| Fire Protection and Safety Program | AS | 171 |
| Gaming/Computer Artist Track Simulation Option | AS | 159 |
| Gaming/Computer Programming Track Simulation Option | AS | 161 |
| General Sonography Option* | AS | 79 |
| Global Languages Concentration | AA | 105 |
| Health Information Networking Certificate Program | CT | 151 |
| Health Information Technology Certificate Program | CT | 152 |
| History Concentration | AA | 55 |
| Hotel and Restaurant <br> Management Certificate Program | CT | 187 |
| Hotel/Restaurant Management Option | AS | 188 |
| Human Services Program | AS | 60 |
| Information Technology Transfer Option | AS | 155 |
| Integrated Media Design Option | AS | 200 |
| Liberal Arts | AA | 108 |
| Magnetic Resonance (MR) Certificate Program* | CT | 82 |
| Mammography Certificate Program* | CT | 83 |
| Management of Assisted Living and Institutional Facilities | AS | 190 |
| Management Option | AS | 126 |
| Mathematics Concentration | AA | 239 |
| Medical Assistant Certificate Program* | CT | 64 |
| Medical Information Management Assistant Certificate Program | CT | 128 |
| Medical Information Management Option | AS | 130 |
| Medical Interpreting Certificate Program* | CT | 66 |
| Medical Laboratory Assistant Certificate Program | CT | 84 |
| Medical Laboratory Technician Program* | AS | 241 |
| Medical Radiography Full-time Option* | AS | 86 |
| Medical Radiography Part-time Option* | AS | 88 |
| Meeting and Event Planning Certificate Program | CT | 193 |
| Meeting and Event Planning Option | AS | 193 |
| Microsoft Applications Support Specialist Certificate Program | CT | 133 |
| Mobile App Starter Certificate Apple | CT | 227 |
| Music Concentration | AA | 110 |
| Network Technology and Administration Option | AS | 157 |


| Object Oriented Computer Programming and Design Certificate Program | CT | 228 |
| :---: | :---: | :---: |
| Paralegal Studies Certificate Program* | CT | 196 |
| Paralegal Studies Program | AS | 197 |
| Paramedic Certificate Program* | CT | 69 |
| Paramedic Studies Program* | AS | 71 |
| Pastry Arts Certificate Program | CT | 195 |
| Patient Care Technician Certificate Program* | CT | 67 |
| PC Hardware Support Specialist Certificate Program | CT | 158 |
| Pharmacy Technician Certificate Program* | CT | 93 |
| Physics Concentration | AA | 237 |
| Political Science Concentration | AA | 57 |
| Professional Human Services Work Certificate Program | CT | 62 |
| Psychology Concentration | AA | 50 |
| Registered Nursing Program: Day/Alternative Options* | AS | 91 |
| Sociology Concentration | AA | 53 |
| Sport Management Certificate Program | CT | 134 |
| Sport Management Option | AS | 135 |
| Studio Arts Option | AS | 202 |
| Surgical Technology Certificate Program* | CT | 95 |
| Theatre Concentration | AA | 113 |
| Visual Design Option | AS | 205 |
| Web Development Certificate | CT | 163 |
| Web Development Option | AS | 165 |

Students enrolling in any A.A. degree program can earn World Studies Emphasis Certification simultaneously.
AA Associate in Arts
AS Associate in Science
CT Certificate Program

Associate in Arts Degrees<br>Business Transfer Option<br>Chemistry Concentration Communication Concentration Computer Information Systems Concentration<br>Computer Science Concentration<br>Education Concentration<br>English: Creative Writing Option<br>English Concentration Global Languages Concentration History Concentration Liberal Arts Concentration Mathematics Concentration Music Concentration Physics Concentration Political Science Concentration Psychology Concentration Sociology Concentration<br>Theatre Concentration

(Students in any A.A. degree program can earn World Studies Emphasis certification.)

## Associate in Science Degrees

Biological Sciences Program:

- Biology Transfer Option
- Biomedical Engineering Option
- Biotechnology Option
- Medical Professions Option

Business Administration Program:

- Accounting Option
- Entrepreneurship Option
- Finance Option
- Management Option
- Medical Information Management Option
- Sport Management Option

Computer Information Technology Program:

- Computer Support Specialist Option
- Cybersecurity Option
- Data Analytics Option
- Database Programming and Administration Option
- Electric Power Utility Technology Program*
- Information Technology Transfer Option
- Network Technology and Administration Option
Computer Science Program
- Computer Science Transfer Option

Computer Media Technology Program:

- Gaming/Computer Artist Track Simulation Option
- Gaming/Computer Programming Track Simulation Option
- Web Development Option

Criminal Justice and Public Safety Program

- Criminal Justice Career Option
- Criminal Justice Transfer Option

Early Childhood Development Program
Emergency Medical Studies:

- Paramedic Studies Program*

Engineering and Physical Sciences Program:

- Electrical Engineering Transfer Option
- Engineering Transfer Option

Environmental Science Option
Fire Protection and Safety Program
Hospitality Program

- Baking and Pastry Arts Option
- Culinary Arts Option
- Hotel/Restaurant Management Option
- Management of Assisted Living and Institutional Facilities
- Meeting and Event Planning Option

Human Services Program
Medical Imaging Program:*

- Cardiac Sonography Option*
- General Sonography Option*
- Medical Radiography Full-time Option*
- Medical Radiography Part-time Evening Option*
Medical Laboratory Technician Program*
Paralegal Studies Program
Registered Nursing Program:
- Day/Alternative Options*

Visual and Media Arts Program:

- Integrated Media Design Option
- Studio Arts Option
- Visual Design Option


## Certificate Programs

Allied Health:*

- Medical Assistant*
- Medical Interpreting*
- Patient Care Technician*

Business Administration:

- Accounting Information
- Administrative Support Specialist
- Entrepreneurship
- Medical Information Management Assistant
- Microsoft Applications Support Specialist
- Sport Management

Computer Information Technology:

- Cisco Systems CCNA (Fast Track)
- Computer Support Specialist
- Data Analytics
- Data Management (Fast Track)
- Excel Applications Support Specialist
- Health Information Networking
- Health Information Technology
- PC Hardware Support Specialist

Computer Media Technology:

- Web Development

Computer Science:

- Android Mobile App
- Mobile App Starter Certificate Apple
- Object Oriented Computer Programming and Design
Early Childhood Development:
- Early Childhood Development
- Early Childhood Development with Child Development Associate Credential*
Emergency Medical Studies
- Paramedic*

Energy and Sustainability Management
Fire Protection and Safety
Hospitality:

- Culinary Arts
- Hotel and Restaurant Management
- Meeting and Event Planning
- Pastry Arts

Human Services:

- Professional Human Services Work

Medical Imaging:*

- Computed Tomography*
- Magnetic Resonance*
- Mammography*
- Medical Laboratory Assistant*

Paralegal Studies*
Pharmacy Technician*
Surgical Technology:

- Central Processing*
- Surgical Technology*
*Selective program with specific prerequisites and start terms. For updated information, please visit the College's website at bhcc.edu/selectiveprogram.

BHCC is fully accredited by the New England Commission of Higher Education.

## ASSOCIATE DEGREE \& CERTIFICATE PROGRAMS, LISTED BY DEPARTMENT

| Behavioral, Social Sciences \& Global Learning |  |  |
| :---: | :---: | :---: |
| Behavioral Sciences |  |  |
| Psychology Concentration | AA | 50 |
| Sociology Concentration | AA | 53 |
| History and Social Sciences |  |  |
| History Concentration | AA | 55 |
| Political Science Concentration | AA | 57 |
| Human Services |  |  |
| Human Services Program | AS | 60 |
| Professional Human Services Work Certificate Program | CT | 62 |
| Health Sciences |  |  |
| Allied Health |  |  |
| Medical Assistant Certificate Program* | CT | 64 |
| Medical Interpreting Certificate Program* | CT | 66 |
| Patient Care Technician Certificate Program* | CT | 67 |
| Emergency Medical Studies |  |  |
| Paramedic Certificate Program* | CT | 69 |
| Paramedic Studies Program* | AS | 71 |
| Medical Imaging |  |  |
| Cardiac Sonography Option* | AS | 75 |
| Computed Tomography Certificate Program* | CT | 78 |
| General Sonography Option* | AS | 79 |
| Magnetic Resonance (MR) Certificate Program* | CT | 82 |
| Mammography Certificate Program* | CT | 83 |
| Medical Laboratory Assistant Certificate Program | CT | 84 |
| Medical Radiography Full-time Evening Option* | AS | 86 |
| Medical Radiography Part-time Option* | AS | 88 |
| Nurse Education |  |  |
| Registered Nursing Program: Day/Alternative Options* | AS | 91 |
| Pharmacy Technology |  |  |
| Pharmacy Technician Certificate Program* | CT | 93 |
| Surgical Technology |  |  |
| Central Processing Certificate Program* | CT | 94 |
| Surgical Technology Certificate Program* | CT | 95 |
| Humanities and Learning Communities |  |  |
| Communication |  |  |
| Communication Concentration | AA | 97 |
| English |  |  |
| English Concentration | AA | 100 |
| English: Creative Writing Option |  | 102 |
| Global Languages |  |  |
| Global Languages Concentration | AA | 105 |


| Liberal Arts |  |  |
| :---: | :---: | :---: |
| Liberal Arts | AA | 108 |
| Performing Arts |  |  |
| Music Concentration | AA | 110 |
| Theatre Concentration | AA | 113 |
| Professional Studies |  |  |
| Business Administration |  |  |
| Accounting Information Certificate Program | CT | 115 |
| Accounting Option | AS | 116 |
| Administrative Support Specialist | CT | 118 |
| Business Transfer Option | AA | 119 |
| Entrepreneurship Certificate Program | CT | 121 |
| Entrepreneurship Option | AS | 122 |
| Finance Option | AS | 124 |
| Management Option | AS | 126 |
| Medical Information <br> Management Assistant <br> Certificate Program | CT | 128 |
| Medical Information Management Option | AS | 130 |
| Microsoft Applications Support Specialist | CT | 133 |
| Sport Management Certificate Program | CT | 134 |
| Sport Management Option | AS | 135 |
| Computer Information Technology |  |  |
| Cisco Systems CCNA (Fast-Track) Certificate Program | CT | 137 |
| Computer Information Systems Concentration | AA | 138 |
| Computer Support Specialist Certificate Program | CT | 140 |
| Computer Support Specialist Option | AS | 141 |
| Cybersecurity Option | AS | 143 |
| Data Analytics Certificate Program | CT | 145 |
| Data Analytics Option | AS | 146 |
| Data Management (Fast-Track) Certificate Program | CT | 148 |
| Electric Power Utility Technology Program* | AS | 149 |
| Excel Applications Support Specialist Certificate Program | CT | 151 |
| Health Information Networking Certificate Program | CT | 146 |
| Health Information Technology Certificate Program | CT | 148 |
| Information Technology Transfer Option | AS | 149 |
| Network Technology and Administration Option | AS | 157 |
| PC Hardware Support Specialist Certificate Program | CT | 159 |
| Computer Media Technology |  |  |
| Gaming/Computer Artist Track Simulation Option | AS | 160 |


| Gaming/Computer Programming Track Simulation Option | AS | 162 |
| :---: | :---: | :---: |
| Web Development Certificate | CT | 165 |
| Web Development Option | AS | 167 |
| Criminal Justice and Public Safety |  |  |
| Criminal Justice Career Option | AS | 169 |
| Criminal Justice Transfer Option | AS | 171 |
| Fire Protection and Safety Certificate Program | CT | 173 |
| Fire Protection and Safety Program | AS | 174 |
| Early Childhood Development |  |  |
| Early Childhood Development Certificate Program | CT | 176 |
| Early Childhood Development Program | AS | 178 |
| Early Childhood Development with Child Development <br> Associate Credential Certificate Program* | CT | 181 |
| Education Concentration | AA | 183 |
| Hospitality |  |  |
| Baking and Pastry Arts Option | AS | 185 |
| Culinary Arts Certificate Program | CT | 187 |
| Culinary Arts Option | AS | 188 |
| Hotel and Restaurant <br> Management Certificate Program | CT | 190 |
| Hotel and Restaurant Management Option | AS | 191 |
| Management of Assisted Living and Institutional Facilities | AS | 193 |
| Meeting and Event Planning Certificate Program | CT | 195 |
| Meeting and Event Planning Option | AS | 196 |
| Pastry Arts Certificate Program | CT | 198 |

ASSOCIATE DEGREE \& CERTIFICATE PROGRAMS, LISTED BY DEPARTMENT
(continued from previous page)

| Paralegal and Legal Studies |  |  |
| :--- | :---: | :---: |
| Paralegal Studies Certificate <br> Program* | CT | 199 |
| Paralegal Studies Program | AS | 201 |
| Visual and Media Arts |  |  |
| Integrated Media Design Option | AS | 205 |
| Studio Arts Option | AS | 207 |
| Visual Design Option | AS | 209 |
| Science, Engineering and Mathematics |  |  |
| Biology and Chemistry | AS | 220 |
| Biological Sciences: <br> Biotechnology Program | AS | 212 |
| Biological Sciences: <br> Medical Professions Option |  |  |


| Biology Transfer Option | AS | 215 |
| :--- | :--- | :--- |
| Biomedical Engineering Option | AS |  |
| Chemistry Concentration | AA | 222 |
| Computer Science | CT | 224 |
| Android Mobile App Certificate <br> Program | AS | 228 |
| Computer Science Concentration | AA | 225 |
| Computer Science Transfer <br> Option | CT | 231 |
| Mobile App Starter Certificate <br> Apple | CT | 232 |
| Object Oriented Computer <br> Programming and Design <br> Certificate Program |  |  |


| Engineering \& Physical Sciences |  |  |
| :--- | :---: | :---: |
| Electrical Engineering Transfer <br> Option | AS | 233 |
| Energy and Sustainability <br> Management Certificate <br> Program | CT | 235 |
| Engineering Transfer Option | AS | 237 |
| Environmental Science | AS | 239 |
| Physics Concentration | AA | 241 |
| Mathematics | AA | 243 |
| Mathematics Concentration | AS | 245 |
| Medical Laboratory Technician |  |  |
| Medical Laboratory Technician <br> Program* | Ans |  |

Division $\square$ Department $\square$ Certificate or Program
AA Associate in Arts AS Associate in Science CT Certificate Program
*Selective program with specific prerequisites and start terms. For updated information, please visit the College's website at bhcc.edu/selectiveprogram.
Students enrolling in any A.A. degree program can earn World Studies Emphasis Certificatiom simultaneously.
BHCC is fully accredited by the New England Commission of Higher Education.

## ELECTIVE COURSES

Electives provide students with flexibility in their programs of study. The elective categories help students make choices beyond the required courses for their respective programs.

Liberal Arts Electives include not only those categorized as Liberal Arts Electives but also the Science/Lab Science, Social Science and Behavioral Science Electives.

Career Electives are courses in the student's major field or related field approved by the department chair or program coordinator.

| ENG English |
| :--- |
| FRE French |
| GER German |
| ITL Italian |
| MUS Music |
| POR Portuguese |
| SPN Spanish |
| THE Theatre |
| HIS 101 |
| HIS 102 |
| PHL Philosophy |
| HON Honors |
| MAT Mathematics |
| REL Religious Studies |
| Social Science Electives |
| ECO Economics |
| GOV Gov't/Politics |
| HIS History |
| PHL Philosophy |
| GEO Geography |


| Behavioral Science Electives |
| :--- |
| PSY Psychology |
| SOC Sociology |
| Humanities Electives |
| The Humanities provide students with the <br> knowledge, skills and habits of mind to <br> adapt to any pathway in their educations, <br> careers and lives. Humanities courses <br> challenge students to think critically and <br> creatively, communicate effectively, and make <br> connections across disciplines. The following <br> courses count as Humanities electives: |
| All Language Courses any level: ARB Arabic, <br> CHN Mandarin Chinese, FRE French, GER |
| German, ITL Italian, JPN Japanese, POR <br> Portuguese, RUS Russian, SPN Spanish |
| All Music Courses: MUS Music |
| All Philosophy Courses: PHL Philosophy |
| All Religion Courses: REL Religion |
| All Theater Courses: THE Theatre |
| All 200 level ENG Courses |
| All Film Courses: FLM Film |
| All History Courses: HIS History |
| Honors Seminar: HON-200 Honors |
| Selected Interdisciplinary Courses: <br> INT-101 Introduction to Yoga Studies, <br> INT-110 American Culture |


| All Literature Courses: LIT Literature |
| :--- |
| Selected Visual and Media Arts Courses: |
| VMA-102 Visual Design: Composition and |
| Color, VMA-103 Elements of Form, VMA-104 |
| Drawing from Observation, VMA-106 Digital |
| Imaging for Artists and Designers, VMA111 |
| Introduction to Mass Media, VMA-112 Art |
| History: Prehistoric to Medieval, VMA-113 Art |
| History: Renaissance to Contemporary, VMA- |
| 122 Painting for General Education, VMA-123 |
| Watercolor I, VMA-124 Printmaking I, VMA- |
| 161 Introduction to Digital Photography, |
| VMA-207 Figure Drawing, VMA-227 Studio |
| Portfolio |
| Lab Science Electives |
| PHY Physics |
| AST Astronomy |
| BIO Biology* |
| CHM Chemistry |
| ENV Environmental Science |
| Liberal Arts Electives |
| VMA Art |
| VMA Photography |
| FLM Film |
| HUM Humanities |
| LIT Literature |

* BIO111 does not qualify as a Lab Science Elective


# Psychology Concentration 

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| HUM-120 Self, Culture and Society <br> Elective Natural \& Physical Sciences OR <br> Humanities \& Fine Arts OR Behavioral \& Social Sciences | 3 \| ${ }^{-1}$ |  |
| HUM-120 satisfies the Learning Community Requirement |  |  |
| ENG-111 College Writing I | 3 - | ENG-095 and RDG-095, ELL-103 or placement. |
| * This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| PSY-101 Principles of Psychology | 3 \\| | ESL-098 or RDG-095 or ELL-103 or placement. |
| 2 This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |
| SOC-101 Principles of Sociology | 3 | ESL-098 or RDG-095 or ELL-103 or placement. |
| MAT-181 Statistics | $3 \sim$ | MAT-098 or M AT-097. |
| 2 This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) |  |  |
| Total Credits: |  |  |
| Semester 1 Advising Note <br> - Students enrolling in this degree program can earn <br> - New degree-seeking students enrolled in 9 credits Cluster within their first year. | World Studies Emphasis c or more must take a Learni | ertification simultaneously. ng Community Seminar or a Learning Community |


| SEMESTER 2 |
| :--- |
| PSY-235 $\quad$ Introduction to Behavioral Research |
| ENG-112 |
| College Writing II |
| This course meets the General Education requirement for Research Writing (Formerly Area 1) |
| GenEd-E $\quad$ General Education Elective |
| This course meets the General Education requirement for General Education Elective. |
| Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |
| A Social Science elective is highly recommended in order to comply with Mass Transfer guidelines. |
| GenEd-SR Scientific Reasoning |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |
| Choose one course from the Scientific Work Program Menu |
| GenEd-CW Creative Work |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) |
| Choose one course from the Creative Work Program Menu |

## Semester 2 Advising Note

- Upload in ePortfolio required Psychology majors courses artifacts PSY-235 onwards
- PSY-235 introduces students to research methods
- Participate in Psychology discipline conference offered by department
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Meet with an advisor to begin career planning activities.

Psychology Concentration (continued)


## SEMESTER $4 \quad$ Credits Milestone GenEd Prerequisites

## Elective-1 Psychology Elective <br> 3

- Elective Options:

PSY-201 Learning \& Memory, PSY-203 Psychology of Personal Adjustment, PSY-215 Counseling, PSY-223 Personality, PSY-227 Abnormal Psychology, PSY-233 Introduction to Psychiatric Rehabilitation
PSY-219 Social Psychology 3 PSY-101.

- Capstone course


## Elective-2 Humanities Elective <br> 3

- Choose one course from the Humanities electives

Sequence courses in a foreign language starting at 102 levels are highly recommended as most four-year colleges require intermediate proficiency in a foreign language.

## Elective-3 Humanities Elective

## 3

- Choose one course from the Humanities electives

Elective-4 Literature Elective 3 Pre/co-requisite: ENG-111.
Choose one LIT course
Total Credits: 15

## Semester 4 Advising Note

- Select the career elective from PSY, HSV, or ECE courses. The Department encourages students to take a computer course for one of the three electives.
- PSY-219 - ePortfolio to be completed and presented
- See an advisor about World Studies emphasis certification
- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{\mathcal { W }}$ This course has pre/co- requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- a basic knowledge and understanding of the different principles and concepts of Psychology (foundational knowledge) - the ability to apply learned concepts to the intrapersonal and interpersonal experiences embedded within diverse cultural contexts
- the ability to evaluate, compare and contrast, critique various theoretical perspectives and complex/debatable and current issues as they relate to the various domains of Psychology
- the ability to use learned knowledge to actively engage in and produce scientific research.


## CAREER OUTLOOK

Graduates of this concentration should plan to transfer to a four-year college or university because entry-level positions in the general field of psychology require a bachelor's degree. Career positions generally require a master's degree.

## Sociology Concentration

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| HUM-120 Self, Culture and Society <br> or <br> Elective Natural \& Physical Sciences OR <br> Humanities \& Fine Arts OR Behavioral \& Social Sciences | $3 \sim$ |  |
| - HUM-120 satisfies the Learning Community Requirement |  |  |
| SOC-101 Principles of Sociology | $3 \sim 2$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| $\sim$ This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |
| PSY-101 Principles of Psychology | 3 | ESL-098 or RDG-095 or ELL-103 or placement. |
| ENG-111 College Writing I | $3 \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| $\sim$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| MAT-181 Statistics | $3 \sim N$ | M AT-098 or M AT-097 or placement. |
| $\sim$ This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) |  |  |
| - Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - Attend Behavioral Sciences Group Advising Workshop: Transfer, J ob Shadowing / Internship, Educational Planning <br> - The department encourages students to explore curricular or extra curricular Student and Community Engagement Activities (recommendation: join Behavioral Sciences Club). <br> - Create Eportfolio and Upload participation. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| SOC-109 Introduction to Cultural Anthropology | $3 \sim$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| SOC-211 The Family | $3 \sim$ | 100 level introductory SOC or PSY course. |
| GenEd-SR Scientific Reasoning | $4 *$ |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) Choose one course from Scientific Reasoning Menu |  |  |
| GenEd-E General Education Elective | $3 N$ |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
| ENG-112 College Writing II | $3 \quad 2$ | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| Total Credits: 16 |  |  |
| Semester 2 Advising Note <br> - Upload in ePortfolio required Sociology majors courses artifacts SOC 109 and SOC 211 <br> - Participate in Sociology Discipline conference offered by department <br> - Begin exploring transfer options: attend a transfer workshop and the College transfer fair. <br> - Meet with an advisor to begin career planning activities. |  |  |

Sociology Concentration (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Elective-1 Elective | 3 \| |  |
| Elective-2 Behavioral Science Elective | 3 |  |
| - Choose one PSY or SOC course |  |  |
| Elective-3 Math Elective | 3-4 \| |  |
| - Recommended: MAT-171 or MAT-172 or MAT-173 |  |  |
| GenEd-CW Creative Work | 3 E |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> - Choose one course from Creative Work Menu |  |  |
| Elective-4 Literature Elective | 3 |  |
| - Choose one course from LIT |  |  |
| Semester 3 Advising Note <br> - Upload in ePortfolio: required Sociol participation <br> - SOC204 is recommended or student job shadowing opportunities to explor <br> - Speak to an Advisor about the World <br> - Continue preparations for transfer: w | rses artifacts from SOC 204 <br> a Learn and Earn Internshi in Sociology. asis certification. ransfer institution, collect l | Earn Placem red hours. Th <br> dation, apply |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| SOC-203 Social Problems | 3 \| | SOC-101. |
| - Capstone Course |  |  |
| SOC-227 Race and Ethnicity | 3 \| | SOC-101 or PSY-101 or SOC-109. |
| Elective-1 Lab Science Elective | 4 |  |
| - Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course |  |  |
| COM-171 Public Speaking and Professional Communication | 3 |  |
| Elective-2 Literature Elective | 3 | Pre/co-requisite: ENG-111. |
| - Choose one LIT course |  |  |
| Total Credits: | 16 |  |

## Semester 4 Advising Note

- SOC-203 - ePortfolio to be completed and presented
- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathcal{F}$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO:

- a basic knowledge and understanding of the different principles and concepts of Sociology (foundational knowledge)
- the ability to apply learned concepts to intrapersonal experiences, social institutions, and social issues embedded within diverse cultural contexts
- the ability to evaluate, compare and contrast, critique various theoretical perspectives and complex/debatable and current issues as they relate to the various domains of Sociology
- the ability to use learned knowledge to actively engage in and produce scientific research


## CAREER OUTLOOK

Graduates of this concentration qualify for entry-level positions in the general field of Sociology. Students will be able to choose which career track they intend to pursue by taking classes that are relevant to their interest. Graduates may wish to transfer to a four-year college or university, or will be able to work in the community with an associate's degree.

Associate in Arts
Behavioral, Social Sciences \& Global Learning - History and Social Sciences

## History Concentration



| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| HIS Elective HIS-231 African American History OR HIS-117 Women in US History OR other specialized department-approved course | 3 - | HIS-231 ENG-111 and (HIS-102, HIS-112, HIS-151 or 152) or by permission. HIS-117 ESL-098 or RDG-095; and ENG-095; or ELL-103. |
| HIS-Elective Any 100-level HIS course | 3 |  |
| Elective Any ECO, GEO, GOV, PHL, PSC, REL course [aligned interdisciplinary course] | 3 |  |
| Elective Natural or Physical Science Elective | 4 |  |
| Elective Humanities and Fine Arts Elective | 3 |  |
| Total Credits: | 16 |  |

## Semester 3 Advising Note

- Electives should be based on the career goals and interests of the student. Consider courses in Economics, Environmental Science, Literature, Languages, Philosophy, Political Science, Religious Studies, and/or Sociology.
- Students are encouraged to consider the Honors Seminar and/or internship experiences aligned with their goals to fulfill their electives.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeM ap
- See an advisor about World Studies emphasis certification

| SEMESTER 4 | Credits Milestone GenEd |  |
| :--- | :---: | :---: |
| Any 200-level History course | 3 |  |
| Elective Elective | 3 |  |
| Elective | Elective | 3 |
| Elective | Elective | 3 |
|  |  | Total Credits: |
|  |  | 12 |

## Semester 4 Advising Note

- Students who changed their major to History after one or more semesters in another degree program will typically apply those courses to fulfill the electives identified here.
- The many free electives in the program are intended to provide flexibility for students who previously were working toward a different degree program (e.g. Business, Biology, Criminal J ustice, IT, Nursing, Sociology), so that they could change their major to History without delaying graduation. Students who reach the $4^{\text {th }}$ semester with free electives available are strongly encouraged to select 200-level courses in history, languages, or in other fields relevant to their goals and interests; consult with department advisors to learn about special topics courses, internships, and other possibilities.
- See an advisor about World Studies emphasis certification.
- Apply for graduation.

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\leqslant$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be Able TO:

- Interpret historical artifacts and documents (primary sources) using various specialized techniques
- Develop historical explanations at multiple levels, from long-range global structures to microcosmic personal experiences
- Demonstrate distinctive ways of thinking in the study of history, including narrative, causal explanation, and historical imagination
- Analyze historians' works in various media, including essays, books, documentary films, and podcasts - Contribute to preserving living history (e.g. archiving oral histories of community members)
- Critically analyze how social power, cultural context, and historical position influence the construction of historical narratives
- Reflect on their ethical responsibilities \& community accountability as a historian
- Communicate with a range of audiences in traditional and innovative ways
- Produce signature research contributing to historical knowledge


## CAREER OUTLOOK

- Graduates of this concentration may qualify to transfer to four-year colleges or universities as juniors. The concentration is excellent preparation for careers in law, teaching, government, museums, or similar public service fields.
- A bachelor's degree is the minimum requirement for entry into many of these fields.
- Graduate work may be necessary, as well.

Associate in Arts
Behavioral, Social Sciences \& Global Learning - History and Social Sciences

## Political Science Concentration



| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ```PSC-210 State/Local Politics or Approved PSC 200 level course``` | 3 | ESL-098 or RDG-095 and ENG-095, or ELL-103 or placement. |
| ENG-112 College Writing II | 3 2 |  |
| This course meets the General Education requirement for Research Writing. |  |  |
| GenEd-SR Scientific Reasoning | $4 N$ |  |
| $\sim$ This course meets the General Education requirement for Scientific Reasoning. |  |  |
| PSC-220 Introduction to International Relations | 3 | ENG-111. |
| GenEd-CW Creative Work | 3 2 |  |
| This course meets the General Education requirement for Creative Work. |  |  |
| Total Credits: | 16 |  |
| Semester 2 Advising Note <br> - Begin exploring transfer options: attend a transfer workshop and the College transfer fair. <br> - Meet with an advisor to begin career planning activities. <br> - PSC-210 is recommended for students interested in public policy. |  |  |


| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { GEO-101 } \\ & \text { ECO-201 } \\ & \text { ECO-202 } \end{aligned}$ | World Regional Geography or <br> Macroeconomics <br> or <br> Microeconomics | 3 | Prerequisites for GEO-101: ESL-098 or RDG-095 and ENG-090 or ESL-099; or ELL-103 or placement. Prerequisites for ECO-201: MAT-097 or MAT-098 or higher and RDG-095 or ESL-098 or ELL-103. Prerequisites for ECO-202: MAT-097 or MAT-098 or higher and RDG-095 or ESL-098 or ELL-103. |
| PSC-211 | Introduction to Comparative Politics | 3 \| | ENG-111. |
| GenEd-E | General Education Elective | 3 E |  |
| This course meets the General Education requirement for General Education Elective. |  |  |  |
| Elective | Natural or Physical Science Elective | 4 |  |
| Elective | Humanities and Fine Arts Elective | 3 |  |
|  | Total Cr | 16 |  |

## Semester 3 Advising Note

- Electives should be based on the career goals and interests of the student, e.g. Political Science, International Relations, Public Policy, Pre Law.
- PSC-211 serves as the capstone course for the concentration for those students who do not choose HON 200 as an elective or complete internships through the Community Engagement office.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeM ap

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :--- | :--- |
| REL-111 | World Religions <br> or <br> History of the Pre-M odern World <br> or <br> Modern World History <br> or <br> History: From Colonization through the <br> Civil War <br> or | 3 | Prerequisites for HIS-111, HIS-112, HIS-151, HIS- <br> HIS-111 |
| HIS-112 |  | 152: ESL-098 or RDG-095 and ENG-095, or ELL- |  |
| HIS-151 or placement. . |  |  |  |

## Semester 4 Advising Note

- Electives should be based on the career goals and interests of the student, e.g. Political Science, International Relations, Public Policy, Pre Law.
- A third Humanities and Fine Arts elective will not be necessary if taken during first semester.
- See an advisor about World Studies emphasis certification
- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{J}$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. $\approx$ This course satisfies General Education requirement.

Political Science Concentration (continued)

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Articulate the legal, ideological, and theoretical basis for different governing systems.
- Interpret what the US Constitution and other foundational documents mean in light of current social issues and debates.
- Exhibit a fundamental knowledge of the dynamics of governmental institutions and politics at the national and international levels.
- Engage in dialogue about contemporary policy issues such as finance, economic development, education, criminal justice, social justice, healthcare, and environmental policy.
- Research the development and implementation of public policy.
- Analyze the dynamics of participatory democracy by engaging the institutions of civil society.
- Explain how the various channels of citizen influence operate at each level of government.
- Generate scholarly arguments about enduring and contemporary political questions.


## CAREER OUTLOOK

Graduates of this concentration qualify for entry-level positions with an associate's degree, and are encouraged to transfer to a four-year college or university to earn a bachelor's degree for further career advancement. Degrees in political science prepare students for careers in fields including public policy, government, journalism, activism, polling and research, community advocacy, labor organizing, and international relations. Political science is often described as a "pre-law" major, an ideal foundation for students planning to go to law school.

## Human Services Program

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | $\cdots \mathrm{F}$ | G-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse. |  |  |
| HSV-101 Introduction to Human Services with Field Practice | 3 | ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement. |
| GenEd-Q PS Q uantitative Problem Solving | 3-4 \| |  |
| 2 This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) |  |  |
| HUM-120 Self, Culture and Society or <br> AHE-104 Understanding Human Behavior for Health Care Professionals | $3 \sim$ |  |
| This course satisfies Learning Communities Seminar requirement. <br> - See semester note |  |  |
| PSY-101 Principles of Psychology | $\cdots$ * | ESL-098 or RDG-095 or ELL-103. |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) <br> PSY-101 is a pre-requisite for several courses in the program. |  |  |
| Total Credits: 15-16 |  |  |
| Semester 1 Advising Note <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - LCS and/or AHE-104 must be taken in first semester and is only allowed for those students still with freshman status and little or no college experience; if student is transferring or has prior college experience student should take a career elective in lieu of freshman seminar/LCS at later semester. AHE-104 is recommended for those students interested in community health work in social service agency. Those with prior college experience should take career elective in lieu of LCS or AHE-104 - PSY 233 or PSY 227. <br> - CORI/SORI/fingerprints after acceptance to program, before practicum course can be completed are required of all students in program. Those with concerns about this requirement should see the College's CORI officer before beginning the program. |  |  |


| SEMESTER 2 |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| ENG-112 | College Writing II | 3 | $\cdots \mathrm{F}$ | ENG-111. |
| 2 This course meets the General Education requirement for Academic Discourse. |  |  |  |  |
| PSY-215 | Counseling | 3 | $\cdots$ | PSY-101. |
| HSV-112 | Addiction | 3 |  | PSY-101 and ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement. |
| PSY-224 | Adolescent/Adult Development | 3 | $\cdots$ | PSY-101. |
| HSV-216 | Pre-practicum Prep for Field Experience | 3 | $\cdots$ | ENG-111Pre/Co-requisites: HSV-101, HSV-112, PSY-215 and PSY-224. |
|  | Total Credits: | 15 |  |  |

## Semester 2 Advising Note

- HSV 216 requires a 50 -hour pre-practicum experience. Fulfillment of the pre-practicum is required prior to enrollment in HSV220. A grade of $B$ or better is required in this course to allow for enrollment in further practicum coursework in the program.


## ECE-103 Child Growth and Development

3
ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement.

- ECE-103 must be completed in first semester with a C or better to move to other ECE courses in subsequent semesters. All ECE courses after the first semester require $E C E=103$ to be completed with this grade requirement.
HSV-214 Professional Ethics in Human Services
GenEd-CW Creative Work
This course meets the General Education requirement for Creative Work.
HSV-220 Practicum I in Human Services
HSV-220 requires that the student complete HSV-216 with a B or better. Class ONLY starts in the fall and is a two semester sequence
(HSV 220-221). Students missing application and orientation process must wait until the next fall to move forward (deadline end of
spring semester). A GPA of 2.25 or above is required as well as multiple other requirements for application and acceptance into
placement. HSV Coordinator and Department Chair have further information.

HSV-218 Case Management 3
Total Credits: 15

PSY-215 and ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement.

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| GenEd-E General Education Elective | $3 \quad \stackrel{\rightharpoonup}{*}$ |  |
| R This course meets the General Education requirement for General Education Elective. <br> - Students may choose a course from: GEO-101, PSC-101 or REL-111 |  |  |
| HSV-217 Issues in Human Services | 3 | HSV-101 and PSY-101 and PSY-215 and PSY-224. |
| GenEd-SR Scientific Reasoning | $3 \quad \geqslant$ |  |
| This course meets the General Education requirement for Scientific Reasoning. <br> Choose one course from Scientific Reasoning |  |  |
| HSV-221 Practicum II in Human Services | 3 \| | HSV-220. |
| . HSV-221 requires student to have completed HSV-220 in the fall semester with a passing grade and completed portfolio. Students without this requirement completed are not allowed to proceed to HSV-221 and must reapply for readmission to the HSV-220 class in the next fall after following Department procedures for readmission. |  |  |
| Elective Career Elective | 3 \| |  |
| - Career Elective Options: <br> PSY-233 Introduction to Psychiatric Rehabilitation PSY-227 Abnormal Psychology HSV-215 Substance Abuse Counseling |  |  |
| Total Credits | 15 |  |

## Semester 4 Advising Note

- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{F}$ This course has pre/co- requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO:

- Use formal and informal assessment practices to respond to the needs, desires, and interests of participants receiving information and support from a Human Service organization, enhancing the persons' ability to lead a self determining life.
- Communicate effectively and demonstrate skills needed to establish collaborative relationships with participants receiving services.
- Demonstrate knowledge about formal and informal supports available, as well as diverse challenges facing participants, using advocacy strategies to overcome these challenges by mobilizing resources to reach participant goals.
- Demonstrate knowledge and skill in handling crisis prevention, intervention, and resolution techniques with detailed documentation of the work in a human services agency.
- Understand the mission and practices of human services organizations, fully participating in the life of the agency as a professional and be able to identify areas of self improvement and professional development needed for future goal attainment.


## CAREER OUTLOOK

Graduates of this program qualify for careers in social welfare, mental health, community development, public administration, youth work, work with elderly, family counseling and social service agencies.

# Professional Human Services Work Certificate Program 

| SEMESTER 1 |  | Credits | Milestone GenEd | Prerequisites |
| :--- | :--- | :---: | :---: | :--- |
| ENG-111 | College Writing I | 3 |  | ENG-095 and RDG-095, ELL-103 or placement. |

## Semester 1 Advising Note

- CORI/SO RI/fingerprints after acceptance to program, before practicum course can be completed are required of all students in program. Those with concerns about this requirement should see the College's CORI officer before beginning the program.
- ENG-111 is required at the beginning semester as degree program requires much reading and writing and student must be fully prepared for intense writing assignments in HSV courses.
- HSV-101 and PSY-101 must be completed in first semester to move onto other HSV courses in subsequent semesters.

| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| PSY-227 | Abnormal Psychology | 3 | PSY-101. |
| PSY-215 | Counseling | 3 | PSY-101. |
| HSV-112 | Addiction | PSY-101 and ESL-098 or RDG-095 or ELL-103 <br> and ENG-095 or placement. |  |
| HSV-112 <br> work. |  |  |  |

Total Credits: 9

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| HSV-214 | Professional Ethics in Human Services | 3 | ENG-111 and HSV-112 and HSV-101. |
| HSV-218 | Case Management | 3 | PSY-215 and ENG-095 and ESL-098 or RDG-095 <br> or ELL-103 or placement. |
| Elective | Career Elective | 3 |  |

- Career Elective Options:

PSY-233 Introduction to Psychiatric Rehabilitation, HSV-215 Substance Abuse Counseling,
AHE-104 Understanding Human Behavior

> Total Credits:

9

## Semester 3 Advising Note

- Career elective choices should fit students human service interests: PSY-233 Psych Rehabilitation for those interested in working with developmentally disable or in mental health care or HSV-215 Substance Abuse Counseling. AHE-104 may be used as a career elective in this program, but is a freshmen seminar and should be taken in the first semester and is only allowed for those students still with freshman status and with little or no college experience; if student is transferring or has prior college experience, student should take PSH-233 or HSV-215.
- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co- requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Use assessment practices to respond to the needs of participants and enhance these individuals in leading a life that involves self-empowerment, assertiveness, and strong decisionmaking skills.
- Communicate effectively and establish collaborative relationships to allow planning, implementation of support services, and interventions with participants, agency supports, and other community resources.
- Demonstrate knowledge of supports available, while understanding the challenges facing participants, assist in gaining resources for aid, advocate by overcoming challenges and providing supports through community and educational resources.
- Demonstrate skill in handling crisis prevention, intervention and resolution techniques to solve problems and keep detailed documentation of the process and outcome of each situation.
- Participate in the life of a human services agency, being familiar with the mission and "best" practices of human services organizations, demonstrating these skills in professional activities.


## CAREER OUTLOOK

Students completing the Professional Human Services Work Certificate Program qualify for generalist careers in social welfare, mental health, community development or other similar human service org anizations in the community serving families and children, adolescents, elders or other specific populations in need of services through community programming.

## CRIMINAL OFFENDER RECORD INFORMATION AND SEX OFFENDER REGISTRY INFORMATION CHECKS

As a prerequisite for a clinical placement in the Professional Human Services Work Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a dinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal J ustice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access CORI records. Sex Offender checks shall be performed pursuant to M assachusetts General Laws, Chapter 6, Sections 178C-178P. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SO RI Officer at 617-228-2193.

# Medical Assistant Certificate Program 



## Admission Requirements Advising Note

- This program is Offered for a Fall and Spring start at the Chelsea Campus only
- Prior to clinical placement this program requires that all students undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information, please contact the College CORI/SORI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

| SEMESTE |  | Credits | ts Milestone GenEd | d Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| AHE-110 | Principles of Clinical Practice | 3 | 1 |  |
| AHE-112 | Medical Assisting Skills | 3 | $\cdots$ | Co-requisite: AHE-110. |
| NHP-180 | Medical Terminology | 3 | ${ }^{\sim}$ |  |
| $\begin{aligned} & \text { AHE-104 } \\ & \text { PSY-213 } \end{aligned}$ | Understanding Human Behavior for Health Care Professionals or Human Growth and Development | 3 | ${ }^{\sim}$ | Prerequisites for PSY-213: PSY-101. |
| $\begin{aligned} & \text { OIM-102 } \\ & \text { CIT-110 } \end{aligned}$ | Medical Computer Applications or Applications/Concepts | 3 | ${ }^{\sim}$ | Prerequisite for OIM-102: Chair approval. Prerequisite for CIT-110: ESL-098 or RDG-095 or ELL-103 or placement. |
| Total Credits: 15 |  |  |  |  |
| Semester 1 Advising Note <br> - Students must achieve a B- in AHE-110 and AHE-112 to proceed to the second semester. <br> - Review graduation requirements with Program Coordinator |  |  |  |  |
| SEMESTER 2 |  | Credits Milestone GenEd |  | Prerequisites |
| AHE-201 | Advanced Clinical Skills | 3 | $1 \sim$ A | AHE-111 or AHE-112. |
| - The pre-requisite for AHE-201 is AHE-112 for students in the Medical Assistant Certificate Program |  |  |  |  |
| AHE-205 | Practicum Medical Assistant | 3 | $1 \sim$ A | AHE-112; co-requisite of AHE-201. |
| AHE-209 | Practicum Seminar | 1 | $\cdots$ C | Co-requisite: AHE-205. |
| OIM-170 | Procedures for Medical Office | 3 | $\cdots \quad 0$ | OIM-102 or Chair approval. |
| Elective | Elective | 3 |  |  |

- Choose one college-level course. Recommended: College Writing 1 (ENG-111); Principles of Sociology (SOC-101); Human Biology/Lab (BIO-108).

Total Credits: 13

## Semester 2 Advising Note

- Attend a resume writing workshop
- Participation in employer panel
- Review graduation requirements with Program Coordinator
- Submit graduation application online

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{F}$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

Medical Assistant Certificate Program (continued)

UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Assist with the examination and treatment of patients in clinical areas, phlebotomy, and EKG.
- Perform computer and medical office tasks.


## CAREER OUTLOOK

Graduates of this program qualify for employment in hospitals, clinics, health maintenance organizations, and physicians' offices as multi-skilled workers, medical assistants, medical aides, clinical assistants, and clinical practice assistants.

## Medical Interpreting Certificate Program

| ADMISSION REQUIREMENTS |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| Diploma | High School Diplo |  |  |
| Session | Attend a Mandato |  |  |
| ENG-095 | Writing Skills II | 3 |  |
| - Completion of ENG-095 or placement into ENG-111 (College Writing I) |  |  |  |
| ALTA | M eet level 9 of La | testing |  |
|  |  | 3 |  |
| - Prior to clinical placement this program requires that all students undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information, please contact the College CORI/SO RI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/ |  |  |  |


| SEMESTER | R 1 FALL | Credits Milestone | GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| AHE-101 | Medical Interpreting I | 3 \| |  | ENG-095 and RDG-095 or ELL-103 or ESL-098 or placement. |
| . A grade of B - or better required in this course for progression in the program. |  |  |  |  |
| AHE-104 | Understanding Human Behavior for Health Care Professionals | 3 \| |  |  |
| NHP-180 | Medical Terminology | $3 \\|$ |  |  |
| $\begin{aligned} & \text { CIT-101 } \\ & \text { CIT-110 } \end{aligned}$ | Computer Essentials or Applications/Concepts | $3 \quad \omega$ |  | Prerequisites for CIT-101: none. <br> Prerequisites for CIT-110: ESL-098 or RDG-095 or ELL-103. |
| Total Credits: 12 |  |  |  |  |
| Semester 1 Fall Advising Note |  |  |  |  |


| SEMESTER 2 | SPRING | Credits | Milestone GenEd | Prerequisites |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AHE-102 | Medical Interpreting II | 2 |  | AHE-101 with a grade of B- or better. |  |
| Course includes 30 hours of active clinical interpreting. |  |  |  |  |  |
| AHE-299 | Medical Interpreting Internship | 1 |  | Co-req of AHE-102. |  |
| AHE-117 | Communication Skills for Health Care | 3 |  |  |  |
|  |  | Total Credits: | 6 |  |  |

## Semester 2 Spring Advising Note

- Medical Interpreting Skills Assessment.
- Review graduation requirements with Program Coordinator.
- Complete graduation application.

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{\leqslant}$ This course has pre/co- requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be ABLE TO:

- Take the certification examination offered by the National Board of Certification for Medical Interpreters.
- Assist the health care team by serving as a certified medical interpreter between the patient or the patient's family and the health care provider.


## CAREER OUTLOOK

Graduates of this program qualify for employment in hospitals, clinics, chronic care facilities, and health maintenance organizations as medical interpreters.

## Patient Care Technician Certificate Program

| ADMISSION REQUIREMENTS | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Diploma High School diplo |  |  |
| Session Attend Mandatory |  |  |
| ENG-095 Writing Skills II | 3 |  |
| - Completion of ENG-095 or higher or placement |  |  |
| Total Credits: 3 |  |  |
| Admission Requirements Advising Note |  |  |
| - This program is Offered for a <br> - Medical and CORI clearances Record Information (CORI) che the College CORI/SORI Officer https://www.bhcc.edu/student | at the Chelsea Campus 0 cement this program requi er Registry Information (SO visit rds/coriandsorichecks/ | ts undergo a C re information, |



## SEMESTER 2

Credits Milestone GenEd
Prerequisites
AHE-201 Advanced Clinical Skills 3 AHE-111 or AHE-112.

- The pre-requisite for AHE-201 is AHE-111 for students in the Patient Care Technician Certificate Program

| AHE-204 | Practicum Patient Care | 3 |  | AHE-111; Co-requisite: AHE-201. |
| :--- | :--- | :--- | :--- | :--- |
| AHE-209 | Practicum Seminar | 1 |  | Co-requisite: AHE-204. |
| OIM-102 | Medical Computer Applications | 3 |  | Chair approval. |
| CIT-110 Applications and Concepts can also satisfy the OIM-102 requirement |  |  |  |  |

Elective Elective 3
Total Credits: 13

## Semester 2 Advising Note

- Attend a resume writing workshop
- Participation in employer panel
- Review graduation requirements with Program Coordinator
- Submit graduation application on-line

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
© This course has pre/co-requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS

## CONCENTRATION GRADUATES WILL

 BE ABLE TO:- Perform direct patient care competently.
- Perform basic computer skills.


## CAREER OUTLOOK

Graduates of this program qualify for employment in hospitals, clinics, chronic care facilities, and the home environment as multi-skilled workers, patient care technicians, patient care associates, medical aides, certified
nursing assistants, and home health aides. The program prepares students in Healthcare Provider CPR Certifications. Graduates are eligible to sit for certification exams for State Nurse Aide and Home Health Aide.

## Paramedic

The Paramedic is a health care professional who cares for those injured or suddenly taken ill in the pre-hospital setting. BHCC's Paramedic Studies Program is a sixteen month program that includes classroom, in hospital clinical rotations and a field internship. The program prepares the student to be eligible to sit for the National Registry of Emergency Medical Technician Paramedic Certification examinations.

## Paramedic Studies Program

Located at the Bunker Hill Community College's Chelsea Campus, the 16 month Paramedic Studies Program provides instruction in advanced emergency medical skills.

The program, which follows the National Standard EMTParamedic Curriculum, meets and/or exceeds the requirements set forth by the Commonwealth of Massachusetts Office of Emergency Medical Services. BHCC's experienced instructors utilize state-of-the art equipment, including a self-contained ambulance simulator and manikins. BHCC is committed to preparing graduates with the knowledge, skills and professional attributes associated with entry-level paramedic positions. The program has been approved by the Massachusetts Office of Emergency Medical Services (OEMS), and is accredited by the Committee on the Accreditation of Educational Programs for the Emergency Medical Services (CoAEMSP), Program \#600796, a subsidiary of the Commission on Accreditation of Allied Health Education Programs (CAAHEP), a non-profit, non-governmental agency, who reviews and accredits over 2000 educational programs in nineteen (19) health science occupations. CAAHEP issues accreditation to Paramedic education programs, based on the review and upon its recommendation from the CoAEMSP.

## Admission

The Paramedic Certificate and Associate Degree in Paramedic Studies is a selective admissions program.

Please contact Nicholas J. Cardellicchio, Program Director, Department of Emergency Medical Studies, Chelsea Campus, Room 313, Chelsea, MA 02150, (617) - 936-1973, njcardel@bhcc.mass.edu regarding application and entrance requirements. All potential candidates for admission to the program must apply through the college. The Paramedic Studies Certificate program is sixteen months and awards forty-six credits. An Associate Degree in Paramedic Studies is available upon completion of an additional five courses.
Candidates for the Paramedic program must have achieved their EMT certification prior to application, maintain EMT certification throughout the program, submit all required health records/utilizations prior to the start of the program, attend an information session and submit to a CORI/SORI check.

## Program Notes

Minimum Grades: A grade of B- (80\%) or higher must be earned and maintained for the term of the program. Pre/corequisites: College Writing; ENG 111 \& Human Biology/Lab, BIO 108.

## Scope of Practice

The Paramedic is a highly trained individual who provides both in hospital and out of hospital: Patient assessment, Advanced Airway Management, Vascular access, EKG Interpretation and Treatment, Emergency Pharmacology, and Management of Medical and Trauma Emergencies.

## Tuition \& Fees

Tuition cost is $\$ 9,062$ for the Certificate and $\$ 12,017$ for the Associate Degree. Students are responsible for the purchase of texts, equipment, uniforms, certification and exam fees.

## Gl Bill ${ }^{\circledR}$

Bunker Hill Community College is an approved institution for veterans' education benefits. For specific information on how the GI Bill ${ }^{\circ}$ works, and to apply for benefits please visit the United States Department of Veterans Affairs Gl Bill Site at gibill.va.gov.

## Program Goals and Objectives

- Provide individuals with a career preparation associated with Entry-Level and Advanced Practitioner Paramedic care competencies with consideration of the needs and expectations of the program's communities of interest.
- Provide a curriculum that leads to eligibility for the national credentialing process, entry into the Massachusetts licensure process, and employment in paramedicine
- Promote the development of those intellectual skills that foster critical thinking and problem solving that are necessary for life-long learning
- Provide the development of life-long professional attitudes and values
- Understand and manage self, to function effectively in social and professional environments and to make reasonable judgments on understanding the diversity of the world community
- Locate, understand, evaluate, synthesize, information and data in a technological and data driven society.

The Paramedic Studies Certificate program is sixteen months and awards forty-six credits and sixty one credits for an Associate Degree in Paramedic Studies.

## Nationwide Employment Opportunities

National Registry certification allows an individual reciprocity in most of the United States.

## Career Opportunities

The United States Bureau of Labor Statistics reports that the number of jobs in 2012 was 239,100. The job growth from 2012-2022 is projected to grow by $23 \%$ (faster than the national average of 11\%) Projected Employment Change of new Paramedics from 2012-2022 is expected to be 55,300.

## Job Opportunities

Municipalities, Fire Departments, private ambulance companies, hospitals and clinics.

## Salary Outlook

According to the Journal of Emergency Medical Services (JEMS), the national average salary is $\$ 42,618.00$ per year (2018).

## Related Job Titles

EMT-Paramedic, Paramedic.

## National Registry of Emergency Medical

Technicians

| Year | Number of Students | Percentage <br> Passed |
| :--- | :--- | :--- |
| 2018 | As of July 2019 | N/A |
|  | First Attempt Written 9 | $89 \%$ |
|  | First Attempt Practical 8 | $\mathbf{1 0 0 \%}$ |

## Paramedic Certificate Program

| ADMISSION REQUIREMENTS | Credits Milestone GenEd Prerequisites |
| :---: | :---: |
| Diploma High School diplo |  |
| Session Attend mandatory |  |
| License Possess a valid driver |  |
| EMT Complete one yea | mergency Medical Technician or equivalent |
| CPR Possess a current | ciation, Basic Life Support Health Care Provider Card |
| ENG-111 College Writing I | ENG-095 and RDG-095, ELL-103 or placement. |
| - Course must be completed with a C or better |  |
| BIO-108 Human Biology/Lab | 4 ENG-095, RDG-095 or ELL-103, and MAT-093. |
| - Course must be completed with a C or better |  |
|  |  |

## Admission Requirements Advising Note

- Submit letter of completion of one year experience as an EMT on company letterhead
- Submit copy of EMT and CPR card
- The more non-core courses taken before applying to the program, the higher your score on the admissions rubric.
- Ten panel drug testing and medical clearances required.
- As a prerequisite for a clinical placement this program requires that all students must undergo a Criminal Offender Record Information (CO RI) check and a Sex Offender Registry Information (SO RI) check. For more information regarding the College's CORI/SO RI check process, please contact the College CORI/SORI Offcer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

| SEMESTER 1 FALL | Credits Milestone GenEd | Prerequisites |  |
| :--- | :---: | :---: | :---: |
| EMS-205 | Principles of Paramedicine I | 10 | BIO-108 and ENG-111; Co-requisite: EMS-214. |
| Course to be taken in the Fall |  |  |  |
| Course to be taken in the Fall |  |  |  |


| SEMESTER 2 SPRING | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| EMS-206 Principles of Paramedicine II | 10 \| | EMS-205 and EMS-214; Co-requisite: EMS-215. |
| - Course to be taken in Spring |  |  |
| EMS-215 Paramedic Clinical Rotation II | 3 - | EMS-205 and EMS-214; Co-requisite: EMS-206. |
| - Course to be taken in Spring |  |  |
| Total Credits: | 13 |  |
| Semester 2 Spring Advising Note |  |  |
| - Successful completion of EMS-205 and EMS-214 w | th a grade of B - or better. |  |


| SEMESTER 3 SUMMER | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| EMS-207 Principles of Paramedicine III | 4 \| | EMS-206 and EMS-215; Co-requisite: EMS-216. |
| - Course to be taken in Summer Session I |  |  |
| EMS-216 Paramedic Clinical Rotation III | $1 \boldsymbol{\sim}$ | EMS-206 and EMS-215; Co-requisite: EMS-207. |
| Course to be taken in Summer Session I |  |  |
| Total Credits: | 5 |  |
| Semester 3 Summer Advising Note |  |  |
| - Successful completion of EMS-206 and EMS-215 | with a grade of B- or better. |  |


| SEMESTER 4 SUMMER | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| EMS-208 Principles of Paramedicine IV | 4 \| | EMS-207 and EMS-216; Co-requisite: EMS-217. |
| - Course to be taken in Summer Session II |  |  |
| EMS-217 Paramedic Clinical Rotation IV | 1 \| | EMS-207 and EMS-216; Co-requisite: EMS-208. |
| - Course to be taken in Summer Session II |  |  |
| Total Credits: | 5 |  |
| Semester 4 Summer Advising Note |  |  |
| - Successful completion of EMS-207 and EMS-216 with a grade of B- or better. |  |  |
| SEMESTER 5 FALL | Credits Milestone GenEd | Prerequisites |
| EMS-218 Paramedic Field Internship | 3 \| | EMS-208 and EMS-217 and Chair approval. |
| - Course to be taken in the fall |  |  |
| Total Credits: | 3 |  |

## Semester 5 Fall Advising Note

- Successful completion of EMS-208 and EMS-217 with a grade of B- or better.
- Apply for graduation
\| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
$\approx$ This course satisfies General Education requirement.


## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WILL BE ABLE TO:- After successful completion of the program, the student will receive a Certificate of Completion enabling him or her to apply for and take the National Registry of Emergency Medical Technicians (NREMT) Paramedic written and practical examinations.
- Participants who successfully pass the NREMT certification examination may go onto practice with fire departments, private ambulance services, third service ambulance services, hospital emergency departments, and various clinical settings where advanced emergency care is required.


## CAREER OUTLOOK

The U.S. Bureau of Labor Statistics predicts that employment of emergency medical technicians (EMTs) and paramedics will grow nine percent between 2008 and 2018, which is about as fast as the average percentage for all occupations (www.BLS.gov). As our population ages and individuals face increased medical concerns, the likelihood of medical emergencies will increase; thus increasing the need for EMTs and paramedics. In addition emergency rooms are frequently overcrowded, which increases the amount of time that the EMTs and paramedics must spend with each patient. This is also likely to increase the number of potential positions. Job prospects are expected to be good since paid employees are needed to replace volunteers who have a high turnover rate.

## Associate in Science

Health Sciences - Emergency Studies

## Paramedic Studies Program

| ADMISSION REQUIREMENTS | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Diploma High School Diploma or GED | GED |  |
| Session Attend a mandatory Information Session | mation Session |  |
| License Possess a valid driver's license | ense |  |
| EMT Complete one year experience as an Eme | rience as an Emergency Medical Technic | ian or equivalent |
| CPR Possess a current American Heart Asso | an Heart Association, Basic Life Support | Health Care Provider Card |
| BIO-108 Human Biology/Lab | $4 \quad \\|$ | MAT-093, RDG-095 or ELL-103, ENG-095 or placement. |
| This course meets the General Education requirement for Scientific Reasoning. Completion of BIO 108, Human Biology/Lab |  |  |
| ENG-111 College Writing I | $3 \\|$ | NG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse. <br> Completion of ENG 111, College Writing I |  |  |
|  | Total Credits: 7 |  |
| Admission Requirements Advising Note <br> - Submit letter of completion of one year experience as an EMT on company letterhead <br> - Ten panel drug testing and medical clearances <br> - As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SO RI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/ |  |  |
| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| EMS-205 Principles of Paramedicine I | I 10 \| | Co-requisite: EMS-214. |
| - Course to be taken in the Fall |  |  |
| EMS-214 Paramedic Clinical Rotation I | 1 - 1 | Co-requisite: EMS-205. |
| - Course to be taken in the Fall |  |  |
|  | Total Credits: 13 |  |
| Semester 1 Advising Note <br> - Successful completion of EMS-205 and EMS-214 with a grade of B- or higher is required to advance in the program. |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| EMS-206 Principles of Paramedicine II | 10 \| | EMS-205; Co-requisite: EMS-215. |
| - Course to be taken in Spring |  |  |
| EMS-215 Paramedic Clinical Rotation II | $3 \sim$ | EMS-205; Co-requisite: EMS-206. |
| - Course to be taken in Spring |  |  |
| Total Credits: | 13 |  |
| Semester 2 Advising Note <br> - Successful completion of EMS-206 and EMS-215 | with a grade of B - or higher | is required to advance in the progr |

Paramedic Studies Program (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| EMS-207 Principles of Paramedicine III | 4 \\| | EMS-206 and EMS-215; Co-requisite: EMS-216. |
| - Course to be taken in Summer Session I |  |  |
| EMS-216 Paramedic Clinical Rotation III | $1 \sim$ | EMS-206 and EMS-215; Co-requisite: EMS-207. |
| - Course to be taken in Summer Session I |  |  |
| Total Credits: 5 |  |  |
| Semester 3 Advising Note |  |  |
| - Successful completion of EMS-207 and EMS-216 | with a grade of B - or higher | is required to advance in the program. |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| EMS-208 Principles of Paramedicine IV | 4 \\| | EMS-207, EMS-216; Co-requisite: EMS-217. |
| - Course to be taken in Summer Session II |  |  |
| EMS-217 Paramedic Clinical Rotation IV | $1 \sim$ | EMS-216; Co-requisite: EMS-208. |
| Course to be taken in Summer Session II <br> Successful completion of EMS-208 and EMS-217 with a grade of B- or higher is required to advance in the program. <br> Total Credits: 5 |  |  |
| SEMESTER 5 | Credits Milestone GenEd | Prerequisites |
| EMS-218 Paramedic Field Internship | 3 \| | EMS-208 and EMS-217 with a grade of B- or better. |
| Total Credits: | 3 |  |
| SEMESTER 6 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | $3 \quad \geqslant$ | ENG-111. |
| This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| PSY-101 Principles of Psychology | 3 W | ESL-098 or RDG-095 or ELL-103 or placement. |
| 2 This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |
| GenEd-E General Education Elective | $3 \quad \sim$ |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
| MAT-181 Statistics | 3-4 \| | MAT-097 or MAT-098 or placement. |
| - This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) |  |  |
| GenEd-CW Creative Work | $3 \quad 2$ |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> Choose one course from Creative Work Menu |  |  |
| Total Credits: 15-16 |  |  |
| Milestone Courses should be taken in the order shown. $\widehat{\sigma}$ This course has pre/co- requisites. Advising note or sug This course satisfies General Education requirement. | his will help you stay on track ggestion regarding this course | and graduate on time. |

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- After successful completion of the program, the student will receive a Certificate of Completion enabling him or her to apply for and take the National Registry of Emergency Medical Technicians (NREMT) Paramedic written and practical examinations.
- Participants who successfully pass the NREMT certification examination may go onto practice with fire departments, private ambulance services, third service ambulance services, hospital emergency departments, and various clinical settings where advanced emergency care is require.


## CAREER OUTLOOK

The U.S. Bureau of Labor Statistics predicts that employment of emergency medical technicians (EMTs) and paramedics will grow nine percent between 2008 and 2018, which is about as fast as the average percentage for all occupations (www.BLS.gov). As our population ages and individuals face increased medical concerns, the likelihood of medical emergencies will increase; thus increasing the need for EMTs and paramedics. In addition emergency rooms are frequently overcrowded, which increases the amount of time that the EMTs and paramedics must spend with each patient. This is also likely to increase the number of potential positions. J ob prospects are expected to be good since paid employees are needed to replace volunteers who have a high turnover rate.

## Associate in Science Degree: Medical Imaging Program

## The Medical Imaging Program prepares students in four different Associate in Science Degree options:

Full-time Cardiac Sonography Option - 24 months. p. 72
Full-time General Sonography Option - 24 months. p. 76
Full-time Medical Radiography Option - 21 months. p. 81
Part-time Medical Radiography Option - 35 months. p. 83
Program accreditations are as follows:
The Medical Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JCERT), 20 North Wacker Drive, Suite 2850, Chicago, IL 60606-3182, Phone: (312) 704-5300; Fax: (312) 704-5304, Email: mail@jrcert.org; URL: www.jrcert.org.

The program prepares students for entry-level positions in the respective fields. Graduates are eligible to apply to take the American Registry of Radiologic Technologists Exam (Medical Radiography) or the American Registry of Diagnostic Medical Sonography Exam (Sonography Options). Medical Radiography graduates are also eligible to apply to take the Massachusetts State Licensing Examination. The program begins in the fall semester, and didactic and clinical education are carefully correlated to provide reinforcement in the clinical setting of skills learned in the classroom. Students in the program must earn a numerical course grade of 80 percent or better in all imaging courses, and a minimum grade of $C$ in all general education courses. Failure to meet clinical objectives or failure to meet the academic standard in any course will result in withdrawal from the program. Students may apply for readmission to the program one time, on a spaceavailable basis. Prior to re-application students must successfully repeat failed course(s).

Readmission is considered on a case-by-case basis. All medical imaging students must undergo a physical examination, complete the necessary immunization forms, including the three (3) dose Hepatitis B immunization series, have CPR certification, carry malpractice and health insurance, and undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. The application process for the Medical Imaging Program is highly competitive and selective. Potential applicants are ranked based on prerequisite grades, Test of Essential Academic Skills V (TEAS V) results in Reading, Math and English/Language, as well as grades earned in any program required noncore courses. The highest ranked students for each A.S. Program will be invited to complete the TEAS Allied Health test. Standby lists will be generated annually for each A.S. Degree option. Stand- by students not obtaining a seat in that year will be required to reapply for future admission to any Medical Imaging Program.

## Prerequisites for all medical imaging options:

- Attend one MANDATORY information session within one year of application. (Refer to BHCC website for dates).
- Possess a high school diploma or GED certificate.
- Complete the following courses with a grade of $C$ or better:
- One semester of any three credit College Algebra or statistics course.
- One semester of college level Anatomy/Physiology I/Lab (must be completed within five years of application unless currently working in related healthcare position).
- One semester of College Writing I (ENG111) or equivalent with a grade of C or better.


## After all prerequisites are completed:

- Prospective students must apply online through Admissions during the enrollment period. Approximate application dates for the Fall program are mid-October - mid-February for admission to the program for the next academic year. Check with Admissions for exact timelines.
- All applicants in each option must complete the TEAS Allied Health Test (TEAS). Job shadows will be recommended to accepted students and those on the stand-by list.
- Applicants must score at least $47.6 \%$ in reading, $46.7 \%$ in math and $47.6 \%$ in English/Language on the TEAS test to be considered for the Medical Imaging Programs.
- The Medical Imaging Admissions Committee will evaluate each candidate's record after completion of the TEAS V test. Admission to the Program will be based on overall ranking of applicants as described previously.
- Stand-by lists will be developed for each option annually. Stand-by students not offered a seat will need to reapply the next year for future consideration.
- Applicants not selected for admission to the Medical Imaging Program must meet with a member of the advising staff for guidance before reapplication.


## Tuition and fees for Medical Imaging students*

Massachusetts Residents . . . . . . . . $\$ 12,500.00$ for 2 years
Non-Massachusetts Residents . . . . $\$ 25,700.00$ for 2 years
Uniforms . . . . . . . . . . . . . . . . . . . . . $\$ 200.00$
Malpractice/Liability Insurance . . . . . . . $\$ 15.00$ annually
Books/Software . . . . . . . . . . . . . $\$ 900.00$ annually
Medical Imaging Pin . . . . . . . . . . . . . . . . $\$ 10.00$
Certification Exam Fees . . . . . . $\$ 200.00$ Radiography
$\$ 250.00-\$ 500.00$ Sonography

[^0]
## Cardiac Sonography Option

| ADMISSION REQ UIREMENTS | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Diploma High School diploma or GED |  |  |
| Session Attend a mandatory information session |  |  |
| ENG-111 College Writing I | 2 | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse. <br> Completion of ENG 111, College Writing I |  |  |
| BIO-203 Anatomy and Physiology/Lab I |  |  |
| - Completion of BIO 203, Anatomy and Physiology I/Lab |  |  |
| MATH College Algebra or Statistics 3 |  |  |
| - Completion of any 3 credit College Algebra or Statistics course |  |  |
| TEAS Complete the Test of Essential Academic Skills (TEAS) Allied Health |  |  |
| Total Credits: 10 |  |  |
| Admission Requirements Advising Note <br> - TEAS scores must be at least 47.6 percent in Reading, 46.7 percent in Math and 47.6 percent in English/language <br> - All Admissions course requirements must be completed with a grade of C or better <br> - As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the College's CO RI/SO RI check process, please contact the College CO RI/SO RI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/ <br> - Anatomy and Physiology must be completed within ten (10) years of application unless currently working in a related healthcare position <br> - Approximate application dates for the Fall program are mid-O ctober through mid-February for admission to the program for the next academic year. Check with the Admissions office for exact timelines |  |  |


| SUMMER BEFORE STARTING THE PROGRAM | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| MIG-111 | Imaging Technology I |  |  |
| or |  | Prerequisite for MIG-111: Acceptance into the <br> program. Prerequisite for PHY-201: MAT-197 or <br> placement. |  |

- Accepted and standby students must complete either the online MIG-111 or PHY-201 with a grade of C or better in the summer prior to the start of the program. Students will need access to a personal computer with Internet access for MIG-111.

Total Credits: 3-4

| SEMESTER 1 | FALL | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :--- | :--- | :--- |
| MIG-101 | Introduction to Ultrasound | 2 | 4 | Acceptance into the Cardiac Sonography program. |

## Semester 1 Fall Advising Note

- General Education Requirements Quantitative Problem Solving, Scientific Reasoning, Creative Work and Elective satisfied by program.
- Core courses (i.e. MIG prefix) are only offered once per year and must be taken as scheduled, as must BIO-204.

Cardiac Sonography Option (continued)

| SEMESTER 2 SPRING | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MIG-112 Echo 1 | 3 - | MIG-101, MIG-109, BIO-204, Co-req MIG-115. |
| MIG-115 Interpretation I | 4 \\| | MIG-109, MIG-105, BIO-204, Co-req MIG-112. |
| ENG-112 College Writing II | $3 \quad 2$ | ENG-111. |
| This course meets the General Education requirement for Research Writing (Formerly Area 1) <br> Suggested semester course |  |  |
| CIT-110 Applications/Concepts | 3 | ESL-098 or RDG-095 or ELL-103 or placement. |
|  | s: 13 |  |
| Semester 2 Spring Advising Note <br> - Students may consider taking ENG-112, SOC-101 or CIT-110 this semester. It is strongly recommended that you do not take these general education courses in Summer Session I. |  |  |
| SEMESTER 3 SUMMER | Credits Milestone GenEd | Prerequisites |
| MIG-205 Vascular Ultrasound <br> To be taken during the Summer I Session |  |  |
|  |  |  |
| MIG-119 Echo II | 3 \\| | MIG-112, MIG-115; Co-req MIG-205. |
| - To be taken during the Summer I Session |  |  |
| SOC-101 Principles of Sociology | 3 F | RDG-095 or ELL-103 or ESL-098 or placement. |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) <br> To be taken during Summer Session II |  |  |
| MIG-203 Interpretation II | $3 \sim$ | MIG-115. |
| - To be taken during Summer Session II |  |  |
|  | 12 |  |
| Semester 3 Summer Advising Note <br> - ENG-112 or SOC-101 or CIT-110 may be taken any time prior to the last semester of the program. |  |  |


| SEMESTER 4 | FALL | Credits | Milestone GenEd | Prerequisites |
| :--- | :--- | :---: | :--- | :--- |
| MIG-201 | Echo III | 4 | $\sim$ | MIG-119, Co-req MIG-207 and MIG-211. |
| MIG-207 | Ultrasound Physics and Instrumentation <br> for the Cardiac Sonographer | 2 |  | MIG-105 and MIG-119, Co-Req MIG-201 and <br> MIG-211. |
| MIG-211 | Cardiac Sonography Clinical I | 3 |  | MIG-119 and co-requisite of MIG-201 and MIG- <br> 207. |

Cardiac Sonography Clinical I is three (3) eight hour days/week. Total Credits: 9


## Semester 5 Spring Advising Note

- All required general education courses must be completed by the end of the second spring semester.


Cardiac Sonography Option (continued)

* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\circlearrowleft$ ' This course has pre/co- requisites.

Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Demonstrate general knowledge and technical skills required to perform cardiac echo examinations as an entrylevel cardiac sonographer.
- Demonstrate sufficient knowledge of cardiac sonography to pursue registry status through The American Registry of Diagnostic Medical Sonographers.
- Understand the importance of lifelong
continuing education in the field of Cardiac Sonography.


## CAREER OUTLOOK

Graduates of this option qualify for employment in hospitals, HMOs, clinics, doctors' offices, mobile units, community health agencies, equipment/film companies, and/or as application specialist sales representatives.

# Computed Tomography Certificate Program 



| SEMESTER 1 FALL | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CTC-111 Computer Tomography I | 3 \| | Acceptance into the Computed Tomography Program. |
| - This course has a Fall Semester start date. |  |  |
| Total Credits: | 3 |  |
| SEMESTER 2 SPRING | Credits Milestone GenEd | Prerequisites |
| CTC-211 Computed Tomography II | 3 \| | CTC-111 and pre/co-requisite CTC-299. |
| - This course has a Spring Semester start date. |  |  |
| CTC-299 Computed Tomography Internship | $3 \\|$ | Chair approval. CTC-211. |
| - This course has a Spring Semester start date. |  |  |
| Total Credits: | 6 |  |

## Semester 2 Spring Advising Note

- Apply online for graduation.
\| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\widehat{\mathcal{O}}$ This course has pre/co-requisites. Advising note or suggestion regarding this course. This course satisfies General Education requirement.


## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Demonstrate competence in the essential aspects of computed tomography at the entry-level.
- Understand the importance of life-long continuing education in the field of computed tomography.


## CAREER OUTLOOK

It is expected that the number of positions in this modality will continue to grow in the near future. Opportunities exist in hospitals, outpatient clinics and free-standing medical imaging facilities.

## General Sonography Option

| ADMISSION REQUIREMENTS | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Diploma High School diploma or GED |  |  |
| Session Attend a mandatory Information session |  |  |
| ENG-111 College Writing I | 3 | ENG-095 and RDG-095, ELL-103 or placement. |
| - Completion of ENG 111, College Writing I |  |  |
| BIO-203 Anatomy and Physiology/Lab I | 4 \\| |  |
| - Completion of BIO 203, Anatomy and Physiology 1/Lab |  |  |
| MATH College Algebra or Statistics | 3 |  |
| - Completion of any 3 credit College Algebra or Statistics course |  |  |
| TEAS Complete the Test of Essential Academic Skills (TEAS) Allied Health |  |  |
| Total Credits: 10 |  |  |
| Admission Requirements Advising Note <br> - TEAS scores must be at least 47.6 percent in Reading, 46.7 percent in Math and 47.6 percent in English/language <br> - All Admissions course requirements must be completed with a grade of $C$ or better <br> - Anatomy and Physiology must be completed within ten (10) years of application unless currently working in a related healthcare position <br> - Approximate application dates for the Fall program are mid-O ctober through mid-February for admission to the program for the next academic year. Check with the Admissions office for exact timelines <br> - As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information regarding the College's CO RI/SO RI check process, please contact the College CORI/SO RI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/ |  |  |

SUMMER BEFORE STARTING THE PROGRAM Credits Milestone GenEd Prerequisites

## MIG-111 Imaging Technology I or ${ }^{\text {General Physics/Lab }}$

Prerequisite for MIG-111: Acceptance into the program. Prerequisite for PHY-201: MAT-197 or placement.

- Accepted and standby students must complete either the online MIG-111 or PHY-201 with a grade of C or better in the summer prior to the start of the program. Students will need access to a personal computer with Internet access for MIG-111.

Total Credits: 3

| SEMESTER 1 FALL | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MIG-101 Introduction to Ultrasound | $2 \sim$ | Acceptance into the Sonography program. |
| MIG-109 Patient Care in Medical Imaging | $4 \sim$ | Co-requisite: MIG-101. |
| MIG-105 Ultrasound Physics and Instrumentation | $3 \sim$ | Acceptance into the Sonography program. |
| BIO-204 Anatomy and Physiology/Lab II | 4 \\| | BIO-203. |
| SO N-113 Cross-Sectional Anatomy | $4 \sim$ | Co-Requisite: BIO-204. |
| Total Credits: | 17 |  |

## Semester 1 Fall Advising Note

- General Education Requirements Quantitative Problem Solving, Scientific Reasoning and Creative Work satisfied by program.
- Core courses (i.e. MIG prefix) are only offered once per year and must be taken as scheduled, as must BIO-204.
- Fall start only.

General Sonography Option (continued)

| SEMESTER | R 2 SPRING | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| SON-115 | Abdominal Ultrasound | 3 | ${ }^{\sim}$ | SON-113 and co-requisite of SON-121. |
| CIT-110 | Applications/Concepts | 3 |  | ESL-098 or RDG-095 or ELL-103 or placement. |
| CIT-110 may be taken in a different semester but must be successfully completed with a grade of C or better by the Spring of Year 2 to graduate on time. |  |  |  |  |
| SON-117 | Ultrasound Scanning protocols and Pathology | 4 | $\cdots$ | SON-113 and co-requisite of SON-121. |
| SON-119 | Subspecialty Sonography and Neurosonography | 3 | $\cdots$ | SON-113 and co-requisite of SON-121. |
| SON-121 | General Sonography Clinical I | 3 | ${ }^{\sim}$ | SON-113 and co-requisite SON-115 and SON 117 and SON-119. |
|  | Total Credits: | 16 |  |  |


$\approx$ This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3)

- SOC-101 may be taken in any semester but must be completed by Spring of year 2 to graduate on time

| SON-217 | Advanced General Sonography Seminar II | 2 | ${ }^{\sim}$ | SON-215 and co-requisite of SON-225. |
| :---: | :---: | :---: | :---: | :---: |
| SON-221 | Obstetrical/Gynecological Sonography II | 3 | ${ }^{\sim}$ | SON-219 and co-requisite of SON-225. |
| SON-225 | General Sonography Clinical IV | 3 | 1 | SON-223 and co-requisites of SON-217 and SON-221. |
|  | Total Credits: | 11 |  |  |

## Semester 5 Spring Advising Note

- All required general education courses must be completed by the end of the second spring semester.

| SEMESTER 6 SUMMER | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| SON-227 General Sonography Clinical V | 3 \| | SON-225. |
| Total Credits: | 3 |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. <br> $\mathfrak{F}$ This course has pre/co- requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |

General Sonography Option (continued)

## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WIL BE ABLE TO:- Recognize and identify the sonographic appearance of normal anatomic structures and Doppler flow patterns.
- Utilize ultrasound equipment to obtain an image and provide physicians with diagnostic information for treatment. - Understand the role of ultrasound in patient management and discuss the biologic effects of ultrasound.
- Apply to take the national registry exam (ARDMS).


## CAREER OUTLOOK

Graduates of this option qualify for employment in hospitals, HMOs , clinics, doctors' offices, mobile units, community health agencies, equipment/film companies, and/or as application specialist sales representatives.

# Magnetic Resonance (MR) Certificate Program 

## ADMISSION REQUIREMENTS

| AART Card | Submit copy of current ARRT |
| :--- | :--- |
| Letter | Submit letter of interest |
| Recommendation | Submit letter of recommendation from a supervisor on letterhead |
| Clinical | Submit a letter of guarantee of clinical site for the Clinical Internship |

## Admission Requirements Advising Note

- All MR students are required to undergo a physical examination; complete the necessary immunization forms, including three (3) Hepatitis B series; have malpractice and health insurance
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

| SEMESTER 1 FALL | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| MRC-111 MR Concepts I | 3 | $\cdots$ | Acceptance into the MR program. |
| Total Credits: | 3 |  |  |
| SEMESTER 2 SPRING | Credits | Milestone GenEd | Prerequisites |
| MRC-211 MR Concepts II | 3 | ${ }^{\sim}$ | MRC-111 and co-requisite of MRC-299. |
| - This course has a Spring semester start date |  |  |  |
| MRC-299 MR Clinical Internship | 3 | $\cdots$ | Department Chair Approval; pre/co-requisite of MRC-211. |
| This course has a spring semester start date |  |  |  |
| Total Credits: | 6 |  |  |
| Semester 2 Spring Advising Note |  |  |  |
| - Apply for graduation |  |  |  |

M Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathcal{F}$ This course has pre/co- requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Demonstrate competence in the essential aspects of MR imaging at the entry-level.
- Understand the importance of life-long continuing education in the field of MR imaging.


## CAREER OUTLOOK

It is expected that the number of positions in this modality will continue to grow in the near future. Opportunities exist in hospitals, outpatient clinics and free-standing medical imaging facilities.

Certificate
Health Sciences - Medical Imaging

## Mammography Certificate Program

| ADMISSION REQUIREMENTS |  |
| :---: | :---: |
| AART Card | Submit copy of current ARRT |
| Letter | Submit letter of interest |
| Recommendation |  |
| Clinical | Submit a letter of guarantee of clinical site for the Clinical Internship |
| Admission Requirements Advising Note |  |
| - All mammography students are required to undergo a physical examination; complete the necessary immunization forms, including three (3) Hepatitis B series; have malpractice and health insurance. <br> - As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information regarding the College's CO RI/SO RI check process, please contact the College CORI/SO RI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/ |  |


| SEMESTER 1 FALL | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MAC-111 Mammography Principles I | 3 \| | Acceptance into the Mammography program. |
| Total Credits: | 3 |  |
| SEMESTER 2 SPRING | Credits Milestone GenEd | Prerequisites |
| MAC-211 Mammography Principles II | 3 \| | MAC-111; co-requisite MAC-299. |
| MAC-299 Mammography Clinical Internship | 3 \| | Chair approval; pre/co-requisite MAC-211. |
| Total Credits: | 6 |  |

## Semester 2 Spring Advising Note

- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{F}$ This course has pre/co- requisites
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WILL be AbLE TO:- Demonstrate competence in the essential aspects of Mammographic imaging at the entry-level.
- Understand the importance of life-long continuing education in the field of Mammographic imaging.


## CAREER OUTLOOK

It is expected that the number of positions in this modality will continue to grow in the near future. Opportunities exist in hospitals, outpatient clinics and free-standing medical imaging facilities.

## Medical Laboratory Assistant Certificate Program

| ADMISSİ | N REQUIREMENTS | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| Diploma | High School diplom |  |  |
| Session | Attend Mandatory |  |  |
| BIO-108 | Human Biology/Lab | 4 | MAT-093 and RDG-095 or ESL-099 and ENG-095 or ELL-103 or placement. |
| Complete the course with a grade of C or better. |  |  |  |
|  |  | 4 |  |

## Admission Requirements Advising Note

Students are encouraged to meet with the Program Director to discuss the application process and to explore the profession.
If you are accepted into the program, you must complete the following steps:

- Complete a CORI Form during the first semester in the Program.
- Complete the first page of a Student Health Form - this form must go to your doctor, and when completed, must be brought to Room E154 at the Charlestown Campus of BHCC. Health clearance is required to participate in clinical internships.

| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| MLA-120 | Medical Terminology for the Clinical Laboratory Professional | 1 | $\cdots$ | Admission to Program. |
| MLA-121 | Phlebotomy and Specimen Processing | 4 | $\cdots$ | Admission to Program. |
| ENG-111 | College Writing I | 3 |  | ENG-095 and RDG-095, ELL-103 or placement. |
|  | Total Credits: | 8 |  |  |
| Semester | 1 Advising Note |  |  |  |
| M LA-120 | and MLA-121 must be completed with a B- or | or higher. |  |  |
| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| MLA-222 | Clinical Laboratory Techniques | 4 | ${ }^{\sim}$ | MLA-120 and MLA-121 *see note. |
| BIO-203 | Anatomy and Physiology/Lab I | 4 |  | BIO-105 or BIO-108 or BIO-195. |
|  | Total Credits: | 8 |  |  |

## Semester 2 Advising Note

*Note: MLA-120 and MLA-121 must be completed with a grade of $B$ - or higher.

| SEMESTER 3 SUMMER | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MLA-223 Clinical Practicum | 4 | MLA-121 and MLA-222. |
| - MLA-222 must be completed with a grade of B- or higher. |  |  |
| MAT-181 Statistics | 3 | MAT-097 or MAT-098. |
|  | 7 |  |
| Semester 3 Summer Advising Note |  |  |
| *Note: MLA-222 must be completed with a grade of B- or higher. |  |  |

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Develop an attitude of professionalism and be knowledgeable of the ethical considerations of dealing with patient and laboratory information.
- Correctly perform basic venipuncture techniques using a variety of blood drawing apparatuses.
- Explain the proper method to process and store various specimens used for laboratory testing.
- Describe the routine workflow of the clinical laboratory.
- Describe the importance of and correctly utilize a laboratory information system (LIS).
- Discuss the various types of laboratory equipment that would be best utilized for various testing procedures.
- Describe the roles of laboratory staff.
- Discuss the advantages and disadvantages of instrumentation. - Discuss the importance of and how to perform maintenance and quality control on instrumentation.
- Perform assigned procedures, demonstrating competency in the performance of the test, understanding the underlying principles of the test, and the determination of appropriate actions necessary in handling and reporting of sensitive data.
- Demonstrate organizational skills in the performance of assigned workload in a timely manner.


## CAREER OUTLOOK

A Medical Lab Assistant (MLA) is someone who works in a laboratory setting and assists in the processing of patient samples and the preparation of tests that need to be done. They play a key role in aiding the medical technologist and allowing for everything to run as efficiently as possible. They perform phlebotomy, specimen processing, testing preparation for the Medical Technologist to perform the actual testing, maintenance and calibration of instrumentation, and work with the Laboratory Information System (LIS).

# Medical Radiography Full-time Option 





| SEMESTER 4 FALL | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| MIG-220 Positioning III | 2 | ${ }^{\sim}$ | MIG-126. |
| MIG-228F FT Medical Radiography Clinical IV | 3 | $\cdots$ | MIG-222F. |
| MIG-224 Radiologic Technology II | 3 | $\cdots$ | MIG-111. |
| MIG-226 Radiologic Imaging II | 3 | ${ }^{\sim}$ | MIG-120. |
| MIG-227 Pharmacology of Radiology | 1 | $\cdots$ | MIG-109 and BIO-204. |
| ENG-112 College Writing II | 3 | 0 | ENG-111. |

~ This course meets the General Education requirement for Research Writing (Formerly Area 1)
Total Credits: 15

| SEMESTER 5 SPRING | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| MIG-230 Radiation Protection | 3 | $\cdots$ | MIG-226. |
| MIG-236F FT Medical Radiography Clinical V | 3 | $\cdots$ | MIG-228F. |
| MIG-234 CT/Cross Sectional Anatomy | 2 | ${ }^{\sim}$ | BIO-204. |
| CIT-110 Applications/Concepts | 3 |  | ESL-098 or RDG-095 or placement. |
| MIG-238 Advanced Medical Radiography Seminar | 2 | $\cdots$ | MIG-224 and MIG-226. |
| Total Credits: | 13 |  |  |
| Semester 5 Spring Advising Note <br> - MIG-234 is a web-based course. |  |  |  |

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\circlearrowleft$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. $\approx$ This course satisfies General Education requirement.

## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WILL BE ABLE TO:- Demonstrate clinical competence
- Apply critical thinking skills
- Demonstrate communication skills
- Model professionalism


## CAREER OUTLOOK

Graduates of this option qualify for employment in hospitals, HMOs , clinics, doctors' offices, mobile units, community health agencies, industrial $x$-ray, and equipment/film companies. Successful
graduates will qualify to take the American Registry of Radiologic Technologists Registry Examination and the State of Massachusetts Licensing Examination for entry-level Radiologic Technologists.

# Medical Radiography Part-time Option 

| ADMISSION REQUIREMENTS | Credits Milestone GenEd Prerequisites |
| :---: | :---: |
| Diploma High School diploma or GED |  |
| Session Attend a mandatory Informatio |  |
| ENG-111 College Writing I | 3 ENG-095 and RDG-095, ELL-103 or placement. |
| - Completion of ENG 111, College Writing I |  |
| BIO-203 Anatomy and Physiology/Lab I <br> Completion of BIO 203, Anatomy and Physiology I/Lab |  |
|  |  |
| MATH College Algebra or Statistics | 3 |
| - Completion of any 3 credit College Algebra or Statistics course |  |
| TEAS Complete the Test of Essential Academic Skills (TEAS) Allied Health |  |
| Total Credits: 10 |  |
| Admission Requirements Advising Note <br> - TEAS scores must be at least 47.6 percent in Reading, 46.7 percent in Math and 47.6 percent in English/language <br> - All pre-requisite courses must be completed with a grade of C or better. <br> - Anatomy and Physiology must be completed within ten (10) years of application unless currently working in a related healthcare position <br> - Approximate application dates for the Fall program are mid-O ctober through mid-February for admission to the program for the next academic year. Check with the Admissions office for exact timelines <br> - As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information regarding the College's CORI/SO RI check process, please contact the College CORI/SO RI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/ |  |


| SEMESTER 1 | FALL | Credits Milestone GenEd | Prerequisites |
| :--- | :--- | :---: | :--- |
| MIG-109 | Patient Care in Medical Imaging | 4 |  |
| MIG-107 | Introduction to Medical Radiography | 4 | Co-requisite: MIG-107. |
|  |  | Total Credits: | 8 |
|  |  | Acceptance to Medical Radiography program. |  |

## Semester 1 Fall Advising Note

- General Education Requirements Quantitative Problem Solving, Scientific Reasoning, Creative Work and Elective satisfied by program
- Core Courses (i.e. MIG prefix) in this program are only offered once per year, and must be taken as scheduled.
- Required general education courses (i.e. ENG-112, SOC-101 and CIT-110) may be taken as scheduled, or when convenient for the individual student, with the exception of BIO-204 which must be completed by the end of Spring Year 2 to prepare the student for success in the clinical setting. They must be completed by the last semester of the program to graduate on time.
- Please remember that this is a part-time program, and that may impact financial aid options. Plan ahead financially for the last two daytime semesters of clinical, which are a mandatory requirement of this program.

| SEMESTER 2 SPRING | Credits | Milestone GenEd |  | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| MIG-111 Imaging Technology I | 3 | $\cdots$ |  |  |
| MIG-120 Radiologic Imaging I | 3 | $\cdots$ | MIG-107. |  |
| ENG-112 College Writing II | 3 | 2 | ENG-111. |  |

$\approx$ This course meets the General Education requirement for Research Writing (Formerly Area 1)

Medical Radiography Part-time Option (continued)

| SEMESTER 3 | SUMMER | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- | :--- | :--- |
| MIG-224 | Radiologic Technology II | 3 | MIG-111. |  |
| SOC-101 | Principles of Sociology | 3 |  | RDG-095 or ESL-098 or placement. |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |  |  |
| CIT-110 | Applications/Concepts |  | 3 | ESL-098 or RDG-095 or placement. |
|  |  | Total Credits: | 9 |  |


| SEMESTER 4 | FALL |  | Credits | Milestone GenEd | Prerequisites |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MIG-226 | Radiologic Imaging II | 3 |  | MIG-120. |  |
| MIG-230 | Radiation Protection | 3 | Co-requisite: MIG-226. |  |  |


| SEMESTER 5 SPRING | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| MIG-122 Positioning I | 3 | ${ }^{\sim}$ | Co-requisite: MIG-124P. |
| MIG-124P PT Medical Radiography Clinical I | 1 | $\cdots$ |  |
| BIO-204 Anatomy and Physiology/Lab II | 4 | $\cdots$ | BIO-203. |
| Total Credits: | 8 |  |  |

## Semester 5 Spring Advising Note

- All didactic courses and clinical are held in the evenings this semester.

| SEMESTER 6 SUMMER | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| MIG-126 Positioning II | 3 | $\cdots$ | MIG-122; co-requisite of MIG-128P. |
| MIG-128P PT Medical Radiography Clinical II | 1 |  | MIG-124P. |
| MIG-227 Pharmacology of Radiology | 1 | $\cdots$ | MIG-109 and BIO-204. |
| Total Credits: | 5 |  |  |

## Semester 6 Summer Advising Note

- All didactic courses and clinical are held in the evening this semester.

| SEMESTER 7 FALL | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| MIG-220 Positioning III | 2 | ${ }^{\sim}$ | MIG-126. |
| - Clinical intershhip held during evening hours. |  |  |  |
| MIG-222P PT Medical Radiography Clinical III | 1 | ${ }^{\sim}$ | MIG-128P. |
| - Clinical intersship held during evening hours. |  |  |  |
| MIG-234 CT/Cross Sectional Anatomy | 2 | ${ }^{\sim}$ | BIO-204. |
| - This is an online course. Students will need access to a personal computer with internet capability for this course. |  |  |  |
| Total Credits: 5 |  |  |  |
| SEMESTER 8 SPRING | Credits Milestone GenEd |  | Prerequisites |
| MIG-228P PT Medical Radiography Clinical IV | 5 | ${ }^{\sim}$ | MIG-222P. |
| This is a daytime clinical rotation. Students need to be available Monday - Friday for a total of 35 hours per week and have one evening didactic course. |  |  |  |
| MIG-238 Advanced Medical Radiography Seminar | 2 | ${ }^{\sim}$ | MIG-224 and MIG-226. |
| Total Credits: | 7 |  |  |
| SEMESTER 9 SUMMER | Credits Milestone GenEd |  | Prerequisites |
| MIG-236P PT Medical Radiography Clinical V | 5 | ${ }^{\sim}$ | MIG-228P. |
| - Daytime Clinical Course. Students need to be available | Monday- | Friday for 40 hours | per week. |

Medical Radiography Part-time Option (continued)
Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathcal{F}$ This course has pre/co- requisites.
Advising note or suggestion regarding this course This course satisfies General Education requirement.

## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WIL BE ABLE TO:- Demonstrate clinical competence.
- Apply critical thinking skills.
- Demonstrate communication skills.
- M odel professionalism.


## CAREER OUTLOOK

Graduates of this option qualify for employment in hospitals, HMOs , clinics, doctors' offices, mobile units, community health agencies, industrial $x$-ray, and equipment/film companies. Successful graduates will qualify to take the American Registry of Radiologic Technologists Registry Examination and the State of M assachusetts Licensing Examination for entry-level Radiologic Technologists.

## Registered Nursing Program: Day/Alternative Options

| ADMISSIO | N REQUIREMENTS | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| Diploma High School diploma or GED |  |  |  |
| Session |  |  |  |
| TEAS Complete the ATI Test of Essential Academic Skills (TEAS) Nursing |  |  |  |
| ENG-111 | College Writing I | $\cdots \quad \approx$ | NG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |
| BIO-203 Anatomy and Physiology/Lab I 4 BIO-105 or BIO-108 or BIO-195. |  |  |  |
| Chem One year of high school chemistry with lab or one semester of college chemistry with lab |  |  |  |
| One year of high school chemistry with lab or one semester of college chemistry with lab with a grade of C or better |  |  |  |
| Math | MAT-097 Fundamentals of Algebra or placement above MAT-097 | $0 \sim$ | M AT-093 or placement. |
|  | Total Credits: |  |  |
| Admission Requirements Advising Note <br> - Complete TEAS VI Exam with a score of 60 percent in each of the four sections (Reading, Math, Science and English). All courses for admissions requirements must be completed with a C or better. <br> - Credits for Anatomy and Physiology/Lab that were earned more than ten (10) years prior to enrollment in the nursing program are not accepted. <br> - As a prerequisite for a clinical placement this program requires that all students must undergo a Criminal Offender Record Information (CO RI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/ <br> - View the Nurse Education department page for more information - https://www.bhcc.edu/nursing/ |  |  |  |



$$
\text { Total Credits: } 17
$$

## Semester 1 Advising Note

- General Education Requirements Creative Work and Scientific Reasoning satisfied by program.

| SEMESTER 2 |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| NUR-150 | Patient-Centered Care of the Adult and Mental Health Concepts | 10 | ${ }^{\sim}$ | BIO-204, NUR-120 and PSY-101. |
| B10-205 | Microbiology/ Lab | 4 | - | BIO-195 or BIO-203. |
| PSY-213 | Human Growth and Development | 3 |  | PSY-101. |
|  | Total Credits: | 17 |  |  |


| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| NUR-220 | Patient-Centered Care of Adults and <br> Families | 10 | 0 |

2 This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3)
ENG-112 College Writing II 3 ENG-111.

This course meets the General Education requirement for Research Writing (Formerly Area 1)
SEMESTER 4

NUR-250 | Patient-Centered Care of Adults with |
| :--- |
| Multisystem Disorders and Transition |
| to Practice |

GenEd-Q PS Quantitative Problem Solving
This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) Statistics is recommended.
Choose one MAT course from Quantitative Problem Solving Menu.
Total Credits: 12
NUR-220.
Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
F This course has pre/co- requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Evaluate nursing care provided to patients and families from diverse backgrounds in a variety of settings to ensure that it is compassionate, age and culturally appropriate and based on a patient's preferences, values and needs.
- Collaborate with members of the interprofessional health care team to manage and coordinate the provision of safe, quality care for patients and families.
- Use current evidence from scientific, peer reviewed sources and clinical expertise when making clinical decisions in the provision of patient-centered care.
- Use evidence-based quality improvement processes to effect change in the delivery of patientcentered care.
- Analyze effective use of strategies to mitigate errors and reduce the risk of harm to patients, self and others in a variety of settings.
- Use evidence-based information and patient care technology to communicate relevant patient information, manage care and mitigate error in the provision of safe, quality patient-centered care.
- Integrate integrity and accountability into practices that uphold established regulatory, legal, and ethical principles while providing patient-centered, standard-based nursing care.
- Use leadership, management and priority-setting skills in the provision and management of safe, quality patientcentered care.


## CAREER OUTLOOK

Graduates of this option qualify for employment in hospitals, long-term care facilities, HMOs , clinics, doctors' offices, and other community health agencies.

The Associate Degree Registered Nursing Program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; telephone: 404-975-5000; fax: 404-975-5020; email: info@acenursing.org; URL: acenursing.org, and approved by the Massachusetts Board of Registration in Nursing, 239 Causeway Street, Suite 500, 5th Floor, Boston, MA 02114; telephone: 617-973-0900; or 1-800-4140168; fax: 617-973-0984 URL: mass.gov/dph/boards/rn

Certificate
Health Sciences - Pharmacy Technology

## Pharmacy Technician Certificate Program



# Central Processing Certificate Program 



## Admission Requirements Advising Note

- Program offered at the Chelsea Campus as a part-time evening program.
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

| SEMESTER 1 | Credits | Milestone GenEd | Prerequisites |
| :--- | :--- | :---: | :--- |
| SGT-109 | Central Processing I | 2 |  |
| SGT-109A | Central Processing I Clinical | 2 |  |
| NHP-180 | Medical Terminology | 3 |  |
| CIT-110 | Applications/Concepts |  | 3 |

## Semester 1 Advising Note

- Students must maintain a grade of C or better in all surgical technology courses.
- Program offered at the Chelsea Campus as a part-time evening program.

| SEMESTER 2 | Credits | Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- | :--- |
| SGT-110 | Central Processing II | 2 |  | SGT-109 and SGT-109A and ENG-090 and RDG- |
| SGT-110A Central Processing II Clinical | 2 | 090 and MAT-093 or placement. |  |  |
| SGT-111 | Central Processing Clinical | 2 | SGT-109 and SGT-109A. |  |

Students working in Central Processing can apply for Prior Learning Assessment credits.

## AHE-117 Communication Skills for Health Care 3 <br> Total Credits: 9

## Semester 2 Advising Note

- Students must maintain a grade of C or better in all surgical technology courses.
- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{F}$ This course has pre/co- requisites. Advising note or suggestion regarding this course.

* This course satisfies General Education requirement.


## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Qualify for the CBSPD Central Processing Technician certifying exam.
- Support the operative team during surgical procedures.
- Prepare equipment and supplies for use throughout the hospital.
- Assist in resource allocation and budget preparation for central processing.


## CAREER OUTLOOK

Graduates of this program qualify as Central Processing Technicians who perform duties in one or more of the
functional areas of sterile processing and distribution, materials management, and distribution. Graduates qualify for positions in healthcare facilities and industry. Graduates qualify for advanced responsibilities within the profession, and job prospects are excellent.

Certificate
Health Sciences - Surgical Technology

## Surgical Technology Certificate Program

| ADMISSION REQUIREMENTS |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| Diploma | High School diploma or GED |  |  |
| Session | Attend Mandatory information session |  |  |
| Test | Take College Placement Test |  |  |
| ENG-095 | Writing Skills II | 3 |  |
| - Complete ENG-095 or higher placement |  |  |  |
| MAT-093 | Foundations of Mathematics | 3 |  |
| - Complete MAT-093 or higher placement |  |  |  |
| Total Credits: |  |  |  |
| Admission Requirements Advising Note |  |  |  |
| - To be a co PSY 101 - P prior to app <br> - As a prere Record Info College's C https://www | mpetitive candidate it is recommend tha inciples of Psychology, BIO 108 - Human ying. <br> quisite for a clinical placement or internsh mation (CORI) check and a Sex Offender RI/SO RI check process, please contact the bhcc.edu/studentcentral/academicrecor | applicants complete with Biology w/lab or BIO 203 <br> ip this program requires th Registry Information (SOR) he College CORI/SORI Offic ds/coriandsorichecks/ | er ENG 111 - <br> tomy \& physio <br> ust undergo a information r 93 or visit |


| SEMESTER 1 FALL |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| SGT-105 | Surgical Technology I | 5 | - | Acceptance in the Surgical Technology program and pre/co-requisite of NHP-180. |
| NHP-180 | Medical Terminology | 3 | $\cdots$ |  |
| SGT-115 | Asepsis for Surgical Technology | 2 | $\cdots$ | Acceptance into the Surgical Technology program. |
| PMT-103 | Pharmacology for the Surgical Technologist I | 1 | $\cdots$ | Acceptance into the Surgical Technology program. |
| BIO-108 | Human Biology/Lab | 4 | $\cdots$ | ENG-095 and MAT-093 and ESL-098 or RDG-095 or ELL-103 or placement. |
| PSY-101 | Principles of Psychology | 3 | $\cdots$ | ESL-098 or RDG-095 or ELL-103 or placement. |
|  | Total Credits: | 18 |  |  |

## Semester 1 Fall Advising Note

- The Surgical Technology Program has a Fall semester start date.
- Students must earn a grade of B- or better in all Surgical Technology (SGT) courses for progression in the program.

| SEMESTER 2 | SPRING | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- | :--- |
| SGT-106 | Surgical Technology II | 8 | BIO-108 and SGT-105. |  |
| PMT-105 | Pharmacology for the Surgical <br>  <br> Technologist II | 1 | PMT-103. |  |
| PSY-213 | Human Growth and Development | 3 |  |  |
| ENG-111 | College Writing I | Total Credits: | 15 | ENG-095 and RDG-095, ELL-103 or placement. |
| Semester $\mathbf{2}$ Spring Advising Note |  |  |  |  |

Surgical Technology Certificate Program (continued)

| SEMESTER 3 |  | Credits | Milestone GenEd | Prerequisites |
| :--- | :--- | :---: | :--- | :--- |
| SGT-107 | Surgical Technology III | 3 |  | SGT-106 and PMT-105 and PSY-213. |
| SGT-116 | Surgical Seminar |  | 4 | SGT-106 and PSY-213. |
|  |  | Total Credits: | 7 |  |

## Semester 3 Advising Note

- Students must earn a grade of B- or better in all Surgical Technology (SGT) courses for progression in the program.
- Apply for graduation.

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Assist the operative team during the pre-operative, intra-operative, and postoperative phases of surgery.
- Prepare equipment and supplies for use during surgery.
- Function as "first scrub" on most surgical procedures.


## CAREER OUTLOOK

Graduates of this program qualify for surgical technologist positions in hospitals. The prospect for jobs is very good at the present time as the cost of health care rises. Graduates of the program qualify to take the national certification exam at the end of the program.

## Communication Concentration

## SEMESTER 1

## Credits Milestone GenEd

Prerequisites
Complete ENG-095 and either ESL-098 or
ENG-111 College Writing I 3
$3 \sim 2$ RDG-095, or ELL-103 with a grade of $C$ or higher. - Must be completed prior to taking this course.
This course meets the General Education requirement for Academic Discourse (Formerly Area 1)
COM-110 Introduction to Communication 3
$\approx$ This course satisfies Learning Communities Seminar requirement.

- Fulfills the Learning Community Seminar requirement.

New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
GenEd-QPS Quantitative Problem Solving 3-4 |
$\approx$ This course meets the General Education requirement for Q uantitative Problem Solving (Formerly Area 4)

- Choose one course from Quantitative Problem Solving Menu. Recommended: MAT-181 Statistics or MAT-174 Quantitative Reasoning.


## GenEd-CCC Community \& Cultural Contexts 3 |

$\approx$ This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Area 2 and Area 3)

- Choose one course from Community and Cultural Contexts Menu. PHL-103 or SO C-227 recommended.
COM-101 Film as Art $3 \approx$ Pre/co-requisite: ENG-111: College Writing I.
$\approx$ This course meets the General Education requirement for Creative Work.
Total Credits: 15-16


## Semester 1 Advising Note

- Semester 1 is typically the Fall Semester
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning

Community Cluster within their first year.

- Students, please consult with a Communication faculty member before registering.
- Students intending to use Mass Transfer are recommended to take quantitative math (MAT-174 Quantitative Reasoning)

| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| ENG-112 | College Writing II | 3 | 2 | ENG-111. |
| This course meets the General Education requirement for Research Writing. |  |  |  |  |
| COM-171 | Public Speaking and Professional Communication | 3 | ${ }^{\sim}$ |  |
| COM-250 | Analyzing Media I | 3 |  | ENG-095 and RDG-095 or ELL-103, or placement into ENG-111. |
| COM-254 | Digital Media \& Performance | 3 | ${ }^{\sim}$ | Pre/Corequisite: COM-110. |
| Gen-Ed Elective | Behavioral or Social Sciences | 3 | 0 |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose one PSY or SOC course. PSY-107 or SO C-101 is recommended. |  |  |  |  |

$$
\text { Total Credits: } 15
$$

## Semester 2 Advising Note

- Semester 2 is typically the Spring Semester.
- Students, please consult with a Communication faculty member before registering.



## COM-299 Communication Internship <br> 3 <br> Pre/corequisites: COM-171 or permission from Chair.

Placement must be decided upon with Communication faculty, with approval from the Chair.
GenEd-SR Scientific Reasoning 4

2 This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5)

- Choose one course from Scientific Reasoning Menu

ENV-105 Environmental Science/Lab is recommended

## Elective

## Behavioral Science Elective

3

- Choose one PSY or SOC course

PSY-219, SOC-227 or SO C-229 is recommended

$$
\text { Total Credits: } 16
$$

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| Elective-1 | Literature Elective | 3 |  |
| LIT-203 recommended. |  |  |  |
| Elective-2 | Concentration Elective | 3 |  |

Elective-2 Concentration Elective
3

- Choose one Concentration Elective:

COM-102 American Cinema, COM-241 Introduction to Today's) ournalism, COM-242 Multimedia J ournalism, ENG-234 Literary Publishing, VMA-262 Video Techniques Lab, VMA-263: Video Concepts Lab
Elective-3 Concentration Elective
3
Choose one Concentration Elective:
COM-102 American Cinema, COM-241 Introduction to Today's J ournalism, COM-242 M ultimedia J ournalism, ENG-234 Literary Publishing, VMA-262 Video Techniques Lab, VMA-263 Video Concepts Lab
Elective-4 Lab Science Elective
ENV-110 Recommended
Elective-5 Concentration Elective
Choose one Concentration Elective:
COM-102 American Cinema, COM-241 Introduction to Today's J ournalism, COM-242 M ultimedia J ournalism,
ENG-234 Literary Publishing, VMA-262 Video Techniques Lab, VMA-263 Video Concepts Lab

Total Credits: 16

## Semester 4 Advising Note

- Students who are interested in journalism and media are encouraged to take COM-241, COM-242 and ENG-234.
- Students who are interested film studies and video production are encouraged to take COM-102 and VMA-262 OR VMA-263.
- Semester 4 is typically the Spring Semester.
- Apply for graduation.
(ص Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\widehat{\leqslant}$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
* This course satisfies General Education requirement.


## UPON COMPLETION OF THIS

## CONCENTRATION GRADUATES WIL

## BE ABLE TO：

－Have an effective transfer path to a
four－year college／university．
－Express foundational communication skills，such as public speaking， professional communication，clear argumentation，and critical reasoning．
－Write for a variety of purposes， adapting to varying audiences．
－Develop cultural and ethical competency，by engaging in human rights advocacy and effective intercultural communication．
－Conduct research in the field of communication．
－Earn hands－on skills in the field of communication through coursework and an internship．
－Understand the dynamics of communication in a global context． －Enter the workforce upon graduation in journalism，media，film studies，video production，or other creative industry． －Produce and edit video．

## CAREER OUTLOOK

Students in this program will earn hands－on skills in the field of communication through coursework and an internship．Students are prepared to enter the workforce upon graduation in journalism，media，film studies，video production，or other creative industry． The program is suited for students who wish to pursue careers in the field of： Advertising，Broadcasting，Business， Communication，Education，Film，
J ournalism，M arketing，Politics，Public Relations，Social Media，and／or Video Production．

Associate in Arts
Humanities and Learning Communities - English

## English Concentration



## Semester 1 Advising Note

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- General Education Requirement Creative Work satisfied by program.

| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-112 College Writing II | $\cdots$ | ENG-111. |
| 2 This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| GenEd-E General Education Elective | \% |  |
| F This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
|  |  |  |
| Elective Literature Elective | 3 | Pre/co-requisite: ENG-111. |
| - Choose one LTT course |  |  |
| Elective-1 Math Elective | 3 | MAT-097 or MAT-098 or placement. |
| - Choose one college-level MAT course |  |  |
| Elective-2 Foreign Language Elective | 3 |  |
| - Choose one foreign language course |  |  |
|  | 15 |  |

## Semester 2 Advising Note

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-115 Writing Tutor Seminar I | 3 \| | Grade of $\mathrm{B}+$ or better in ENG 111 or course equivalent, professor recommendation, interview and permission of ENG 115 instructor. |
| Elective-1 Behavioral Science Elective | 3 |  |
| - Choose one PSY or SOC course |  |  |
| Choose one ENG course |  |  |
|  |  |  |
| Elective-3 Literature Elective | 3 | Pre/co-requisite: ENG-111. |
| - Choose one LIT course |  |  |
| GenEd-SR Scientific Reasoning | 4 - |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) Choose one course from Scientific Reasoning Menu |  |  |
| Total Credits: 16 |  |  |
| Semester 3 Advising Note <br> - Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer. <br> - Complete a pre-graduation check with an advisor in LifeMap |  |  |
| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| Elective-1 Literature Elective | 3 | Pre/co-requisite: ENG-111. |
| - Choose one LIT course |  |  |
| Elective-2 Literature Elective | 3 | Pre/co-requisite: ENG-111. |
| - Choose one LIT course |  |  |
| Elective-3 Elective |  |  |
| - Choose any course |  |  |
| Elective-4 Social Science Elective 3 |  |  |
| - Choose one HIS or GOV or PHIL or GEO course |  |  |
| Elective-5 Laboratory Science Elective | 4 |  |
| - Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course |  |  |
| Total Credits: 16 |  |  |
| Semester 4 Advising Note <br> - Apply for graduation |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\leqslant$ This course has pre/co-requisite <br> - Advising note or suggestion regarding this course. This course satisfies General Education requirement. |  |  |
| UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO: <br> - Demonstrate competence as a writer. Write for a variety of purposes, adapting to various audiences. <br> - Demonstrate proficiency in critical thinking. <br> - Demonstrate a basic understanding of a language other than English. <br> - Demonstrate strong interpersonal communication skills. | OUTLOOK <br> es of this concentration qua to four-year institutions tha students for careers in tea $m$, public relations, and me ications. Students must co or's degree and teaching e to pursue a teaching car 's degree in English is a m ent for entry level work in publishing, advertising, pubis , and journalism. In order to in some fields, graduate w required. | alify to <br> hing, <br> dia <br> mplete <br> eer. A <br> inimum <br> careers <br> blic <br> 0 <br> work |

## English: Creative Writing Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-203 Creative Writing Workshop | 3 | ELL-103 or ENG-095 or Higher. - Must be completed prior to taking this course. |
| - ENG-203 satisfies the Learning Community requirement. |  |  |
| ENG-111 College Writing I | 3 F | ENG-095 and RDG-095, ELL-103 or placement. |
| 2 This course meets the General Education requirement for Academic Discourse. |  |  |
| GenEd-Q PS Quantitative Problem Solving | 3-4 $\quad \sim$ | MAT-097 or MAT-098 or placement. |
| $\approx$ This course meets the General Education requirement for Quantitative Problem Solving. <br> - Choose one course from the Quantitative Problem Solving Menu. |  |  |
| GenEd-CCC Community \& Cultural Contexts | 3 N |  |
| This course meets the General Education requirement for Community \& Cultural Contexts. <br> - Choose one course from the Community \& Cultural Contexts Menu. |  |  |
| Elective-1 Global Language Elective |  |  |
| Choose one course from Global Languages. |  |  |
| Total Credits: 15-16 |  |  |
| Semester 1 Advising Note <br> - Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community within their first year. <br> - General Education Requirement Creative Work satisfied by program. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | 3 N | ENG-111. |
| This course meets the General Education requirement for Research Writing. |  |  |
| Elective-1 Global Language Elective 3 |  |  |
| Choose one course from Global Languages. |  |  |
| Elective-2 Literature Elective | 3 | Pre/co-requisite: ENG-111. |
| GenEd-E General Education Elective | 3 2 | Pre/co-requisite: ENG-111. |
| 2 This course meets the General Education requirement for General Education Elective. <br> - Students must take ENG-231, ENG-232, ENG-233, or THR-115 to satisfy this requirement. |  |  |
| Elective-3 Behavioral or Social Science Elective 3 |  |  |
| - Choose one PSY, SOC HIS, GOV, PHL, GEO, PSC, or REL course. |  |  |
| Total Credits: 15 |  |  |
| Semester 2 Advising Note <br> - Meet with an advisor to begin career planning activities. <br> - Begin exploring transfer options: attend a transfer workshop at the college transfer fair. |  |  |



English：Creative Writing Option（continued）

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO：

Students graduating with an AA in English with the Creative Writing Option will be able to：
－Develop a creative writing portfolio in preparation for transfer to a four－year college or university．
－Collaboratively compose，edit，and publish a creative project．
Demonstrate competence as a writer， composing for a variety of purposes，and in a variety of genres，adapting to various audiences．
－Demonstrate proficiency in critical thinking．
－Demonstrate a basic understanding of a language other than English．
＊Demonstrate strong interpersonal communication skills．

## CAREER OUTLOOK

Graduates of English with the Creative Writing Option qualify to transfer to four－ year institutions that prepare students for careers in writing，editing，teaching English or creative writing，content development，and publishing．These
students would be well－equipped to apply for BFA programs in Creative Writing or BA programs in English． （Students must complete a bachelor＇s degree and teaching certificate to pursue a teaching career．）A bachelor＇s degree in English is a minimum requirement for entry level work in careers such as publishing，content development，and other creative fields．In order to advance in some fields，graduate work may be required．Students interested in eventually pursuing a MFA in Creative Writing would benefit from this Option．

## Global Languages Concentration



Total Credits: 15-16

## Semester 2 Advising Note

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

Global Languages Concentration (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Language 201 Global Language Elective or <br> SPN-280 Spanish for Heritage Speakers | 3 \| | Prerequisite for 201 Global language: Global Language 102 level or departmental approval. |
| - Example: SPN-201 Intermediate Spanish I |  |  |
| LIT-211 Masterpieces of World Literature I | $3 \sim$ | Pre/co-requisite: ENG-111. |
| Elective History Elective | $3 \quad \\| \quad \approx$ | ESL-098 or RDG-095 and ENG-095; or ELL-103 earning a minimum grade of $C$ or higher or placement. |
| This course meets the General Education requirement for Community \& Cultural Contexts. <br> - Choose from HIS-102 or HIS-103 or HIS-111 or HIS-112 |  |  |
| General Elective Elective | 3 |  |
| Choose one college level course. |  |  |
| GenEd-SR Scientific Reasoning | 4 R |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> Choose one course from Scientific Reasoning Menu |  |  |
| Total Credits: 16 |  |  |
| Semester 3 Advising Note <br> - The Department has only Spanish and French at the <br> - Continue preparations for transfer: write essays for tra <br> - Complete a pre-graduation check with an advisor in Lis | intermediate level. ransfer institution, collect LifeMap | ers of recommendation, apply for transfer. |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Language 202 Global Language Elective | 3 | Global Language 201 level or departmental approval. |
| - Example: SPN-202 Intermediate Spanish II |  |  |
| LIT-212 Masterpieces of World Literature II | 3 | Pre/co-requisite: ENG-111. |
| - Students should take LIT-211 beforehand. |  |  |
| Elective-2 Mathematics Elective | 3 or 4 | MAT-097 or MAT-098 or placement. |
| - Choose one college level MAT course |  |  |
| History Elective Elective | 3 N | ESL-098 or RDG-095 and ENG-095; or ELL-103 earning a minimum grade of $C$ or higher or placement. |
| 2 This course meets the General Education requirement for Community \& Cultural Contexts. <br> Choose from HIS-102 or HIS-103 or HIS-111 or HIS-112 |  |  |
| Elective Lab Science Elective | 4 |  |
| - Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course. |  |  |
| Total Credits: | 16-17 |  |
| Semester 4 Advising Note <br> - Apply for graduation |  |  |

Global Languages Concentration (continued)

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL <br> BE ABLE TO:

- In one global language: Demonstrate intermediate listening and reading skills, basic oral skills, and express their thoughts and ideas in writing in an uncomplicated manner.
- In another global language: Demonstrate basic listening and reading skills, beginner oral skills, and express basic ideas in writing in an uncomplicated matter.
- Have a basic understanding of the world's literatures.
- Be culturally aware in two cultures.


## CAREER OUTLOOK

The Global Languages concentration prepares students to transfer to four-year colleges or universities with a major in language, cultural studies, or literature. The interdisciplinary approach allows students to consider a career in international relations, law, sociology, anthropology, history, education, or in any other discipline within Social Sciences and Humanities. Graduates of this concentration mayqualify to transfer using benefits of M assTransfer to a fouryear state college or University of M assachusetts. Graduates of this concentration often qualify for careers that require bilingual skills.

## Liberal Arts

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| HUM-120 Self, Culture and Society | $3 \sim$ |  |
| This course satisfies Learning Communities Seminar requirement. <br> - HUM-120 meets the General Education Elective Requirement. <br> HUM-120 satisfies the College's Learning Community Requirement. |  |  |
| ENG-111 College Writing I | 3 \\| | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| GenEd-Q PS Q uantitative Problem Solving | 3-4 $\sim_{0}$ | MAT-097 or MAT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) <br> - Choose one MAT course from Quantitative Problem Solving Menu. |  |  |
| GenEd-CCC Community \& Cultural Contexts | $3 \sim$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) <br> Choose one course from Community and Cultural Contexts Menu |  |  |
| GenEd-CW Creative Work | $3 \sim$ |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> - Choose one course from the Creative Work Menu |  |  |
| Total Credits: 15-16 |  |  |
| Semester 1 Advising Note <br> - Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | $3 \sim$ | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| Elective-1 Elective 3 |  |  |
| Choose one college-level course. <br> The first semester of a two-semester global language sequence is recommended. |  |  |
| Elective-2 Humanities Elective 3 |  |  |
| - Choose one course from the Humanities Electives menu. |  |  |
| Elective-3 Elective 3 |  |  |
| - Choose one college-level course |  |  |
| GenEd-SR Scientific Reasoning | $3 \sim$ |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) Choose one course from Scientific Reasoning Menu |  |  |
| Total Credits: 15 |  |  |
| Semester 2 Advising Note <br> - A two-semester language sequence is recommended for two of the electives. <br> - Students should consult their intended transfer institution to determine appropriate electives for this program. <br> - Begin exploring transfer options: attend a transfer workshop and the College transfer fair <br> - Meet with an advisor to begin career planning activities. |  |  |


| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Elective-1 Literature Elective | 3 | ENG-111. |
| - Choose one LIT course |  |  |
| Elective-2 Behavioral Science Elective | 3 |  |
| - Choose one PSY or SOC course |  |  |
| Elective-3 Social Science Elective | 3 |  |
| - Choose one HIS or GOV or PHIL or GEO course |  |  |
| Elective-4 Lab Science Elective | 4 |  |
| Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course |  |  |
| Elective-5 Elective 3 |  |  |
| Choose one college-level course. <br> The first semester of a two-semester global language sequence is recommended. |  |  |
| Total Credits: |  |  |
| Semester 3 Advising Note <br> - Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer. <br> - Complete a pre-graduation check with an advisor in LifeM ap |  |  |
| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| Elective-1 Elective | 3 |  |
| - Choose one college-level course |  |  |
| Elective-2 Elective$3$ |  |  |
| - Choose one college-level course |  |  |
| Elective-3 Elective |  |  |
| - Choose one college-level course |  |  |
| Elective-4 Elective |  |  |
| - Choose one college-level course |  |  |
| Elective-5 Elective 3 |  |  |
| - Choose one college-level course. <br> The first semester of a two-semester global language sequence is recommended. |  |  |
| Total Credits: 15 |  |  |
| Semester 4 Advising Note <br> - Students should consult their intended transfer institution to determine appropriate electives for this program. <br> - Apply for graduation |  |  |
| ( Milestone Courses should be taken in the order shown. <br> $\mathfrak{F}$ This course has pre/co-requisites. Advising note or sug <br> This course satisfies General Education requirement. | This will help you stay on track uggestion regarding this cours |  |

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Discuss the interaction of history, culture, literature, economics, and science as studied within a broad liberal arts curriculum
- Develop skills as critical and creative thinkers, readers, and writers
- Construct ideas and arguments with intention, listen actively, and facilitate inclusive dialogue
- Discover interests, skills and values that may inform course selection, career choice and pathway to degree completion
- Demonstrate the ability to navigate a variety of digital tools that facilitate evaluation of information, creation of knowledge and expression of self
- Apply classroom learning to local and global challenges


## CAREER OUTLOOK

Graduates of this concentration qualify for a variety of careers depending upon the chosen major. A bachelor's degree is the usual minimum requirement for entry into most fields. Graduate work may be necessary, as well.

## Music Concentration

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MUS-101 Music Fundamentals | 3 \| | ESL-088 and ESL-099 or RDG-090 and ENG-090 or ELL-101 or placement. |
| M M sic elective may replace MUS-101 if a student passes a Challenge Exam. See the Department Chair for more information. |  |  |
| MUS-180 Introduction to the Music Business | 3 |  |
| - Satisfies Learning Communities requirement |  |  |
| MUS-151 Piano I | 2 |  |
| Elective Performance Ensemble Elective | 1 |  |
| See semester advising note |  |  |
| MUS-195 Applied Music I or MUS-295 Applied Music II | 1 |  |
| See semester advising note |  |  |
| ENG-111 College Writing I | 3 N | ENG-095 and RDG-095, ELL-103 or placement. |
| - This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| GenEd-Q PS Q uantitative Problem Solving | 3-4 $\quad$ - | MAT-097 or M AT-098 placement. |
| $\approx$ This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) <br> - Choose one MAT course from Quantitative Problem Solving Menu |  |  |
| Semester 1 Advising Note <br> - General Education Requirements Creative Work satisfied by program. <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - Students with basic keyboarding skills may replace Piano I with Piano II (MUS-152). Those with intermediate or advanced keyboarding skills may satisfy this requirement with 2 or more credits of Music Electives. See the department Chair for more information. <br> - Performance Ensemble Elective: Students are required to take four credits of performance ensemble electives and may repeat these electives. Students may be required to audition for performance ensemble electives. See the department Chair for more information. <br> - Applied Music Elective: Students are required to take four credits of applied music electives and may repeat these electives. Students should register for the section of Applied Music that fits the instrument (or voice) they would like to study. An audition may be required. See the department Chair for more information. |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MUS-105 Music Theory and Aural Skills I | ${ }^{\sim}$ | MUS-101 or Chair approval. |
| MUS-171 Introduction to Music Technology | 3 |  |
| Elective Performance Ensemble Elective | 1 |  |
| - See semester advising note |  |  |
| MUS-195 Applied Music I MUS-295 Applied Music II |  |  |
| - See semester advising note |  |  |
| ENG-112 College Writing II | $3 \quad \sim$ | ENG-111. |
| This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| GenEd-CCC Community \& Cultural Contexts 3 |  |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) Choose one course from Community and Cultural Contexts Menu |  |  |
| Total Credits: 15 |  |  |
| Semester 2 Advising Note <br> - Performance Ensemble Elective: Students are required to take four credits of performance ensemble electives and may repeat these electives. Students may be required to audition for performance ensemble electives. See the department Chair for more information. <br> - Applied Music Elective: Students are required to take four credits of applied music electives and may repeat these electives. Students should register for the section of Applied Music that fits the instrument (or voice) they would like to study. An audition may be required. See the department Chair for more information. <br> - Meet with an advisor to begin career planning activities. <br> - Begin exploring transfer options: attend a transfer workshop and the College transfer fair. |  |  |
| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| MUS-106 Music Theory and Aural Skills II | 4 | MUS-105. |
| MUS-133 Music History I | 3 \| | MUS-101 and ESL-098 and ESL-099 or RDG-095 or ELL-103 and ENG-095 or placement or Chair approval. |
| Elective Performance Ensemble Elective | 1 |  |
| - See semester advising note. |  |  |
| MUS-195 Applied Music I <br> MUS-295 Applied Music II |  |  |
| See semester advising note. |  |  |
|  |  |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> Choose any course from Scientific Reasoning Menu |  |  |
| Elective-3 Behavioral or Social Science Elective 3 |  |  |
| Choose one PSY or SOC or HIS or GOV or PHIL or GEO course |  |  |
| Total Credits: 16 |  |  |
| Semester 3 Advising Note <br> - Performance Ensemble Elective: Students are required to take four credits of performance ensemble electives and may repeat these electives. Students may be required to audition for performance ensemble electives. See the department Chair for more information. <br> - Applied Music Elective: Students are required to take four credits of applied music electives and may repeat these electives. Students should register for the section of Applied Music that fits the instrument (or voice) they would like to study. An audition may be required. See the department Chair for more information. <br> - Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer. <br> - Complete a pre-graduation check with an advisor in LifeM ap |  |  |



## Theatre Concentration

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| HUM-120 Self, Culture and Society Elective or Elective | $3 \sim$ |  |
| - HUM-120 satisfies the Learning Community Requirement OR Choose one college-level course as an elective. |  |  |
| THR-107 Acting I | $3 \quad \omega$ |  |
| ENG-111 College Writing I | 3 W | ENG-095 and RDG-095, ELL-103 or placement. |
| 0 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| GenEd-CCC Community \& Cultural Contexts | $3 \quad \mathrm{~F}$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) Choose one course from Community and Cultural Contexts Menu |  |  |
| GenEd-Q PS Q uantitative Problem Solving | 3-4 $\quad$ - | MAT-097 or MAT-098 placement. |
| This course meets the General Education requirement for Q uantitative Problem Solving (Formerly Area 4) |  |  |
| Semester 1 Advising Note <br> - Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| THR-109 Play Production Workshop | 3 | THR-107. |
| COM-171 Public Speaking and Professional Communication | 3 |  |
| ENG-112 College Writing II | 3 W | ENG-111. |
| 2 This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| Elective-1 Mathematics Elective | 3-4 | M AT-097 or M AT-098 placement. |
| - Choose a college-level MAT course |  |  |
| THR-108 Acting II | 3 | THR-107. |
| Total Credits: 15-16 |  |  |
| Semester 2 Advising Note <br> - Meet with an advisor to begin career planning activit <br> - Begin exploring transfer options: attend a transfer wo | ties. orkshop and the College |  |



## Accounting Information Certificate Program

| SEMESTER |  | Credits | Milestone GenEd | d Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| ACC-101 | Principles of Accounting I | 3 | ${ }^{\sim}$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| $\begin{aligned} & \text { CIT-110 } \\ & \text { CIT-133 } \end{aligned}$ | Applications/Concepts or Introduction to Microsoft Office | 3 | $\cdots$ | Prerequisites for CIT-110: ESL-098 or RDG-095 or ELL-103 or placement. |
| MAT-181 | Statistics | 3 | $\cdots$ | M AT-097 or MAT-098 or placement. |
| Total Credits: |  | s: 9 |  |  |
| SEMESTER 2 |  | Credits Milestone GenEd |  | Prerequisites |
| ACC-102 | Principles of Accounting II | 3 | $\cdots$ A | ACC-101. |
| ACC-105 | Accounting Information Systems | 3 |  | ACC-101 and ENG-095 and ESL-098 or RDG095 or ELL-103 or placement. |
| CIT-234 | Decision Support Using Microsoft Excel | 3 |  | CIT-110, CIT-113 or CSC-120. |
|  | Total Credits: | 9 |  |  |
| SEMESTER 3 |  | Credits Milestone GenEd |  | Prerequisites |
|  | Intermediate Accounting I | $3 \quad$ - |  | ACC-102. |
| Elective-1 Concentration Elective |  | 3 |  |  |
| - Choose Concentration Elective from: <br> ACC-202 Intermediate Accounting II, ACC-207 Cost Accounting I, ACC-203 Personal Income Tax, FIN-210 Financial Management, CIT-128 Database Design with Microsoft Access |  |  |  |  |

## Elective-2 Concentration Elective

- Choose Concentration Electives from:

ACC-202 Intermediate Accounting II, ACC-207 Cost Accounting I, ACC-203 Personal Income Tax, FIN-210 Financial Management, CIT-128 Database Design with M icrosoft Access

## Semester 3 Advising Note

- Gather recommendation letters from faculty and staff.
- Apply for graduation

M Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.

- This course satisfies General Education requirement.


## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Describe and demonstrate an understanding of cash vs. accrual accounting.
- Compare and contrast different concepts of depreciation of property, plant and equipment assets.
- Explain in detail the nature of receivables, payables and inventory. - Analyze and evaluate revenues, expenses cash flows, and behavior of cost.
- Assess and analyze integrated accounting systems, setup, and applications.
- Use spreadsheet models addressing a range of practical and business applications.
- Record transactions and input data from initial investment in the business cycle, ending entries that are necessary to ready the books for period-ending financial statements.
- Prepare and evaluate financial statements and process and maintain computerized records, accounts, and information.


## CAREER OUTLOOK

This program qualifies graduates for entry-level accounting, billing, or advanced bookkeeping positions. Students may also transfer many of these courses into the following degrees: Associate in Science Degree: Business Administration Accounting option or Business Administration Management option.

## Accounting Option



| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ENG-112 | College Writing II | 3 2 | ENG-111. |
| * This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |  |
| ACC-102 | Principles of Accounting II | 3 \\| | ACC-101. |
| BUS-201 | Business Law I | 3 | ENG-095 and ESL-098 or RDG-095 or ELL-103 or placement. |
| MAN-112 | Organizational Behavior and Design | 3 R | ESL-098 and ESL-099 or RDG-095 or ELL-103 and ENG-090 or placement. |


| ACC-105 Accounting Information Systems | 3 | ACC-101 and ENG-095 and ESL-098 or RDG- |
| ---: | :---: | :---: | :---: |
| Total Credits: | 15 | 095 or ELL-103 or placement. |

## Semester 2 Advising Note

- Meet with an advisor to begin career planning activities
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair
- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.

Accounting Option (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ACC-201 Intermediate Accounting I | 3 | ACC-102. |
| GenEd-SR Scientific Reasoning | 4 2 |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |  |  |
| ACC-203 Personal Income Tax | 3 | ACC-102. |
| ACC-207 Cost Accounting I | 3 | ACC-102. |
| ECO-201 Macroeconomics  <br> or  <br> ECO-202 Microeconomics | 3 e | Prerequisites for ECO-201 and ECO-202: MAT097 or MAT-098 or RDG-095 or ELL-103. |

\& This course meets the General Education requirement for Community \& Cultural Contexts.

$$
\text { Total Credits: } 16
$$

## Semester 3 Advising Note

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Develop a financial plan for continued education and life after graduation.
- Complete a pre-graduation check with an advisor in LifeMap.



# Administrative Support Specialist 

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| OIM-103 | MS Word | $3 \quad \downarrow$ |  |
| OIM-103 is a pre/co-requisite to the program. It should be taken prior to the first semester. An exemption exam is available. Contact BHCC's Prior Learning Assessment coordinator at pla@bhcc.edu to learn more. |  |  |  |
| $\begin{aligned} & \text { CIT-110 } \\ & \text { CIT-133 } \end{aligned}$ | Applications/Concepts or Introduction to Microsoft Office | 3 \| | Prerequisites for CIT-110: ESL-098 or RDG-095 or ELL-103 or Chair approval. |
| OIM-132 | Administrative Business Communications I | 3 | ENG-095 or placement and OIM-103 or OIM101. |
| Total Credits: 9 |  |  |  |
| Semester 1 Advising Note <br> - This program is considered a DAY program. Some courses in this program are offered as hybrid or Web (online). See the OIM Coordinator for details if you have specific limitations in scheduling. |  |  |  |


| SEMESTER 2 |
| :--- | Credits Milestone GenEd $\quad$ CIT-110 or CIT-113 or CIT-120 or Chair approval.

## UPON COMPLETION OF THIS

## CONCENTRATION GRADUATES WILL

 BE ABLE TO:- Demonstrate proficiency in computer and software applications.
- Use the complete range of Microsoft

Office applications in an efficient manner.

- Demonstrate the ability to use various communication mediums


## CAREER OUTLOOK

Graduates of this program may qualify for entry-level positions such as receptionists, data-entry clerks, word processing specialists, office assistants, or customer service representatives in a wide range of small and large organizations. More experienced graduates may obtain positions as executive assistants or office managers. Students qualify to take the MS Office certification exam at the end of the program.

## Business Transfer Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| BUS-101 Introduction to Business | 3 - | ESL-098 and ESL-099 or RDG-095 or ELL-103 and ENG-090 or placement. |
| Satisfies the Learning Community Requirement |  |  |
| ENG-111 College Writing I | $3 \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| $\sim$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| Elective Career Elective | 3 |  |
| - Choose any ACC, BUS, FIN or MAN prefixed course |  |  |
| CIT-110 Applications/Concepts | 3 | ESL-098, RDG-095 or ELL-103 or placement. |
| PSY-101 Principles of Psychology | $3 \sim$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| $\sim$ This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |
| Total Credits: 15 |  |  |
| Semester 1 Advising Note <br> - BUS-101: New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club. <br> - Create and follow an Education Plan with an Academic Advisor. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | 3 F | ENG-111. |
| $\sim$ This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| MAT-181 Statistics | $3 \sim$ | M AT-097 or M AT-098 or placement. |
| * This course meets the General Education requirement for Q uantitative Problem Solving (Formerly Area 4) |  |  |
| ACC-101 Principles of Accounting I | $3 \sim$ | ESL-098 or RDG-095 or placement. |
| GenEd-SR Scientific Reasoning | 4 E |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) Choose one course from Scientific Reasoning Menu |  |  |
| GenEd-CW Creative Work | 32 |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> Choose one course from Creative Work Menu |  |  |
| Total Credits: 16 |  |  |
| Semester 2 Advising Note <br> - Meet with an advisor to begin career <br> - Begin exploring transfer options: at <br> - Complete a volunteer activity in an <br> - Learn about Alpha Beta Gamma (Busin <br> - Inquire about the Commonwealth Hor | ies orkshop and the College tra ciety) and Alpha Kappa Mu | ansfer fair <br> (General Honor Society). |

Business Transfer Option (continued)

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ACC-102 | Principles of Accounting II | 3 | ACC-101. |
| ECO-202 | Microeconomics | 3 | MAT-097 or MAT-098 and RDG-095 or ELL-103 or placement. |
| $\begin{aligned} & \text { MAT-231 } \\ & \text { MAT-281 } \end{aligned}$ | Calculus for Management Science or <br> Calculus I | 4 | MAT-231 MAT-194 or placement. MAT-281 MAT197 or placement. |
| Elective | Literature Elective | 3 | Pre/co-requisite: ENG-111. |
| - Choose one course designated with the prefix LIT |  |  |  |
| GenEd-E | General Education Elective | 3 2 |  |
| $\approx$ This course meets the General Education requirement for General Education Elective. <br> *Note: Students must take MAN-112 Organizational Design and Behavior to satisfy this requirement |  |  |  |
| Total Credits: 16 |  |  |  |
| Semester 3 Advising Note <br> - MAT-231 and MAT-281 may require the student to take an additional math course(s) depending on placement and/or math courses taken and completed at another college or university. <br> - Develop a financial plan for continued education and life after graduation. <br> - Continue preparations for transfer: write essays for transfer institution collect letters of recommendation, apply for transfer. <br> - Complete a pre-graduation check with an advisor in LifeMap. |  |  |  |



## Entrepreneurship Certificate Program

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| ACC-101 | Principles of Accounting I | 3 |  |
| CIT-110 | Applications/Concepts | 3 | ESL-098 or RDG-095 or ELL-103 or placement. |


| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| MAN-204 | Entrepreneurship \& Innovation | 3 | MAN-107 or Chair approval. |
| MAN-207 | Small Business Management | 3 | ACC-102 or ACC-105 and MAN-111 and MAN105 or Chair approval. |
| ACC-105 | Accounting Information Systems | 3 | ACC-101 and ENG-095 or ELL-103 and ESL098 or RDG-095 or placement. |
| MAN-112 <br> BUS-201 | Organizational Behavior and Design or Business Law I | 3 | Prerequisites for MAN-112: ESL-098 and ESL099 or RDG-095 or ELL-103 and ENG-090 or placement. Prerequisites for BUS-201: ENG-095 and RDG-095 or ELL-103 or ESL-098 or placement. |
| Total Credits: 12 |  |  |  |

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Analyze viability of opportunities from various points of view.
- Understand the leadership skills and personal characteristics needed for success in starting and managing a small business.
- Develop and implement a business plan.
- Prepare a set of financial statements for a service, merchandising or manufacturing business that is structured as a sole proprietorship, partnership or a corporation.
- Analyze a set of financial statements to determine strengths or weaknesses of the business.
- Understand the basic principles of business law, contracts and agency, intellectual property and product liability.
- Demonstrate proficiency in computer applications as required to operate and manage a small business.
- Examine management theory and practice, and explain basic business methodology and management issues.
- Be able to identify and analyze the marketing strategies of an organization that can be used to advance its mission.
- Understand the techniques useful in achieving the full potential from limited resources and improving productivity and effectiveness.


## CAREER OUTLOOK

This certificate prepares graduates to start and manage a small business, and to move into management and supervisory positions.

## Entrepreneurship Option

| SEMESTER |  | Credits Milestone GenEd |  |  | Prerequisites |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BUS-101 | Introduction to Business | 3 | ${ }^{\sim}$ |  | ESL-098 and ESL-099 or RDG-095 or ELL-103 and ENG-090 or placement. |
| - Satisfies Learning Community Requirement |  |  |  |  |  |
| ENG-111 | College Writing I | 3 | $\omega$ | 0 | ENG-095 and RDG-095 or ELL-103 or placement. . |


| CIT-110 | Applications/Concepts | 3 | ESL-098 or RDG-095 or ELL-103 or placement. |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-101 | Principles of Accounting I | 3 |  | ESL-098 or RDG-095 or ELL-103 or placement. |
| MAT-181 | Statistics | 3 | Preqequisites for MAT-181: MAT-098 or MAT- <br> 097 |  |

$\approx$ This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4)

$$
\text { Total Credits: } 15
$$

## Semester 1 Advising Note

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning

Community Cluster within their first year. Students who have already taken an LCS course should consult Department Chair or Division Dean.

- Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club.
- Create and follow education plan.

| SEMESTER 2 |
| :--- | Credits Milestone GenEd $\quad 3 \quad$ Prerequisites


| MAN-105 Principles of Marketing | 3 | ENG-090 or placement and ESL-098 or RDG- <br> 095 or ELL-103 or placement. |
| :--- | :--- | :--- | :--- |
| MAN-111 Principles of Management | 3 | ESL-098 and ESL-099 or RDG-095 or ELL-103 <br> and ENG-090 or placement. |
| ACC-102 Principles of Accounting II | 3 | Prerequisites for ACC-102: ACC-101. <br> Or <br> Prequisites for ACC-105: ACC-101 and ENG- <br> 095 or ELL-103. |
| ACC-105 Accounting Information Systems | 3 |  |

## Semester 2 Advising Note

- Meet with an advisor to begin career planning activities
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair
- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.


## Prerequisites

## ECO－201 Macroeconomics

 or 3 or ESL－098 or placement．
ECO－202 Microeconomics
$\approx$ This course meets the General Education requirement for Community \＆Cultural Contexts（Formerly Areas 2 and 3 ）
GenEd－SR Scientific Reasoning
This course meets the General Education requirement for Scientific Reasoning（Formerly Area 5）
Choose one course from Scientific Reasoning Menu

| MAN－107 Introduction to Entrepreneurship | 3 | ENG－095 and RDG－095 or ELL－103 or ESL－098 <br> or placement． |  |
| :--- | :--- | :--- | :--- |
| BUS－201 | Business Law I | 3 | ENG－095 and ESL－098 or RDG－095 or ELL－103 <br> or placement． |
| CIT－234 | Decision Support Using Microsoft Excel | 3 | CIT－110 or CIT－113 or CSC－120 or Chair <br> approval． |
| Total Credits： | 16 |  |  |
| Semester 3 Advising Note |  |  |  |
| －Continue preparations for transfer：write essays for transfer institution，collect letters of recommendation，apply for transfer． |  |  |  |
| －Develop a financial plan for continued education and life after graduation． |  |  |  |
| －Complete a pre－graduation check with an advisor in LifeMap |  |  |  |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| GenEd－CW Creative Work | 3 E |  |
| This course meets the General Education requirement for Creative Work（Formerly Area 6） <br> Choose one course from Creative Work Menu |  |  |
| MAN－204 Entrepreneurship \＆Innovation | 3 | MAN－107 or Chair approval． |
| Elective Career Elective | 3 |  |
| －Choose any ACC，BUS，FIN or MAN course |  |  |
| BUS－207 Professional Communication | 3 | ENG－111． |
| MAN－201 Management Seminar <br> or <br> MAN－299 Business Internship or <br> INT－299B Learn and Earn Business Internship | 3 | Prerequisites for MAN－201：MAN－105 and MAN－111．Prerequisites for MAN－299：Chair approval．Prerequisites for INT－299B：Chair approval． |

Total Credits： 15

## Semester 4 Advising Note

－The Management Seminar in this program is a Capstone course and should be taken in the student＇s final semester．
－Gather recommendation letters from faculty and staff．
－Apply for Graduation．
－Finalize your resume and upload it to your ePortfolio and LinkedIn website．
Milestone Courses should be taken in the order shown．This will help you stay on track and graduate on time．
§ This course has pre／co－requisites．Advising note or suggestion regarding this course．
＊This course satisfies General Education requirement．

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO：

－Analyze viability of opportunities from various points of view．
－Understand the leadership skills and personal characteristics needed for success in starting and managing a small business．
－Develop and implement a business plan．
－Prepare a set of financial statements for a service，merchandising or manufacturing business that is structured as a sole proprietorship， partnership or a corporation．
－Analyze a set of financial statements to determine strengths or weaknesses of the business．
－Understand the basic principles of business law，contracts and agency， intellectual property and product liability．
－Demonstrate proficiency in computer applications as required to operate and manage a small business．
－Examine management theory and practice，and explain basic business methodology and management issues．
－Be able to identify and analyze the marketing strategies of an organization that can be used to advance its mission．
－Understand the techniques useful in achieving the full potential from limited resources and improving productivity and effectiveness．

## CAREER OUTLOOK

This option prepares graduates to start and manage a small business，and to move into management and supervisory positions．

## Finance Option

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ENG-111 | College Writing I | $3 \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| $\sim$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |
| CIT-110 | Applications/Concepts | 3 | ESL-098 or RDG-095 or ELL-103 or placement. |
| ACC-101 | Principles of Accounting I | 3 \| | ESL-098 or RDG-095 or ELL-103 or placement. |
| BUS-101 | Introduction to Business | 3 \| | ESL-098 and ESL-099 or RDG-095 or ELL-103 and ENG-090 or placement. |
| Satisfies Learning Community Requirement |  |  |  |
| FIN-112 | Personal Finance Total Credits: | 3 |  |
|  |  | 15 |  |
| Semester 1 Advising Note |  |  |  |
| - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club. <br> - Create and follow an Education Plan with an Academic Advisor. |  |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MAN-111 Principles of Management | 3 | ESL-098 and ESL-099 or RDG-095 or ELL-103 and ENG-090 or placement. |
| - BUS101 for Business Concentration, Management and Finance options O NLY |  |  |
| ENG-112 College Writing II | $3 \quad 2$ | ENG-111. |
| \& This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| ACC-102 Principles of Accounting II | 3 \| | ACC-101. |
| GenEd-Q PS Q uantitative Problem Solving | 3-4 $N$ | M AT-097 or MAT-098 or placement. |
| 2 This course meets the General Education requirement for Q uantitative Problem Solving (Formerly Area 4) |  |  |
| ECO-201 Macroeconomics | 3 2 | MAT-097 or MAT-098 and RDG-095 or ELL-103 or placement. |
| - This course meets the General Education requirement for Community \& Cultural Contexts. |  |  |
| Total Credits: 15-16 |  |  |
| Semester 2 Advising Note <br> - Complete a volunteer activity in an area of interest. <br> - Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society). <br> - Inquire about the Commonwealth Honors Program. <br> - Meet with an advisor to begin career planning activities. |  |  |

Finance Option (continued)


| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| FIN-211 | Money \& Banking | 3 | ECO-201 and ECO-202. |
| FIN-213 | Mutual Funds Industry | 3 | ACC-102 and FIN-111. |
| FIN-106 <br> MAN-299 <br> INT-299B | Introduction to Corpora or <br> Business Internship or <br> Learn and Earn Busines | 3 | Prerequisites for MAN-299: Chair approval. Prerequisites for INT-299B: Chair approval. |
| GenEd-SR | Scientific Reasoning | 2 |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> Choose one course from Scientific Reasoning Menu |  |  |  |
| GenEd-CW | Creative Work | 3 2 |  |
| This course meets the General Education requirement for Creative Work (Formerly A rea 6) Choose one course from Creative Work Menu |  |  |  |

$$
\text { Total Credits: } 15
$$

## Semester 4 Advising Note

- Gather recommendation letters from faculty and staff.
- Apply for Graduation.
- Finalize your resume and upload it to your ePortfolio and LinkedIn website.

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.

- This course satisfies General Education requirement.


## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO:

- Understand the process of preparing a budget and recognize the value it provides the end-user.
- Analyze the many choices available to the investor and recognize the importance of diversifying investment options.
- Evaluate sets of financial statements using financial ratios and draw accurate conclusions as to the strengths or weaknesses of the concern.
- Understand the mutual fund industry in order to design a comprehensive portfolio for a wide range of investors


## CAREER OUTLOOK

This option qualifies graduates for a variety of positions in banking, insurance, finance, brokerage, and mutual fund operations.

## Management Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | $3 \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| $\approx$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| ACC-101 Principles of Accounting I | 3 \\| | ESL-098 or RDG-095 or ELL-103 or placement. |
| CIT-110 Applications/Concepts | 3 | ESL-098 or RDG-095 or ELL-103 or placement. |
| MAN-105 Principles of Marketing | 3 | ENG-090 and ESL-098 or RDG-095 or ELL-103 or placement. |
| BUS-101 Introduction to Business | 3 \| | ESL-098 and ESL-099 or RDG-095 or ELL-103 and ENG-090 or placement. |
| , Satisfies Learning Community Requirement |  |  |
|  | 15 |  |

## Semester 1 Advising Note

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club.
- Create and follow education plan.

| SEMESTER 2 |
| :--- | Credits Milestone GenEd $\quad$ Prerequisites

This course meets the General Education requirement for Community \& Cultural Contexts.
GenEd-Q PS Quantitative Problem Solving $\quad 3-4 \sim$ MAT-097 or MAT-098 or placement.
$\approx$ This course meets the General Education requirement for $Q$ uantitative Problem Solving (Formerly Area 4)

- Choose one MAT course from Quantitative Problem Solving Menu.

$$
\text { Total Credits: } \quad 15-16
$$

## Semester 2 Advising Note

- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.
- Meet with an advisor to begin career planning activities
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair



## Medical Information Management Option

| SEMESTER |  | Credits | estone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| OIM-103 | MS Word | 3 | ${ }^{\sim}$ |  |
| - OIM-103 is a pre-requisite or co-requisite to the program, which should be taken prior to or during the first semester. An exemption exam is available through the Center for Self-Directed Learning $(\mathrm{H}-165)$ for students who type 40 words per minute or more with accuracy and know MS Word and document format. |  |  |  |  |
| OIM-105 | Skills for the Administrative Success | 3 |  | ENG-095 and RDG-095 or ELL-103 or ESL-098 or placement; Pre/co-requisite of OIM-103. |
| Satisfies the Learning Community Requirement |  |  |  |  |
| CIT-110 | Applications/Concepts | 3 | ${ }^{\sim}$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| NHP-180 | Medical Terminology | 3 | $\omega$ |  |
| OIM-132 | Administrative Business Communications ITotal Credits: | 3 |  | ENG-095 or ELL-103 or placement, and OIM-103 or OIM-101. |
|  |  | 15 |  |  |

## Semester 1 Advising Note

- Some courses in this program are offered as hybrid or Web (online).
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community

Cluster within their first year.


| SEMESTE |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| O IM-232 | Administrative Business Communications II | $3 \sim$ | OIM-130 or OIM-132 and Pre/co-requisite OIM106 and OIM-112 or OIM-110 or OIM-101 and OIM-115 or Chair approval. |
| - This course must be taken during the fall semester prior to enrolling OIM-299 and requires Chair approval. |  |  |  |
| CIT-118 | Principles of Internet \& Information Security | 3 | CIT-110 or CIT-113 or CSC-120 or Chair approval. |
| ENG-112 | College Writing II | $3 \quad 2$ | ENG-111. |
| $\sim$ This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |  |
| $\begin{aligned} & \text { CIT-128 } \\ & \text { CIT-250 } \end{aligned}$ | Database Design or Collaboration, Communication and Integration | 3 | CIT-110 or CIT-113 or CSC-120 or Chair approval. CIT-110 or CIT-113 or Chair approval. |
| O IM-115 | Administrative Technology and Procedures | $3 \sim$ | Pre/co requisites: OIM-103 and CIT-110. |
|  | Total Credits: 15 |  |  |
| SEMESTER 4 |  | Credits Milestone GenEd | Prerequisites |
| OIM-299 Office and Information Management Internship |  | $3 \sim$ | OIM-232 and Chair approval. |
| The internship involves 150 hours within a medical office. With prior approval from the OIM coordinator, students with a minimum of one year in a medical administrative position complete a portfolio in place of the internship. |  |  |  |
| GenEd-CCC Community \& Cultural Contexts |  | $3 \sim$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) PSY-107 is recommended |  |  |  |
| GenEd-Q PS Q uantitative Problem Solving |  | 3-4 | M AT-097 or M AT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) Choose one MAT course from Quantitative Problem Solving Menu. |  |  |  |
| GenEd-E General Education Elective |  | $3 N$ |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |  |
| GenEd-SR Scientific Reasoning |  | $4 \sim$ |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) Choose one course from Scientific Reasoning Menu |  |  |  |
| GenEd-CW Creative Work |  | 32 |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) Choose one course from Creative Work Menu |  |  |  |
| Total Credits: 19-20 |  |  |  |
| Semester 4 Advising Note |  |  |  |
| - Apply for graduation |  |  |  |

Medical Information Management Option (continued)

## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WIL BE ABLE TO:- Demonstrate proficiency in computer operations and software applications unique to a medical setting.
- Demonstrate proficiency in understanding and using medical terminology.
- Use the complete range of Microsoft applications effectively and efficiently. - Demonstrate proficiency in medical office operations and communication media


## CAREER OUTLOOK

Graduates of this option qualify for job opportunities in physicians' and dentists' offices, clinics, HMOs , community health agencies, long-term care facilities, and hospitals. Students also qualify for jobs in large corporations that provide on-site health services, engage in medical research, or produce medical products. Graduates qualify for entry-level positions such as medical receptionists, medical records management specialists, medical office managers, patient service representatives, and medical administrative assistants. Students also may qualify for at-home opportunities as medical transcriptionists.

Certificate
Science, Engineering and M athematics - Medical Laboratory Assistant

## Medical Laboratory Assistant Certificate Program

| ADMISSIO | N REQ UIREMENTS | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| Diploma | High School diploma or GED |  |  |
| Session | Attend Mandatory information session |  |  |
| BIO-108 | Human Biology/Lab | 4 | MAT-093 and RDG-095 or ESL-099 and ENG-095 or ELL-103 or placement. |
| - Complete the course with a grade of C or better. |  |  |  |
| Total Credits: |  | 4 |  |
| Admission Requirements Advising Note |  |  |  |
| Students are encouraged to meet with the Program Director to discuss the application process and to explore the profession. <br> If you are accepted into the program, you must complete the following steps: <br> - Complete a CORI Form during the first semester in the Program. <br> - Complete the first page of a Student Health Form - this form must go to your doctor, and when completed, must be brought to Room E154 at the Charlestown Campus of BHCC. Health clearance is required to participate in clinical internships. |  |  |  |
| SEMESTE |  | Credits Milestone GenEd | Prerequisites |
| M LA-120 | Medical Terminology for the Clinical Laboratory Professional | 1 | Admission to Program. |
| M LA-121 | Phlebotomy and Specimen Processing | $4 \sim$ | Admission to Program. |
| ENG-111 | College Writing I | 3 | ENG-095 and RDG-095, ELL-103 or placement. |
| Total Credits: |  | 8 |  |
| Semester 1 Advising Note |  |  |  |
| M LA-120 and MLA-121 must be completed with a B-or higher. |  |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |  |  |  |  |  |  |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| MLA-222 | Clinical Laboratory Techniques | 4 |  |  |  |  |  |  |
| BIO-203 | Anatomy and Physiology/Lab I | 4 | MLA-120 and MLA-121 *see note. |  |  |  |  |  |
| Total Credits: |  |  |  |  |  |  | 8 | BIO-105 or BIO-108 or BIO-195. |

## Semester 2 Advising Note

*N ote: M LA-120 and MLA-121 must be completed with a grade of B- or higher.

| SEMESTER 3 SUMMER | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :--- | :--- |
| MLA-223 | Clinical Practicum | 4 | MLA-121 and MLA-222. |
| MLA-222 must be completed with a grade of B- or higher. |  |  |  |
| MAT-181 | Statistics | 3 | MAT-097 or MAT-098. |

## Semester 3 Summer Advising Note

*N ote: M LA-222 must be completed with a grade of B- or higher.
Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\leqslant$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Develop an attitude of professionalism and be knowledgeable of the ethical considerations of dealing with patient and laboratory information.
- Correctly perform basic venipuncture techniques using a variety of blood drawing apparatuses.
- Explain the proper method to process and store various specimens used for laboratory testing.
- Describe the routine workflow of the clinical laboratory.
- Describe the importance of and correctly utilize a laboratory information system (LIS).
- Discuss the various types of laboratory equipment that would be best utilized for various testing procedures.
- Describe the roles of laboratory staff.
- Discuss the advantages and disadvantages of instrumentation. - Discuss the importance of and how to perform maintenance and quality control on instrumentation.
- Perform assigned procedures, demonstrating competency in the performance of the test, understanding the underlying principles of the test, and the determination of appropriate actions necessary in handling and reporting of sensitive data.
- Demonstrate organizational skills in the performance of assigned workload in a timely manner.


## CAREER OUTLOOK

A Medical Lab Assistant (MLA) is someone who works in a laboratory setting and assists in the processing of patient samples and the preparation of tests that need to be done. They play a key role in aiding the medical technologist and allowing for everything to run as efficiently as possible. They perform phlebotomy, specimen processing, testing preparation for the Medical Technologist to perform the actual testing, maintenance and calibration of instrumentation, and work with the Laboratory Information System (LIS).

## Microsoft Applications Support Specialist Certificate Program

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |  |  |
| :--- | :--- | :---: | :--- | :--- |
| CIT-110 | Applications/Concepts | 3 |  | ESL-098 or ELL-103 or RDG-095 or placement. |
| CIT-133 | Introduction to Microsoft Office | 3 |  |  |
| OIM-100 | PC Keyboarding Techniques | 1 |  |  |

- For students proficient in keyboarding techniques, a challenge exam is available. For more information please email pla@bhcc.edu Total Credits: 7

| SEMESTER 2 |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| CIT-233 | Advanced MS Office | 3 | ${ }^{\sim}$ | CIT-110 or CIT-113 or CIT-133 or Chair approval. |
| CIT-250 | Collaboration, Communication and Integration in MS Office Applications | 3 | $\cdots$ | CIT-110 or CIT-113 or Chair approval. |
| CIT-230 | Help Desk Techniques | 3 | $\cdots$ | CIT-110 or Chair approval. |
|  | Total Credits: | 9 |  |  |
| Semester 2 Advising Note |  |  |  |  |
| - Apply for graduation |  |  |  |  |

* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Understand in-depth and support the most common desktop Office
Applications.
- Understand and support the Integration features among all Microsoft Office applications.
- Set-up, support and conduct on-line meetings.
- Troubleshoot end-user O ffice application problems.
- Demonstrate good communication skills and professional behavior while working with customers.
- Qualify to take the Microsoft Office Word, Excel \& Outlook Certification Examinations.


## CAREER OUTLOOK

Graduates completing this certificate may find employment in information support services departments in organizations large and small as applications support and/or "Help Desk" specialists.

Certificate
Professional Studies - Business Administration

## Sport Management Certificate Program

| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| BUS-101 | Introduction to Business | 3 | ${ }^{\sim}$ | ESL-098 and ESL-099 or RDG-095 or ELL-103 and ENG-090 or placement. |
| SPM-101 | Principles of Sport Management | 3 | $\cdots$ | Pre/Co-requisite of BUS-101. |
| CIT-110 | Applications/Concepts | 3 |  | ESL-098 or RDG-095 or ELL-103 or placement. |
| Elective | Elective | 3 |  |  |
| - Elective Options: <br> ACC-101 Accounting I, FIN-112 Personal Finance |  |  |  |  |
|  |  |  |  |  |

Total Credits: 12

| SEMESTER 2 |  | Credits | Milestone GenEd |  | Prerequisites |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPM-211 | Sport Facility and Event Management | 3 | \| | SPM-101. |  |
| SPM-213 | Sport Law and Ethics | 3 | $\cdots$ | SPM-101. |  |
| SPM-215 | Sport Marketing and Promotion | 3 | $\cdots$ | SPM-101. |  |
| BUS-207 | Professional Communication | 3 |  | ENG-111. |  |
|  | Total Credits: | 12 |  |  |  |

## Semester 2 Advising Note

- ENG-111 is not a required course for this program, but is a prerequisite for BUS-207.
- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
$\approx$ This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Apply the foundational concepts of managerial, marketing and leadership skills to a sport management enterprise/environment.
- Understand the basic principles of sport management and apply research and theory to solve sport and event management issues.
- Integrate principles of management to organize people and resources to succeed in the sport management industry.


## CAREER OUTLOOK

This option prepares students to seek employment in many entry-level positions in the areas of health and fitness, sport and leisure, park and recreation and the professional sport industry including opportunities in the management of professional, college, secondary school and community sports.

## Sport Management Option



Sport Management Option（continued）

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| SPM－201 Psychology of Sport | 3 | PSY－101． |
| MAT－181 Statistics | $3 \sim$ | MAT－097 or MAT－098 or placement． |
| \％This course meets the General Education requirement for Quantitative Problem Solving（Formerly Area 4） |  |  |
| ECO－201 Macroeconomics | 3 E | MAT－097 or MAT－098 or placement and RDG－ 095 or ELL－103 or placement． |
| This course meets the General Education requirement for General Education Elective． |  |  |
| BIO－108 Human Biology／Lab | 4 E | ENG－095，MAT－093 and RDG－095 or ELL－103 or placement． |
| 2 This course meets the General Education requirement for Scientific Reasoning（Formerly Area 5） |  |  |
| PSY－101 Principles of Psychology | 3 \｜ | ESL－098 or RDG－095 or ELL－103 or placement． |
| This course meets the General Education requirement for Community \＆Cultural Contexts（Formerly Areas 2 and 3） |  |  |
| Total Credits： 16 |  |  |
| Semester 3 Advising Note |  |  |
| －Continue preparations for transfer：write essays for transfer institution，collect letters of recommendation，apply for transfer． <br> －Develop a financial plan for continued education and life after graduation． <br> －Complete a pre－graduation check with an advisor in LifeMap |  |  |



Milestone Courses should be taken in the order shown．This will help you stay on track and graduate on time．
$\mathfrak{\Im}$ This course has pre／co－requisites．Advising note or suggestion regarding this course．
This course satisfies General Education requirement．

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be Able to：

－Integrate principles of management to organize people and resources to succeed in the sport management industry．
－Apply the concepts needed to plan， lead，organize，control and staff the operations of a sport management enterprise．
－Understand the basic principles of sport management as they relate to legal issues，managing and marketing a sports organization，communications and administration．

## CAREER OUTLOOK

This option prepares students to seek employment in many entry－level positions in the areas of health and fitness，sport and leisure，park and recreation and the professional sport industry including opportunities in the management of professional，college， secondary school and community sports．

## Cisco Systems CCNA (Fast-Track) Certificate Program

| SEMESTER 1 |  | Credits Milestone GenEd |  | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| CIT-110 | Applications/Concepts or |  |  |  |
| CIT-113 | Information Technology Problem Solving or | 3 |  | ESL-098 or RDG-095 or placement. |
| CIT-182 | PC Hardware and Software |  |  |  |
| CIT-162 | Cisco Networking I | 3 | $1 \sim$ | ESL-098 or RDG-095 or placement. |
| CIT-167 | Cisco Networking II | 3 | $1 \sim$ | CIT-162. |
| CIT-267 | Cisco Networking III | 3 | $1 \sim$ | CIT-167. |
| CIT-274 | Cisco Networking IV | 3 | $1 \sim$ | CIT-267. |
| OIM-100 | PC Keyboarding Techniques | 1 |  |  |
|  | Total Credits: | 16 |  |  |

## Semester 1 Advising Note

- In order to complete the Fast Track (FT) certificate in one semester, students must register for FT courses.
- Alternatively, if a student has successfully finished one of the Networking courses previously in any other format (full semester or web), the student may complete the remaining courses as FT courses.
- CIT-162 Cisco Networking I must be taken before registering for Networking II OR Networking III OR

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathcal{F}$ This course has pre/co- requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL <br> be ABLE TO:

- Qualified to apply for positions as entrylevel network technicians.
- Prepared to take the Cisco CCNA

Certification Examination(s).

## Computer Information Systems Concentration

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CIT-110 Applications/Concepts <br> CIT-113 or <br> Information Technology Problem Solving  | 3 \| | Prerequisites for CIT-110 and CIT-113: ESL-098 or RDG-095 or ELL-103 or placement. |
| - CIT-113 satisfies the Learning Community Requirement |  |  |
| ENG-111 College Writing I | 3 T | ENG-095 and RDG-095, ELL-103 or placement. |
| 2 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| ACC-101 Principles of Accounting I | 3 - | ESL-098 or RDG-095 or ELL-103 or placement. |
| GenEd-E General Education Elective | 3 E |  |
| $\approx$ This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
| GenEd-Q PS Q uantitative Problem Solving | 3-4 $\quad$ - | M AT-097 or M AT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) |  |  |
| Total Credit |  |  |

## Semester 1 Advising Note

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Students taking 9 or more credits should take CIT-113

| SEMESTER 2 | Credits | Milestone GenEd |
| :--- | :---: | :--- |$\quad$ Prerequisites

This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3)
Elective Mathematics Elective 3-4 MAT 097 or MAT-098 or placement.

- Choose one college-level MAT course

$$
\text { Total Credits: } 15-16
$$

## Semester 2 Advising Note

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair


Certificate
Professional Studies - Computer Information Technology

# Computer Support Specialist Certificate Program 

| SEMESTER 1 |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| CIT-110 | Applications/Concepts | 3 | ${ }^{\sim}$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| CIT-133 | Introduction to Microsoft Office | 3 | \\| |  |
| CIT-162 | Cisco Networking I | 3 |  | ESL-098 or RDG-095 or ELL-103 or placement. |
| CIT-182 | PC Hardware and Software | 3 |  | RDG-095 or ELL-103 or ESL-098 or placement. |
| OIM-100 | PC Keyboarding Techniques | 1 |  |  |
|  | Total Credits: | 13 |  |  |

## Semester 1 Advising Note

- Students can also complete the Challenge Exam for OIM-100. Please email pla@bhcc.edu for more information.



## Computer Support Specialist Option



Computer Support Specialist Option (continued)

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| CIT-182 | PC Hardware and Software | $3 \quad \omega$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| ENG-112 | College Writing II | 3 2 | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |  |
| CIT-299C Computer Technology Internship |  | 3 \| | Chair approval. |
| GenEd-SR Scientific Reasoning |  | $4 \quad \sim$ |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> - Choose one course from Scientific Reasoning Menu |  |  |  |
| ACC-101 | Principles of Accounting I | 3 | ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement. |
|  | Total Credits: | 16 |  |
| Semester 3 Advising Note |  |  |  |
| SEMESTER 4 |  | Credits Milestone GenEd | Prerequisites |
| CIT-250 | Collaboration, Communication and Integration in MS Office Applications | 3 | CIT-110 or CIT-113 or Chair approval. |
| GenEd-E General Education Elective |  | 3 2 |  |
| This course meets the General Education requirement for General Education Elective. <br> - Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |  |
| $\begin{aligned} & \text { CIT-230 } \\ & \text { COM-171 } \end{aligned}$ | Help Desk Techniques | $3 \\|$ | CIT-110 or Chair approval. |
|  | Public Speaking and Professional Communication | 3 |  |
| CIT-268 | Windows Operating Systems | $3 \sim$ | CIT-110 or CIT-113 or CSC-120 or Chair approval. |
|  | Total Credits: | 15 |  |
| Semester 4 Advising Note <br> - Apply for graduation |  |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{F}$ This course has pre/co- requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |  |
| UPON COM CONCENTR be Able TO <br> - Take the C Examination <br> - Understand support, hard IT support p |  | OUTLOOK <br> s of this option may qualify el support positions in support, trouble-shooting k, Microsoft applications a rnet support positions. | y for |

## Cybersecurity Option

| SEMESTER |  | Credits | s Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CIT-110 } \\ & \text { CIT-113 } \end{aligned}$ | Applications/Concepts <br> or <br> Information Technology Problem Solving | 3 | $\cdots$ | Prerequisites for CIT-110 and CIT-113: ESL-098 or RDG-095 or ELL-103 or placement. |
| - CIT-113 satisfies the Learning Community requirement. |  |  |  |  |
| CIT-162 | Cisco Networking I | 3 | $\cdots$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| CIT-182 | PC Hardware and Software | 3 | $\cdots$ | RDG-095 or ELL-103 or ESL-098 or placement. |
| ENG-111 | College Writing I | 3 | 2 | ENG-095 and RDG-095, ELL-103 or placement. |
| * This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |  |
| GenEd-Q PS Q uantitative Problem Solving |  | 3-4 | 2 | MAT-097 or MAT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) Choose one MAT course from Quantitative Problem Solving Menu. |  |  |  |  |
| Semester 1 Advising Note <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. |  |  |  |  |
| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| CIT-118 | Principles of Internet \& Information Security | 3 | $\omega \quad$ Cit | CIT-110 or CIT-113 or CSC-120 or Chair approval. |
| CIT-268 | Windows Operating Systems | 3 | $\cdots$ | CIT-110 or CIT-113 or CSC-120 or Chair approval. |
| CIT-121 | Introduction to Computer Forensics | 3 | $\cdots \quad$ | CIT-110 or CIT-113 or CSC-120 or Chair approval. |
| CIT-167 | Cisco Networking II | 3 | $\cdots$ C | CIT-162. |
| ENG-112 | College Writing II | 3 | $\approx E$ | ENG-111. |
| * This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |  |  |
| Total Credits: 15 |  |  |  |  |
| Semester 2 Advising Note |  |  |  |  |

SUMMER SEMESTER
GenEd-CCC Community \& Cultural Contexts
Credits Milestone GenEd
This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3)
Total Credits: 3

Cybersecurity Option (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |  |  |
| :--- | :--- | :---: | :--- | :--- | :--- |
| CIT-264 | Networking Security | 3 |  | CIT-162. |
| CIT-219 | Information Security and Assurance | 3 |  | CIT-268. |
| CSC-125 | Python Programming | 3 |  | CIT-113 or CIT-110 or CSC-120 or CMT-121. |
| Elective | CIT Elective | $3-4$ |  |  |

- Elective Options:

CIT-221 Advanced Computer Forensics, CSC-225 Adv Python Programming, CIT-262 Wireless Technology,
CIT-267 CISCO Networking III, CIT-270 Linux Administration/Lab, CIT-274 CISCO Networking IV,
CIT-282 MS Windows Administration/Lab, CRJ -245 Cyber Crime-J ustice in the Virtual World


- Elective Options:

CIT-221 Advanced Computer Forensics, CSC-225 Adv Python Programming, CIT-262 Wireless Technology,
CIT-267 CISCO Networking III, CIT-270 Linux Administration/Lab, CIT-274 CISCO Networking IV,
CIT-282 MS Windows Administration/Lab, CRJ-245 Cyber Crime-J ustice in the Virtual World

## GenEd-E General Education Elective 3

This course meets the General Education requirement for General Education Elective.

- Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

GenEd-CW Creative Work 3
$\approx$ This course meets the General Education requirement for Creative Work (Formerly Area 6)

- Choose one course from Creative Work Menu

Total Credits: 16-17

## Semester 4 Advising Note

- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{F}$ This course has pre/co- requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Understand network protocols and routing.
- Understand commonly used network services - DNS, mail, web, etc. as well as less common network services.
- Perform packet analysis and be able to identify malformed packets.
- Understand differences between various operating systems - which OS an event came from and which $O S$ is vulnerable to a certain attack.
- Define the types of malicious software found in modern networks.
- Explain the threats and countermeasures for physical security and social engineering.
- Perform footprinting, port scans, and enumeration on a network.
- Perform very simple programming in C, HTML, and Perl, specifically oriented towards the needs of network security professionals.
- Identify Microsoft Windows vulnerabilities and to harden systems.
- Identify Linux vulnerabilities and to protect servers.
- Describe and deploy security devices, including routers, firewalls, Intrusion Detection Systems, and honeypots.
- Describe the ethics associated with the use of hacking or penetration testing tools and techniques.


## CAREER OUTLOOK

The option is designed to align with the National Institute of Technology and Standards' (NITS) N ational Initiative for Cybersecurity Education Cybersecurity Workforce Framework to ensure consistent, current, and flexible training in the growing technology field of Information Security. Graduates of this option will qualify for positions as entrylevel information security professionals.

## Data Analytics Certificate Program

| SEMESTER $\mathbf{1}$ |
| :--- |
| CIT-113 | | Information Technology Problem |
| :--- |
| Solving |

## Data Analytics Option



Data Analytics Option (continued)

| SEMESTER 4 |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| CIT-130 | Data Visualization | 3 |  |
| CIT-268 | Windows O perating Systems | 3 CIT- | or CIT-113 or CSC-120 or Chair al. |
| GenEd-C | N Creative Work | 32 |  |
| This course meets the General Education requirement for Creative Work. <br> Choose one course from General Education Program Menu |  |  |  |
| CSC-225 Advanced Python Programming 3 CSC-125. |  |  |  |
| GenEd-E General Education Elective |  | 4 N |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose one four credit Science/Lab course (see semester four advising note) |  |  |  |
| Total Credits: 16 |  |  |  |
| GenEd-E To satisfy MassTransfer STEM program requirements, students are required to earn seven credits in the Natural/Physical Sciences. |  |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. This course has pre/co-requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |  |
| UPON COMPLETION OF THIS - Handle data with an ethically  <br> CONCENTRATION GRADUATES WILL conscious approach and understanding. CAREER OUTLOOK <br> BE ABLE TO: - Select the correct data visualization to Graduates of this option will be <br> - Collect, clean and prepare data from communicate findings and <br> recommendations. qualified to pursue internships or junior <br> various sources for analysis. <br> - Utilize R and Python computer - Select appropriate data visualizations analytics. <br> languages to generate insight from jobs in the field of data   <br> data. to clearly communicate insights to  |  |  |  |

Certificate
Professional Studies - Computer Information Technology

## Data Management (Fast-Track) Certificate Program

| SEMESTE |  | Credits | S Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CIT-110 } \\ & \text { CIT-113 } \\ & \text { CSC-120 } \end{aligned}$ | Applications/Concepts <br> or <br> Information Technology Problem Solving <br> or <br> Intro to Computer Science and Object <br> Oriented Programming | $3-4$ $3-4$ | $\cdots$ | Prerequisites for CIT-110: ESL-098 or RDG-095 or ELL-103 or placement. <br> Prerequisites for CIT-113: RDG-095 or ELL-103 or ESL-098 or placement. <br> Prerequisites for CSC-120: ENG-095 and RDG 095 or ELL-103 or ESL-098 and MAT-099 or placement. |
| SEMESTER 2 |  | Credits | Milestone GenEd | Prerequisites |
| MAT-181 | Statistics | 3 | \|w | MAT-097 or MAT-098 or placement. |
| CIT-137 | Introduction to Big Data with R and R Studio | 3 | $\cdots$ | CIT-110 or CIT-113 or CSC-120 or Chair approval. |
| CSC-236 | SQL Programming | 3 | $\cdots$ | CIT-110 or CIT-113 or CSC-120 or Chair approval. |
| CIT-234 | Decision Support Using Microsoft Excel | $12$ | ${ }^{\sim}$ | CIT-110 or CIT-113 or CSC-120 or Chair approval. |
| Semester 2 Advising Note |  |  |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. <br> $\mathfrak{F}$ This course has pre/co- requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |  |  |
| UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be Able to: |  | CAREER OUTLOOK |  |  |
| - Design and code complex queries. <br> - Find databases, and convert the data into readable and analyzable formats. <br> - Support Excel functions and databases. <br> - Support basic data gathering and manipulation with R programming. |  | databas ositions in ons. | se and spreadshee in a wide range of |  |

## Electric Power Utility Program - A Partnership with EVERSOURCE

n partnership with EVERSOURCE and Local 369 UWUA, 3HCC offers a two-year accredited Associate in Science Jegree with a focus on Electric Power Utility Technology. Most classroom course work takes place at BHCC. Students eceive continuous hands-on training at EVERSOURCE labs and during required internships.

## Electric Power Utility Technology (EPUT) Program Requirements

Students must apply to the Electric Power Utility program through Enrollment Management and Admissions and zomplete an Eversource application which may be found at tbcdn.talentbrew.com/company/7774/FULL_v1_0/docs/ EPUT-Application-2018-2019.pdf.

This two-year program of study includes approximately 12 weeks paid internship with Eversource for students who naintain a C or higher in all courses.

Students in this program must successfully pass any random drug or alcohol screening tests mandated by EVERSOURCE during the program; successfully complete all appropriate Skills Aptitude Tests administered by EVERSOURCE; and naintain safety skills to EVERSOURCE criteria as per OSHA 1910 and OSHA 1926 directives. Qualified applicants must sass additional physical and mechanical testing.

Graduates of the program in good standing at Eversource will have the opportunity to interview with Eversource for a votential job.

## Careers and Salaries

During break, students in the Electric Power Utility program participate in a paid ten to twelve week work experience at Eversource while they complete a for-credit internship course. Students are paid $\$ 14$ an hour.

After completing this degree option, students receive an associate in science degree and a certificate in Natural Gas Technology. They will have the experience and qualifications needed to launch a career in electric and gas.

The current starting salary range for laborers in Massachusetts is approximately $\$ 30$ an hour, with additional compensation for overtime.

## Tuition Assistance

Eversource offers tuition assistance to enrolled students up to $\$ 600$ per semester.

For more information visit bhcc.edu/eput.

## Electric Power Utility Technology Program

| ADMISSION REQUIREMENTS | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Diploma Possess a High School Diploma or GED |  |  |
| Other See Admissions Requirements below |  |  |
| Test Take College Placement Test |  |  |
| MAT-097 Fundamentals of Algebra | 3 |  |
| - Completion of MAT-097 or higher placement |  |  |
| ENG-095 Writing Skills II | 3 |  |
| - Completion of ENG-095 or higher placement |  |  |
| Total Credits: | 6 |  |

## Admission Requirements Advising Note

- If you meet the academic requirements for BHCC you will receive an email from Eversource with next steps to continue with the application process. For more info - https://jobs.eversource.com/ student-programs\#electric- power-utility
- As a prerequisite for internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SO RI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

| SEMESTE |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ENG-111 | College Writing I | 3 N | ENG-095 and RDG-095, ELL-103 or placement. |
| 2 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |
| M AT-193 | Topics in Algebra and Trigonometry | 3 \| | MAT-097 or placement. |
| EPU-101 | DC Circuit Theory/Lab | 4 - | Pre/co-requisite: MAT-193. |
| EPU-151 | Fundamentals of Single Phase and Poly Phase Metering | 4 \| | Acceptance into the program. |
| CIT-110 | Applications/Concepts | 3 | ESL-098 or RDG-095 or placement. |
|  | Total Credits: | 17 |  |

## Semester 1 Advising Note

- Courses with EPU, MAT and PHY prefixes must be taken and completed as indicated in the program map.
- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.

| SEMESTER 2 |
| :--- | Credits Milestone GenEd

## Excel Applications Support Specialist Certificate Program


( Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
$\approx$ This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO:

- Use spreadsheet models, analyze and evaluate revenues, expenses and cash flows.
- Understand and utilize collaboration techniques of the Microsoft Office Suite.
- Understand the requirements of securing data and computer systems.


## CAREER OUTLOOK

Most organizations, across all industry segments have increased utilization of Excel software. As a result, the employment prospects for students completing this certificate program are extremely high. O ver 1,500 requests for Excel skills can be found through Boston-area searches of job placement websites.

Certificate
Professional Studies - Computer Information Technology

# Health Information Networking Certificate Program 



| SEMESTER |  |  | Credits | Milestone GenEd |  | Prerequisites |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIT-167 | Cisco Networking II |  | 3 | ${ }^{\sim}$ | CIT-162. |  |
|  |  | Total Credits: | 3 |  |  |  |
| Semester 2 Advising Note |  |  |  |  |  |  |
| - CIT-167 is the equivalent to Cisco's CCNA R\&S Semester 2 <br> - Upon completion of CIT-167, prepare and take the Cisco Certified Networking Technician certification. <br> - Speak to an Advisor about internship and career opportunities. |  |  |  |  |  |  |


| SEMESTER 3 |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| CIT-267 | Cisco Networking III | 3 | CIT-167. |
| CIT-277 | Health Information Networking | 3 | CIT-167. |
| CIT-279 | Cisco CCNA Security | 3 | CIT-167. |
| Total Credits: 9 |  |  |  |
| Semester 3 Advising Note <br> - CIT-267 is the equivalent to Cisco's CCNA R\&S Semester 3 <br> - CIT-274 is the equivalent to Cisco's CCNA R\&S Semester 4 <br> - CIT-279 is the equivalent to Cisco's CCNA Security <br> - Upon completion of CIT-274, prepare and take the Cisco Certified Networking Associate certification and/or <br> - Upon completion of CIT-279 prepare and take the Cisco CCNA Security certification <br> - Speak to an Advisor about internship and career opportunities. |  |  |  |


| SEMESTER 4 |  | Credits Milestone GenEd | Prerequisites |
| :--- | :--- | :---: | :--- |
| CIT-274 | Cisco Networking IV | 3 | Co-requisite: CIT-267 or Chair approval. |
|  |  | Total Credits: | 3 |

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathcal{F}$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

Health Information Networking Program (continued)

## UPON COMPLEIION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Apply for entry-level networking positions.
- Apply for entry-level network security specialist careers.
- Apply for entry-level network and network security positions in the healthcare industry.
- Prepare to take the Cisco CCNA

Certification Examination(s).

- Prepare to take the Comp TIA A+

Certification Examination(s).

- Prepare to take the Cisco Network Security Certification Examination.

CAREER OUTLOOK
The Health Information Networking
Program helps students prepare for entrylevel specialized ICT and networking careers in physician offices, hospitals, healthcare facilities and with third-party contractors. Students also gain the knowledge and skills needed to prepare for entry-level security specialist careers and networking careers in industry and will be prepared to take multiple industry certificate exams.

# Health Information Technology Certificate Program 

| SEMESTE |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CIT-113 } \\ & \text { CIT-110 } \end{aligned}$ | Information Technology Problem Solving or Applications/Concepts | 3 | ${ }^{\sim}$ | Prerequisites for CIT-110 and CIT-113: ESL-098 or RDG-095 or ELL-103 or placement. |
| - CIT-110 is recommended. |  |  |  |  |
| CIT-182 | PC Hardware and Software | 3 | ${ }^{\sim}$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| - CIT-182 is the equivalent to Cisco's IT Essentials A + certification course |  |  |  |  |
| CIT-162 | Cisco Networking I | 3 | ${ }^{\sim}$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| CIT-162 is the equivalent to Cisco's CCNA R\&S Semester 1 |  |  |  |  |
|  | Total Credits: | 9 |  |  |
| Semester 1 Advising Note |  |  |  |  |
| - CIT-182 is the equivalent to Ciscos' IT Essentials A+ <br> - CIT-162 is the equivalent to Cisco's CCNA R\&S Semester 1 <br> - Upon completion of CIT-182, prepare and take the CompTiA A+ certifications <br> - Speak to an Advisor about internship and career opportunities. |  |  |  |  |


| SEMESTER 2 |  | Credits | estone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| CIT-183 | Healthcare IT Concepts I | 3 | - | CIT-110 or CIT-113 or CSC-120 or Chair approval and pre/co-requisite of CIT-182. |
| CIT-167 | Cisco Networking II | 3 | $\cdots$ | CIT-162. |
| - CIT-167 is the equivalent to Cisco's CCNA R\&S Semester 2 |  |  |  |  |
| CIT-288 | Healthcare IT Concepts II | 3 | ${ }^{\sim}$ | Pre/co-requisite: CIT-183 or Chair approval. |
| Total Credits: |  |  |  |  |
| Semester 2 Advising Note <br> - CIT-167 is the equivalent to Cisco's CCNA R\&S Semester 2 <br> - Upon completion of CIT-167, prepare and take the Cisco Certified Networking Technician certification. <br> - Upon completion of CIT-288, prepare and take the Certified Healthcare Technology Specialist certification. <br> - Speak to an Advisor about internship and career opportunities. <br> - Apply for graduation |  |  |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{F}$ This course has pre/co- requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |  |  |

## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WILL BE ABLE TO:- Apply for entry-level Healthcare IT positions.
- Apply for entry-level Healthcare IT Systems Support positions.
- Apply for entry-level Healthcare Hardware/Software Support positions.
- Apply for entry-level Healthcare Network Support positions.
- Achieve the national Healthcare

Technology and Information Management competencies.

- Apply Healthcare IT competencies to current Healthcare positions.
- Prepare to take the CompTIA A+ Certification Examination(s).
- Prepare to take the Cisco CCENT Certification Examination


## CAREER OUTLOOK

The Health Information Technology Certificate Program prepares students for entry-level Healthcare IT careers in a variety of healthcare settings including physician offices, clinics, hospitals, and with third-party contractors. Students also gain the knowledge and skills needed to achieve the national Health Information Technology competencies and will be prepared to take multiple IT certification exams.

## Information Technology Transfer Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CIT-113 Information Technology Problem Solving or <br> CIT-110 Applications/Concepts | $\cdots$ | Prerequisites for CIT-110 and CIT-113: ESL-098 or RDG-095 or ELL-103 or placement. |
| - CIT-113 satisfies Learning Community Requirement |  |  |
| ENG-111 College Writing I | $3 \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| MAT-181 Statistics | $3 \sim$ | MAT-097 or MAT-098 or placement. |
| $\sim$ This course meets the General Education requirement for Q uantitative Problem Solving (Formerly Area 4) |  |  |
| GenEd-CCC Community \& Cultural Contexts | $3 \sim$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) Choose one course from the Community and Cultural Context Menu |  |  |
| GenEd-E General Education Elective 2 |  |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. <br> Total Credits: 15 |  |  |
| Semester 1 Advising Note <br> - New degree-seeking student enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| CSC-125 Python Programming | $3 \sim$ | CIT-110 or CIT-113 or CSC-120 of CMT-121 or Chair approval. |
| CMT-111 HTML5 | 3 |  |
| CIT-162 Cisco Networking I | $3 \sim$ R | RDG-095 or ELL-103 or ESL-098 or placement. |
| GenEd-CW Creative Work | 32 |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) Choose one course from Creative Work Menu |  |  |
| MAT-194 College Algebra for STEM | 4 M | M AT-099 or placement. |
| Total Credits: | 16 |  |
| Semester 2 Advising Note <br> - Begin exploring transfer options: attend a transfer work <br> - Meet with an advisor to begin career planning activit | workshop and the College vities. | transfer fair; follow-up with an advisor. |



## Network Technology and Administration Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| $\begin{array}{ll}\text { CIT-113 } & \text { Information Technology Problem Solving } \\ \text { or } \\ \text { CIT-110 } & \text { Applications/Concepts }\end{array}$ | 3 - | Prerequisites for CIT-110 and CIT-113: RDG-095 or ESL-098 and or placement. |
| - CIT-113 satisfies the Learning Community Requirement |  |  |
| ENG-111 College Writing I | 3 \| | ENG-095 and RDG-095, ELL-103 or placement. |
| 2 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| CIT-162 Cisco Networking I | $3 \quad \omega$ | ESL-098 or RDG-095 or placement. |
| CIT-182 PC Hardware and Software | 3 | RDG-095 or ESL-098 or placement. |
| GenEd-Q PS Q uantitative Problem Solving | $3 \sim$ | MAT-097 or MAT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) Choose one MAT course from Quantitative Problem Solving Menu. |  |  |
| OIM-100 PC Keyboarding Techniques |  |  |
| - Student can also complete the Challenge Exam for OIM-100. Please email pla@bhcc.edu for more information |  |  |
| Total Credits: 16 |  |  |
| Semester 1 Advising Note <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| CIT-167 Cisco Networking II | 3 \| | CIT-162. |
| CIT-268 Windows Operating Systems | 3 \\| | CIT-110 or CIT-113 or CIT-120 or Chair approval. |
| GenEd-SR Scientific Reasoning | 4 E |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> Choose one course from Scientific Reasoning Menu |  |  |
| ENG-112 College Writing II | 3 E | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| CIT-282 MS Windows Server Administration/Lab | 4 | CIT-162 and pre/co-requisite CIT-268. |
| Total Credits: | 17 |  |
| Semester 2 Advising Note <br> - Meet with an advisor to begin career planning activiti <br> - Begin exploring transfer options: attend a transfer wo | es. <br> rkshop and the College tr | sfer fair. |

Certificate
Professional Studies - Computer Information Technology

## PC Hardware Support Specialist Certificate Program



## Gaming/Computer Artist Track Simulation Option

| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| CMT-101 | Game Development Essentials | 3 | ${ }^{\sim}$ | ENG-095 and ESL-098 or RDG-095 or ELL-103 or placement. |
| - Satisfies Learning Community Requirement |  |  |  |  |
| CMT-121 M | Maya Foundations | 3 | \\| | ENG-095 and ESL-098 or RDG-095 or ELL-103 or placement. |
| ENG-111 | College Writing I | 3 | 2 | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |  |
| GenEd-CCC Community \& Cultural Contexts 3 |  |  |  |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) Choose one course from Community and Cultural Contexts Menu Recommended: SOC-101 |  |  |  |  |
| GenEd-E General Education Elective 3 |  |  |  |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. <br> Total Credits: 15 |  |  |  |  |
| Semester 1 Advising Note <br> - CMT-101: New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year |  |  |  |  |
| SEMESTER 2 |  | Credits Milestone GenEd |  | Prerequisites |
| CMT-123 M | Maya Character Modeling | 3 | ${ }^{\sim}$ | CMT-121. |
| CMT-119 | Human Character | 3 |  | CMT-101. |
| CMT-103 M | Managing Game Development | 3 |  | ENG-095 and ESL-098 or RDG-095 or ELL-103 or placement. |
| ENG-112 | College Writing II | 3 | 2 | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |  |  |
| CMT-229 | Creating 3D Special Effects | 3 | ${ }^{\sim}$ | CMT-121. |
|  | Total Credits: | 15 |  |  |
| Semester 2 Advising Note |  |  |  |  |



Gaming/Computer Artist track Simulation Option (continued)

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CMT-249 3D Liquids Simulation | 3 | CMT-229. |
| COM-171 Public Speaking and Professional Communication | 3 |  |
| VMA-151 Introduction to Audio Technology | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
| GenEd-SR Scientific Reasoning | $4 \vec{*}$ |  |
| $\approx$ This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> - Choose one course from Scientific Reasoning Menu |  |  |
| Elective Career Elective | 3 |  |
| Choose one Computer Media Technology (CMT) or Visual and Media Arts (VMA) course. |  |  |

## Total Credits: 16

## Semester 4 Advising Note

- Apply for graduation

N Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

* This course has pre/co-requisites. Advising note or suggestion regarding this course.
$\approx$ This course satisfies General Education requirement.


## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WILL BE ABLE TO:- Create game characters.
- Create custom textures for clothing, surfaces and environmental objects.
- Create 3D objects as game constructs.
- Create 3D lakes, rivers, streams, beverages, soft candy products and liquefied solids to name a few.
- Effectively light and shade the game scene.
- Manage the game development process.


## CAREER OUTLOOK

Students completing this program qualify for entry level positions in local and national gaming and computer simulation companies. The career outlook for computer gaming/simulation opportunities is projected to grow at a rapid rate in the coming years. The inclusion of computer generated graphics in movies, television, educational tutorials and social media have made this career choice very attractive.

## Gaming/Computer Programming Track Simulation Option



Gaming/Computer Programming track Simulation Option (continued)

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| CMT-249 | 3D Liquids Simulation | 3 | CMT-229 or Approval from the Department Chair. |
| CMT-232 | Game Engines | 3 | CMT-231 or Department Chair Approval. |
| VMA-151 | Introduction to Audio Technology | 3 | Grade of C or better in ENG-095 or ELL-103 and MAT-093 or placement. |
| GenEd-SR | Scientific Reasoning | $4 \geqslant$ |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> - Choose one course from Scientific Reasoning Menu |  |  |  |
| Elective | Career Elective | 3 |  |
| Select the career elective from the Computer Media Technology or Visual M edia Arts Department |  |  |  |
|  | Total Cr | 16 |  |
| Semester 4 Advising Note |  |  |  |
| - Apply for graduation |  |  |  |

- Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co- requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.


## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WILL BE ABLE TO:- Create game characters.
- Create 3D objects as game constructs.
- Create 3D lakes, rivers, streams, beverages, soft candy products and liquefied solids to name a few.
- Effectively light and shade the game scene.
- Animate the game scene.
- Manage the game development process.


## CAREER OUTLOOK

Students completing this program qualify for entry level positions in local and national gaming and computer simulation companies. The career outlook for computer gaming/simulation opportunities is projected to grow at a rapid rate in the coming years. The inclusion of computer generated graphics in movies, television, educational tutorials and social media have made this career choice very attractive.

## Web Development Certificate

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| CMT-111 | HTM L5 | 3 \\| |  |
| VMA-105 | Digital Imaging with Photoshop | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
|  | Total Credits: | 6 |  |
| Semester 1 Advising Note |  |  |  |
| - Due to course prerequisites and the order required courses are sequenced, it is not possible to complete this certificate program in two semesters. |  |  |  |
| SEMESTER 2 |  | Credits Milestone GenEd | Prerequisites |
| CMT-125 Cascading Style Sheets |  | 3 | Pre/co-requisite: CMT-111. |
| CMT-113 J | J avascript | $3 \sim$ | CMT-111. |
|  | Total Credits: | 6 |  |
| SEMESTER 3 |  | Credits Milestone GenEd | Prerequisites |
| CMT-117 ${ }^{\text {X }}$ | XML | 3 | CMT-113. |
| CMT-225 j | jQ uery | $3 \sim$ | CIT-113. |
| CMT-228 | Web Design with Ajax | 3 | CMT-113. |
| CMT-241 | PHP/MySQL | 3 | CMT-113. |
|  | Total Credits: | 12 |  |
| SEMESTER 4 |  | Credits Milestone GenEd | Prerequisites |
| CMT-250 M | Mobile Web Applications | $3 \quad \\|$ | CMT-225. |
|  | Total Credits: | 3 |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. <br> This course has pre/co-requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |  |

UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be ABLE TO:

- Design, implement, publish, and maintain websites in support of creating a web presence for businesses and organizations.
- Create animated, event driven multimedia content for web delivery. - Construct, extract, transform, and present database resident content directly into a web delivery mechanism.
- Construct event driven action scripts within a web page to respond to user stimulations and provide dynamic results in a real time environment.


## CAREER OUTLOOK

Graduates of this program will qualify as entry-level web developers and web development support personnel.

Associate in Science

## Web Development Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | 3 \\| | ENG-095 and RDG-095, ELL-103 or placement. |
| 2 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| CMT-111 HTML5 | 3 \| | ENG-090 and RDG-090 or placement. |
| COM-171 Public Speaking and Professional Communication | 3 \| |  |
| VMA-105 Digital Imaging with Photoshop | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
| GenEd-Q PS Quantitative Problem Solving | 3-4 | M AT-097 or M AT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) <br> - Choose one course from Quantitative Problem Solving Menu |  |  |
| Total Credits: 15-16 |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | $3 \quad \stackrel{\rightharpoonup}{*}$ | ENG-111. |
| 2 This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| CMT-113 Javascript | $3 \sim$ | CMT-111. |
| CMT-125 Cascading Style Sheets | $3 \sim$ | Pre/co-requisite: CMT-111. |
| - Milestone courses should be taken in the order shown. |  |  |
| GenEd-SR Scientific Reasoning | $4 \quad \mathrm{~F}$ |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |  |  |
| GenEd-CW Creative Work | $3 \sim$ |  |
| - This course meets the General Education requirement for Creative Work (Formerly Area 6) |  |  |
| Total Credits: 16 |  |  |
| Semester 2 Advising Note |  |  |


| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CMT-225 jQuery | 3 \| | CMT-113. |
| CMT-228 Web Design with Ajax | 3 | CMT-113. |
| CMT-241 PHP/MySQL | 3 | CMT-113. |
| VMA-111 Introduction to Mass Media | $3 \\|$ | ENG-095 or ELL-103 and MAT-093. |
| - This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |
| CMT-117 XML | 3 \\| | CMT-113. |
| Milestone courses should be taken in the order shown. |  |  |
| Total Credits: | 15 |  |
| Semester 3 Advising Note |  |  |
| - Complete a pre-graduation check with an advisor | in LifeM ap |  |

Web Development Option (continued)


## Criminal Justice Career Option



Criminal Justice Career Option（continued）

| SEMESTER 3 | Credits | Milestone GenEd |
| :--- | :---: | :---: |
| SOC－207 | Criminology | 3 |
| Prerequisites |  |  |
| CRJ－211 | Criminal Procedure | 3 |
| GenEd－SR Scientific Reasoning | 4 | ENG－111 and CRJ－101 and CRJ－103． |
| This course meets the General Education requirement for Scientific Reasoning（Formerly Area 5） |  |  |
| Choose one course from Scientific Reasoning menu．SCI－150 Forensic Science／Lab is recommended． |  |  |

## Semester 3 Advising Note

－For students interested in a career in Law Enforcement recommended electives：CRJ－202 Evidence and Court Procedures and
CRJ－ 208 Criminal Investigation
－For students interested in a career in Corrections recommended electives：CRJ－102 J uvenile J ustice and CRJ－203
Rehabilitation of Offender
－Continue preparations for transfer：write essays for transfer institution，collect letters of recommendation，apply for transfer．
－Complete a pre－graduation check with an advisor in LifeM ap

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CRJ－275 Criminal J ustice Capstone | 3 | Complete all core requirements of the CRJ degree． |
| Elective－1 Career Elective | 3 |  |
| Choose from any non－required CRJ course |  |  |
| Elective－2 Career Elective | 3 |  |
| －Choose from any non－required CRJ course |  |  |
| Elective－3 Career Elective | 3 |  |
| －Choose from any non－required CRJ course |  |  |
| Elective－4 Open Elective | 3 |  |
| Recommended electives include communication or G | V or Computer or Foreign | anguage courses． |
| Total Credits： | 15 |  |
| Semester 4 Advising Note |  |  |
| －Apply for graduation |  |  |

Milestone Courses should be taken in the order shown．This will help you stay on track and graduate on time．
$\leqslant$ This course has pre／co－requisites．Advising note or suggestion regarding this course．
$\approx$ This course satisfies General Education requirement．

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be ABLE TO：

－Demonstrate knowledge，defend and critique the structure of the criminal justice system．
－Identify，demonstrate and evaluate knowledge of corrections，including its purpose and function．
－Explain the history and critique major theories of why crime is committed with a focus on criminal behavior．
－Identify and demonstrate knowledge of Courts including its purpose and function，be able to accurately discuss and relate criminal law and procedure and its constitutional basis．
－Identify and demonstrate knowledge of policing including its purpose and function，describe and assess the general responsibilities of the criminal justice professional including the professional＇s responsibilities and governing ethics．
－Articulate and critique the role of data and research in the development of criminal justice and policy．

## CAREER OUTLOOK

Graduates that complete the Transfer O ption can transfer to four－year colleges and universities to seek a bachelor＇s degree in criminal justice or a related field．Graduates who complete the Law Enforcement or Corrections Tracks qualify for entry level positions in law enforcement，corrections or security at local，state，regional and federal agencies．

## Criminal Justice Transfer Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | $3 \quad \mathrm{~F}$ | ENG-095 and RDG-095, ELL-103 or placement. |
| 0 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| PSY-101 Principles of Psychology | $3 \quad \stackrel{\rightharpoonup}{*}$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| This course meets the General Education requirement for General Education Elective. |  |  |
| GenEd-CW Creative Work | $3 \quad \stackrel{\rightharpoonup}{*}$ |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> Choose one course from Creative Work Menu |  |  |
| CRJ-101 Introduction to Criminal J ustice | 3 \| | ENG-095 and ESL-098 or RDG-095 or ELL-103 or placement. |
| Satisfies Learning Community Requirement |  |  |
| CRJ-103 Criminal Law | 3 \| | ENG-095 and ESL-098 or RDG-095 or ELL-103 or placement. |
| Total Credits: | 15 |  |
| Semester 1 Advising Note |  |  |
| - New degree-seeking students enrolled in 9 credits Community Cluster within their first year. | s or more must take a Lea | ning Community Seminar or a Learning |


| SEMESTER 2 |
| :--- | Credits Milestone GenEd

## Semester 2 Advising Note

- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Meet with an advisor to begin career planning activities.

Criminal Justice Transfer Option (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| SOC-207 Criminology | $3 \quad \omega$ | PSY-101 or SOC-101. |
| CRJ-211 Criminal Procedure | 3 \| | EN G-111 and CRJ-101 and CRJ-103 or Chair approval. |
| GenEd-SR Scientific Reasoning | $4 \quad \stackrel{\rightharpoonup}{*}$ |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> - Choose one course from Scientific Reasoning menu. SCI-150 Forensic Science/Lab is recommended. |  |  |
| Elective-1 Career Elective | 3 |  |
| - Choose from any non-required CRJ course |  |  |
| Elective-2 Behavioral Science Elective | 3 |  |
| - Choose one PSY or SOC course |  |  |
| Total Credits: | 16 |  |
| Semester 3 Advising Note <br> - Continue preparations for transfer: write essays for <br> - Complete a pre-graduation check with an advisor | transfer institution, collect in LifeM ap | letters of recommendation, apply for transfer. |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :--- | :---: | :--- |
| CRJ -275 Criminal J ustice Capstone | 3 | Complete all core requirements of the CRJ <br> degree. |
| Elective-1 Lab Science Elective | 4 |  |
| Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course |  |  |
| Elective-2 Humanities Elective | 3 |  |
| Choose one course from the Humanities Electives menu. |  |  |
| Elective-3 Humanities Elective | 3 |  |
| Choose one course from the Humanities Electives menu. |  |  |
| Elective-4 Career Elective | 3 |  |
| Choose from any non-required CRJ course |  |  |

$$
\text { Total Credits: } 16
$$

## Semester 4 Advising Note

- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{F}$ This course has pre/co- requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Demonstrate knowledge, defend and critique the structure of the criminal justice system.
- Identify, demonstrate and evaluate knowledge of corrections, including its purpose and function.
- Explain the history and critique major theories of why crime is committed with a focus on criminal behavior.
- Identify and demonstrate knowledge of Courts including its purpose and function, be able to accurately discuss and relate criminal law and procedure and its constitutional basis.
- Identify and demonstrate knowledge of policing including its purpose and function, describe and assess the general responsibilities of the criminal justice professional including the professional's responsibilities and governing ethics.
- Articulate and critique the role of data and research in the development of criminal justice and policy.


## CAREER OUTLOOK

Graduates that complete the Transfer O ption can transfer to four-year colleges and universities to seek a bachelor's degree in criminal justice or a related field. Graduates who complete the Law Enforcement or Corrections Tracks qualify for entry level positions in law enforcement, corrections or security at local, state, regional and federal agencies.

# Fire Protection and Safety Certificate Program 



## Fire Protection and Safety Program

| SEMESTER |  | Credits Milestone GenEd | d Prerequisites |
| :---: | :---: | :---: | :---: |
| FPS-111 | The Fire Service, This Century and the Next, What Should We Expect | 3 | ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement. |
| Satisfies Learning Community Requirement |  |  |  |
| ENG-111 | College Writing I | 3 N | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |
| GenEd-Q PS | PS Q uantitative Problem Solving | 3-4 $\quad$ ? | MAT-097 or M AT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) Choose one MAT course from Quantitative Problem Solving Menu. |  |  |  |
| FPS-119 | Principles of Fire and Emergency Services Safety \& Survival | 3 | ESL-098 or ELL-103 or RDG-095 and ENG-095 or placement. |
| Total Credits: 15-16 |  |  | ESL-098 or RDG-095 or ELL-103 or placement. |
| Semester 1 Advising Note <br> - General Education Requirements Scientific Reasoning satisfied by program. <br> - Students with previous college experience choose from the following career electives: FPS-125 or FPS-127 or FPS-221 <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - FPS-111: Students with previous college experience choose from the following career electives: FPS-125 or FPS-127 or FPS221 |  |  |  |
| SEMESTER 2 |  | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II |  | 3 E | ENG-111. |
| 2 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |
| FPS-133 | Fire Protection Systems | 3 P | ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement. |
| SOC-101 | Principles of Sociology | 3 F | SL-098 or RDG-095 or ELL-103 or placement. |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |  |
| FPS-123 | Principles of Emergency Services | $3 \sim$ | ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement. |
| CHM-120 | Principles of Inorganic Chemistry/ Lab | 4 E | ENG-095 and ESL-098 or RDG-095 or ELL-103 and MAT-097 or placement. |
|  | Total Credits: 16 |  |  |
| SEMESTER 3 |  | Credits Milestone GenEd | Prerequisites |
| FPS-139 | Fire Prevention | 3 ES | ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement. |
| Elective-1 | Career Elective | 3 |  |
| Career Electives: FPS-125 Hazardous M aterials, FPS-127 Fire Protections Hydraulics and Water Supply, FPS-221 Strategy and tactics |  |  |  |
| Elective-2 Behavioral Science Elective |  | 3 |  |
| - Choose one course from PSY or SOC |  |  |  |
| FPS-135 | Fire Behavior and Combustion | 3 | ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement. |
| GenEd-E | General Education Elective | 3 2 |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Community and Cultural Context Menu |  |  |  |
|  | Total Credits: |  |  |

Fire Protection and Safety Program (continued)

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| Elective C | Career Elective | 3 |  |
| - Career Electives: FPS-125 Hazardous M aterials, FPS-127 Fire Protections Hydraulics and Water Supply, FPS-221 Strategy and tactics |  |  |  |
| FPS-223 | Building Construction for Fire Protection | 3 | ENG-095; ESL-098 or RDG-095; or ELL-103, and FPS-133. |
| COM-171 P | Public Speaking and Professional Communication | 3 |  |
| FPS-107 | Fire Company Officership | 3 | ENG-095 and ESL-098 or RDG-095 or ELL-103 or placement. |
| GenEd-CW | Creative Work | $3 \quad \sim$ |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> - Choose one course from Creative Work Menu |  |  |  |
|  | Total C | 15 |  |

## Semester 4 Advising Note

- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co- requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## ADMISSION REQ UIREMENTS:

Contact Prior Learning Assessment Coordinator if student has gone through a firefighting academy or has on-the-job training.
Talk to the Advising Liaisons for Professional Studies before registering for classes.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Understand the principles of fire protection and safety.
- Demonstrate preparedness to be a fire company officer.
- Understand the principles of arson investigation.
- Demonstrate familiarity with inspections for fire prevention. - Demonstrate preparedness to take promotional civil service fire exams.


## CAREER OUTLOOK

Graduates of this program qualify for careers in municipal, state and federal agencies, industry, and insurance companies. Graduates also qualify to transfer to four-year colleges or universities in fire protection and safety. This program also prepares fire fighters who wish to upgrade their career status.

## Early Childhood Development Certificate Program

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| ECE-103 | Child Growth and Development | 3 | $\sim$ | | ESL-098 or RDG-095 and ENG-095 or ELL-103 or |
| :--- |
| placement. |

- ECE-103 must be completed in first semester with a C or better to move to other ECE courses in subsequent semesters. All ECE courses after the first semester require ECE-103 to be completed with this grade requirement.

| ECE-106 | Program Environments | 3 |  |
| :--- | :---: | :---: | :---: |
| ENG-111 College Writing I | 3 |  | ESL-098 or RDG-095 and ENG-095 or ELL-103 or <br> placement. |
| HUM-120 Self, Culture and Society |  |  |  |
| Or |  |  |  |
| Elective Career Elective | 3 | ENG-095 and RDG-095, ELL-103 or placement. |  |
| See career elective options in semester note |  |  |  |

$$
\text { Total Credits: } 12
$$

## Semester 1 Advising Note

- CORI/SORI/fingerprints after acceptance to program, before practicum course can be completed are required of all students in program. Those with concerns about this requirement should see the College's CORI officer before beginning the program.
- ECE-103 and ECE-106 are courses required to be certified by Massachusetts Department of Early Education and Care (DEEC).
- No other developmental Psychology courses may be substituted for ECE-103. Only ECE-103 is allowed for this degree plan and others will not be counted toward qualifications for certification by Massachusetts DEEC.
- Career electives: ECE-108, ECE-151 through ECE-168, ECE-207, ECE-209, ECE-210, ECE-223, EDU-102 or INT-123

| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ECE-101 Guidance and Discipline in ECE | 3 \| | ECE-103. |
| ECE-104 Curriculum in ECE | 3 \| | ECE-103. |
| Total Credits: 6 |  |  |
| Semester 2 Advising Note <br> - ECE-101 and ECE-104 may not be taken unless stud without C or better in any ECE course will be barred <br> - ECE-101 and ECE-104 are courses required to be <br> - Apply for graduation | dent has received a C or b rom practicum until this me ertified by the Massachuse | tter in ECE-103 in previous semester. Students asure is completed. ts Department of Early Education and Care. |

Early Childhood Development Certificate Program (continued)

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Use knowledge of child development and relationships with children and families to understand children as individuals and plan for their unique development by organizing environments which facilitate development in all developmental areas.
- Design and implement developmentally appropriate learning experiences using methods and materials which promote growth and development. - Work with parents, families, and community leaders to support growth and development of children by engaging each child in meaningful experiences.
- Observe children in their care to analyze and synthesize information about those children so as to improve their work with children, families, and communities.
- Analyze, evaluate and strengthen their work with children by reflecting upon effective practices and collaborating with other professionals in the field.


## CAREER OUTLOOK

Graduates of this program qualify as teacher's aides in the State of Massachusetts. For more information on minimal requirements for employment, contact the Department chair.

## CRIMINAL OFFENDER RECORD INFORMATION AND SEX OFFENDER REGISTRY INFORMATION CHECKS

As a prerequisite for a dinical placement in the Childhood Development Certificate Program, all students must undergo a Criminal Offender Record Information (CO RI) check and a Sex Offender Registry Information (SORI) check. These checks
are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal J ustice Information Services, pursuant to M assachusetts General Laws, Chapter 6, Sections 167-178 B, to access CO RI records. Sex Offender checks shall be performed pursuant to Massachusetts General Laws, Chapter 6, Sections 178C178P.
For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193.

Associate in Science
Professional Studies - Early Childhood Education

## Early Childhood Development Program

## SEMESTER 1

## Prerequisites

ECE-103 Child Growth and Development
3
ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement.

ECE-103 is prerequisite to most other ECE courses in this program.

| ECE-106 | Program Environments | 3 |  |
| :--- | :--- | :--- | :--- |
| ENG-111 | College Writing I | 3 |  |

ESL-098 or RDG-095 or ELL-103 and ENG-095 or placement.
ENG-095 and RDG-095, ELL-103 or placement.
$\approx$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1)
ECE-520 $\begin{array}{ll}\text { Introduction to Early Childhood } \\ \text { Education }\end{array}$
3
Satisfies the Learning Community Requirement OR choose one college-level course as an Elective.
GenEd-Q PS Quantitative Problem Solving $\quad \approx$ MAT-097 or MAT-098 or placement.
$\approx$ This course meets the General Education requirement for Q uantitative Problem Solving (Formerly Area 4)

- Choose one MAT course from Quantitative Problem Solving Menu. Recommended class MAT-181 or MAT-172.

$$
\text { Total Credits: } 15
$$

## Semester 1 Advising Note

- CORI/SO RI/fingerprints after acceptance to program, before practicum course can be completed are required of all students in program. Those with concerns about this requirement should see the College's CORI officer before beginning the program.
- ECE-103 and ECE-106 are courses required to be certified by Massachusetts Department of Early Education and Care (DEEC).
- No other developmental Psychology courses MAY BE substituted for ECE-103. Only ECE-103 is allowed for this degree plan and others will not be counted toward qualifications for certification by Massachusetts DEEC.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

| SEMESTER 2 | Credits | Milestone | GenEd | Prerequisites |
| :--- | :--- | :--- | :--- | :--- |
| ECE-101 | Guidance and Discipline in ECE | 3 | ECE-103. |  |
| ECE-104 | Curriculum in ECE | 3 | ECE-103. |  |
| ENG-112 | College Writing II | 3 | ENG-111. |  |
| This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |  |  |
| PSY-101 | Principles of Psychology | 3 | ESL-098 or ELL-103 or RDG-095 or placement. |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Area 2) |  |  |  |  |
| ECE-217 | Observing and Recording Behavior | 3 | ECE-103. |  |

## Semester 2 Advising Note

- ECE-101, ECE-104, and ECE-217 may not be taken unless student has received a C or better in ECE-103 in previous semester. Students without C or better in any ECE course will be barred from practicum until this measure is completed.
- ECE-101 and ECE-104 are courses required to be certified by the Massachusetts Department of Early Education and Care.
- Meet with an advisor to begin career planning activities.

Early Childhood Development Program (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :---: | :---: |
| LIT-217 | Children's Literature | 3 | Pre/co-requisite: ENG-111. |

- This course meets the General Education requirement for Creative Work (Formerly Area 6)

| ECE-212 | Family <br> ECE | 3 | ECE-103 plus 3 ECE or EDU courses or equivalent. |
| :--- | :--- | :--- | :--- |

ECE-220 requires application and orientation in spring semester (deadline end of spring semester) before fall enrollment. Class ONLY starts in the fall and is a two semester sequence (ECE 220-221). Students missing application and orientation process must wait until the next fall to move forward. A GPA of 2.25 or above is required as well as multiple other requirements for application and acceptance into placement. ECE Coordinator and Department Chair have further information.

## Elective Career Elective <br> 3

- Electives:

ECE-108 Infant/Toddler Curriculum Development, ECE-207 Literacy Development and Learning,
ECE-209 M ath Concepts and Learning, ECE-210 Science Concepts and Learning, ECE-521 Pedagogy of Play, PSY-209 Child Psychology, SO C-211 The Family, SO C-203 Social Problems, PSY-201 Learning and Memory
Elective Career Elective 3

- Electives:

ECE-108 Infant/Toddler Curriculum Development, ECE-207 Literacy Development and Learning,
ECE-209 M ath Concepts and Learning, ECE-210 Science Concepts and Learning, ECE-521 Pedagogy of Play,
PSY-209 Child Psychology, SOC-211 The Family, SO C-203 Social Problems, PSY-201 Learning and Memory
Total Credits: 15

## Semester 3 Advising Note

- ECE-108 Infant/Toddler Curriculum and Development is course required by Mass DEEC for those wishing to pursue teaching in infant and toddler classrooms.
- Complete a pre-graduation check with an advisor in LifeM ap

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :--- | :---: | :---: |
| GenEd-SR Scientific Reasoning | 4 |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |  |  |
| Choose one course from Scientific Reasoning Menu |  |  |

ECE-221 Practicum II in ECE 3 ECE-220.

- ECE-221 requires student to have completed ECE-220 in the fall semester with a $C$ or higher grade and completed portfolio. Students without this requirement completed are not allowed to proceed to ECE-221 and must reapply for readmission to the ECE-220 class in the next fall after following Department procedures for readmission.
ECE-211 The Young Child with Special Needs $\quad$ ECE-103 plus 3 ECE or EDU courses or equivalent.
Elective Career Elective
Electives:
ECE-108 Infant/Toddler Curriculum Development, ECE-207 Literacy Development and Learning,
ECE-209 Math Concepts and Learning, ECE-210 Science Concepts and Learning, ECE-521 Pedagogy of Play,
PSY-209 Child Psychology, SOC-211 The Family, SO C-203 Social Problems, PSY-201 Learning and Memory
GenEd-E General Education Elective
This course meets the General Education requirement for General Education Elective.
Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. Total Credits: 16


## Semester 4 Advising Note

- Apply for graduation
\| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{E}$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. $\approx$ This course satisfies General Education requirement.

Early Childhood Development Program (continued)

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Use knowledge of child development and relationships with children and families to understand children as individuals and plan for their unique development by organizing environments which facilitate development in all developmental areas.
- Design and implement developmentally appropriate learning experiences using methods and materials which promote growth and development.
- Work with parents, families, and community leaders to support growth and development of children by engaging each child in meaningful experiences.
- Observe children in their care and be able to analyze and synthesize information about children so as to improve their own work with children, families, and communities.
- Analyze, evaluate and strengthen their work with children by reflecting upon effective practices and collaborating with other professionals in the field.


## CAREER OUTLOOK

Graduates of this program qualify for employment in a variety of settings, including day care centers, preschools, head start programs, family home care and social service organizations. Students also may transfer to four-year colleges or universities in elementary education, human services work, or special needs childcare. Graduates of this program qualify as teachers and/or lead teachers in the state of Massachusetts.

# Early Childhood Development with Child Development Associate Credential Certificate Program 

## ADMISSION REQUIREMENTS

| Age | Must be 18 years of age |
| :--- | :--- |
| Diploma | High School diploma or GED |
| Hours | Must have completed specific number of hours in ECE - see note |
| Courses | Completed minimum of three ECE courses with C or better |

Admission Requirements Advising Note

- Must be at least 18 years of age and have U.S. Work Authorization
- Must have completed 120 hours of formal training in Early Childhood Education in subject areas covered by the Early

Childhood Development with Child Development Associate Credential Certificate

- Must have completed within the last 3 years 300 hours of professional work experience in a group setting supervised by a professional Early Childhood educator
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information regarding the College's CORI/SO RI check process, please contact the College CORI/SO RI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ECE-103 | Child Growth and Development | $3 \sim$ | ESL-098 or RDG-095 and ENG-095 or placement. |
| ECE-103 must be completed in first semester with a C or better to move to other ECE courses in subsequent semesters. All ECE courses after the first semester require ECE-103 to be completed with this grade requirement. |  |  |  |
| ECE-106 | Program Environments | 3 \| | ESL-098 or RDG-095 and ENG-095 or placement. |
| ENG-111 | College Writing I | $3 \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| HUM-120 Elective | Self, Culture and Society or Career Elective | 3 |  |
| - See career elective options in semester note |  |  |  |

Total Credits:
12

## Semester 1 Advising Note

- CORI/SORI/fingerprints after acceptance to program, before practicum course can be completed are required of all students in program. Those with concerns about this requirement should see the College's CORI officer before beginning the program.
- ECE-103 and ECE-106 are courses required to be certified by Massachusetts Department of Early Education and Care (DEEC).
- No other developmental Psychology courses may be substituted for ECE-103. Only ECE-103 is allowed for this degree plan and others will not be counted toward qualifications for certification by Massachusetts DEEC.
- Career electives: ECE-108, ECE-151 through ECE-168, ECE-207, ECE-209, ECE-210, ECE-223, EDU-102 or INT-123Ā

| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ECE-101 | Guidance and Discipline in ECE | 3 |  | ECE-103. |  |
| ECE-104 | Curriculum in ECE | 3 | ECE-103. |  |  |
| ECE-217 | Observing and Recording Behavior | 3 |  | ECE-103. |  |
|  |  | Total Credits: | 9 |  |  |

## Semester 2 Advising Note

- ECE-101, ECE-104, and ECE-217 may not be taken unless student has received a $C$ or better in ECE-103 in previous semester. Students without C or better in any ECE course will be barred from practicum until this measure is completed.
- ECE-101 and ECE-104 are courses required to be certified by the Massachusetts Department of Early Education and Care.
- CDA requires students complete ECE-217 prior to working on CDA portfolio and credentialing planning.
- Apply for graduation

Early Childhood Development with Child Development Associate Credential Certificate Program (continued)

| SEMESTER 3 |  | Credits Milestone GenEd |  | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| ECE-223 | CDA Professional Portfolio | 3 | $\cdots$ | A grade of a C or better in ECE-103, ECE-104, and ECE-106. |
| ECE-224 | CDA Mentoring and Coaching Practicum | 3 | $\cdots$ | grade of a C or better in ECE-223. |
|  | Total | 6 |  |  |

## Semester 3 Advising Note

- ECE-223 and ECE-224 require that student is working in a classroom for development of portfolio and completion of the credentialing requirements. See requirements at bottom under additional advising notes. Students are required to pay their own credentialing fee at the end of the program upon taking the national test and sitting for other requirements of the CDA Council for Professional Recognition. Fees for this are noted below. Usually, it is recommended that students complete ECE223 before moving to ECE-224, however, a waiver of this requirement is possible if student is completing program and will be ready to graduate at the end of this third semester.
( Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
$\approx$ This course satisfies General Education requirement.


## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Use knowledge of child development and relationships with children and families to understand children as individuals and plan for their unique development by organizing environments which facilitate development in all developmental areas.
- Design and implement developmentally appropriate learning experiences using methods and materials which promote growth and development.
- Work with parents, families, and community leaders to support growth and development of children by engaging each child in meaningful experiences.
- O bserve children in their care to analyze and synthesize information about those children so as to improve their work with children, families, and communities.
- Analyze, evaluate and strengthen their work with children by reflecting upon effective practices and collaborating with other professionals in the field.


## CAREER OUTLOOK

Graduates of this program are academically qualified in the State of M assachusetts through the Department of Early Education and Care to be either teacher or lead teacher qualified once work experience is completed as required by the state. For more information contact the Department Chair.

## GENERAL ADVISING NOTES FOR THIS PROGRAM

- All developmental courses: RDG-90, RDG 095 or ESL-098, ENG-090 and ENG-095 must be taken and completed with a grade of C or higher before beginning the first semester towards a two semester certificate plan.
- Students are encouraged to take fewer courses and go slower if they have life responsibilities with family, work and personal challenges; these part-time students and/or those taking 1, 2 or 3 per semester are encouraged to use a longer route to completion to assure quality work.
- ENG-111 is required at the beginning semester as the program requires much reading and writing and student must be fully prepared for intense writing assignments in ECE courses.
- ECE-103 must be completed in first semester with a C or better to move to other ECE courses in subsequent semesters. All ECE courses after the first semester require ECE-103 to be completed with this grade requirement. - ECE-103 and ECE-106 are courses required to be certified by M assachusetts Department of Early Education and Care (DEEC).
- No other developmental Psychology courses may be substituted for ECE103. Only ECE-103 is allowed for this degree plan and will not be counted toward qualifications for certification by Massachusetts DEEC.
- The LCS must be taken in first semester and is only allowed for those students with no prior college experience; if the student is transferring or has prior college experience, the student may substitute a previous college course for the LCS through the college course waiver process (see Department Chair or ECE Coordinator for assistance). Recommended LCS for ECE students: LCS-101J Parents as First Teachers.


## Education Concentration

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| EDU-102 Becoming a Teacher | $3 \sim$ |  |
| - Satisfies Learning Community Requirement. |  |  |
| ENG-111 College Writing I | $3 \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| PSY-101 Principles of Psychology | 3 N | ESL-098 or ELL-103 or RDG-095 or placement. |
| \& This course meets the General Education requirement for Scientific Reasoning (Formerly Area 2) |  |  |
| ECE-103 Child Growth and Development | $3 \sim$ | ESL-098 or RDG-095 and ENG-095, or ELL-103 or placement. |
| GenEd-Q PS Q uantitative Problem Solving | 3-4 | MAT-097 or M AT-098. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) <br> - Choose one MAT course from Quantitative Problem Solving Menu. |  |  |
| Semester 1 Advising Note <br> - New degree-seeking students enrolled in Community Cluster within their first year. If s elective required in subsequent semester mas subsequent semester instead of the fine arts <br> - The department recommends students tak <br> - As a prerequisite for a clinical placement or Offender Record Information (CO RI) check and regarding the College's CORI/SORI check pro https://www.bhcc.edu/studentcentral/acade | or more must take a Lear not eligible to take EDUken during this first semes in this curriculum map. <br> 102, Becoming a Teacher, ship this program requires x Offender Registry Inform lease contact the College ds/coriandsorichecks/ | ing Community Seminar or a Learning 02 due to prior college experience, the Fine Arts and Career elective substituted in the <br> as their Learning Community Seminar. hat all students must undergo a Criminal tion (SO RI) check. For more information CO RI/SO RI Officer at 617-228-2193 or visit |


| SEMESTER 2 |
| :--- | Credits Milestone GenEd $\quad$ Prerequisites


| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| EDU-220 P | Practicum in Instruction | $3 \sim$ | EDU-201. |
| $\begin{aligned} & \text { BIO-105 } \\ & \text { BIO-108 } \end{aligned}$ | Introduction to Biology or <br> Human Biology/Lab | 4 2 | ESL-098 or RDG-095 or ELL-103 and ENG-095 and MAT-093. |
| $\sim$ This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |  |  |  |
| ECE-212 | Family and Community Involvement in ECE | $3 \sim$ | ECE-103 plus three (3) ECE or EDU courses or equivalent. - Must be completed prior to taking this course. . |
| Elective-1 | Career Elective | 3 |  |
| - See semester advising note |  |  |  |
| LIT-218 | Children's Literature II Total Credits: | $\begin{gathered} 3 \\ 16 \end{gathered}$ | Pre/co-requisite: ENG-111. |
| Semester <br> - Two scie science are <br> - Career <br> ECE-224 E | 3 Advising Note <br> ence courses are required for this degree ea. No exceptions will be approved. elective options: ECE-104, ECE-106, ECE-ECE-213, ECE-215, ECE-516, EDU-504, ED | plan. One must be in biolo <br> 108, ECE-151 through ECE U-102 | gical/life science area; the other, in physical -168, ECE-207, ECE-209, ECE-210, ECE-223, |


| SEMESTER 4 |
| :--- |
| ENV-105 |
| Environmental Science/Lab |
| ECE-211 |
| The Young Child with Special Needs |

## Baking and Pastry Arts Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | $3 \quad \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| 2 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| CUL-115 Introduction to Culinary Arts | 4 \\| | Co-requisite: CUL-125. |
| - Offered in the fall semester only. Uniforms and tools required for this course |  |  |
| CUL-125 Principles of Baking | 4 \| | Co-requisite: CUL-115. |
| Offered in the fall semester only. Uniforms and tools required for this course |  |  |
| CUL-101 If You Can't Stand the Heat |  |  |
| Satisfies Learning Community Seminar Requirement |  |  |
| MAT-100 Topics in Career Math Total Credits: | 3 | MAT-093 or placement. |
|  | 17 |  |
| Semester 1 Advising Note <br> - General Education Requirements Quantitative Problem Solving, Creative Work, and Community and Cultural Context satisfied by program. <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | 3 F | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| CUL-135 Café and Bistro Cuisine | 4 \\| | CUL-115 and CUL-125. Co-requisite: CUL-145. |
| - Offered in the spring semester only. Uniforms and tools required for this course. |  |  |
| CUL-145 Advanced Desserts and Pastries | 4 \\| | CUL-115 and CUL-125. Co-requisite: CUL-135. |
| - Offered in the spring semester only. Uniforms and tools required for this course. |  |  |
| CUL-111 Food Service Sanitation and Skills |  |  |
|  |  |  |
| Semester 2 Advising Note |  |  |
| CUL-135 and CUL-145- Co-requisites- offered in spring semester only. Uniforms and tools are required for this course. |  |  |
| SUMMER SEMESTER SUMMER | Credits Milestone GenEd | Prerequisites |
| CUL-299P Pastry Arts Internship | 3 \| | Chair approval. |
| Total Credits: | 3 |  |


| SEMESTER 3 |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| CUL-113 Science of Baking |  | 3 |  |
| Offered in fall semester only. Uniforms and tools are required for this course. |  |  |  |
| CUL-243 Hot and Cold Desserts |  | 4 CUL |  |
| Offered in fall semester only. Uniforms and tools are required for this course. |  |  |  |
| CUL-119 Introduction to Cake Decorating |  |  | 3 |  |
| - Uniforms and tools are required for this course. This course is for Culinary Arts Students O nly. |  |  |  |
| CUL-249 Baking for Health |  | 3 CUL |  |
| Offered in fall semester only. Uniforms and tools are required for this course. |  |  |  |
| GenEd-E General Education Elective |  |  | $3 \quad 2$ |  |
| 2 This course meets the General Education requirement for General Education Elective. <br> - Choose one course from Community \& Cultural Contexts menu. <br> Recommended: PSY-101 or SOC-101 |  |  |  |
| Total Credits: |  | 16 |  |
| SEMESTER 4 |  | Credits Milestone GenEd | Prerequisites |
| BIO-115 Nutrition Science/Lab |  | $4$ | 3 and RDG-095 or ESL-098 and ENG-095 103 or placement. |
| F This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |  |  |  |
| CUL-21 | Classical and International Pastries | 4 CUL |  |
| - Offered in spring semester only. Uniforms and tools are required for this course. |  |  |  |
| CUL-241 Chocolate and Sugar Artistry |  | 4 CUL |  |
| Offered in spring semester only. Uniforms and tools are required for this course. |  |  |  |
| CUL-24 | Advanced Desserts and Showpiece Cakes | 3 CU | 9 and CUL-145. |
| Offered in spring semester only. Uniforms and tools are required for this course. |  |  |  |
| Semester 4 Advising Note <br> - CUL 217, CUL 241 and CUL 247 -offered in spring semester only. Uniforms and tools are required for this course <br> - Apply for graduation |  |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. <br> $\mathcal{S}$ This course has pre/co- requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |  |
| UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO: <br> - Demonstrate an acquired technical skill in the usage of tools, equipment and machinery found in typical bakeries and commercial pastry production facilities. <br> - Demonstrate the necessary administrative skills common to basic cost control and planning methods found in a typical commercial pastry <br> - Demonstrate conceptual skills acquired through course work relative to operating a successful pastry shop or bakery facility. <br> - Demonstrate the ability to apply advanced decorating techniques in cake and pastry design. <br> - Demonstrate knowledge of advanced chocolate and sugar design. <br> - Demonstrate a skill in working with the design and implementation of healthy alternatives to recipes. <br> CAREER OUTLOOK <br> Graduates of this program qualify for a variety of entry level positions in retail bakeries, pastry shops and related pastry production facilities. An A.S. degree will position the student for entry level management positions, as well as the opportunity to transfer to a four year institution for further studies. |  |  |  |

# Culinary Arts Certificate Program 



## Culinary Arts Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CUL-115 Introduction to Culinary Arts | $\ldots$ | Co-requisite: CUL-125. |
| Offered in the fall semester only. Uniforms and tools required for this course |  |  |
| CUL-125 Principles of Baking | 4 \| | Co-Requisite: CUL-115. |
| Offered in the fall semester only. Uniforms and tools required for this course |  |  |
| CUL-101 If You Can't Stand the Heat | 3 |  |
| - Satisfies the Learning Community Requirement |  |  |
| MAT-100 Topics in Career Math | 3 | MAT-093 or placement. |
| Total Credits: |  |  |
| - General Education Requirements Quantitative Problem Solving, Community and Cultural Contexts and Creative Work satisfied by program. <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - This map assumes that a student enters the College ready to enroll in ENG 111 and MAT 100. Maps may be altered if developmental courses need to be taken. |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | $3 \sim$ | ENG-095 and RDG-095, ELL-103 or placement. . |
| 2 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| CUL-135 Café and Bistro Cuisine | $4 \quad \omega$ | CUL-115 and CUL-125. Co-requisite: CUL-145. |
| - Offered in the spring semester only. Uniforms and tools required for this course. |  |  |
| CUL-145 Advanced Desserts and Pastries | 4 \\| | CUL-115 and CUL-125. Co-requisite: CUL-135. |
| - Offered in the spring semester only. Uniforms and tools required for this course. |  |  |
| CUL-111 Food Service Sanitation and Skills | 3 |  |
| Total Credits: |  |  |



$$
\text { Total Credits: } 17
$$

## Semester 3 Advising Note

- It is strongly recommended that a student meet with their Advisor when planning for semesters 3 and 4 to ensure the focus of study aligns with course selection, especially the General Education Elective courses.

Culinary Arts Certificate Program (continued)

This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5)
CUL-235 Advanced and Ethnic Food Production 4
Offered in the spring semester only. Uniforms and tools required for this course.
CUL-245 Food and Beverage Operations 4
CUL-215 and CUL-225. Co-requisite: CUL-245.

Offered in the spring semester only. Uniforms and tools required for this course.
Elective Career Elective 3
Choose one CUL or HRT course. Any HRT or CUL course not included in the program can be used to fulfill requirement of Career Elective.

Total Credits: 15
\| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
F This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Demonstrate practiced and acquired technical skills in the usage of tools and equipment found in a typical food service/ food production setting.
- Demonstrate necessary administrative skills common to basic cost control and planning methods found in a typical commercial food service/food production setting.
- Demonstrate conceptual skills acquired through course work relative to planning a successful restaurant operation.


## CAREER OUTLOOK

Graduates of this program qualify for a variety of positions in hotels, restaurants, and resorts. Typically, these positions are in food production, shift supervision, and kitchen management. Students also qualify to transfer to fouryear colleges or universities to pursue bachelor's degrees.

Certificate
Professional Studies - Hospitality

## Hotel and Restaurant Management Certificate Program

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| HRT-121 Pr | Principles of Management and Service in Hospitality | 3 \| |  |
| HRT-131 | Front Office $\mathbf{O}$ perations | 3 |  |
| - Fall course |  |  |  |
| ENG-111 | College Writing I | $3 \\|$ EN | 5 and RDG-095, ELL-103 or placement. |
| F This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |
| ACC-101 | Principles of Accounting I | 3 ESL- | or RDG-095 or ELL-103 or placement. |
| HRT-112 | Food and Beverage $\mathbf{O}$ perations | 3 |  |
|  | Total Credits: | : 15 |  |
| SEMESTER 2 |  | Credits Milestone GenEd | Prerequisites |
| HRT-231 Advan <br> Spring course |  | H | HRT-131. |
|  |  | - Spring course |  |
| HRT-133 | Culinary Theory in Hospitality | 3 HR | HRT-121. |
| CIT-110 | Applications/Concepts | 3 RD | -095 or ESL-098 or ELL-103 or placement. |
| CUL-111 | Food Service Sanitation and Skills | 3 |  |
|  | Total Credits: | s: 12 |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{F}$ This course has pre/co-requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |  |
| - Perform technical skills in basic cooking and kitchen operations, basic skills in front desk, reservations and housekeeping procedures. | MPLETION OF THIS - Perform <br> busion GRADUATES WILL business b <br> business c <br> coordinati  <br> annical skills in basic operations <br> kitchen operations, basic <br> ng procedures. <br>  - Demons <br> necessary  <br> of the hot  | - Perform administrative skills in basic business bookkeeping procedure, business cost controls, and planning and coordinating hotel and restaurant operations. <br> - Demonstrate conceptual skills necessary to understanding the needs of the hotel and restaurant industry. | CAREER OUTLOOK <br> Graduates of this option qualify for entry level managerial positions as well as for management training programs in hotels and restaurants. Students also qualify to transfer all credits to the Associate in Science Degree in Hotel and Restaurant Management. |

Associate in Science
Professional Studies - Hospitality

## Hotel/Restaurant Management Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :--- | :---: | :---: | :---: | :---: |
| ENG-111 College Writing I | 3 | ENG-095 and RDG-095, ELL-103 or placement. |

This course meets the General Education requirement for Academic Discourse (Formerly Area 1)



Hotel and Restaurant Management Option (continued)

| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| HRT-125 | Principles of Hospitality Finance and Accounting | 3 |  | ACC-101. |
| CIT-110 | Applications/Concepts | 3 |  | RDG-095 or ESL-098 or ELL-103 or placement. |
| BIO-115 | Nutrition Science/Lab | 4 | 2 | MAT-093 and RDG-095 or ELL-103 or ESL-098 and ENG-095 or placement. |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |  |  |  |  |
| HRT-131 | Front Office Operations | 3 | ${ }^{\sim}$ |  |
| HRT-117 | Hospitality Law | 3 |  |  |
|  | Total Credits: | 16 |  |  |
| Semester <br> - It is stro study alig | 3 Advising Note <br> ngly recommended that a student meet with ns with course selection, especially the Gener | heir Adv Educatio | isor when planni ion Elective cour | for semesters 3 and 4 to ensure the focus of s. |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CUL-111 Food Service Sanitation and Skills | 3 |  |
| HRT-231 Advanced Lodging Operations | 3 | HRT-131. |
| HRT-133 Culinary Theory in Hospitality | 3 | HRT-121. |
| GenEd-CCC Community \& Cultural Contexts | 3 E |  |
| $\approx$ This course meets the General Education requirement for <br> - Recommended: GEO-101 | Community \& Cultural C | exts (Formerly Areas 2 and 3 ) |
| GenEd-E General Education Elective | 3 2 |  |
| This course meets the General Education requirement for Choose a course from the General Education Communit Recommended: PSY-101 or SOC-101 | r General Education Elective y and Cultural Context Menu $15$ |  |
| Semester 4 Advising Note <br> - Apply for graduation |  |  |

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. © This course has pre/co- requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO:

- Perform technical skills in basic cooking and kitchen operations, basic skills in front desk, reservations and housekeeping procedures.
- Perform administrative skills in basic business bookkeeping procedure, business cost controls, and planning and coordinating hotel and restaurant operations.
- Demonstrate conceptual skills necessary to understanding the interrelationship of the component parts of the travel and tourism/hospitality industry.


## CAREER OUTLOOK

Graduates of this option qualify for many supervisory and managerial positions as well as for management training programs in nationally recognized hotels and restaurants. Students also qualify to transfer to four-year college or university programs in Hotel/Restaurant Management.

# Management of Assisted Living and Institutional Facilities 

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG－111 College Writing I | 3 － | ENG－095 and RDG－095，ELL－103 or placement． |
| This course meets the General Education requirement for Academic Discourse（Formerly Area 1） |  |  |
| HRT－121 Principles of Management and Service in Hospitality | 3 ｜ |  |
| HRT－105 Hospitality Seminar | 3 |  |
| Satisfies the Learning Community Requirement |  |  |
| GenEd－CW Creative Work | $3 \quad \geqslant$ |  |
| This course meets the General Education requirement for Creative Work（Formerly Area 6） <br> Choose one course from Creative Work Menu |  |  |
| GenEd－Q PS Quantitative Problem Solving | 3 － | MAT－097 or MAT－098 or placement． |
| This course meets the General Education requirement for $Q$ uantitative Problem Solving． <br> Recommended：MAT－172 |  |  |
| Total Credits： |  |  |

## Semester 1 Advising Note

－New degree－seeking students enrolled in 9 or more credits must take a Learning Community Seminar or a Learning Community Cluster within their first year．
－This map assumes that a student enters the College ready to enroll in ENG 111 and Quantitative Problem Solving requirement．Maps may be altered if developmental courses need to be taken．

| SEMESTE |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ENG－112 | College Writing II | $3 \quad \sim$ | ENG－111． |
| This course meets the General Education requirement for Research Writing（Formerly Area 1） |  |  |  |
| ACC－101 | Principles of Accounting I | 3 － | ESL－098 or RDG－095 or ELL－103 or placement． |
| HRT－112 | Food and Beverage 0 perations | 3 |  |
| CIT－110 | Applications／Concepts | 3 | ESL－098 or RDG－095 or ELL－103 or placement． |
| HRT－109 | Hospitality Marketing Management | 3 | HRT－121． |
|  | Total Credits： | 15 |  |


| SUMMER SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :--- | :--- | :---: | :--- |
| HRT－299 | Assisted Living Internship | 3 |  |
|  |  |  |  |
|  |  | Total Credits： | 3 |


| SEMESTER 3 |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| HRT－125 | Principles of Hospitality Finance and Accounting | 3 | ACC－101． |
| HLT－111 | Health Aspects of Aging | 3 |  |
| BIO－115 | Nutrition Science／Lab | 4 2 | ENG－095，ESL－098 or RDG－095 or ELL－103，MAT 093. |
| This course meets the General Education requirement for Scientific Reasoning（Formely Area 5） <br> Satisfies General Education requirement for Scientific Reasoning |  |  |  |
| HRT－131 | Front Office $\mathbf{O}$ perations | 3 \｜ |  |
| HRT－117 | Hospitality Law | 3 |  |
|  | Total Credits： | 16 |  |

## Semester 3 Advising Note

－It is strongly recommended that a student meet with their Advisor when planning for semesters 3 and 4 to ensure the focus of study aligns with course selection，especially the General Education Elective courses．

Management of Assisted Living and Institutional Facilities (continued)

| SEMESTER 4 | Credits Milestone GenEd |  | Prerequisites |  |
| :--- | :--- | :--- | :--- | :--- |
| CUL-111 | Food Service Sanitation and Skills | 3 |  |  |
| HRT-231 | Advanced Lodging O perations | 3 |  |  |
| HRT-135 | Marketing and Managing Institutional <br> Facilities | 3 |  |  |
| GenEd-CCC Community \& Cultural Contexts | 3 |  |  |  |
| This course meets the General Education requirement for Community \& Cultural Contexts. |  |  |  |  |

GenEd-E General Education Elective $3 \approx$ ESL-098 or RDG-095 or ELL-103.
This course meets the General Education requirement for General Education Elective.
Choose a course from the General Education Community and Cultural Context Menu Recommended: PSY-101 or SOC-101

PSY-141 Social Aspects of Aging $\quad$|  |  | 3 |
| :--- | :--- | :--- |
|  |  | Total Credits: |
|  |  | 18 |

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{F}$ This course has pre/co- requisites. $\boldsymbol{\sim}$ Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Use currently accepted biological, chemical and physical concepts to investigate problems and ideas presented in advanced study related to health and medicine.
- Use biological concepts to evaluate their own science related concerns such as personal health or health careers.
- Use laboratory technology, equipment and techniques to investigate scientific problems critically and safely using proper scientific methods.
- Use molecular and cellular laboratory techniques that are commonly used in Biotechnology and Medicine.
- Explain the major concepts of cell structure, function and cellular processes that are key to life.


## CAREER OUTLOOK

This option will allow students to transfer to four-year colleges and universities to seek a bachelor's degree to pursue a career in the health professions. Students should enroll in this option if they plan to transfer to a four-year college or university to pursue admission to programs in medical, veterinary, pharmacy, physician's assistant or physical therapy professions.

# Meeting and Event Planning Certificate Program 

| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| HRT-121 | Principles of Management and Service in Hospitality | 3 | $\cdots$ |  |
| ACC-101 | Principles of Accounting I | 3 | $\cdots$ | ESL-098 or RDG-095 or ELL-103 or placement. |
| ENG-111 | College Writing I | 3 | $\cdots$ | ENG-095 and RDG-095, ELL-103 or placement. |
| HRT-119 | Basics of Meeting Management | 3 | $\cdots$ |  |
| CIT-110 | Applications/Concepts | 3 |  | RDG-095 or ELL-103 or ESL-098 or placement. |
|  | Total Credits: | 15 |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |  |  |
| :--- | :--- | :---: | :--- | :--- |
| HRT-122 | Managing Groups | 3 | HRT-119. |  |
| HRT-133 | Culinary Theory in Hospitality | 3 | HRT-121. |  |
| HRT-223 | Event Planning |  | 3 | HRT-119. |
| HRT-229 | Corporate Travel |  | 3 | HRT-127. |
|  |  | Total Credits: | 12 |  |

## Semester 2 Advising Note

- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\widehat{*}$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO:

- Perform administrative skills in basic business bookkeeping procedure, business cost controls, and planning and coordinating hotel and restaurant operations.
- Demonstrate conceptual skills necessary to understanding the needs of the hotel, conference center, corporate office, and restaurant industry.
- Demonstrate the skills necessary to perform the various functions related to the needs of the meeting and event planning industry.


## CAREER OUTLOOK

Graduates of this option qualify for entry level managerial positions as well as for management training programs in hotels, restaurants, corporate offices, and conference centers. Students also qualify to transfer all credits to the Associate in Science Degree in Meeting and Event Planning Management.

## Meeting and Event Planning Option

| SEMESTER 1 |
| :--- |
| ENG-111 |
| College Writing I |
| HRT-121 | | Principles of Management and Service |
| :--- |
| in Hospitality | Credits Milestone GenEd


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-112 College Writing II | 3 2 | ENG-111. |
| 2 This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| ACC-101 Principles of Accounting I | 3 \\| | ESL-098 or ELL-103 or RDG-095 or placement. |
| HRT-223 Event Planning | 3 |  |
| HRT-109 Hospitality Marketing Management | 3 | HRT-121. |
| HRT-122 Managing Groups | 3 \| |  |
| Total Credits. | 15 |  |


| SUMMER SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| HRT-210 | Hospitality Internship | 3 - | HRT-121. |
| Total Credits: |  | 3 |  |
| SEMESTER 3 |  | Credits Milestone GenEd | Prerequisites |
| HRT-125 | Principles of Hospitality Finance and Accounting | 3 | ACC-101. |
| CIT-110 | Applications/Concepts | 3 | RDG-095 or ELL-103 or ESL-098 or placement. |
| BIO-115 | Nutrition Science/Lab | 4 T | MAT-093 and RDG-095 or ELL-103 or ESL-098 and ENG-095 or placement. |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |  |  |  |

GenEd-CW Creative Work 3
This course meets the General Education requirement for Creative Work (Formerly Area 6)
Choose one course from Creative Work Menu
HRT-117 Hospitality Law $\quad$ Total Credits: 16

## Semester 3 Advising Note

- It is strongly recommended that a student meet with their Advisor when planning for semesters 3 and 4 to ensure the focus of study aligns with course selection, especially the General Education Elective courses.

Meeting and Event Planning Option (continued)

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| HRT-229 Corporate Travel | 3 |  |
| Elective Career Elective | 3 |  |
| - Career Elective Options: HRT-112, HRT-131, CUL-111 |  |  |
| HRT-133 Culinary Theory in Hospitality | 3 |  |
| GenEd-CCC Community \& Cultural Contexts | 32 |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) <br> Recommended: GEO-101 |  |  |
| GenEd-E General Education Elective | 3 2 |  |
| This course meets the General Education requirement for General Education Elective. Choose a course from the General Education Community and Cultural Context Menu Recommended: PSY-101 or SOC-101 |  |  |
| Total Credits: | 15 |  |

## Semester 4 Advising Note

- Apply for graduation
\| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.


## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WILL BE ABLE TO:- Perform administrative skills in basic business bookkeeping procedure, business cost controls, and planning and coordinating hotel and restaurant operations.
- Demonstrate conceptual skills necessary to understanding the needs of the hotel, conference center, corporate office, and restaurant industry.
- Demonstrate the skills necessary to perform the various functions related to the needs of the meeting and event planning industry.
- Demonstrate skills acquired through course work relative to planning and executing all types of meetings and events in both the public and private sector.


## CAREER OUTLOOK

Graduates of this option qualify for entry level managerial positions as well as for management training programs in hotels, restaurants, corporate offices, and conference centers. Students also qualify to transfer to four year college or university program.

## Pastry Arts Certificate Program



# Paralegal Studies Certificate Program 

## ADMISSION REQUIREMENTS

| Degree | Proof of a completed Associate's or Bachelor's degree |
| :--- | :--- |
| Letter | Submission of a Letter of Interest |
| Resume | Submission of a Professional Resume |
| References | Three (3) Letters of Reference |

## Admission Requirements Advising Note

- Student may enroll full-time or part-time
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SO RI) check. For more information regarding the College's CORI/SO RI check process, please contact the College CORI/SORI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :--- | :---: | :--- |
| PLG-101 | Introduction to Law | 3 |

Elective-2 Concentration Elective 3

- Paralegal Option Electives:

PLG-201 Family Law, PLG-203 Real Estate, CRJ-103 Criminal Law, PLG-204 Wills, Estates and Trusts, PLG-105 Practical Legal Writing, PLG-299 Paralegal Internship
Elective-3 Concentration Elective 3

- Paralegal Option Electives:

PLG-201 Family Law, PLG-203 Real Estate, CRJ-103 Criminal Law, PLG-204 Wills, Estates and Trusts, PLG-105 Practical Legal Writing, PLG-299 Paralegal Internship

Total Credits:
12

## Semester 1 Advising Note

- Program chair approval may be required to register for elective courses as well as PLG-103 and PLG-202.

| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :--- | :---: | :--- |
| PLG-102 | Legal Research \& Writing | 3 |
| PLG-101. |  |  |
| PLG-103 | Litigation | 3 |
| PLG-104 | Legal Ethics | 3 |

- Paralegal Option Electives:

PLG-201 Family Law, PLG-203 Real Estate, CRJ-103 Criminal Law, PLG-204 Wills, Estates and Trusts,
PLG-105 Practical Legal Writing, PLG-299 Paralegal Internship
Total Credits: 15

## Semester 2 Advising Note

- Program chair approval may be required to register for elective courses as well as PLG-103 and PLG-202.
- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{O}$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Understand the legal process and the nature of law practice
- Construct and evaluate logical arguments in support of specific positions.
- Conduct effective legal research and oversee legal projects.


## CAREER OUTLOOK

Paralegals typically find jobs with law firms, corporations, government offices, non-profit entities, banks, health care organizations, bio-tech companies and
financial institutions. Areas of specialization include litigation, corporate law, criminal law, regulatory compliance, intellectual property, bankruptcy, labor law, immigration, family law, and real estate. The number of jobs in the paralegal field is expected to grow much faster than average through 2016, and the position of paralegal is consistently ranked among the best jobs in America. Boston is home to one of the top legal markets in the United States and BHCC's main campus is minutes away from many courthouses, law schools, law firms, and government offices.

## UNAUTHORIZED PRACTICE OF LAW STATEMENT

A Legal Studies graduate may work as a paralegal only under the supervision of an attorney and is not authorized to engage in the practice of law. The ABA (American Bar Association) defines a paralegal or legal assistant as "a person, qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.

## Paralegal Studies Program

| SEMESTER 1 | Credits Milestone GenEd | d Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | 3 E | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| GenEd-Q PS Q uantitative Problem Solving | 3-4 | MAT-097 or M AT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) <br> Choose one MAT course from Quantitative Problem Solving Menu. |  |  |
| PLG-101 Introduction to Law | $3 \quad \\|$ | ENG-095 and ESL-098 or RDG-095 or ELL-103 or placement. |
| Satisfies Learning Community Requirement |  |  |
| CIT-110 Applications/Concepts | 3 | ESL-098 or RDG-095 or ELL-103 or placement. |
| This course may be waived on the basis of previous coursework or experience. Please see the Dean of Professional Studies. |  |  |
| GenEd-CCC Community \& Cultural Contexts | $3 \quad \sim$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) <br> - Choose one course from Community and Cultural Contexts menu <br> Recommended courses: PSY-101 or SOC-101 |  |  |
| Total Credits: 15-16 |  |  |
| Semester 1 Advising Note <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | 3 ¢ | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1 ) |  |  |
| GenEd-SR Scientific Reasoning | $4 \quad \sim$ |  |
| $\approx$ This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> Choose one course from the Scientific Reasoning Menu <br> Recommended courses: BIO-115 or ENV-105 |  |  |
| Elective Behavioral Science Elective |  |  |
| - Choose one course from PSY or SOC Recommended: PSY-101 or SOC-101 |  |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) Choose one course from Creative Work Menu |  |  |
|  |  |  |
| PLG-103 Litigation | 3 - | PLG-101. |
| Elective-2 Paralegal Option Elective |  |  |
| - Paralegal Option Elective Courses: <br> CRJ-103 Criminal Law, PLG-201 Family Law, PLG-203 Real Estate Law, PLG-204 Wills, Estates and Trusts, PLG-299 Paralegal Internship, PLG-105 Practical Legal Writing <br> Total Credits: 19 |  |  |
|  |  |  |


| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Elective-1 Humanities Elective | 3 |  |
| - Choose one course from Humanities Elective Menu |  |  |
| Elective-2 Lab Science Elective |  |  |
| Choose one course from Lab Science Menu Recommended course: BIO-115 or ENV-105 |  |  |
| Elective-3 Behavioral Science Elective |  |  |
| Choose one course from PSY or SOC <br> Recommended course: PSY-107 |  |  |
| PLG-104 Legal Ethics | PLG-101. |  |
| PLG-202 Business Organizations | PLG |  |
|  | Total Credits: 16 |  |
| SEMESTER 4 Credits Milestone GenEd Prerequisites |  |  |
| Elective-1 Humanities Elective |  |  |
| Choose one course from Humanities Elective Menu |  |  |
| PLG-102 Legal Research \& Writing | 3 PLG | PLG-101. |
| Elective-3 Paralegal Option Elective |  |  |
| Paralegal Option Elective Courses: <br> CRJ-103 Criminal Law, PLG-201 Family Law, PLG-203 Real Estate Law, PLG-204 Wills, Estates and Trusts, PLG-299 Paralegal Internship, PLG-105 Practical Legal Writing |  |  |
| Elective-4 Paralegal Option Elective |  |  |
| - Paralegal Option Elective Courses: <br> CRJ-103 Criminal Law, PLG-201 Family Law, PLG-203 Real Estate Law, PLG-204 Wills, Estates and Trusts, PLG-299 Paralegal Internship, PLG-105 Practical Legal Writing |  |  |
| GenEd-E General Education Elective 3 |  |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. Total Credits: 15 |  |  |
| Semester 4 Advising Note <br> - Apply for graduation |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. § This course has pre/co- requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |
| UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO: <br> - Understand the legal process and the nature of law practice. <br> - Construct and evaluate logical arguments in support of specific positions. <br> - Conduct effective legal research and oversee legal projects. <br> - Understand, identify and resolve legal and ethical issues associated with the paralegal profession. <br> CAREER OUTLOOK <br> Paralegals typically find jobs with law firms, corporations, government offices, non-profit entities, banks, health care | organizations, bio-tech companies and financial institutions. Areas of specialization include litigation, corporate law, criminal law, regulatory compliance, intellectual property, bankruptcy, labor law, immigration, family law, and real estate. The number of jobs in the paralegal field is expected to grow much faster than average through 2016, and the position of paralegal is consistently ranked among the best jobs in America. Boston is home to one of the top legal markets in the United States and BHCC's main campus is minutes away from many courthouses, law schools, law firms, and government offices. <br> UNAUTHORIZED PRACTICE OF LAW STATEMENT <br> A Legal Studies graduate may work as a paralegal only under the supervision of an attorney and is not authorized to engage in the practice of law. The ABA (American Bar Association) defines a paralegal or legal assistant as "a person, qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible. |  |

## Integrated Media Design Option



Integrated Media Design Option (continued)

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| VMA-262 | Video Techniques Lab | 3 | ENG-095 or ELL-103 and MAT 093 or placement. |
| VMA-263 | Video Concepts Lab | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
| VMA-232 <br> VMA-275 | Visual Design Lab I or Interactive Design I | 3 | Pre/co-requisite for VMA-232: VMA-133 Prerequisite for VMA-275: VMA-132. |
| - Fallonly |  |  |  |
| GenEd-E | General Education Elective | $3 \quad \sim$ |  |
| This course meets the General Education requirement for General Education Elective. <br> - Choose a course from the General Education Scientific Reasoning, Creative Work or Elective Menus. |  |  |  |
| VMA-110 | Audio for Media | 3 | ENG-095 or ELL-103 and M AT-093 or placement. |
| VMA-111 | Introduction to Mass Media | $3 \sim$ | ENG-095 or ELL-103 and MAT-093 or placement. |
| - This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |  |
| Total Credits: 18 |  |  |  |
| Semester <br> - Students <br> - Conside | 3 Advising Note <br> s, please consult with a VMA r taking Gen. Ed. Courses du | ber before registering. mer. |  |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| VMA-140 Media in Motion | 3 \| | VMA-132. |
| VMA-130 Social Media Strategy | 3 \| | ENG-095 or ELL-103 and MAT-093 or placement. |
| GenEd-Q PS Q uantitative Problem Solving | $3 \quad 2$ | M AT-097 or M AT-098 or placement. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) <br> d Choose one course from Quantitative Problem Solving Menu. Take in summer if possible. |  |  |
| VMA-115 The Moving Image | 3 \| | ENG-095 or ELL-103 and MAT-093 or placement. |
| GenEd-SR Scientific Reasoning | 4 2 |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) Choose one course from Scientific Reasoning menu. |  |  |

$$
\text { Total Credits: } 16
$$

## Semester 4 Advising Note

- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\leqslant$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
$\approx$ This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

Upon the successful completion of the requirements of this option, graduates will be able to:

- Approach multimedia design as a responsive process of problem identification, ideation, creation and iteration.
- Apply basic skills in video, still images, visual design, typography, web/interactive design, storytelling and social media strategy to produce a portfolio of work that demonstrates their preparedness in industry-standard technical and critical-thinking skills.
- Demonstrate proficiency in software applications for image editing, and layout and content creation.
- Produce content using industry standard procedures for publication of content on electronic devices, websites and print.
- Use social media platforms for social media interaction and public relations and marketing strategy.
- Work within a team.
- Plan and execute projects to meet deadlines and design objectives.
- Practice effective communication and presentation skills necessary to engage in professional practice.
- Engage in creative and analytical discourse in order to communicate concepts to colleagues and clients. - Produce portfolio content that is suitable for applying to four-year design programs, internships, and entry-level employment.
- Cultivate habits of independent learning and creativity.


## CAREER OUTLOOK

The Integrated Media Design program addresses current demands for crossdisciplinary skills in the contemporary job market. Visual designers, interactive designers, social media specialists and many other professions require people to understand various aspects of content creation in video, web, and visual design, and social media strategy. People with a multimedia portfolio find work in advertising agencies, visual design firms, web design companies, publishing companies, game design companies, pre- and post-production houses, public relations firms, colleges, and many kinds of private, public, and non-profit companies. Examples of occupations that require cross-disciplinary skills are:

- The visual designer who needs to know web content management, social media, video, and motion graphics.
- The promotions manager who needs to know web architecture, video production and editing, social media strategy, and storytelling skills.
- The communications specialist, or journalist, who needs photography, video, sound and social media strategy
- The videographer who needs to know social media, typography and web content management.
- Interactive designer who needs to know animation, storyboarding, and content management.
Further, more concentrated study can lead to jobs such as animator, motion graphic designer, art director, advertising account manager, public relations specialist, communications specialist, journalist, multimedia designer, multimedia production artist, multimedia developer, illustrator, videographer, filmmaker, film video editor, sound designer, 3-D artist, web designer, multimedia coordinator, technical artist, multimedia developer, experience designer, game designer, storyboard artist, interface designer, virtual reality specialist. art director/creative director, web designer, broadcast designer, software application designer, interface designer, information designer, product designer, environmental designer, broadcast design, educator, instructional designer, artist, and special effects designer.


## Studio Arts Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| VMA-100 VMA Freshman Seminar | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
| - Satisfies Learning Community Requirement |  |  |
| VMA-104 Drawing from Observation | $3 \sim$ | ENG-095 or ELL-103 or placement. |
| 2 This course meets the General Education requirement for Creative Work (Formerly Area 6) |  |  |
| VMA-102 Visual Design: Composition and Color | 3 \| | ENG-095 or ELL-103 and MAT-093 or placement. |
| VMA-103 Elements of Form | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
| ENG-111 College Writing I | $3 \quad \sim$ | ENG-095 and RDG-095, ELL-103 or placement. |
| - This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| Total Credits |  |  |
| - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - Students, please consult with a VMA faculty member before registering. <br> - VMA100 and VMA104 should be completed as soon as possible. <br> - VMA104 is pre-requisite for multiple courses. <br> - Consider taking Gen. Ed. courses during Summer. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| VMA-205 Inventive Drawing | 3 | VMA-104. |
| VMA-207 Figure Drawing | 3 - | VMA-104. |
| Spring only |  |  |
| VMA-111 Introduction to Mass Media | 3 2 | MAT-093 and ENG-095 or ELL-103 or placement. |
| 2 This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |
| GenEd-Q PS Quantitative Problem Solving | 3-4 $\quad=$ |  |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) <br> Choose one course from Quantitative Problem Solving Menu |  |  |
| ENG-112 College Writing II | 3 F | ENG-111. |
| - This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| Total Credits: 15-16 |  |  |
| Semester 2 Advising Note <br> - Students, please consult with a VMA faculty member before registering. <br> - Consider taking Gen. Ed. courses during Summer. |  |  |

Studio Arts Option (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| VMA-221 Multimedia Paint and Theory | 3 \| | VMA-104. |
| - Fall only |  |  |
| VMA-118 Elements of Time | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
| Elective Career Elective | 3 |  |
| - Choose one VMA course not already required for the program. |  |  |
| VMA-112 Art History: Prehistoric to Medieval | 3 | ENG-095 and MAT-093 or placement. |
| \% This course meets the General Education requirement for Creative Work (Formerly Area 6) |  |  |
| GenEd-E General Education Elective | $3 \quad \sim$ |  |
| $\approx$ This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Creative Work, Community/Cultural Contexts, Scientific Reasoning and Elective menus. |  |  |
| Total Credits: | 15 |  |
| Semester 3 Advising Note <br> - Students, please consult with a VMA faculty mem <br> - Student should select electives based on their s <br> - Consider taking Gen. Ed. courses during Summ | ber before registering. ecialization in order to stren | gthen portfolio. |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :--- | :---: | :---: |
| VMA-227 Studio Portfolio | 3 | VMA-207 or VMA-221. |
| SmA-225 Painting Concepts |  |  |
| Spring only |  | VMA-221. |
| Elective Career Elective | 3 |  |
| Choose one VMA course not already required for the program. |  |  |


| VMA-113 | Art History: Renaissance to Contemporary | 3 |  | ENG-095 or ELL-103 and MAT-093 or higher. |
| :---: | :---: | :---: | :---: | :---: |
| GenEd-SR | Scientific Reasoning | 4 | 2 |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> Choose one course from Scientific Reasoning Menu |  |  |  |  |

$$
\text { Total Credits: } 16
$$

## Semester 4 Advising Note

- Students, please consult with a VMA faculty member before registering.
- Student should select electives based on their specialization in order to strengthen portfolio.
- Consider taking Gen. Ed. courses during Summer.

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.
$\mathfrak{O}$ This course has pre/co-requisites. Advising note or suggestion regarding this course.
This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Develop a portfolio in preparation for transfer to a four-year college or university.
- Adapt the fundamental elements and principles of design to individual aesthetic.
- Demonstrate proficiency in Drawing, painting, and creating works in traditional as well as digital technologies and experimental forms.
- Apply the basic principles of color theory.
- Combine conceptual and critical thinking skills as applied to Studio Art


## CAREER OUTLOOK

Graduates of this option qualify to transfer to bachelor's degree-granting colleges or universities. Potential entry level careers in the visual arts, which vary according to the chosen major, may include: Fine Arts, Commercial Arts, Graphic/visual Design, Photography,

Sculpture/3-D Designer, Illustration, Animation, Filmmaker, Videography, Architecture/Interior Architecture, Fashion Designer, Art Therapy, Art Education, Art Criticism and Theory, Art Historian, Art Critic, Curator, Gallerist/Art Dealer, Video Game Designer, Audio/Visual Artist, Audio Technician, Web Designer, Display Designer, Product Designer, and more. Students of all these tracks receive the same foundational curriculum within a typical four-year art college.

## Visual Design Option

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| VMA-100 | VMA Freshman Seminar | 3 \| | ENG-095 or ELL-103 and MAT-093 or placement. |
| Satisfies the Learning Community Requirement |  |  |  |
| VMA-132 | Typography I | 3 \| | ENG-095 or ELL-103 and MAT-093 or placement. |
| VMA-102 | Visual Design: Composition and Color | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
| VMA-104 | Drawing from Observation | $3 \sim$ | ENG-095 or ELL-103 and MAT-093 or placement. |
| 2 This course meets the General Education requirement for Creative Work (Formerly Area 6) |  |  |  |
| VMA-114 | History of Graphic Design | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
|  | Total Credits: | 15 |  |
| Semester 1 Advising Note <br> - New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. <br> - VMA-132, Typography I and VMA-104 Drawing from O bservation must be successfully completed to move through the program. <br> - Consider taking Gen. Ed. Courses during the summer. |  |  |  |
| SEMESTER 2 |  | Credits Milestone GenEd | Prerequisites |
| VMA-133 | Typography II | 3 W | VMA-132. |
| VMA-129 | Visual Design with HTML and CSS | $3 \sim$ | ENG-095 or ELL-103 and MAT-093 or placement. |
| VMA-135 | Digital Illustration | 3 | ENG-095 or ELL-103 and MAT-093. |
| VMA-106 | Digital Imaging for Artists and Designers | 3 | ENG-095 or ELL-103 and MAT-093 or placement. |
| ENG-111 | College Writing I | 3 E | ENG-095 and RDG-095, ELL-103 or placement. |
| - This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |  |
| Total Credits: |  | 15 |  |
| Semester 2 Advising Note <br> - Students, please consult with a VMA faculty member before registering. <br> - Consider taking Gen. Ed. Courses during the summer. <br> - VMA-105 is not for VMA majors - do not take. VMA-129 required for VMA-275 in semester 3 (Fall). <br> - VMA-133 required for VMA-232 in semester 3 (fall semester). |  |  |  |

Visual Design Option (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| VMA-232 Visual Design Lab I | $3 \boldsymbol{\sim}$ | Pre/co-requisite for VMA-232: VMA-133. |
| - Course offered in the fall only |  |  |
| VMA-275 Interactive Design I | 3 | VMA-132. |
| - Course offered in the fall only |  |  |
| Elective Career Elective | 3 |  |
| Career Elective Courses: <br> VMA-103, VMA-118, VMA-130, VMA-140, VMA-205, VMA-207, VMA-261, VMA-262, VMA-299G |  |  |
| ENG-112 College Writing II | 3 E | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| VMA-111 Introduction to Mass Media | 3 E | ENG-095 or ELL-103 and MAT-093 or higher. |
| - This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) |  |  |
| GenEd-QPS Quantitative Problem Solving | 3-4 $\quad$ - |  |
| This course meets the General Education requirement for Quantitative Problem Solving. <br> - Choose one course from Quantitative Problem Solving Menu |  |  |
| Total Credits: 18-19 |  |  |
| Semester 3 Advising Note <br> - Students, please consult with a VMA faculty <br> - Consider taking Gen. Ed. Courses like EN <br> - VMA-232 only offered in the Fall. Must ha | ber before registering. nd GenEd-QPS during the -232 for VMA-233. | summer. |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| VMA-233 Visual Design Lab II | 3 | grade of C or higher. |
| - This course is offered in the spring only |  |  |
| Elective Career Elective | 3 |  |
| Career Elective Courses: <br> VMA-103, VMA-118, VMA-130, VMA-140, VMA-205, VMA-207, VMA-261, VMA-262, VMA-299G |  |  |
| GenEd-SR Scientific Reasoning | $4 \quad \stackrel{\rightharpoonup}{2}$ |  |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) <br> Choose one course from General Education Program Menu |  |  |
| GenEd-E General Education Elective | 3-4 |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
| Total Credits: 13-14 |  |  |
| Semester 4 Advising Note <br> - Students, please consult with a VMA faculty member before registering. <br> - Consider taking Gen. Ed. Courses during the summer. <br> - At least one Gen Ed will have to be taken over the semester; the program is 64 credits. <br> - Apply for graduation |  |  |
| Milestone Courses should be taken in the © This course has pre/co- requisites. / Advi This course satisfies General Education req | This will help you stay on track uggestion regarding this cours |  |

Visual Design Option (continued)

## UPON COMPLETION OF THIS

 CONCENTRATION GRADUATES WIL BE ABLE TO:- Approach visual design as a responsive process of problem identification, ideation, and creation.
- Apply design skills in typography, color, image, form, and materials to print and digital media projects.
- Produce portfolio content that is suitable for applying to four-year design programs, internships, and designrelated employment.
- Demonstrate proficiency in software applications for drawing, image editing, and layout.
- Use industry standard procedures to produce files and materials for print and digital production.
- Plan and execute projects to meet deadlines and design objectives. - Practice effective communication and presentation skills necessary to engage in professional visual design practice.
- Engage in creative and analytical discourse about design in order to communicate concepts to colleagues and clients.
- Cultivate habits of life-long learning and creativity.


## CAREER OUTLOOK

Graduates of this program will produce a portfolio of design work demonstrating foundation and entrylevel skills and knowledge needed for careers in fields such as: advertising, print and digital book design, editorial design, environmental design, experience design, identity design, illustration, information design, in-house design, interaction design, motion graphics, packaging, print design, product design, typography, UX design, and web design.

## Biological Sciences: Biotechnology Option



Total Credits: 15

## Semester 1 Advising Note

If student is taking developmental math their first semester, they can supplement their schedule with General Education courses an College Writing I (ENG111). Taking developmental math the first semester will require a student to attend for an extra semester and/or attend a summer session to complete the program.
A student should consider taking one of their General Education courses during the summer session to lighten their academic load in semester two.
General Education Quantitative Problem Solving and General Education Scientific Reasoning satisfied by Program. This is a day program only. The only biotechnology course offered in the evening is BIO-120.

| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-112 College Writing II | 3 - | ENG-111. |
| - This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| GenEd-CCC Community \& Cultural Contexts | $3 \quad \geqslant$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) <br> Choose one course from Community and Cultural Contexts Menu |  |  |
| GenEd-E General Education Elective | $3 \quad \stackrel{\rightharpoonup}{2}$ |  |
| $\approx$ This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
| BIO-196 General Biology II/Lab | 4 | BIO-195. |
| BIO-207 Cell Biology/Lab | 4 \| | MAT-197, BIO-195 and either BIO-196 or BIO-12 |
| Total Credits: | 17 |  |

## Semester 2 Advising Note

- Three General Education menu courses must be completed during semesters 2 and 3 , in no particular sequence.
- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.



## Biological Sciences: Biotechnology Option (continued)

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Use currently accepted biological, chemical, and physical concepts to investigate problems and ideas presented in advanced biological study.
- Use biological concepts to evaluate their own science related concerns such as personal health or careers.
- Use laboratory technology, equipment and techniques to investigate scientific problems critically and safely using proper scientific methods
- Use molecular and cellular laboratory techniques that are commonly used in Biotechnology.
- Explain the major concepts of cell structure, function and cellular processes that are key to life.
- Explain current models, concepts and principles of genetics and inheritance.
- Explain and apply the underlying concepts of current topics and experimental models in molecular biology and Biotechnology.
- Use industry skills and work practices of the biotechnology industry for direct employment.


## CAREER OUTLOOK

Students completing this option qualify for entry level positions in a wide range of biotechnology disciplines in industry, police, government and academic labs. These positions require a biotechnology certificate, AS degree or BS degree with $0-2$ years of experience. Such positions offer the possibility of merit bonus and promotion and are available locally as well as nationwide.

## Biological Sciences: Medical Professions Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | 2 | ENG-095 and RDG-095, ELL-103 or placement. |
| 2 This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| CHM-201 General Chemistry I/Lab | 4 | MAT-197 and pre/co req: ENG-111. |
| MAT-281 Calculus I | 4 | M AT-197. |
| BIO-195 General Biology I/Lab | 4 | ENG-095 and ESL-098 or RDG-095 or ELL-103 and MAT-194 or placement. |
| Total Credits: 15 |  |  |
| Semester 1 Advising Note <br> - General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program. <br> - This option has three tracks: 1. Pre-pharmacy school; 2. Pre-physician's assistant or physical therapy school; 3. Pre-medical or Preveterinary school. Course selection will vary based on a student's intended career. Students should learn about the course requirements of specific programs as they choose their electives. Please see each semester's advising notes for correct course registration. <br> - Students need to complete three General Education courses during semesters 1 and 2. Students do not need to complete General Education courses in any particular order. <br> - MAT-197 requires a C+ or higher to enroll in CHM-201. <br> - If a student is not eligible to take (MAT281) Calculus I, they should take (MAT-197) Precalculus in order to take (CHM-201) General Chemistry I/Lab in their second semester. |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | $3 \quad \stackrel{\rightharpoonup}{2}$ | ENG-111. |
| F This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| GenEd-CCC Community \& Cultural Contexts | 3 \| |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Area 2) <br> Choose one course from Community and Contexts Menu |  |  |
| BIO-196 General Biology II/Lab | 4 | BIO-195. |
| CHM-202 General Chemistry II/Lab | 4 | CHM-201. |
| GenEd-CW Creative Work | 3 T |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> - Choose one course from Creative Work Menu |  |  |
| Total Credits: 17 |  |  |
| Semester 2 Advising Note <br> - Cell Biology/Lab (BIO-207), Genetics/Lab (BIO-208), O rganic Chemistry I/ Lab (CHM-251), (CHM-252) O rganic Chemistry II/Lab and Interpretation and Presentation of Scientific Research (SCI-221) is not always offered during the summer semester. All other required science and math courses are offered during the summer. <br> - Meet with an advisor to begin career planning activities. <br> - Begin exploring transfer options: attend a transfer workshop and the College transfer fair |  |  |

Biological Sciences: Medical Professions Option (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| BIO-207 | Cell Biology/Lab | 4 | MAT-197, BIO-195 and either BIO-196 or BIO-120. |
| CHM-251 | Organic Chemistry I/Lab | 4 | CHM-202 and ENG-112. |
| PHY-251 | College Physics I/Lab | or | 4 |
| PHY-201 | General Physics/Lab | 3 | Prerequisite for PHY-251: MAT-281. <br> Prerequisite for PHY-201: MAT-197. |
| Elective | Elective |  |  |

- Option elective courses: BIO-203 Anatomy and Physiology, BIO-204 Anatomy and Physiology II, BIO-205 M icrobiology, BIO-208 Genetics, CHM-252 Organic Chemistry, MAT-181 Statistics, MAT-282 Calculus II, NHP-180 M edical Terminology,
COM-171 Public Speaking and Professional Communication, SCI-221 Interpretation of Scientific Research,
HON-200 Honors Seminar
See semester advising note.


## Total Credits: 15

## Semester 3 Advising Note

- Veterinary and pharmacy schools: Most require calculus and calculus-based College Physics (PHY-251 and PHY-252).
- Medical, physician's assistant, physical therapy schools: Most do not require calculus or calculus-based physics and students can instead take General Physics (PHY-201 and PHY-202). However, College Physics (PHY-251 and PHY-252) courses will strengthen your application.
- Electives should be decided based on the medical profession chosen by the student. Students should research specific programs and their course requirements.
- Veterinary and medical schools elective options.O rganic Chemistry II (CHM-252),Genetics (BIO-208)Statistics (MAT-181),
*Students may choose to take Microbiology (BIO-205).
- Pharmacy programs elective options.O rganic Chemistry II (CHM-252),M icrobiology (BIO-205)Anatomy \& Physiology I (BIO-203),
*Students may also choose: Public Speaking and Professional Communication (COM-171), Statistics (MAT-181), and/or Anatomy \& Physiology II (BIO-204).
- Physician's Assistant or Physical Therapy programs elective options•Anatomy \& Physiology I and II (BIO-203 and BIO-204), Statistics (MAT-181), *tudents may choose to take Medical Terminology (NHP-180) and/or Microbiology (BIO-205).
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeM ap

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Elective-1 Elective | 3-4 |  |
| - See semester advising note |  |  |
| $\begin{array}{ll}\text { PHY-252 } & \text { College Physics II/Lab } \\ \text { or } \\ \text { PHY-202 } & \text { General Physics II/Lab }\end{array}$ |  | Prerequisites for PHY-252: PHY-251; Pre/corequisite: MAT-282. <br> Prerequisites for PHY-202: PHY-201. |
| GenEd-E General Education Elective | 3 2 |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
| Elective-2 Elective 3-4 |  |  |
| Option elective courses: <br> BIO-203 Anatomy and Physiology I, BIO-204 Anatomy and Physiology II, BIO-205 M icrobiology, BIO-208 Genetics, CHM-252 Organic Chemistry, MAT-181 Statistics, MAT-282 Calculus II, NHP-180 M edical Terminology, COM-171 Public Speaking and Professional Communication, SCI-221 Interpretation of Scientific Research, HON-200 Honors Seminar See semester advising note. |  |  |
| Semester 4 Advising Note <br> - Veterinary and medical schools elective options.O rganic Chemistry II (CHM-252),Genetics (BIO-208), Statistics (MAT-181), *Students may choose to take Microbiology (BIO-205). <br> - Pharmacy programs elective options.O rganic Chemistry II (CHM-252),M icrobiology (BIO-205)Anatomy \& Physiology I (BIO-203), *Students may also choose: Public Speaking and Professional Communication (COM-171), Statistics (MAT-181), and/or Anatomy \& Physiology II (BIO-204). <br> - Physician's Assistant or Physical Therapy programs elective options•Anatomy \& Physiology I and II (BIO-203 and BIO-204), Statistics (MAT-181),*Students may choose to take Medical Terminology (NHP-180) and/or Microbiology (BIO-205). <br> - Apply for graduation. |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{F}$ This course has pre/co-requisites. <br> Advising note or suggestion regarding this course. This course satisfies General Education requirement. |  |  |
| UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO: <br> - Use currently accepted biological, chemical and physical concepts to investigate problems and ideas presented in advanced study related to health and medicine. <br> - Use biological concepts to evaluate their own science related concerns such as personal health or health careers. | - Use laboratory technology, equipment and techniques to investigate scientific problems critically and safely using proper scientific methods. <br> - Use molecular and cellular laboratory techniques that are commonly used in Biotechnology and Medicine. <br> - Explain the major concepts of cell structure, function and cellular processes that are key to life. | CAREER OUTLOOK <br> This option will allow students to transfer to four-year colleges and universities to seek a bachelor's degree to pursue a career in the health professions. Students should enroll in this option if they plan to transfer to a four-year college or university to pursue admission to programs in medical, veterinary, pharmacy, physician's assistant or physical therapy professions. |

Associate in Science
Science, Engineering and Mathematics - Biology and Chemistry

## Biology Transfer Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | $3 \\|$ | ENG-095 and RDG-095, ELL-103 or placement. |
| $\sim$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| GenEd-CCC Community \& Cultural Contexts | $3 \sim$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 an 3) <br> Choose a course from the Community \& Cultural Contexts Menu |  |  |
| MAT-281 Calculus I | 4 \\| | MAT-197 or placement; see semester advising note. |
| BIO-195 General Biology I/Lab | $4 \sim$ | ENG-095 and RDG-095 or ELL-103 or ESL-098, and MAT-194. |
| Total Credits: 14 |  |  |
| Semester 1 Advising Note <br> - General Education Requirements Q uantitative Problem Solving and Scientific Reasoning satisfied by program. <br> - Students need to complete three General Education courses during semesters $1 \& 2$. These do not need to be completed in any particular sequence. <br> - If a student is not eligible to take MAT-281, they should take Precalculus (MAT-197) in orders to take General Chemistry I (CHM201) in their second semester |  |  |
| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| ENG-112 College Writing II | $3 \sim \sim$ | ENG-111. |
| $\sim$ This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| GenEd-E General Education Elective | $3 \sim$ |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
| GenEd-CW Creative Work | $3 \sim$ |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) Choose a course from the Creative Work Menu |  |  |
| BIO-196 General Biology II/Lab | 4 - | BIO-195. |
| CHM-201 General Chemistry I/Lab | $4 \\|$ | MAT-197 and pre/co req: ENG-111. |
| - Students must complete MAT197 with a C + or better before taking CHM 201 |  |  |
| Total Credits: |  |  |
| Semester 2 Advising Note <br> - Meet with an advisor to begin career planning activit <br> - Begin exploring transfer options: attend a transfer w | ities <br> workshop and the College | nsfer fair |

Biology Transfer Option (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| BIO-207 Cell Biology/Lab | 4 | M AT-197, BIO-195 and either BIO-196 or BIO-120. |
| CHM-202 General Chemistry II/Lab | 4 | CHM-201. |
| PHY-251 College Physics I/Lab  <br> PHY-201 General Physics/Lab | 4 \| | Prerequisite for PHY-251: MAT-281. <br> Prerequisite for PHY-201: MAT-197. |
| Elective Option Elective | 3-4 |  |
| Elective Options: <br> BIO-120 Introduction to Biotechnology, BIO-210 Population Biology, ENV-211 Environmental Microbiology/Lab, BIO-261 Advanced Lab Techniques in Biotechnology, BIO-262 Principles of M olecular Biotechnology, CHM-251 Organic Chemistry I, CHM-252 Organic Chemistry II, MAT-181 Statistics I, MAT-282 Calculus II, SCI-221 Interpretation and Presentation of Scientific Research, HON-200 Honors Seminar <br> Total Credits: 15-16 |  |  |
| Semester 3 Advising Note <br> - It is highly recommended that a student take Organic Chemistry I \& II for two of their option electives. However, this will require an extra semester at BHCC to complete unless the student has completed the math prerequisite (MAT-197 or equivalent) to take General Chemistry I (CHM-201) in their first semester. <br> - If a student elects to take Advanced Lab Techniques in Biotechnology (BIO-261) they should also take Principles of M olecular Biotechnology (BIO-262) to insure transferability. BIO-261 will only be offered in the fall semester and BIO-262 will only be offered in the spring semester. <br> - Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer. <br> - Students should check with their transferring institution to see if they require algebra or calculus based physics for their biology programs. <br> - Complete a pre-graduation check with an advisor in LifeMap |  |  |


| SEMESTER $\mathbf{4}$ | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| BIO-208 | Genetics/Lab | 4 | BIO-196 and Pre/coreq BIO-207 or Chair approval. |
| PHY-252 | College Physics II/Lab <br> or <br> General Physics II/Lab | 4 | Prerequisites for PHY-252: PHY-251; Pre/co- <br> requisite: MAT-282. <br> Prerequisites for PHY-202: PHY-201. |
| PHY-202 | $3-4$ |  |  |
| Elective-1 Option Elective |  |  |  |
| Elective Options: |  |  |  |
| BIO-120 Introduction to Biotechnology, BIO-210 Population Biology, ENV-211 Environmental Ecology/Lab, |  |  |  |
| BIO-261 Advanced Lab Techniques in Biotechnology, BIO-262 Principles of Molecular Biotechnology, |  |  |  |
| CHM-251 Organic Chemistry I, CHM-252 Organic Chemistry II, MAT-181 Statistics, MAT-282 Calculus II, |  |  |  |
| SCI-221 Interpretation and Presentation of Scientific Research, HON-200 Honors Seminar |  |  |  |

## Elective-2 Option Elective

- Elective Options:

BIO-120 Introduction to Biotechnology, BIO-210 Population Biology, ENV-211 Environmental Ecology/Lab, BIO-261 Advanced Lab Techniques in Biotechnology, BIO-262 Principles of M olecular Biotechnology, CHM-251 Organic Chemistry I, CHM-252 Organic Chemistry II, MAT-181 Statistics, MAT-282 Calculus II,
SCI-221 Interpretation and Presentation of Scientific Research, HON-200 Honors Seminar

$$
\text { Total Credits: } 14-16
$$

## Semester 4 Advising Note

- Elective Notes: It is highly recommended that a student take Organic Chemistry I/Lab and Organic Chemistry II/Lab for two of their option electives. However, this will require an extra semester at BHCC to complete.
- If a student elects to take Advanced Lab Techniques in Biotechnology (BIO-261) they should also take Principles of M olecular Biotechnology (BIO-262) to insure transferability. BIO -261 will only be offered in the fall semester and BIO -262 will only be offered in the spring semester.
- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\circlearrowleft$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

Science, Engineering and Mathematics - Biology and Chemistry

## Biomedical Engineering Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :---: | :--- | :--- |
| ENR-101 | Introduction to Engineering/Lab | 4 | MAT-194 or placement. |
| ENG-111 | College Writing I | 3 |  |

$\approx$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1)
MAT-281 Calculus I
GenEd-CCC Community \& Cultural Contexts
This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Area 2 and Area 3)
Choose one course from Community and Cultural Contexts Menu
GenEd-E General Education Elective
This course meets the General Education requirement for General Education Elective.
Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.
Total Credits: 17

## Semester 1 Advising Note

- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program
- This map assumes a student enters the program ready to enroll in MAT-281.

| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CHM-201 General Chemistry I/Lab | 4 \\| | MAT-197 and pre/co req: ENG-111. |
| - Students must complete MAT197 with a C + or better before taking CHM-201 |  |  |
| M AT-282 Calculus II | 4 | M AT-281. |
| PHY-251 College Physics I/Lab | 4 | M AT-281. |
| ENG-112 College Writing II | 32 | ENG-111. |
| $\sim$ This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| GenEd-CW Creative Work | $3 *$ |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) Choose one course from Creative Work Menu |  |  |
| Total Credits: 18 |  |  |
| Semester 2 Advising Note <br> - A student should plan to complete CHM-201 during the Spring semester or the Summer Bridge Session. <br> - Meet with an advisor to begin career planning activities. <br> - Begin exploring transfer options: attend a transfer workshop and the College transfer fair. |  |  |

Program information was omitted in the original version of the 2021-2023 College Catalog, and has been added as an insert to the final catalog as Pages 216a and 216b.

Biomedical Engineering Option (continued)

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| BME-100 | Biomedical Engineering I/Lab | 4 \| | MAT-281 and CHM-201. Pre-/Co-requisite: MAT282. |
| MAT-283 | Calculus III | 4 | MAT-282. |
| PHY-252 | College Physics II/Lab | 4 | PHY-251. Pre/co-requisite: M AT-282. |
| BIO-195 | General Biology 1/Lab | 4 | ENG-095, RDG-095 or ESL-098 and MAT-194 or placement. |
| Total Credits: 16 <br> Semester 3 Advising Note <br> - Biomedical Engineering I/Lab is currently only offered during the Fall Semester. <br> - Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer. <br> - Complete a pre-graduation check with an advisor in LifeM ap |  |  |  |
|  |  |  |  |
| SEMESTER 4 |  | Credits Milestone GenEd | Prerequisites |
| BME-200 | Biomedical Engineering II | 3 | BME-100 and MAT-282. Pre/co-requisite: M AT-283. |
| MAT-285 | Differential Equations | 4 | M AT-282. |
| BME-250 | Biomedical Engineering III | 3 | BME-200 or Chair approval. Pre/co-requisite: MAT285. |
| - See semester advising note. |  |  |  |
| BIO-196 | General Biology II/Lab | 4 | BIO-195. |
| CHM-202 | General Chemistry II/Lab | 4 | CHM-201. |
| Total Credits: |  | 18 |  |
| Semester 4 Advising Note <br> - BME-250: Depending on the student's intended transfer program/school, Biomedical Engineering III may be substituted with another course. The substitution may also allow for Biomedical Engineering II and Biomedical Engineering III to be completed in the same semester. Biomedical Engineering II is currently offered during only the Spring semester <br> - Apply for graduation. |  |  |  |

Program information was omitted in the original version of the 2021-2023 College Catalog, and has been added as an insert to the final catalog as Pages 216 and 216 b.

```
Biomedical Engineering Option (continued)
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. }\leqslant\mathrm{ This course has pre/co-requisites
/ Advising note or suggestion regarding this course.* This course satisfies General Education requirement.
```

UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be Able TO:

- Design and conduct experiments.
- Analyze and interpret data.
- Apply computational tools and scientific concepts to biomedical engineering problems.
- Design systems, components, or processes for solving biomedical engineering problems.
- Function as part of a biomedical engineering team.
- Articulate the professional and ethical responsibilities required of engineers.


## CAREER OUTLOOK

Graduates with an associate of science degree will be qualified for direct employment in entry-level research/lab assistant, design and manufacturing positions available in private industries, academic research institutions, and hospitals locally and nationwide.

Program information was omitted in the original version of the 2021-2023 College Catalog, and has been added as an insert to the final catalog as Pages 216a and 216 b .

## Chemistry Concentration

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | 3 \| | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| GenEd-CCC Community \& Cultural Contexts | 3 ? |  |
| 2 This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Area 2 and 3) |  |  |
| MAT-281 Calculus I | 4 \| | MAT-197 or placement; See Note*. |
| CHM-201 General Chemistry I/Lab | 4 \\| | M AT-197 Co-requisite: ENG-111. |
| A grade of C or better is required for MAT-197. Recommendation: take MAT-281 concurrently with CHM-201. |  |  |
| GenEd-CW Creative Work | $3 \quad \mathrm{~F}$ |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> - Choose one course from Creative Work Menu |  |  |
| Total Credits: 17 |  |  |
| Semester 1 Advising Note <br> - General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program <br> - Student enrolling in this degree program can earn World Studies Emphasis certification simultaneously <br> - Students need to complete three General Education courses and a humanities course. They do not need to be completed in any particular sequence. <br> - Student must have completed ENG-111 with a C or better or take ENG-111 concurrently with CHM-201. Must have completed MAT-197 with a C+ or better before taking CHM-201 or take MAT-281 concurrently with CHM-201. Students who are not able to take CHM-201 in their first semester will need to take CHM-202 during the summer or take an additional semester for completion of CHM-252 at the end of the program. |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-112 College Writing II | 3 E | ENG-111. |
| 2 This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| MAT-282 Calculus II | 4 \| | MAT-281; see note. |
| CHM-202 General Chemistry II/Lab | 4 \| | CHM-201. |
| PHY-251 College Physics I/Lab | 4 \\| | MAT-281. |
| Total Credits: | 15 |  |

## Semester 2 Advising Note

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- It is recommended that students take the General Education elective or Humanities courses during the summer to lighten their load in the second semester, and/or to take one of their recommended third-semester electives during the summer to lighten their load in the third semester
- CHM-251 and CHM-252 are not offered during the summer session. All other required science and math courses are offered during the summer. Students wishing to complete the program in four semesters will need to begin their CHM - $251 / 252$ sequence in their third semester, and will need to take CHM-202 in the summer if they take CHM-201 in their second semester


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :---: | :---: | :---: | :---: |
| CHM-252 Organic Chemistry II/Lab | 4 |  | CHM-251. |
| Elective-1 Concentration Elective | $3-4$ |  |  |

- Concentration Electives: BIO-120 Introduction to Biotechnology, BIO-195 General Biology I, BIO-196 General Biology II, CSC-120 Introduction to Computer Science and Object Oriented Programming, ENR-101 Introduction to Engineering, HON-200 Honors Seminar, MAT-181 Statistics I, M AT-283 Calculus III, MAT-285 O rdinary Differential Equations, SCI-221 Scientific Writing

```
Elective-2 Humanities Elective 3
- Choose one course from the Humanities Electives menu.
Elective-3 Concentration Elective 3-4
```

Concentration Electives: BIO-120 Introduction to Biotechnology, BIO-195 General Biology I, BIO-196 General Biology II, CSC-120 Introduction to Computer Science and Object Oriented Programming, ENR-101 Introduction to Engineering, HON-200 Honors Seminar, MAT-181 Statistics I, MAT-283 Calculus III, MAT-284 Ordinary Differential Equations, SCI-221 Scientific Writing

Total Credits:
13-15

## Semester 4 Advising Note

O ne of the Concentration electives must be a 4-credit course to satisfy the minimum 60-credit degree requirement.
Concentration Electives:

- BIO-120 Introduction to Biotechnology
- BIO-195 General Biology I
- BIO-196 General Biology II
- CSC-120 Introduction to Computer Science and Object Oriented Programming
- ENR-101 Introduction to Engineering
- HON-200 Honors Seminar
- MAT-181 Statistics I
- MAT-283 Calculus III
- MAT-285 Ordinary Differential Equations
- SCI-221 Scientific Writing
\| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\leqslant$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

Chemistry concentration (continued)

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Use currently accepted chemical concepts to investigate problems and ideas presented in advanced chemical study.
- Use chemical concepts to evaluate their own science-related concerns such as personal health or careers in science.
- Use laboratory technology, equipment, and techniques critically and safely to investigate scientific problems using proper scientific methods.


## CAREER OUTLOOK

Graduates of this concentration should transfer to a four year college or university because entry-level employment opportunities in chemistry such as lab or field technicians usually require a minimum of a bachelor's degree in chemistry. Professional positions such as engineers, researchers, or college instructors usually require a minimum of a master's degree.

## Android Mobile App Certificate Program

| SEMESTER 1 |  | Credits Milestone GenEd |  | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| CIT-102 | IT Career Exploration | 1 |  |  |
| CIT-113 <br> CIT-110 CSC-120 | Information Technology Problem Solving or <br> Applications/Concepts <br> or <br> Intro to Computer Science and Object <br> Oriented Programming | 3 | ${ }^{\sim}$ | Prerequisites for CIT-110 and CIT-113: ESL-098 or RDG-095 or ELL-103 or placement. Prerequisites for CSC-120: MAT099, ENG-095, and RDG-095 or ELL-103 or ESL-098. |
| CSC-129 | Mobile Application Development | 3 | $\cdots$ | ENG-090 and RDG090 or placement. |
| CSC-131 | Introduction to Creating Mobile Applications | 3 | $\cdots$ | ENG-090 and RDG-090 or placement. |
|  | Total Credits: | : 10 |  |  |
| SEMESTER 2 SPRING |  | Credits Milestone GenEd |  | Prerequisites |
| CSC-135 | Design for Mobile Devices | 3 | ${ }^{\sim}$ | ENG-090 and RDG-090 or placement. |
| - This course is only offered during the Spring Semester |  |  |  |  |
| CSC-229 | Programming for Android I | 3 | $\cdots$ | CIT-113 or CSC-120 or CSC-129 or Chair approval. |
| - This course is only offered during the Spring Semester |  |  |  |  |
|  | Total Credits: | 6 |  |  |

## Semester 2 Spring Advising Note

- Apply for graduation
- Any BHCC CIT programming course may be used as a prerequisite for CSC-229
$\|$ Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{B}$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO:

- Tackle large problems by systematically breaking them down into smaller, more manageable problems.
- Use their knowledge, skills, and resources to effectively adapt to change.
- Utilize a foundation in programming practices and principles.
- Utilize skills and competencies required to program basic Android applications in J ava.
- Utilize skills and competencies required to design basic mobile applications on several device platforms.


## CAREER OUTLOOK

This Certificate Program is designed to align with the needs specified by industry partners. This option will have stackable credentials ideal for the working professional who is not seeking a degree, but looking to enhance their existing information technology skills.

## Computer Science Concentration



Computer Science Concentration (continued)

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| GenEd-CW Creative Work | 3 2 |  |
| 2 This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> - Choose one course from the Creative Work Menu |  |  |
| CSC-285 Advanced J ava | 3 \| ${ }^{-1}$ | MAT-197 and CSC-239. |
| PHY-251 College Physics I/Lab | 4 - | MAT-281. |
| GenEd-E General Education Elective | 3 E |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose one course from the Community \& Cultural Contexts Menu. |  |  |
| Elective Concentration Elective <br> Elective Options: <br> CSC-243 Android for J ava Programmers, CSC-236 SQ L Programming, CSC-284 Advanced C++, <br> CSC-287 0 O PL for Programmers, CSC-299CSc Computer Science Internship, HON-200 Honors Seminar, INT-299CSc Learning and Earn Internship, MAT-283 Calculus III, MAT-285 Differential Equations, MAT-291 Linear Algebra Total Credits: 16-17 |  |  |
|  |  |  |
| Semester 3 Advising Note <br> - Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer. <br> - Complete a pre-graduation check with an advisor in LifeM ap <br> - Students planning to transfer to UMASS Boston's Computer Science program, should plan to take CS-240 (Programming in C) at UMB, and transfer it back to BHCC as an elective. |  |  |


| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :---: | :---: | :---: | :---: |
| PHY-252 | College Physics II/Lab | 4 | PHY-251 and pre/co-req MAT-282. |
| CSC-242 | Data Structures | 3 | CSC-239 and MAT-197. |
| Department strongly recommends students complete CSC-239 with a B- or better. |  |  |  |
| Elective-1 Concentration Elective | $3-4$ |  |  |
| Concentration Elective O ptions: |  |  |  |
| CSC-243 Android for J ava Programmers, CSC-236 SQL Programming, CSC-284 Advanced C++, |  |  |  |
| CSC-287 OOPL for Programmers, CSC-299CSc Computer Science Internship, HON-200 Honors Seminar, |  |  |  |
| INT-299CSC Learning and Earn Internship, MAT-283 Calculus III, MAT-285 Differential Equations, MAT-291 Linear Algebra |  |  |  |

Elective-2 Concentration Elective 3-4

- Concentration Elective Options:

CSC-243 Android forJ ava Programmers, CSC-236 SQ L Programming, CSC-284 Advanced C++, CSC-287 O O PL for Programmers, CIT-299CSc Computer Science Internship, HON-200 Honors Seminar, INT-299CSc Learning and Earn Internship, MAT-283 Calculus III, MAT-285 Differential Equations, M AT-291 Linear Algebra
Elective Humanities Elective $3 \quad$ Choose one course from Humanities Elective.

Total Credits: 16-18

[^1]Computer Science Concentration (continued)

## UPON COMPLEIION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

Computer Science Concepts -

- Demonstrate a clear understanding of the concepts, terminology, and term definitions associated with Computer Science, including basic computer architecture and organization. Computer Science Software -
- Demonstrate a clear understanding of the discipline's specific Integrated Development Environments, software utilities, and computer platforms which can be used in the development of software.
Computer Software Development -
- Design, plan, develop, and produce complete computer software from start to finish with all stages of the development process clearly identified.
- Create software in Object Oriented Languages
Computer Science Teams -
- Participate in multi-cultural teams and team projects as a contributing member with the requirement to be an active and supportive team member.
Computer Software Quality and Assurance -
- Analyze Worst and Best case for algorithm performance
- Design and implement software test plans, including Unit and Integration testing
- Reporting and Presenting Software Solutions -
- Write formal report of software solutions
- Present software solutions using diverse modalities (PowerPoint, Video, etc.)
- Provide and receive constructive and critical feedback
- Create software Requirements and

Design Documents

- Create software program documentation

CAREER OUTLOOK
Graduates of this concentration are prepared for well-paying, entry level careers as computer scientists and programmers, and can transfer to bachelor's programs at four-year college Computer Science programs.

## Computer Science Transfer Option



Computer Science Transfer Option (continued)


Total Credits: 13-16

## Semester 4 Advising Note

- Recommended electives: CIT-287 or CIT-243 or MAT-291
- Students planning to transfer to UMASS Lowell and UMASS Amherst should take MAT-291 as an elective
- Students planning to transfer to Tufts University should take MAT-283 as an elective
- Apply for graduation
- Students planning to transfer to UMASS Boston's Computer Science program, should plan to take CS-240 (Programming in C) at

UMB, and transfer it back to BHCC as an elective.
Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathcal{O}$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

Computer Science Concepts -

- Demonstrate a clear understanding of the concepts, terminology, and term definitions associated with Computer Science, including basic computer architecture and organization.
Computer Science Software -
- Demonstrate a clear understanding of the discipline's specific Integrated
- Development Environments, software utilities, and computer platforms which can be used in the development of software.
Computer Software Development -
- Design, plan, develop, and produce complete computer software from start to finish with all stages of the development process clearly identified.
- Create software in Object Oriented Languages
- Computer Science Teams -
- Participate in multi-cultural teams and team projects as a contributing member with the requirement to be an active and supportive team member. Computer Software Quality and Assurance -
- Analyze Worst and Best case for algorithm performance
- Design and implement software test plans, including Unit and Integration testing
- Reporting and Presenting Software Solutions -
- Write formal report of software solutions
- Present software solutions using diverse modalities (PowerPoint, Video, etc.)
- Provide and receive constructive and critical feedback
- Create software Requirements and

Design Documents

- Create software program
documentation


## CAREER OUTLOOK

The CS Transfer Option degree prepares students to transfer to four-year college Computer Science (CS) Programs across the United States and also prepares them for well-paid entry level careers and internships as computer scientists and programmers.

## Mobile App Starter Certificate Apple



# Object Oriented Computer Programming and Design Certificate Program 

| SEMESTER |  | Credits | Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
| CSC-120 | Intro to Computer Science and Object Oriented Programming | 4 | ${ }^{\sim}$ | MAT-099 and ENG-095 and RDG-095 or ELL-103 or ESL-098 or placement. |
|  | Total Credits: | 4 |  |  |
| Semester 1 Advising Note |  |  |  |  |
| SEMESTER 2 |  | Credits Milestone GenEd |  | Prerequisites |
| CSC-237 | C++ Programming | 4 | ${ }^{\sim}$ | ENG-095 or ELL-103 and MAT-194 and CSC-120. |
| CSC-239 | J AVA Programming | 4 | $\cdots$ | ENG-095 or ELL-103 and MAT-194 and CSC-120 or Chair approval. |
|  | Total Credits: | 8 |  |  |
| Semester 2 Advising Note |  |  |  |  |
| - Based | on Accuplacer results for M ath, student may | y need to | o take MAT-197. |  |


| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| CSC-284 Advance C++/OOP | 3 \\| | CSC-237 and MAT-194. |
| - The department recommends that students taking this course have no less than a grade of B in the prerequisite courses. |  |  |
| CSC-242 Data Structures | $3 \quad \omega$ | CSC-239 and MAT-197. |
| - Department strongly recommends students complete CIT-239 with a B- or better. |  |  |
| CSC-285 Advanced J ava | 3 \| | MAT-197 and CSC-239. |
| CSC-243 Android Development for J ava Programming | $3 \sim$ | CSC-239 and MAT-197; pre/co-requisite of CSC-285. |
| CSC-287 OOPL for Programmers | $3 \quad \\|$ | CSC-285 or CSC-284 and MAT-197. |
| - May need department chair approval if taking at the same time as CSC-285 and CSC-284. |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{s}$ This course has pre/co- requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |
| UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL be AbLE TO: <br> - Design, implement, and maintain software solutions for realistic problems by applying principles of object oriented programming. <br> - Write sophisticated and efficient code | OUTLOOK <br> s of this certificate qualify el programmers who can omplex problems and des nt, and run viable solution of the most common obj languages. | n, <br> ct |

- Write sophisticated and efficient code using the latest object oriented programming languages such as $\mathrm{C}++$ and J ava.
- Work in both Unix and Windows environments.


## CAREER OUTLOOK

Graduates of this certificate qualify as entry-level programmers who can analyze complex problems and design, implement, and run viable solutions using any of the most common object oriented languages.

## Electrical Engineering Transfer Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-111 College Writing I | 32 | ENG-095 and RDG-095, ELL-103 or placement. |
| $\approx$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| ENR-101 Introduction to Engineering/Lab | $4 \sim$ | M AT-194 or placement. |
| MAT-281 Calculus I | $4 \sim$ | M AT-197 or placement. |
| GenEd-CCC Community \& Cultural Contexts | 32 |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) Choose one course from Community and Cultural Contexts Menu |  |  |
| GenEd-CW Creative Work | 32 |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) Choose one course from Community and Cultural Contexts Menu |  |  |
| Total |  |  |

## Semester 1 Advising Note

- General Education requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.
- This map assumes that a student enters the College ready to enroll in Calculus I (MAT-281).
- Students may want to consider completing some courses during the Summer to decrease the number of required credits during the Fall or Spring semester.


$$
\text { Total Credits: } 18
$$

## Semester 2 Advising Note

- Students may want to consider completing some courses during the Summer to decrease the number of required credits during the Fall or Spring semester.
- Students should choose their Career Electives in consultation with an Engineering Advisor, as some transfer schools prefer certain courses.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.

Electrical Engineering Transfer Option (continued)

| SEMESTER 3 |
| :--- |
| EN R-271 |
| Circuit Design and Analysis I/Lab |


| SEMESTER 4 |
| :--- |
| ENR-272 |
| Circuit Design and Analysis II/Lab |
| Elective-1 |
| Career Elective |
| Choose one course from Career Elective Options: |
| CHM-201 General Chemistry I/Lab, MAT-291 Linear Algebra, |
| CSC-120 Introduction to Computer Science an Object Orientated Programming, CSC-237 C++ Programming |


| EN R-275 | Digital Logic Systems/Lab | 4 | $\sim$ | ENR-271; Co-requisite: MAT-283. |
| :--- | :--- | :--- | :--- | :--- |
| MAT-285 | Differential Equations |  | 4 | $\boldsymbol{\sim}$ |

## Semester 4 Advising Note

- ENR-272 and ENR-275 are currently offered during only the Spring semester.
- Apply for graduation.
$\|$ Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathcal{*}$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.


## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Design and conduct experiments.
- Analyze and interpret data.
- Apply modern computational tools and lab techniques, along with scientific concepts, to solve engineering problems.
- Design systems, components, and processes for solving problems in electrical engineering.
- Function as part of an engineering team.
- Articulate the professional and ethical responsibilities required of engineers.


## CAREER OUTLOOK

Graduates completing a four-year degree will have a strong electrical engineering foundation and be able to select from a variety of high-demand fields for the balance of their training. Such highdemand fields include nanotechnology, high-tech manufacturing, electronic devices, and robotics.

## Energy and Sustainability Management Certificate Program

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ENV-111 | Survey of Renewable Energy | ${ }^{\sim}$ | RDG-095 or ELL-103 or ESL-098, ENG-095 and MAT-093 or placement. |
| ESM-105 | Green Buildings | 3 | RDG-095 or ELL-103 or ESL-098, ENG-095 and MAT-093 or placement. |
| ESM-115 | Sustainable Resource Conservation | 3 | RDG-095 or ELL-103 or ESL-098, ENG-095 and MAT-093 or placement. |
| O Only offered in the Fall Semester. |  |  |  |
| Elective | Concentration Elective | 3 |  |
| - CIT-110 Applications/Concepts, ENG-111 College Writing I, ENV-105 Environmental Science I/Lab, ENV-106 Environmental Science II/Lab, ENV-120 Tropical Field Studies, ESM-205 Green Existing Buildings: Operation and M aintenance, LCS-101E Energy, Life and Sustainability, MAN-107 Introduction to Entrepreneurship, MAN-111 Principles of Management, MAN-215 Project Management |  |  |  |

$$
\text { Total Credits: } 13
$$

## Semester 1 Advising Note

- All students in the ESM program should be advised by the ESM Program Director.

| SEMESTER 2 |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ESM-211 Project Management and Finance of Energy |  | ENV-111. |  |
| O Only offered in the Spring semester. |  |  |  |
| ESM-299 Internship in Energy and Sustainability Management or <br> ESM-205 Green Existing Buildings |  | Pre adv 105 | Prerequisites for ESM-299: See semester advising note. Prerequisites for ESM-205: ESM105 or Chair approval. |
| ENV-110 | Sustainable Resource Conservation/Lab | $4 \quad$ RD | or ELL-103 or ESL-098, ENG-095 and or placement. |
| Elective | ESM Elective | 3 |  |
| CIT-110 Applications/Concepts, ENG-111 College Writing I, ENV-105 Environmental Science I/Lab, ENV-106 Environmental Science II/Lab, ENV-120 Tropical Field Studies, ESM-205 Green Existing Buildings: Operation and M aintenance, LCS-101E Energy, Life and Sustainability, MAN-107 Introduction to Entrepreneurship, MAN-111 Principles of Management, MAN-215 Project Management |  |  |  |
| Total Credits: 13 |  |  |  |
| Semester 2 Advising Note <br> - ESM 299 prerequisites: (1) Enrollment in the Energy and Sustainability Management Program; and (2) A minimum of 10 credits of ESM courses with a B or higher, OR (3) Department Chair approval <br> - Apply for graduation. |  |  |  |
| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. <br> $\mathfrak{S}$ This course has pre/co-requisites. Advising note or suggestion regarding this course. <br> This course satisfies General Education requirement. |  |  |  |
| UPON COM CONCENTR be Able TO <br> - Identify and sustainability strategies wi or community factors such effectiveness |  | $h$ competencies to sit for the p in Environmental and Energy EED) Green Associate exam, a recognized certification. <br> OUTLOOK <br> of the ESM program may loyment in a variety of entrytions such as technicians, ors, administrators, sales atives, or specialists in a wide | range of industries including renewable energy, construction, facilities management, environmental protection services, energy efficient services, utilities, and industrial operations. In addition to earning BHCC's ESM Certificate, graduates will qualify to sit for the LEED Green Associate (LEED GA) exam, a nationally recognized certification administered by the US Green Building Council. |

Associate in Science
Science, Engineering and Mathematics - Engineering and Physical Sciences

## Engineering Transfer Option

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENR-101 Introduction to Engineering/Lab | 4 | M AT-194 or placement. |
| ENG-111 College Writing I | 3 2 | ENG-095 and RDG-095, ELL-103 or placement. |
| $\sim$ This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| MAT-281 Calculus I | $4 \sim$ | M AT-197 or placement. |
| GenEd-CCC Community \& Cultural Contexts | $3 \sim$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) Choose one course from Community and Cultural Contexts Menu |  |  |
| GenEd-E General Education Elective | 32 |  |
| This course meets the General Education requirement for General Education Elective. <br> Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus. |  |  |
| Semester 1 Advising Note <br> - The A.S. Engineering Transfer Option is app Engineering. <br> - General Education Requirements Quantitativ <br> - This map assumes a student enters the Coll | for students interested in m Solving and Scientific R y to enroll in MAT281. | ursuing a Bachelor's degree in Civil or Mechanical easoning satisfied by program. |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| PHY-251 College Physics I/Lab | 4 \\| | M AT-281. |
| M AT-282 Calculus II | 4 | MAT-281. |
| ENG-112 College Writing II | $3 \sim$ | ENG-111. |
| $\sim$ This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| CHM-201 General Chemistry I/Lab | 4 | MAT-197 and pre/co req: ENG-111. |
| - Students must complete ENG-111 and MAT-197 with a C+ or better before taking CHM-201 |  |  |
|  | 15 |  |
| Semester 2 Advising Note <br> - PHY-251 should be completed in the Spring semester or Summer Bridge Session. - it is a pre-requisite for ENR-260, which is currently offered during only the Fall semester. <br> - Begin exploring transfer options: attend a transfer workshop and the College transfer fair. <br> - Meet with an advisor to begin career planning activities. |  |  |
|  |  |  |


| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENR-260 Engineering Statics | 3 | PHY-251. Pre/co-requisite: MAT-282. |
| - Offered in Fall only |  |  |
| PHY-252 College Physics II/Lab | 4 | PHY-251. Pre/co-requisite: M AT-282. |
| M AT-283 Calculus III | 4 | M AT-282. |
| Elective Career Elective | 3-4 | Chair approval. |
| Career elective selection must be recommended and approved by the Engineering Advisor and/or the Engineering and Physical Sciences Department. |  |  |
| GenEd-CW Creative Work | 32 |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) <br> Choose one course from Creative Work Program Menu |  |  |
|  | 17-18 |  |

Engineering Transfer Option (continued)

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :--- | :---: | :--- |
| ENR-265 | Engineering Dynamics | 3 | ENR-260. Pre/co-requisite: MAT-285. |
| ENR-270 | Strength of Materials | 3 | ENR-260. Pre/co-requisite: MAT-285. |
| MAT-285 | Differential Equations | 4 | MAT-282. |
| CHM-202 | General Chemistry II/Lab | 4 | CHM-201. |
| Elective | Career Elective | $3-4$ | Chair approval. |

- Career elective selection must be recommended and approved by the Engineering Advisor and/or the Engineering and Physical Sciences Department.

Total Credits: 17-18

## Semester 4 Advising Note

- ENR-265 and ENR-270 are currently offered during only the Spring semester.
- Apply for graduation
\| Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\leqslant$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. $\approx$ This course satisfies General Education requirement.


## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Design and conduct experiments.
- Analyze and interpret data.
- Apply computational tools and scientific concepts to engineering problems.
- Design systems, components, or processes for solving engineering problems.
- Function as part of an engineering team.
- Articulate the professional and ethical responsibilities required of engineers.


## CAREER OUTLOOK

Graduates completing a four-year degree will have a strong engineering foundation and able to select from a variety of high demand fields for the balance of their training. Such high demand fields include Nanotechnology, Materials, and Robotics.

## Environmental Science

| SEMESTER |  | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: | :---: |
| ENV-105 | Environmental Science/Lab | $\cdots \mathrm{F}$ | MAT-093, RDG-095, and ENG-095 or ELL-103 or placement. |
| This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5) |  |  |  |
| ENG-111 | ollege Writing I | 3 \% | G-095 and RDG-095, ELL-103 or placement. |
| 2 This course meets the General Education requirement for Academic Discourse. |  |  |  |
| GenEd-C | C Community \& Cultural Contexts | $3 \quad 2$ |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) Choose one course from Community and Cultural Contexts Menu |  |  |  |
| MAT-197 <br> MAT-281 | Pre-Calculus or Calculus I | 4 | Prerequisites for MAT-197: MAT-194 with a grade of C or better. Prerequisites for MAT-281: MAT-197 with a grade of C or better. |
|  | Total Credits: |  |  |
| Semester 1 Advising Note <br> - The A.S. Environmental Science Program is appropriate for students who are interested in pursuing a B.S degree in Environmental Science or a B.A. degree in Environmental Studies <br> - General Education Requirements Quantitative Problem Solving and Scientific Reasoning are satisfied by this program. <br> - This map assumes a student enters the College ready to enroll in MAT-197 Precalculus. <br> - Students need to complete seven General Education courses during semesters $1 \& 2$. These do not need to be completed in any sequence. <br> - For students planning to apply to a B.S. Program in Environmental Science: Take MAT-281 Calculus 1 and complete PHY-251 College Physics I/Lab <br> - For students planning to apply to a B.A. Program in Environmental Studies: Take MAT-197 Precalculus and complete PHY-201 General Physics I/Lab |  |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-112 College Writing II | 3 W | ENG-111. |
| F This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| MAT-181 Statistics | $3 \quad 2$ | MAT-097 or M AT-098. |
| This course meets the General Education requirement for Quantitative Problem Solving (Formerly Area 4) |  |  |
| BIO-195 General Biology I/Lab | 4 | ENG-095, RDG-095 or ELL-103 or ESL-098 and MAT-194. |
| GenEd-E General Education Elective | 4 2 |  |
| This course meets the General Education requirement for General Education Elective. <br> General Education Elective <br> ENV-111 Survey of Renewable Energy or, ENV-113 Introduction to O ceanography/Lab or, ENV-115 Earth Science/Lab or, ENV-120 Tropical Field Studies (ENV-120 is a study abroad course in a tropical country.) <br> Will satisfy the General Education elective requirement. |  |  |
| GenEd-CW Creative Work | 3 |  |

## Semester 2 Advising Note

- ENV-120 is a study abroad course in a tropical country.
- To lighten semester load, it is recommended to complete the General Education courses in the Summer

| SEMESTER 3 | Credits Milestone GenEd | Prerequisites |  |
| :--- | :---: | :--- | :--- |
| BIO-196 | General Biology II/Lab | 4 | BIO-195. |
| ECO-220 | Environmental Economics |  |  |
| or |  |  |  |
| ENV-222 |  |  |  |
| Environmental Policy, Law, and |  |  |  |
| Management |  |  |  |

## PHY-201 General Physics/Lab

 or4

## PHY-251 College Physics I/Lab

- Prerequisites for PHY-201: MAT-197, Prerequisites for PHY-251: MAT-281 Total Credits: 15


## Semester 3 Advising Note

- For students planning to apply to a B.S. Program in Environmental Science: Take MAT-281 Calculus 1 and complete PHY-251 College Physics I/Lab
- For students planning to apply to a B.A. Program in Environmental Studies: Take MAT-197 Precalculus and complete PHY-201 General Physics I/Lab

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| Elective Option Elective | 4 |  |
| - Option Elective BIO-210 Population Ecology/Lab, ENV-211 Enviro MAT-281 Calculus I, (see semester advising note), | mental Microbiology/Lab, HY-202 General Physics II | ENV-250 Global Environmental Change, ab, PHY-252 College Physics II/Lab |
| Elective Option Elective | 4 |  |
| - Option Electives BIO-210 Population Ecology/Lab, ENV-211 Enviro MAT-281 Calculus I, (see semester advising note), | mental Microbiology/Lab, HY-202 General Physics II/ | ENV-250 Global Environmental Change, ab, PHY-252 College Physics II/Lab |
| CHM-202 General Chemistry II/Lab | 4 | CHM-201 with a minimum grade of C or better. |
| GIS-224 Introduction to Geographic Information Systems | 4 * | MAT-181 or MAT-197 or placement. |

$\approx$ This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5)
Total Credits: 16

## Semester 4 Advising Note

- MAT-281 Calculus I cannot be used as a program elective unless you have also completed MAT-197 Precalculus.
successful completion GIS-224 Introduction to Geographic Information Systems course will require access outside of class to Windows computers with ArcGIS for Desktop installed; evaluation licenses will be made available for students to install ArcGIS onto their own Windows computers. ArcGIS for Desktop will also be provided in two public computers on campus for students without personal computers.
- Apply for Graduation
- Any course, other than those listed, must be approved by the program director.
|( Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathcal{F}$ This course has pre/co- requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.


## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WIL BE ABLE TO:

- Identify, define, and explore the major concepts of environment processes, problems, and solutions
- Investigate a variety of scientific methods and techniques to study the environment
- Demonstrate effective oral and written communication skills about environmental findings
- Analyze the cultural, ethical, economic, and government policy aspects of current and emerging environmental concerns


## CAREER OUTLOOK

Students majoring in Environmental Science prepare for a variety of entrylevel careers in the private, public and non-profit sector involving resource conservation and sustainability. Entrylevel careers include environmental monitors, assistants, and technicians. This program will allow students to transfer to four-year colleges and universities to seek a bachelor's degree in environmental science orenvironmental studies. A bachelor's or graduate degree is required for professional positions in education, outreach, environmental planning, environmental conservation, natural resource management,
environmental consulting, environmental monitoring, environmental engineering, hazardous materials, and occupational health and safety.
Employment of environmental scientists and specialists is projected to grow 8 percent from 2018 to 2028, faster than the average for all occupations. Heightened public interest in the hazards facing the environment, as well as increasing demands placed on the environment by population growth, are expected to spur demand for environmental scientists and specialists Link to Bureau of Labor Statistics https://www.bls.gov/ooh/life-physical-and-social-science/environmental-scien-tists-and-specialists.htm

Associate in Arts
Science, Engineering and Mathematics - Engineering and Physical Sciences

## Physics Concentration

| SEMESTER 1 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| $\begin{array}{ll}\text { ENR-101 } & \text { Introduction to Engineering/Lab } \\ \text { or } & \text { (lective } \\ \text { Computer Elective }\end{array}$ | 3-4 | Prerequisite for ENR-101: MAT-194 College Algebra or placement. |
| - Computer Elective: Choose one CIT course |  |  |
| ENG-111 College Writing I | 3 ? | ENG-095 and RDG-095, ELL-103 or placement. |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |  |  |
| MAT-281 Calculus I | 4 \| | MAT-197 or placement. |
| GenEd-CCC Community \& Cultural Contexts | 3 F |  |
| This course meets the General Education requirement for Community \& Cultural Contexts (Formerly Areas 2 and 3) <br> - Choose one course from Community and Cultural Contexts Menu |  |  |
| Total Credits: 13-14 |  |  |
| Semester 1 Advising Note <br> - Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously <br> - General Education Requirements Q uantitative Problem Solving and Scientific Reasoning satisfied by Program. <br> - This map assumes a student enters the College ready to enroll in MAT-281. |  |  |


| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| PHY-251 College Physics I/Lab | 4 \| | MAT-281. |
| MAT-282 Calculus II | 4 | MAT-281. |
| ENG-112 College Writing II | 3 2 | ENG-111. |
| 2 This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| CHM-201 General Chemistry I/Lab | 4 | MAT-197 and pre/co req: ENG-111. |
| Elective Social Science Elective | 3 |  |
| - Choose one HIS or GOV or PHIL or GEO course |  |  |
|  | 18 |  |
| Semester 2 Advising Note |  |  |
| - Students with strong math background may want to start the Physics sequence during Semester 1. <br> - Meet with an advisor to begin career planning activities. <br> - Begin exploring transfer options: attend a transfer workshop and the College transfer fair |  |  |

Physics Concentration (continued)

| SEMESTER $\mathbf{3}$ | Credits Milestone GenEd | Prerequisites |
| :--- | :---: | :---: |
| PHY-252 | College Physics II/Lab | 4 |
| MAT-283 | Calculus III | 4 |
| MAT-291 | Linear Algebra | 4 |
| Clective | Literature Elective | MAT-282. |
| Choose one LIT course | MAT-281. |  |
| GenEd-CW Creative Work |  |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) |  |  |
| VMA-104 is strongly recommended due to the extensive diagram drawing involved in solving physics problems. |  |  |

## Total Credits: <br> 18

## Semester 3 Advising Note

- Student may want to discuss elective selection with Physics advisor.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with advisor.

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MAT-285 Differential Equations | 4 | M AT-282. |
| CHM-202 General Chemistry II/Lab | 4 | CHM-201. |
| Elective-1 Literature Elective | 3 | Pre/co-requisite: ENG-111. |
| - Choose one LIT course. |  |  |
| Elective-2 Behavioral Science Elective | 3 |  |
| - Choose one PSY or SOC course |  |  |
| GenEd-E General Education Elective | $3 \sim$ |  |
| This course meets the General Education Choose a course from the General Educa | r General Education Elective. y and Cultural Context Menu |  |

## Semester 4 Advising Note

- Apply for graduation

Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\mathfrak{\mathcal { V }}$ This course has pre/co-requisites.
Advising note or suggestion regarding this course. This course satisfies General Education requirement.

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Demonstrate the connections between the major concepts and theories in the field of physics.
- Analyze and create solutions for problems involving principles of physics.
- Apply mathematical techniques in scientific problem solving.
- Properly report on the findings of a designed experiment.


## CAREER OUTLOOK

Graduates of this concentration should transfer to a four-year college or university because employment opportunities in physical science such as lab technicians usually require a minimum of a bachelor's degree. Professional positions such as researchers or college instructors usually require a minimum of a master's degree.

## Mathematics Concentration

| SEMESTER 1 |
| :--- |
| ENG-111 College Writing I |
| This course meets the General Education requirement for Academic Discourse (Formerly Area 1) |
| MAT-281 |
| Calculus I |

$$
\text { Total Credits: } 14
$$

## Semester 1 Advising Note

- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning

Community Cluster within their first year.

- This map assumes that students have completed MAT-197 or tested into MAT-281.

| SEMESTER 2 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| ENG-112 College Writing II | $3 \quad \sim$ | ENG-111. |
| $\approx$ This course meets the General Education requirement for Research Writing (Formerly Area 1) |  |  |
| MAT-282 Calculus II | 4 W | MAT-281. |
| MAT-291 Linear Algebra | 4 | MAT-281. |
| GenEd-CW Creative Work | $3 \sim$ |  |
| This course meets the General Education requirement for Creative Work (Formerly Area 6) Choose one course from the Creative Work Menu |  |  |
| Elective Behavioral Science Elective | 3 |  |
| Choose any PSY or SOC course |  |  |
| Semester 2 Advising Note <br> - Meet with an advisor to begin career planning a <br> - Begin exploring transfer options: attend a transfer | tivities. r workshop and the Colleg | transfer fair |



Mathematics Concentration (continued)

| SEMESTER 4 | Credits Milestone GenEd | Prerequisites |
| :---: | :---: | :---: |
| MAT-285 Differential Equations | 4 \\| | MAT-282. |
| Elective-1 Social Science Elective | 3 |  |
| - Choose one ECO, GOV, HIS, PHL or GEO course. |  |  |
| PHY-252 College Physics II/Lab | 4 \\| | PHY-251 and pre/co-requisite MAT-282. |
| Elective-2 Humanities Elective | 3 |  |
| - Choose one course from the Humanities Elective menu |  |  |
| Total Credits: | 14 |  |
| Semester 4 Advising Note |  |  |
| - Apply for graduation |  |  |
| * Milestone Courses should be taken in the order shown. T $\mathfrak{\leqslant}$ This course has pre/co-requisites. Advising note or su This course satisfies General Education requirement. | This will help you stay on track ggestion regarding this cour | and graduate on time. e. |

## UPON COMPLETION OF THIS CONCENTRATION GRADUATES WILL BE ABLE TO:

- Solve quantitative problems using critical thinking skills and a variety of problem-solving strategies, incorporating technology when suitable.
- Develop complete logical arguments from hypothesis to conclusion, using appropriate mathematical language and notation.
- Interpret and solve problems relevant to other disciplines by applying analytical approaches used to solve abstract problems.
- Construct new mathematical knowledge through independent and collaborative work.


## CAREER OUTLOOK

Graduates of this concentration should transfer to a four-year college or university, as most entry-level employment opportunities in industry require a minimum of a bachelor's degree. Professional positions in education and research fields usually require a minimum of a master's degree.

## Medical Laboratory Technician Program



Medical Laboratory Technician Program (continued)
 methodology.

- Relate test results to other patient information to the extent required for understanding the analyses.


## Accounting

## ACC-101 3 Credits <br> Principles of Accounting I

After a brief consideration of the meaning and purpose of accounting, this course explores the basic statements of an accounting system: the balance sheet, the income statement and the statement of owner's equity. Students will examine the accounting cycle with an emphasis on the methods of accumulating and summarizing data generated by business transactions. Students will apply their manual accounting skills to an automated accounting system using general ledger software. Areas of concentration will include adjusting entries, closing process, inventory analysis,
merchandising, transactions, cash control procedures, receivables, and payables. Prerequisite: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course.

ACC-102
3 Credits

## Principles of Accounting II

This course will expand upon the basic concepts and theories that students learned in the Principles of Accounting I course. Students will be expected to apply their knowledge in a managerial decision-making mode. Areas studied include, but are not limited to, the following: examine long-term assets and liabilities; financial statement analysis; transactions unique to the corporate business structure; bonds payable; planning and controlling using master budgets and cost behavior recognition utilizing costvolume analysis, as well as gaining exposure to accounting for manufacturers. Prerequisite: Principles of Accounting I (ACC-101).

## ACC-104

1 Credit
Introduction to Accounting Software
This course introduces students to Accounting Software with an emphasis on specific applications for accounting software. The modules covered include, among other topics: customer and vendor information, bill pay, and banking. It includes recording transactions, payroll and inventory control in a variety of business situations. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## ACC-105

3 Credits
Accounting Information Systems
This course introduces students to Accounting Information Systems. The course focuses upon integrated systems, set up, and applications. The modules covered include, among other topics: general ledger, report writing, invoicing, purchasing, inventory control, accounts receivable, accounts payable, cash receipts, cash disbursements, payroll, and spreadsheet application. Prerequisites: Principles of Accounting I (ACC-101) and Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## ACC-107 <br> 3 Credits

## Accounting Forensics

This course introduces students to the auditing process and prepares them to perform forensic audit and examination in conformity with pertinent industry standards. Students will learn comprehensive perspectives and skills in regards to occupational fraud and the technicality of fraud examination including searching accounting information, obtaining documentary evidence,
interviewing witnesses and potential suspects, and conducting forensic document examination. This course will also provide electronic techniques required to audit. Prerequisite: Principles of Accounting II (ACC-102).

## ACC-201 <br> 3 Credits

## Intermediate Accounting

This course covers, in detail, financial accounting, and generally accepted accounting principles. After a review of the accounting cycle, issues in revenue recognition and the time value of money are discussed. The four main financial statements are studied. Specific accounting issues pertaining to various current assets are covered.
Prerequisite: Principles of Accounting II (ACC102).

## ACC-202

3 Credits
Intermediate Accounting II
A continuation of Intermediate Accounting I
(ACC201), this course discusses accounting problems for long-term assets, current, and longterm liabilities. Issues in investments leases, employee compensation, and taxes are covered. Accounting for shareholder equity and earnings per share are covered. The preparation of the statement of cash flow is studied. Prerequisite: Intermediate Accounting I (ACC-201).

## ACC-203

3 Credits

## Personal Income Tax

This course provides a comprehensive explanation of tax principles dealing with individuals and small businesses. The course covers modules in federal and state income tax processes, concepts, and applications as well as other topics. Prerequisite: Principles of Accounting II (ACC-102).
ACC-204
3 Credits
Tax Business Income Tax
This course discusses the theoretical tax concepts that are applicable to corporations, partnerships, and trusts. The course covers both effective tax research and planning techniques for these types of entities. Prerequisite: Principles of Accounting II (ACC-102).
ACC-205 3 Credits

## Volunteer Income Tax Assistance

This VITA internship provides an opportunity for students to perform a community service in cooperation with the Internal Revenue Service and the Massachusetts Department of Revenue. The course trains students to assist taxpayers in filling out tax returns. There are several mandatory trainings that take place prior to the start of classes. Please get more information in room C309. Prerequisite: Federal Income Tax I (ACC-203).

ACC-207
3 Credits
Cost Accounting
After an introduction to the nature of cost accounting and key definitions, this course covers the accumulation of costs through a job order system and a process system. It also covers the accounting for and control of materials, labor, and factory overhead. Prerequisite: Principles of Accounting II (ACC-102).

## ACC-216

3 Credits

## Managerial Accounting

This course examines the needs of management and provides students with the necessary analytical skills that become critical to the financial decision-making process. The course covers such areas as budgetary planning and control, cost information, management decisionmaking, cost volume profit analysis, capital budgeting decisions, and control of decentralized organizations. Prerequisite: Cost Accounting I (ACC-207).

ACC-217
3 Credits

## Mass Tax Law I

After an introduction to the Massachusetts General Laws relating to taxation and the organization and role of the Massachusetts Department of Revenue, this survey course will focus on the Massachusetts statutory provisions relating to miscellaneous excises, the taxation of individuals and corporations, including the administration and enforcement of these provisions by the Massachusetts Department of Revenue. Other areas of study covered in this course include: filing requirements for major tax types; assessment and collection of taxes; examination and abatement. This course is critica for students to gain an understanding of specific taxation laws that pertain to the Commonwealth of M assachusetts.

## ACC-299

3 Credits
Mass Dept of Revenue Internship
This course enhances the academic experience for students. All internships take place at the M assachusetts Department of Revenue site. Students will engage in activities that improve knowledge of the practical world of taxation and auditing and help them gain professional experience. The internship experience applies resources gained from students' program of study to improve the quality of their contributions to the employer. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisite: Mass Tax Law I (ACC217) and permission of the Department Chair or Dean.

## Allied Health

## AHE-095

## Topics in Health Care

This course increases understanding across a
broad spectrum of health care topics using readings and writings as related to the core curriculum.

## AHE-101

## Medical Interpreting I

This course is designed for bilingual students interested in becoming integral members of the health care team in bridging the language and cultural gap between patients and providers. Students will examine issues related to interpreter ethics and the role of the interpreter in a variety of clinical settings. Topics include anatomy and physiology, pathophysiology, diagnoses, and medical treatments. Activities are designed to develop listening, memory, language-switching skills, and decision-making This course will familiarize students with the cultural dimensions of health and illness in preparation for their being assigned to an internship where they perform live interpreting under the direct supervision of a professional interpreter and mentor. Note: A grade of B- or better in this course is required for progression in the program. Prerequisites: Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## AHE-102 <br> Medical Interpreting II

2 Credits

A continuation of Medical Interpreting I, this course includes an in depth discussion of crosscultural communication including values and attitudes toward non-traditional health beliefs. Students will examine issues such as giving bad news to patients, and dealing with difficulties between patients and health care providers. O ther topics of discussion include prescription
medicines, measurements for medical dosages, therapies and treatments, and medical insurance verbiage. Finally, chronic conditions such as asthma/COPD, HIV and diabetes as well as medical specialties such as mental health and obstetrics/gynecology are discussed. Prerequisite: Medical Interpreting I (AHE-101).

## AHE-104 3 Credits <br> Understanding Human Behavior for

 Health Care ProfessionalsThis course introduces students to the challenges and responsibilities of healthcare professionals and college students. Discussions center on cross-cultural issues, human growth and development; and psychological and sociological factors involved in the patient healthcare professional relationship.

## AHE-106 1 Credit <br> CNA Practicum Patient Care

This course consists of a clinical practicum of 21 hours at a skilled nursing facility to fulfill the State Nurse Aide Certification requirement. Additional expenses may include supplies, equipment, and/or uniforms. Co-requisites: Principles of Clinical Practice (AHE110) and Patient Care Skills (AHE111).

## AHE-110 <br> 3 Credits

## Principles of Clinical Practice

This course includes topics in the anatomy and physiology of body systems, diseases and conditions, ethics in health care, communications, medical terminology and abbreviations, standard and transmission-based precautions, CPR, and selected clinical skills. Additional expenses may include supplies, equipment, and/or uniforms. The course is open to Allied Health certificate program students only.
AHE-111
3 Credits
Patient Care Skills
This course, taken with CNA Practicum (AHE106) and Principles of Clinical Practice (AHE110), covers the patient care theory and skills required to take the Certified Nurse Aide and Home Health exams. Co-requisites: CNA Practicum (AHE-106) and Principles of Clinical Practice (AHE-110).

AHE-112
3 Credits
Medical Assistant Skills
This course covers the skills and theory necessary for medical assistants in hospitals and clinics. Topics include setting up and assisting for physical and specialty examinations, minor surgical procedures, routine laboratory tests, and related medical terminology and abbreviations. Co-requisite: Principles of Clinical Practice(AHE110).

## AHE-115

3 Credits

## Phlebotomy/Medical Lab Theory

This course teaches anatomy and physiology of the circulatory system and the process of collecting blood samples. This course meets the requirements necessary to sit for a phlebotomy certification exams offered by several private certification groups. Certification is the responsibility of the student. Prerequisites: Writing Skills I (ENG090), Foundations of Mathematics (MAT093), and Reading Skills I (RDG090). Co-requisite: Principles of Clinical Practice (AHE110) and Medical Assistant Skills (AHE112).

## AHE-117

3 Credits
Communication Skills for Health Care
This course provides the student with the skills to communicate effectively as an Allied Health Professional. The course includes discussions of verbal and non-verbal communication,
professional communication and behavior, interviewing techniques, adapting communication to a patient's ability to understand, patient education, cultural sensitivity, electronic communication, and fundamental writing skills.

AHE-201
3 Credits

## Advanced Clinical Skills

This course covers advanced theory and skills for the patient care technician and medical assistant. Students are cross-trained in EKG and
Phlebotomy. Prerequisite: Patient Care Skills
(AHE-111) or Medical Assisting Skills (AHE-112).
AHE-204
3 Credits

## Patient Care Technician

This course consists of a clinical practicum at local health care facilities. Students keep a daily journal and complete a work portfolio. Additional expenses may include supplies, equipment,
and/or uniforms. Prerequisite: Patient Care Skills (AHE-111). Co-requisite: Advanced Clinical Skills (AHE-201).

## AHE-205

3 Credits

## Practicum Medical Assistant

This course consists of a clinical practicum at local health care facilities. Students keep a daily journal and complete a work portfolio. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisite: Medical Assisting Skills (AHE-112). Co-requisite: Advanced Clinical Skills (AHE-201).

## AHE-206 <br> 3 Credits

## Practicum Phlebotomy Technician

This course consists of a clinical practicum at local health care facilities. Students keep a daily journal and complete a work portfolio. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Principles of Clinical Practice (AHE110) and
Phlebotomy/Laboratory Theory (AHE115).

## AHE-209

Allied Health Practicum Seminar
This seminar is an inter-disciplinary course that provides a broad overview of the medical workplace. Taken concurrently with an Allied Health Practicum, it includes discussions of the internship experience, employment opportunities as well as job search skills. Co-requisite: Practicum Patient Care Assistant (AHE-204) or Practicum Medical Assistant (AHE-205) or Practicum Phlebotomy Technician (AHE-206) or Practicum Laboratory Assistant (AHE-207).

## AHE-299

1 Credit
Medical Interpreting Internship
Students will be placed in a 30 -hour internship to be completed over the course of the semester at a local healthcare facility under the direct supervision of a professional interpreter and mentor. This internship will consist entirely of active interpreting. Co-requisite: Medical Interpreting II (AHE-102).

## Arabic

## ARB-101

3 Credits

## Elementary Arabic I

This course is a beginning class in modern standard Arabic. The course begins with exposure to the alphabet, basic vocabulary, and expressions of greetings. The course then focuses on the spoken and written language used in contemporary life in Arab countries. The course works on all skill areas: listening, speaking, reading, and writing, presenting pertinent grammar in context. The course is not intended for native speakers or students who have studied this language within the last three years.

ARB-102
3 Credits

## Elementary Arabic II

A continuation of Elementary Arabic I (ARB101), this course emphasizes conversational skills and sentence structure. The course stresses practical applications of the Arabic language. This course meets the General Education requirement for Creative Work. Prerequisite: Elementary Arabic I (ARB-101).

## Astronomy

## AST-102

4 Credits

## Astronomy/ Lab

This course covers an introductory study of basic astronomy, including the planets, the apparent motions of celestial objects, the seasons, constellations, comets and meteors, stars, galaxies, and the large-scale structure of the universe. The course includes current events in space exploration. The course meets the General Education requirement for Scientific Reasoning. Class meets: 3 hrs . lecture; 3hrs. lab Prerequisites: "A grade of C or higher in Writing Skills II (ENG095) or Integrated ELL Level III (ELL-103); and A grade of $C$ or higher in MAT-097 or exemption by placing into higher level courses.

## Biology

## BIO-105

4 Credits

## Introduction to Biology

This course will investigate the major biological concepts that connect all forms of life and is designed for students with little or no background in science. Topics will include the process of scientific inquiry, the cell as the basic unit of life, metabolism, cellular reproduction, genetics, evolutionary theory and principles of ecology. Laboratory work will introduce students to the basic investigative techniques used to study life's processes. There will be no animal dissection in this course. This course will satisfy the General Education requirement for Scientific Reasoning (previous area title: Science \& Technology) for all programs and may be used to satisfy the biology prerequisite for Anatomy and Physiology I (BIO 203). This course will not satisfy the general biology requirement of the Associate in Science: Biological Science program. Class meets: 3 hours lecture - 3 hours lab.
Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and a grade of C or higher in Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## BIO-108 4 Credits <br> Human Biology/Lab

**Additional Fee covers the cost of all course materials.** This course introduces students to the basic concepts of biology and how these concepts relate to the structure and function of the human body. Topics include cell structure \& function, molecular biology, metabolism, cellular reproduction, and genetics. An introduction to human anatomy and physiology will also be presented. Students will integrate structure and function among all levels of biological organization. This course is specifically designed to provide students with the necessary background in basic biological concepts and molecular biology to be successful in the anatomy \& physiology and microbiology prerequisite courses require by allied health programs such as nursing and medical imaging. This course does not substitute for programs that require BIO 203 and BIO 204. This course will satisfy the General Education requirement for

Scientific Reasoning (previous area title: Science \& Technology) for all programs. Course meets 3 hours lecture; 3 hours lab. Note: May be used as a prerequisite for Anatomy \& Physiology I/Lab (BIO-203). Prerequisites: Writing Skills II (ENG 095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and a grade of C or higher in Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## BIO-111

3 Credits

## Food/Nutrition

This course covers a study of plant and animal sources of human food, their nutritional values, and the way they are utilized by the body in health and disease. Topics include the selection of an adequate diet, evaluation of nutrition status, nutrition in pregnancy and lactation nutrition in infancy and in aging, weight control, alternate food patterns, ethnic foods, and nutrition-related health problems. The department recommends this course for students in Allied Health programs. The course is offered in the Center for Self-Directed Learning only.

## BIO-115

4 Credits
Nutrition Science \& Lab
This course is a study of plant and animal sources of human food, their nutritional values and how the body in health and disease utilizes them. Topics include: chemistry and biology of food, personal nutrition evaluation, nutrition-related health problems and global food and nutrition issues. Laboratory exercises are used to introduce students to the diagnostic procedures used by nutritionists and to reinforce learning of nutritional theory. A background in biology or chemistry is not required. This course will satisfy the General Education requirement for Scientific Reasoning (previous area title: Science \& Technology) for all programs. Class meets: 3 hours lecture - 3 hours lab. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL 098) or Reading Skills II (RDG-095): or Integrated ELL Level III (ELL-103); and a grade of C or higher in Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## BIO-120 4 Credits Introduction to Biotechnology

This course offers an introduction to the field of biotechnology. General principles of biology, recombinant DNA technology, and the applications of biotechnology will be presented. The medical, social, political and ethical implications of recombinant DNA technology and the Human Genome Project will be discussed. Work practices and career opportunities in the biotechnology industry will also be outlined. Students will be introduced to industry-specific laboratory skills and basic investigative techniques and procedures used in research through labs designed to reinforce lecture concepts. Class meets: 3 hrs. lecture; 3 hrs. lab. Prerequisites:Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL103); and Intermediate Algebra (MAT-099) or exemption by placing into higher level courses. ${ }^{* * *}$ This course is designed for students in the A.S. Biological Sciences program. However this course is open to any student interested in exploring careers in biotechnology. This course does not satisfy the General Education "Scientific Reasoning" requirement and may not be appropriate as a lab science elective for Associate in Arts degrees.

## BIO-195 <br> General Biology I \& Lab

The course will examine the cell as the basic unit of life. Topics will include cell chemistry, cell structure and function, metabolism, cellular
respiration, photosynthesis, and cell division. The course will conclude with an examination of the genetic and chromosomal basis of inheritance. Laboratory work will provide students with the basic skills necessary to work in advanced biology laboratory courses. This is the first required biology course in the AS Biological Science program. Students planning to enroll in a health science program should enroll in Introduction to Biology (BIO 105) or Human Biology/Lab (BIO 108). Class M eets: 3 hrs. lecture; 3 hrs. lab Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and a grade of $C$ or higher in College Algebra for STEM (MAT-194) or exemption by placing into higher level courses.

## General Biology II \& Lab

As a continuation of General Biology I/Lab (BIO 195), the course begins with a study of the chemical basis of inheritance and protein synthesis. The course then investigates the mechanisms of adaptive evolution, speciation, phylogeny, and the history of life on earth. The course concludes with a survey of the three domains of life and an introduction to the structure of populations and ecosystems. Laboratory work will continue to develop the student's critical thinking and problem solving skills. Class meets: 3 hrs. lecture: 3 hrs . Lab. Prerequisite: Grade of C or higher in General Biology I/Lab (BIO-195).

## BIO-203 4 Credits Anatomy/Physiology I \& Lab

This is the first course in a two-semester sequence that will examine the systems of the human body using an integrated approach. Areas of study will include the structure and function of cells, histology, and the physiological and anatomical aspects of support and movement systems and the nervous system. Laboratory activities will enhance the students' comprehension of the structure and function of the human body Course meets: 3 hrs. lecture; 3 hours. Lab Prerequisite: Grade of C or higher in Introduction to Biology (BIO-105) or Human Biology (BIO-108) or General Biology I/Lab (BIO-195).

## Anatomy/Physiology II \& Lab

As a continuation of Anatomy/Physiology I (BIO 203), this course will again use an integrated approach to examine the human systems not covered in Anatomy/Physiology I. Areas of study will include the endocrine system, the cardiovascular system, Iymphatic and immune systems, respiratory system, digestive system, urinary system, and reproductive system. Laboratory activities will enhance the student's comprehension of the structure and function of the human body. Course meets: 3 hrs. Lecture; 3 hrs. lab. Prerequisite: Grade of C or higher in Anatomy/Physiology I/Lab (BIO-203).

## BIO-205

4 Credits

## Microbiology \& Lab

This course is intended for students entering health care careers and the biotechnology industry. This course will provide a solid foundation of basic physiological and biochemical activities of bacteria, viruses, fungi, and protozoa. The fundamentals of microbial physiology, genetics, and immunology will be presented with emphasis placed on virulence factors and the mechanisms in which these microorganisms establish disease. Microbiology in the workplace will be covered through a discussion of methods of physical and chemical control of microorganisms, microbial growth and enumeration. The use of anti-viral drugs and antibiotics, the host immune response to
infection, and the effectiveness of various vaccination strategies will also be discussed. The course will be completed by investigating the importance of human pathogens in patient care and nosocomial infection while looking at several major diseases. Exercises in the laboratory portion of the course deal with aseptic techniques, microbial cultivation and growth characteristics, staining and bacterial isolation techniques, differential biochemical tests, identification of unknown bacterial species, and testing effectiveness of antimicrobial agents. Course meets 3 hrs lecture and 3 hrs lab. Prerequisite: Anatomy and Physiology I/Lab (BIO203) or General Biology I/Lab (BIO-195) or admission to the Nursing Program

## BIO-207

## Cell Biology \& Lab

A study of cell structure and function including the following topics: organelles, membrane function, metabolism, gene action, communication, and regulation of growth. Some specialized cells will be discussed. The laboratory will include biotechnological, molecular, and cellular experiments. Class meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Precalculus (MAT-197), and General Biology I/Lab (BIO-195) and either Introduction to Biotechnology/Lab (BIO-120) or General Biology II/Lab (BIO-196) or department chair approval.

BIO-208

## Genetics and Lab

This course offers a broad understanding of classical, molecular and evolutionary genetics. Highlighted topics will include the molecular and chromosomal basis of inheritance, extranuclear inheritance, gene mapping and analysis, control of gene expression in pro- and eukaryotes, Chi square analysis, probability theory, DNA mutation and repair, genetics of cancer, and population and human genetics. Experimental work will focus on the theory and practice of current techniques in genetics. Class hours: 3hrs. lecture; 3hrs. lab. Prerequisite: A grade of C or higher in General Biology II/Lab (BIO-196) and Pre/Corequisite Cell Biology and Lab (BIO-207) or permission of department chair.

## BIO-210 <br> Population Ecology \& Lab

This course is designed to give students an overview of the science of population biology. The course covers topics related to: distribution and abundance of species; mathematical models of logistic and exponential growth; the application of the Hardy-Weinberg principle to describe changes in gene frequencies via natural selection or other processes on populations; lifehistory strategies, interspecific interactions; population regulation and sustainable ecosystems; and human impact on the sustainability of wild populations. Laboratory activities include basic field techniques for collection and estimation of populations, basic statistical analysis, computer simulation, and formal lab exercises. Lab experiments are designed to facilitate an understanding of basic scientific field research and principles of population ecology. This course is designed for advanced science students and may be taken as an elective for the general biology transfer program. Class meets: 3hrs. lecture; 3 hrs. Lab. Prerequisite: General Biology II/Lab (BIO-196) or permission of the Biology and Chemistry department.

BIO-211 4 Credits Environmental Microbiology/Lab
Environmental Microbiology introduces students to the diversity of microbial populations and their ecological roles in terrestrial, aquatic, and marine environments. The course will also focus on industrial microbiology and the relationships of
microbes to urban communities．Microbial community ecology and interactions with plans and animals will also be covered．Students will explore how microbial activities sustain natural ecosystems，contribute to environmental quality， and how these functions are harnessed to support and manage artificial systems．Laboratory investigations will introduce students to the standard experimental procedures used to study microbes．The course will satisfy a required program elective for students enrolled in the AS Biological Sciences－Transfer O ption．This course will not satisfy the microbiology requirement for healthcare and nursing students．Students in health related programs should enroll in Microbiology \＆Lab－BIO－205．Prerequisite：C or better in General Biology \＆Lab－BIO－195 Completion or concurrent enrollment in General Biology II \＆Lab－BIO－196 recommended． 3 hours lection－ 3 hours lab．

## BIO－261 <br> 3 Credits <br> Advanced Laboratory Techniques in

 BiotechnologyLaboratory activities will emphasize proper laboratory protocol and documentation，inquiry based investigations，formal laboratory report writing，and standard laboratory skills used both in industry and in biotechnology research such as media and buffer preparation，protein
purification，cell culture and immunologica techniques．The course will also focus on career opportunities and hiring trends in the biotechnology industry and require that students work on their job readiness skills．Upon completion of this course，students will be qualified for entry level employment or internships in the biotechnology field．Depending on the college，both $\mathrm{BIO}-261$ and $\mathrm{BIO}-262$ may need to be completed for credits to transfer． Course meets：1hr lecture／2．5 hrs．lab Prerequisite：Grade of C or higher in Introduction to Biotechnology（BIO－120），General Biology ／Lab（BIO－195），and General Biology II／Lab（BIO－ 196）or departmental approval．

## BIO－262 <br> 3 Credits

Principles of Molecular Biotechnology
The emphasis in this course will be on major concepts of molecular biology and their relationship to the field of biotechnology．The course will focus on recombinant DNA technology，genetically engineered organisms sequencing，gene expression in prokaryotes and eukaryotes，protein expression and analysis，and genomics．Advanced topics will include bioinformatics，protein engineering，RNA interference and biological products as therapeutic agents．This course will also expand on the concepts and applications presented in Introduction to Biotechnology（BIO 120）and Advanced Laboratory Techniques in
Biotechnology（BIO 261）．Upon completion of this course，students will be qualified for entry level employment or internships in the biotechnology field．Depending on the college，both BIO－261 and BIO－262 may need to be completed for credits to transfer．Course meets：3hrs．lecture Prerequisites：Grade of C or higher in Advanced Laboratory Techniques in Biotechnology（BIO－ 261），Cell Biology and Lab（BIO－207），and Genetics and Lab（BIO－208）or departmental approval．

## B10－270 4 Credits <br> Biotechnology Laboratory Simulations

This multidisciplinary laboratory course will focus on providing theoretical and hands－on experience in advanced laboratory techniques and technologies such as High Pressure Liquid Chromatography（HPLC），Polymerase Chain Reaction（PCR），Real－Time PCR and bioreactors． This course will include laboratory simulations
that will mimic a real－world work experience． Laboratory activities will reinforce an understanding of theory and basic principles as well as method development，operations applications and instrumentation．Key industry skills including documentation，current Good M anufacturing Practices（cGMP），Standard Operating Procedures（SO Ps）and Validation will be emphasized and reinforced．Advanced scientific writing and oral presentation skills will also be developed．Course meets： 6 hrs lab Prerequisites：Grade of C or higher in Cell Biology and Lab（BIO－207），Genetics and Lab （BIO 208），and Advanced Laboratory Techniques in Biotechnology（BIO－261）．Principles of Molecular Biotechnology（BIO－262）must be taken either as a prerequisite or as a co－requisite or departmental approval．

## Biomedical Engineering <br> BME－100 <br> Biomedical Engineering I

A first course in Biomedical Engineering（BME）， this course introduces students to preliminary Biomedical Engineering topics．Topics include： the BME profession，morals and ethics，anatomy and physiology，static biomechanics， rehabilitation engineering，static bioinstrumentation，biosensors，biosignal processing，and models of neurons．MATLAB is used for ease in problem solving．Laboratory involves using a virtual instrument（Biopac）to record and analyze signals from the body．Class meets： 3 hrs．lecture； 3 hrs．laboratory． Prerequisites：Grade of $C$ or higher in Calculus I （MAT－281）and a grade of $C$ or higher in General Chemistry I／Lab（CHM－201）．Co－requisite： Calculus II（MAT－282）．

## BME－200

3 Credits

## Biomedical Engineering II

This course explores the techniques for analysis and modeling of biomedical systems with applications of advanced mathematics including Differential Equations，Difference Equations， State－Variables，and computer－aided methods to study problems at the interface of engineering and biology．Other topics include elements of physiological modeling and the solution of the transient and forced response for a variety of biomechanical and bioelectrical systems．Class meets： 3 hrs．lecture．Prerequisites：Grade of C or higher in Biomedical Engineering I（BME－100） and a grade of C or higher in Calculus II（MAT－ 282）．Co－requisite：Calculus III（MAT－283）．

## Business

BUS－101
Introduction to Business 3 Credits Introduction to Business

This course is a survey of the purpose，role，and responsibility of business in a capitalistic society， including an introduction to the major areas of business such as：Finance，Management， Economics，and Marketing．This course provides a basic foundation for the student who will specialize in some aspect of business in college， and it also provides the opportunity for non－ business majors to learn about the business in which they will someday be both producers and consumers．This course will also enable students to explore career options in business，define a career path，and make connections between classroom learning and the larger business community．This course will fulfill the Learning Community Seminar requirement for first time， full－time students，to assist the student in making a successful transition from our unique urban community into an academic environment．The
course will aid students in learning insights，skills and attitudes necessary to develop academic success strategies for personal and career goals achievement．Prerequisites：A grade a C or higher in Academic Reading III（ESL－098）or Reading Skills II（RDG－095）and Academic Writing III（ESL－099）or Writing Skills I（ENG－090）；or Integrated ELL Level III（ELL－103）or exemption by placing into higher level courses．

## BUS－106

3 Credits

## International Business I

This course is an introduction to the environments，institutions，systems and operations involved in international business． Students will learn how different economic，legal， political and cultural forces influence the conduct of international trade and investment and how international competitive strategies，firm operations and organizational structures contribute to business success or failure in the global marketplace．The impact of international trade and investment on economies，businesses and consumers will also be examined Prerequisite：Macroeconomics（ECO－201）or Microeconomics（ECO－202）．

## BUS－111

Globalization
This course is an exploration of the nature， reasons for and consequences of globalization． Subjects such as global economic integration， cultural convergence，global institutions， multinational corporations and global business will be discussed．Students will acquire an understanding of globalization＇s key aspects and trends in history，geography，politics，culture，and technology，as well as its impact on labor， standards of living and the environment．This course will also enable students to explore career options in international business，define a career path，and make connections between classroom learning and the larger business community．This course will fulfill the learning community seminar requirement for first time，full time，students，to assist the student in making a successful transition from our unique urban community into an academic environment．The course will aid students in learning insights，skills，and attitudes necessary to develop academic success strategies for personal and career goals achievement．Prerequisites：A grade a C or higher in Academic Reading III（ESL－098）or Reading Skills II（RDG－095）and Academic Writing III（ESL－099）or Writing Skills I（ENG－090）；or Integrated ELL Level III（ELL－103）or exemption by placing into higher level courses．

## BUS－201

3 Credits
Business Law I
In this introductory study of the law and its application to the individual，students learn to evaluate and analyze legal problems and systems．The course emphasizes business situations．Topics include procedural law， contracts，torts，consumer law，and related areas． Prerequisites：Writing Skills II（ENG－095）and Academic Reading III（ESL－098）or Reading Skills II（RDG－095）；or Integrated ELL Level III（ELL－103） or exemption by placing into higher level courses．

## BUS－207 <br> 3 Credits <br> Professional Communication

This course gives students a comprehensive understanding of the use and importance of effective communication in business．Students study types of written，oral，and electronic communication and develop a variety of professional communication skills essential to success in business．The course also addresses ethical and cultural issues associated with business communications．Prerequisite：A Grade of C or higher in College Writing I（ENG－111）．

## Chemistry

CHM-120
4 Credits
Principles of Inorganic Chemistry \& Lab
This course is an introduction to the basic concepts of inorganic chemistry. Topics include measurement theory, methods of scientific investigation, atomic theory, nuclear radiation, compound formation, chemical nomenclature, chemical reactions, the mole concept, solution chemistry, acid-base chemistry, and the relevance of chemistry in health professions. Laboratory work will introduce students to basic laboratory techniques, safety regulations, and chemical hygiene. This course does not satisfy the chemistry requirement of the AS Biological Sciences or AS Engineering programs or the AA Chemistry/Physics concentrations. Course meets 3 hrs. lecture; 3 hrs. lab. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and Foundations of Algebra (MAT-097) or exemption by placing into higher level courses.
CHM-121 4 Credits
Principles of Organic \& Chemistry W/Lab
This course serves as an introduction to organic and biochemistry. The naming and reactivity patterns of common organic functional groups will be presented. A study of biochemistry will introduce students to the chemical structures and reactions of lipids, carbohydrates, proteins, and nucleic acids and their role in metabolism. The standard length three hour laboratory session will serve to reinforce the concepts discussed during lectures and will provide students with practical experience in organic synthesis reactions and organic compound identification methods. This course does not satisfy the Organic Chemistry requirement of the AA Chemistry Concentration. Class meets: 3hrs. lecture 3hrs. lab. Prerequisites: Grade of C or higher in Principles of Inorganic Chemistry \& Lab (CHM-120) or grade of C or higher in General Chemistry I (CHM-201).

## CHM-151

## Basic Chemistry (Non-Lab)

This course is an introduction to basic concepts of inorganic chemistry. The course is designed primarily for students who have not previously studied chemistry. Topics, which are presented in a multi-media, modular format, include measurement, chemical symbols and equations, physical and chemical properties, atomic structure, chemical compounds, solutions, and an overview of chemical reactions. The course is offered in the Center for Self-Directed Learning only. Prerequisite: A grade of C or higher in Foundations of Algebra (MAT-097).

## CHM-201

4 Credits

## General Chemistry I \& Lab

This course is a rigorous introductory course as part of a two-semester sequence that studies chemical principles. Topics include atomic structure, reaction types and equations, stoichiometry, gas laws, thermochemistry and bonding theory. Students are required to purchase approved safety goggles. Course meets: 3 hours lecture; 3 hours lab. Prerequisites: Grade of C or better in Precalculus (MAT-197) or higher-level math or exemption by placement testing, and pre/co-requisite College Writing (ENG-111). It is recommended that students take Calculus I ( MAT-281) concurrently with CHM-201. . Note: This course isintended for students planning to major ortransfer as science or engineering majors. Pre-allied health students or students requiring a one semester overview of chemistry should enroll in Principles of Inorganic Chemistry and Lab (CHM-120).

## CHM-202

4 Credits
General Chemistry II \& Lab
This course is a continuation of General Chemistry I and Lab (CHM-201). Topics include solids, solutions, kinetics, equilibrium, acid-base and solubility equilibrium, thermodynamics and electrochemistry. Students are required to purchase approved safety goggles. Course meets: 3 hours lecture; 3 hours lab. Prerequisite: Grade of C or higher in General Chemistry I and Lab (CHM-201).

## CHM-251

## Organic Chemistry I and Lab

This course studies the chemistry of carbon compounds including nomenclature, molecular structure and functional groups. Topics include the reactivity and properties of saturated and unsaturated hydrocarbons, stereochemical relationships and nucleophilic substitution and elimination reactions. Mechanisms are presented as a unifying principle for these reactions. Students are required to purchase approved safety goggles. Course meets: 3 hours lecture; 3 hours lab. Prerequisites: Grade of C or better in General Chemistry II and lab (CHM-202) and a grade of C or higher in College Writing II (ENG112).

## CHM-252 4 Credits

## Organic Chemistry II and Lab

This course is a continuation of Organic Chemistry I and Lab (CHM251). Topics include aromatic substitution reactions, carbonyl addition reactions, acid derivatives, amines, and carbohydrates. Both the laboratory and lecture use instrumental methods for the structural analysis of organic compounds. Students are required to purchase approved safety goggles. course meets: 3 hours lecture; 3 hours lab. Prerequisite: Grade of C or higher in Organic Chemistry I and lab (CHM-251).

## M andarin Chinese

## CHN-101

Elementary Mandarin I
A beginning level course in modern standard Mandarin Chinese, mainly for students with no experience in the language. The goal of the course is to develop in the students through a multi-approach the four basic skills in the M andarin language: listening, speaking, reading, and writing. The course content is geared to use in real life, and the teaching method emphasizes mutual understanding and appreciation of cultures that differ from one's own and draws on the experiences and backgrounds of both the instructor and students. After a semester's study in this course, students are expected to have achieved a general understanding of the speaking and writing systems of the Mandarin language, and be able to communicate, both in oral and writing forms (speaking, listening, reading, and writing), with some simple and daily $M$ andarin.

## CHN-102

3 Credits

## Elementary Mandarin II

The course builds on the basic skills learned in Mandarin I. It is designed for students who might be planning to visit China for business, pleasure or for further study, and it will teach students some of the unique cultural practices of the country will be introduced, from the forms of courtesy to the way of asking questions. The objective of the course will be to sharpen students' oral and written communication skills. We will focus on everyday situations and combine practice in speaking with exercises in writing. The course will stress clarity in writing,
and will teach students how to think critically in formulating statements and understanding meaning. This course meets the General Education requirement for Creative Work. Prerequisite: Grade of C or higher in Elementary Mandarin I (CHN-101) or by permission of instructor.

## Computers

## CIT-101

Computer Essentials
This introductory course is intended for students with little to no computer experience. Students in developmental mathematics, reading and English as well as English as a Second Language (ESL) should consider this for their first computer course. This course starts with an introduction to the Windows environment and covers operating system topics appropriate for beginners, keyboarding, document processing and productivity skills necessary to function in today's electronic office environment. The course teaches students other skills necessary to use a personal computer as a tool for academic success. Utilizing the college's computer laboratories, students get extensive "hands-on" personal computer experience in MS WORD as well as E-M ail, INTERNET, and World Wide Web (WWW) access and use. Students emerge from this course with an understanding of essential computer concepts and terminology, use and application of the INTERNET, keyboarding proficiency, and a high degree of competence with personal computer hardware and software. All Learner Outcomes and Competencies in this course are based on accepted, published ICT Industry Standards. For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-102 <br> 1 Credit <br> IT Career Exploration

This is a hands-on workshop class that provides students with the tools necessary to explore Information \& Communications Technology (ICT) industry career and employment opportunities. Students will engage in activities and assignments designed to assess and evaluate personal values, skills and interests as they relate to the world of work. Students will utilize resources on the College Student portal and beyond to explore careers, research employers and navigate the local job market in the ICT industry. Course assignments and activities will culminate in each student having a thorough understanding of the characteristics that make up a viable career plan that will enhance their gainful employment opportunities. This class is open to anyone with an interest in guided career exploration and a desire to be employed within the field of Information \& Communications Technology.

## CIT-110 <br> Applications/Concepts

This survey course covers the use and application of modern computer systems. This course includes detailed coverage of fundamental computer concepts, terminology, applications, and theory. Students will get extensive 'hands-on personal computer experience and gain a good working knowledge of MS WINDO WS and MS OFFICE. Upon completion of this course, students will have a grasp of important computer concepts and terminology, an understanding of INTERNET use and applications, a high degree of competence with personal computer hardware and software, as well as an understanding of the effects of information technology on the individual, organizations, and society. All Learner Outcomes and Competencies in this course are based on accepted, published ICT Industry

Standards. Students with prior learning
experience may test out of this course by contacting pla@bhcc.edu. Prerequisite: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course. For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

CIT-112
3 Credits
Information Technology Fundamentals
This is a survey course covering major aspects of the Information Technology (IT) industry and provides students with an overview and introduction to the core aspects of Information Technology including N etwork and Infrastructure Systems, Information Support and Services Interactive Media and Programming and Software Development. This course focuses on an understanding and appreciation of the duties of information technology professionals and how each IT area relates to and interacts with the others. Upon completion of this course students will have the knowledge necessary to make educational choices about continued study in IT as well as understanding of the impact of technology on society and organizations of all types. Students taking this course are expected to have a solid knowledge of basic computer terminology, internet navigation and e-mail, operating system and file M anagement skills. All Skill and Knowledge Statements in the course are published and approved by the Massachusetts Department of Education Vocational Technical Education Frameworks for the Information Technology Service cluster. These frameworks are published at http://www.mcte.org/frameworks This course is eligible for M assachusetts Tech Prep advanced placement credit. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu

## CIT-113

Information Technology Problem Solving
This course will give students " hands-on" experience in a wide range of modern information technology. Several IT concepts will be introduced that will provide a basis for further study in Information Technology. Students will work on a number of projects that will give perspectives on areas of IT including but not limited to: visual and/or robotic programming, social networking tools, web design and networking. Issues of security, privacy and ethics will also be examined. Students will leave the course with an understanding of the components of modern IT systems and the scope of knowledge needed to become an IT professional. Students are expected to have access to computer with internet access outside of class as there is a major web component to the course. Designed for first-time, full-time Computer Technology students, this course will fulfill the Learning Community Seminar requirement for the Computer Information Technology Department. First year students registering for this course should not register for Computer
Applications/Concepts (CIT110). This course is not for Computer Science Transfer, Gaming or Web majors. Prerequisites: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

## CIT-118

3 Credits

## Principles of Internet \& Info Security

This is a course in Internet and Information
Security which introduces students to all major areas related to securing both personal and organizational information in the "Internet Age".

Beginning with an introduction to physical and electronic security issues, students proceed to explore the legal, ethical and professional issues in information and Internet security. Topics covered include, but are not limited to, identity theft, phishing and other email scams, personal and corporate firewalls, spyware and virus scanning software, chat rooms, Internet crimes against children, cyber predators, digital computer forensics, wired and wireless home \& organization networks, cyber terrorism, and cyber vandalism. Students gain practical experience in Internet security considerations through a capstone Security Project. Students completing the course also attain the i-SAFE.Org certification. Prerequisite: Applications/Concepts (CIT-110) or IT Problem Solving CIT-113) or Introduction to Computer Science \& OOP (CSC120), equivalent experience or permission of the department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-121

Introduction to Computer Forensics
This is an introductory course in Computer Forensics. Forensics Computing, Digital Forensics, or Computer Forensics is the name for a newly emerging field of study and practice that incorporates many areas of expertise. Some of these areas have been called network security, intrusion detection, incident response, infrastructure protection, disaster recovery, continuity planning, software engineering, cyber security, and computer crime investigation. It is an area of practice in public law enforcement at the federal, state and local levels that deals with cybercrime, cyber vandalism, cyber predators, and cyber terrorism. In the private sector, it deals with critical infrastructure such as business, hospitals, utilities transportation, finance, education, and other key institutions. Taught in the College's hands-on laboratory students will gain an in-depth knowledge of the principles, procedures, and techniques used in digital forensic analysis. Prerequisite: Computer Applications/Concepts (CIT-110) or IT Problem Solving (CIT-113) or Intro to Computer Science \& Object Oriented Programming (CSC-120) or permission of the department chair.

## CIT-128 <br> 3 Credits <br> \section*{Database Design with MS Access}

This is a comprehensive course in the use and application of computers in database applications based on the most current version of Microsoft Access. The course covers all aspects of database design including entity relationship modeling, tables, reports, queries, forms and other database objects. All key MS Access functionalities including Internet applications, integration with the Web and other software programs are covered. Students gain some experience using Structured Query Language (SQL) and Visual Basic for Applications (VBA) in the final component of the course. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC) Program and students may choose to take the MBC ACCESS Certification Examination upon completion of this course. Prerequisite: Applications/Concepts (CIT-110) or IT Problem Solving (CIT-113) or Introduction to Computer Science and Object Oriented Programming (CSC-120) or equivalent experience or permission of the department chairperson. For additional information and/or a ourse syllabus contact ITDepartment@bhcc.edu

CIT-129
3 Credits

## Mobile App Development

This course introduces application development for mobile devices such as Android, Apple, Windows, and web. Students will program simple
apps on multiple devices, using standard development environments commonly used professionally, using a series of skill-based lessons. Prerequisites: Writing Skills I(ENG-090) and Reading Skills I (RDG-090); or Integrated ELL Level I (ELL-101) or exemption by placing into higher level courses.

## CIT-130

3 Credits
Data Visualization
This course in data visualization will teach students an essential skill needed in the business world. Students will learn the foundations of data visualization which uses statistics, computer science, neuroscience and psychology to visually present data. The techniques and skills learned in this course will help students' articulate and present clear evidence of findings in a meaningful and aesthetically pleasing way. This course is geared towards data analytics, but is also open to students in other disciplines looking for a better understanding of data visualization. Students will use learn the software Tableau, along with theory which explains how the visual processing works, and techniques which take advantage of the brain's processing to create effective visualizations. Students will learn how to choose the correct visualization for their data and differentiate between both good and bad data visualizations. By the end of the course, students will be able to create effective visualizations, dashboards and tell a story with data with Tableau.

CIT-131
3 Credits
Introduction to Creating Mobile Apps
This course is designed for individuals with no experience with programming languages or previous experience creating mobile applications. The course uses a graphical-user interface blocks editor for students to build their own Android based mobile apps. The course offers reading about the editor and basic programming concepts, tutorial walk through assignments within the editor, and assessments which require students to build unique apps based on the tutorials so that they can demonstrate their understanding and knowledge of what they have learned. Specific programming concepts covered include design logic, programming conditions, variables, procedures, branching and looping. Specific app functionality covered includes sprite animation, multiple screens, and integration with device sensors, texting, databases, video, and other web APIs. Prerequisites: Writing Skills l(ENG-090) and Reading Skills I (RDG-090); or Integrated ELL Level I (ELL-101) or exemption by placing into higher level courses.

## CIT-133

## ntroduction to Microsoft Office

This introductory course covers the use and application of integrated PC applications software based on the most current version of Microsoft O ffice. The course initially covers the MS Windows skills necessary to complete the course. Using the hands-on college computer laboratory, the course covers the following applications in detail: Word Processing, Spreadsheet, Database, Presentation Graphics, and Desktop Information Management. The course emphasizes Internet applications relating to MS Office. It also covers integration among the MS Office Applications. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC) Program and students may choose to take the MBC Certification Examination(s) upon completion of this course. For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-135 <br> 3 Credits <br> Design for Mobile Devices

This course introduces the central components of user interface design for mobile devices (phones, tablets, and other). Students will learn how to prototype user interface designs using a series of scaffolded, skill based lessons culminating in a mobile application interface design for an application. Prerequisites: Writing Skills I (ENG090) and Reading Skills I (RDG090) or Academic Reading III (ESL-099) and Academic Reading III (ESL-098) or Integrated ELL Level 3 (ELL-103) or exemption by placing into higher level courses.

## CIT-137 4 Credits

Intro to Big Data with R\&R-Studio Studio
This course provides practical foundation level training that enables immediate and effective participation in big data and other analytics projects. It includes an introduction to big data and the Data Analytics Lifecycle to address business challenges that leverage big data. The course provides grounding in basic and advanced analytic methods and an introduction to big data analytics technology and tools, including MapReduce and Hadoop. Labs offer opportunities for students to understand how these methods and tools may be applied to real world business challenges by a practicing data scientist. The course takes an "Open", or technology-neutral approach, and includes a final lab which addresses a big data analytics challenge by applying the concepts taught in the course in the context of the Data Analytics Lifecycle. Prerequisite: Information Technology Problem Solving (CIT113) or equivalent or department chair approval.

## CIT-162

3 Credits

## CISCO Networking I

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The prinicples and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and swtiches, and implement IP addressing schemes. Prerequisite: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses For additional information contact CITDepartment@bhcc.edu

CIT-167
3 Credits
CISCO Networking II
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic funcitonality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with virtual LANs, and inter-VLAN routing in different versions of IP networks. Prerequisite: CISCO Networking I (CIT-162). For additional information contact CITDepartment@bhcc.edu

## CIT-182

PC Hardware \& Software
This course provides an excellent, interactive exposure to personal computers, hardware, and operating systems. Students completing this course will be able to describe the internal components of a personal computer, assemble a system, install an operating system, and troubleshoot using system tools and diagnostic software. They will also be able to connect computers to the Internet, share resources in a networked environment and develop greater
skills and confidence in working with desktop and laptop computers. Students participate in "handson" activities and lab-based learning to become familiar with various hardware and software components and discover best practices in maintenance and safety. Topics covered include: laptops and portable devices, wireless connectivity, security, safety and environmental issues. Standalone virtual learning tools supplement classroom instruction and provide opportunities for interactive "hands-on" learning. Prerequisite: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course. For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-183 <br> 3 Credits <br> \section*{Healthcare IT Concepts I}

This course will provide students with the knowledge and skills to successfully understand the Healthcare IT industry and to adequately prepare for Healthcare IT Hardware/Software Support positions. Topics include privacy, wireless, mobility and security concepts necessary to provide hardware and software support in healthcare environments, including physician offices, clinics, hospitals, and third-party contractors. Students will enhance their CompTIA A+ certification skills and acquire the knowledge and skills needed to implement, deploy, troubleshoot and support healthcare IT systems in clinical settings. Students will also understand healthcare terminology, practical workflow and Healthcare IT operational and regulatory concepts while adhering to security best practices. Hands-on activities, labs, and webbased activities will provide a practical understanding of the material. Prerequisite: Aplications/Concepts (CIT110) or CIT113 or CIT120 or CSC-120 or permission of Department Chair. Pre/co-requisite: PC Hardware and Software (CIT182) or permission of department chair.

## CIT-187

Data Analytics and Predictive Analysis
Data analytics and predictive analysis encompasses a variety of machine learning techniques to analyze and gather insight from data. The data can then be used either to make predictions of future events, or to classify data into different segments. This course is the follow-up course to Introduction to Big Data with R and R-Studio, and will continue to develop a student's skills in the R programming language. It will also continue to grow a student's understanding of data. Students will learn the difference between supervised and unsupervised modeling, and the basic modeling techniques pertaining to each. The techniques taught in the course include regression, clustering, classification and tree-based methods, along with an introduction to neural networks. Prerequisites: Intro to Big Data with R and RStudio (CIT-137) and Statistics I (MAT-181).

## CIT-211

3 Credits

## System Analysis and Design

This first course in computer information systems development introduces students to the tools and techniques available to the systems analyst and designer. The course covers phases of the systems development cycle with emphasis on analysis and design. A major component of the course includes an understanding of structured analysis and design techniques and the transition from structured analysis to O bject Oriented Analysis. The course covers Language (UML) and Entity Relationship Diagrams (ERD). The department strongly suggests that students complete or take concurrently College Writing I (ENG-111). Prerequisites: Applications/Concepts (CIT-110) or IT Problem Solving (CIT-113) or Introduction to Computer Science \& O bject

Oriented Programming (CSC-120) and at least two other CIT courses. For additional information and/or a course syllabus contact
CITDepartment@bhcc.edu

## CIT-216

Visual Basic
This course covers an introduction to computer programming using Visual Basic. The course provides students with "hands-on" exposure to object-oriented programming techniques and emphasizes programming logic, using the eventdriven components of Visual Basic. Using laboratory case assignments, students plan, design, and create their own Windows applications. They learn how to create a user interface, set control properties, design the logic structures of the project and write the associated Visual Basic code. Topics covered include variables and mathematical operations, decision and looping structures, procedures and functions and single level arrays. Prerequisite:
Applications/Concepts (CIT110), IT Problem Solving (CIT113) or Introduction to Computer Science \& OOP (CIT120). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

## CIT-218

3 Credits

## Intermediate Visual Basic

Expanding on the principles of object oriented and visual programming contained in Visual Basic (CIT216), this intermediate-level course provides students with additional in-depth use of the Visual Basic language. Students gain experience working with VB arrays and data interfaces, combination controls and functions, menu design and database interfaces. Multiple Classes and Inheritance will be covered as part of the continuing exposure to object oriented programming. The course emphasizes the incorporation of databases within a Visual Basic Project. Prerequisite: Visual Basic (CIT216) or permission of the instructor and/or department chairperson. For additional information and/or a course syllabus contact
CITDepartment@bhcc.mass.edu.

## CIT-219 <br> 3 Credits

## Information Security \& Assurance

Emphasis in this course in Information Security and Assurance will be placed on understanding the key issues associated with protecting information, the technologies behind securing information and the subsequent detection and response to security incidents. Topics will include inspection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical responses and an overview of the Information Security Planning functions. There will be a "hands-on" lab component required for this course. Students taking this course will be required to sign The White Hat O ath, a Code of Ethics from the International Information Systems Security Certification Consortium, Inc. (www.isc2.org). Prerequisite Windows Operating Systems (CIT-268). For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-220 1 Credi Directed Study in Digital and Computer Forensics

Students in this course will be assigned a special Forensics research topic from either the technical or legal side of digital and computer forensics or cybercrime or an internship, when possible, or a combination of a special research topic and a short term job shadowing assignment.
Prerequisite: Advanced Computer Forensics (CIT221). For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

CIT-221
3 Credits
Advanced Computer Forensics
This course provides advanced work in computer and digital forensic analysis. Emphasis in this course will be placed on file system forensic recovery, analysis and reporting, intrusion detection and analysis, and advanced use of computer forensics tools. Topics covered in Introduction to Computer Forensics (CIT121) will be expanded upon especially in the areas of file system analysis, drive imaging and backup, email and mobile devices forensics and the impact these analyses have upon investigations. Prerequisite: Introduction to Computer Forensics (CIT-121) and Windows O perating Systems (CIT-268).

CIT-223
3 Credits
Special Topics in Digital and Computer Forensics
This course is designed to cover emerging and changing issues in Computer and digita
Forensics. Issues covered in this course could include but will not be limited to testifying as an expert technical witness, mobile device forensics, and new legal issues pertaining to digital evidence. Topics covered will be adjusted as the curriculum needs of the field change. Pre/corequisite: Advanced Computer Forensics (CIT221). For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-225

3 Credits
Advanced Python Programming
This is an advanced course designed for any student interested in learning advanced computer programming concepts in the context of the Python programming language. In this course students will explore classes, object oriented programming, plotting, sampling and statistical thinking, using randomness to solve non-random problems, statistical thinking, graphs, and dynamic programming. Students will complete hands-on individual projects, individual assessments, group projects, and exams to assess student success at achieving the course outcomes. Prerequisite: Python Programming (CIT125) or equivalent experience with chair approval. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu. All prerequisites must be completed with a C or better.

## CIT-229

3 Credits

## Programming with Android I

This course introduces the central components of Android programming. Students will learn how to program in J ava using the Android Development Tools using a series of scaffolded, skill based lessons culminating in a mobile application which can be exported and placed on a device Prerequisites: Writing Skills I (ENG-090) and Reading Skills I (RDG-090); or Integrated ELL Level I (ELL-101) or exemption by placing into higher level courses and CIT-129 or CIT-120 or any BHCC CIT programming course or equivalent experience or permission of the CIT Department Chair.

## CIT-230

3 Credits

## Help Desk Techniques

This course provides students with an overview of the design, implementation, and management of a computer help desk or customer support center. Course topics include customer service skills, troubleshooting tools and methods, problem-solving strategies for common support problems, the incident management process, and user needs analysis and assessment. The course also covers industry certifications, professional asociations, and standards of ethical conduct for help desk personnel. Prerequisites: Applications/Concepts (CIT-110) or Chair approval. For additional information and/or a course syllabus contact CITDept@bhcc.mass.edu.

## CIT-233 <br> 3 Credits

## Advanced Microsoft Office

This advanced course covers the use and application of integrated PC applications software based on the most current version of Microsoft Office. It covers the following applications in detail: Advanced Word Processing, Spreadsheet, Database, Presentation Graphics and Desktop Information Management applications. The course emphasizes Internet applications including on-line collaboration using MS Office. It also stresses integration of the MS Office applications. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC) Program and students may choose to take the MBC Certification Examination(s) upon completion of this course. Prerequisite: Applications/Concepts (CIT-110) or IT Problem Solving (CIT-113) or Introduction to MS Office (CIT-133) or equivalent experience or permission of the department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-234

3 Credits

## Decision Support Using MS Excel

This comprehensive course covers the use and application of Decision Support using spreadsheet software based on the most current version of Microsoft Excel. The applications include basic spreadsheet operations, charting, web queries, multiple sheet workbooks, macros, advanced functions, and database features. The course emphasizes applications involving financial decision-making, financial planning and " what-if" analysis as they relate to various business and organizational models. Internet applications of MS Excel and integration of the other MS O ffice programs are also covered. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC) Program and students may choose to take the MBC EXCEL Certification Examination upon completion of this course. Prerequisite: Applications/Concepts (CIT-110) or Introduction to Computer Science and Object O riented Programming (CSC-120) or Information Technology Problem Solving (CIT-113) or equivalent experience or permission of the department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-237 4 Credits C++ Programming

In this course, students who already have been exposed to programming and Object Oriented thinking, develop the ability to correctly analyze a variety of problems and generate appropriate algorithmic solutions using the C++ Programming Language. The course emphasizes the principles of top-down structured design and O bject $O$ riented thinking. Topics include but are not limited to branching and looping mechanisms; arrays, functions and function overloading, arguments by reference and by value as well as optional arguments; recursion; pointers, creating libraries and namespaces, structures and classes, constructors and other methods, overloading operators; file I/O inheritance and polymorphism. Strong analytical skills are recommended for students enrolling in this course. Prerequisite: Writing Skills II (ENG095), College Algebra-STEM (MAT194) and Introduction to Computer Science \& Object Oriented Programming (CIT120) with grade C or better or equivalent experience with permission of the department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu. All prerequisites must be completed with a C or better.

CIT-238
3 Credits
Programming for IOS I
This course introduces the central components of iOS programming for mobile app development. Students will learn the basics of programming using vendor approved IDE and Tools in a series of scaffolded, skill based lessons culiminating in a mobile applicaiton for iOS devices. This is firstlevel course that introduces programming concepts and structures unique to this product's language, but also addresses the iO S marketplace, what it takes to become an iOS developer, as well as the planning and budgeting required for sustained app development. Prerequisites: Any BHCC programming course or PLA or Chair approval.

## IT-240

3 Credits

## Database Programming

This is an intermediate course in procedural programming for database management systems. Topics in this course include: anonymous and named blocks, named procedures and functions, cursors, triggers, collections and the creation and manipulation of temporary tables. Students perform mid-to advanced level manipulation of databases required for logical processing and user interaction with relational databases. Prerequisite: SQL Programming (CIT236) or permission of department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT-243 3 Credits
Android Development for J ava Programmers
This course is for students who are already experienced J ava programmers. It discusses not only the intricacies of Android app development, but publishing in the $M$ arket place and monetizing the apps through fees, in-app advertising, or inapp billing of selling virtual goods. Topics include but are not limited to: mobile game design principles, tools and terminology, AndEngine framework, J ava/Dalvik and Android SDK, rendering images, using sprite sheets, creating animations, sound, creating an effective game interface, resource files, working with maps, notifications, and building customer UI elements APIs (Application Programming Interfaces) and SDK (Software Development Kits) for phones and tablets will be used. Prerequisites: Grade C or better in J ava Programming (CIT239) and Precalculus (MAT197). Pre/corequisite: Advanced J ava Programming (CIT285).
CIT-245
3 Credits
Database Administration
This course is designed to introduce students to the fundamentals of Relational Database Administration, using the most current versions of the O racle RDBMS engine. Students will learn the basics of database maintenance including installing and configuring the database, controlling the data dictionary, and managing the database tables including constraints, indexes and user roles. Students gain extensive real-world experience utilizing the DBA tools associated with O racle. This course will present the material covered in the Database Fundamentals I O racle Certification Exam \#1Z0-031. Students will also be provided with the personal edition of the O racle software. Prerequisite: SQ L Programming (CIT236), equivalent experience or permission of the department chair. For additional information and/or a course syllabus contact
CITDeptment@bhcc.mass.edu.
CIT-250 3 Credits

Collaboration, Communication, and Integrating
This is a course in modern office technology which introduces students to all major areas of personal and organizational collaboration, communication and integration of MS OFFICE
applications. Building on students' basic knowledge of the most current version of the core MS OFFICE applications, the course proceeds to cover in detail, the integration among OFFICE applications including Object Linking \& Embedding (OLE), On-Line M eeting, document sharing, and the other collaboration features of MS OFFICE. Using WORD as the "core" application, students gain practical experience in moving and linking data among all applications: WORD, EXCEL, ACCESS, POWERPO INT and OUTLOOK. Advantages and limitations of Voice over IP (VoIP) and video conferencing, along with the importance of security and other considerations involved in implementing these technologies are also covered. Students also gain experience in web enabling and publishing as well as knowledge of the principles, best practices, procedures and techniques used in implementing all of these applications in offices large and small. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC) Program and students may choose to take the MBC Certification Examination(s) upon completion of this course. Prerequisite: Computer Applications/Concepts (CIT-110) or IT Problem Solving (CIT-113) or equivalent course or experience or permission of department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-262

3 Credits

## Wireless Technology

This course introduces students to the fund amentals of planning, installing, maintaining and troubleshooting a network supported by unbound media. It is assumed that students have no prior knowledge of wireless networks and devices. Hence, this course permits students to learn how to apply and support wireless technology in personal, LAN, MAN, CAN and WAN networks. The course is divided into two sections, one that teaches the wireless skills required to take and pass your Certified Wireless Network Administration (CWNA) exam, and the other educates students on how many different wireless devices work. Prerequisite: CISCO N etworking I (CIT-162).

## CIT-264

## Networking Security

The goal of this course is to provide you with a fundamental understanding of network security principles and implementation. You will learn about the technologies used and principles involved in creating a secure computer networking environment. You will learn about the authentication, the types of attacks and malicious codes that may be used against your network, the threats and countermeasures for e-mail, Web applications, remote access, and file and print services. A variety of security topologies are discussed as well as technologies and concepts used for providing secure communications channels, secure internetworking devices, and network medium. Further, you will learn about intrusion detection systems, firewalls, and physical networking security concepts. In addition, security policies, disaster recovery, and computer forensics are covered. Aside from learning the technologies involved in security, you will get to understand the daily tasks involved with managing and troubleshooting those technologies. You will have a variety of hands-on and case project assignments that reinforce the concepts you read in each chapter. Prerequisite: CISCO Networking I (CIT162).

## CIT-267

## CISCO Networking III

This course describes the architecture, components, and operations of routers and swtiches in larger and more complex networks. Students learn how to configure routers and
switches afor advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP and VLANs in IP networks. Students will also develo the knowledge and skills needed to implement a WLAN in a small-to-medium network.
Prerequisite: CISCO Networking II (CIT-167). For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-268 <br> 3 Credits <br> \section*{Windows 0 perating Systems}

This course provides students with in-depth, hands-on experience with the most commonly used versions of the Windows operating systems. Students gain experience using system file managers, utilities, set-up procedures, and other major components of the operating systems. In addition, the course emphasizes gaining an understanding of device drivers, link libraries, memory management, multi-tasking requirements, and multi-media considerations. Upon completion of the course, students have a high degree of competence in the application and use of these Windows operating systems such as Windows, DOS, and Linux. Prerequisites: Computer Applications/Concepts (CIT-110) or IT Problem Solving (CIT-113) or Intro to Computer Science/O bject Oriented Programming (CSC120) or permission of the department chairperson. For additional information and/or a course syllabus contact CITDept@bhcc.edu

## CIT-270 <br> Linux Administration/Lab

This course introduces students to the fundamentals of creating and maintaining a network supported by LINUX clients and servers. It is assumed that students already have a grasp of the basic LINUX commands hence the focus will be on system administration which will include but not be limited to installation, distributed computing, system administrator tools and tasks, file systems, printing, send mail, NIS, NFS, DNS/BIND and setting up a firewall. Prerequisite: CISCO Networking I (CIT-162). For additional information and/or a course syllabus contact CITDept@bhcc.edu.

## Batch File Programming

This course teaches students how to create batch files to automate a sequence of commands, to write and use batch files for complex tasks, to use batch file subcommands, to halt the execution of a batch file and to write batch files using replaceable parameters and environment variables. Prerequisite: Linux Administration/Lab (CIT270). Pre/corequisite: Windows O perating Systems (CIT-268). For additional information and/or a course syllabus contact
CITDepartment@bhcc.edu

## CIT-273 <br> 4 Credits

## Ethical Hacking

This course introduces the information technology security specialist to the various methodologies for attacking a network. The student will be introduced to the concepts, principles and techniques, supplemented by "hands-on" exercises, for attacking and disabling a network. These methodologies are presented within the context of properly securing the network. The course will emphasize network attack methodologies with emphasis on student use of network attack techniques and tools and appropriate defenses and counter measures. Students will receive course content information through a variety of methods: lecture and demonstration of hacking tools will be used in addition to a virtual environment. Students will receive a "hands-on" practical approach in penetration testing measures and ethical hacking.

There is an ethics requirement for this course and students will be required to sign the White Hat O ath. Students are expected to have access to a computer with internet access outside of class as there is a major web component to the course. Prerequisite: Windows Operating Systems (CIT268)or Linux Administration/Lab (CIT-270) or permission of the department chairperson.

## CIT-274

3 Credits

## CISCO Networking IV

This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network. Prerequisite: CISCO Networking III (CIT267) or department chair approval. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

## CIT-275 <br> 3 Credits

Information Security Seminar
This course enables the security specialist to employ the various methodologies, tools, and techniques acquired in earlier course curriculum in protecting, hardening and attacking a network in a Capstone course. The student will be introduced to projects/problems/or scenarios which will require hands on engagement to address. The course will emphasize problem solving, critical thinking, and use of multiple skills, techniques, and tools because of the complex nature of the projects/problems/scenarios. Students are expected to have access to computer with internet access outside of class as there is a major web component to the course. Pre/corequisite: Ethical Hacking (CIT-273) or permission of the Department Chair.

## CIT-277

## Health Information Networking

The Health Information Networking course is a technology-focused curriculum primarily designed for students who are looking for career-oriented, entry-level healthcare focused skills that can be applied toward entry-level specialist careers in healthcare networking. The course provides students with the skills to develop an in-depth understanding of principles of practicalities needed for information technology and networking professionals wishing to specialize in healthcare network implementations. Topics include: basic information on healthcare settings, principles of security, mobility and privacy in healthcare, fundamentals of information technology in healthcare, fundamentals of electronic health records systems and electronic medical record implementations. Application of skills and concepts include designing, securing and troubleshooting a health care network. Prerequisite: CISCO Networking II (CIT-167). For additional information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-279

Cisco CCNA Security
This course equips students with the knowledge and skills needed to prepare for entry-level security specialist careers and prepare for the CCNA Security certification. This course is a hands-on, career-oriented e-learning solution that emphasizes practical experience. CCNA Security aims to develop an in-depth understanding of network security principles as well as the tools and configurations available. The following tools are covered: Protocol sniffers/analyzers; TCP/IP
and common desktop utilities; Cisco IOS
Software; Cisco VPN client; Packet Tracer (PT); and Web-based resources. Prerequisite: CISCO Networking II (CIT-167). For additiona information and/or a course syllabus contact CITDepartment@bhcc.edu

## CIT-282 4 Credits <br> MS Windows Administration/Lab Network

This course provides students with the necessary knowledge and hands-on skills required to manage the most current and industry-accepted version of Microsoft Windows. The course tailors information to requirements necessary to complete the Microsoft Certified Professional (MCP) exam required by industry. Topics include, but are not limited to, installation, managing users and groups, managing domains via an overview of the Active Directory Services feature, print services, disk storage, remote access, managing and monitoring the network, the Registry and troubleshooting techniques. Course labs challenge students to piece together new and old networking concepts that reinforce each topic. Prerequisite: CISCO Networking I (CIT162). Pre/corequisite: Windows O perating Systems (CIT-268). For additional information and/or a course syllabus contact
CITDdept@bhcc.edu

## CIT-287 <br> 3 Credits <br> Survey of New Popular 00PL for for Programmers

This course is for students who already have deep knowledge of an Object Oriented Language (Advanced java or Advance C++). This course will cover in depth three of the most commonly requested OOPL in the job market, C\#, Visual Basic.NET and Python (languages covered may change depending on the current ob market needs). The course will focus on the diosyncrasies of the different new languages. Knowledge of programming structures and ability to implement lengthy and complex programming solutions, use of the debuggers and ease to adapt in deferent IDEs is assumed. Long capstone-like projects will be required for each language examined and students will be responsible to analyze and solve the problems by applying the good programming practices and styles already learned in prior semesters. Prerequisites: Grade of C or better in Advanced J ava programming (CIT285) or Advanced C ++ (CIT284), and Precalculus (MAT197).

## CIT-288

3 Credits

## Healthcare IT Concepts II

Students will apply concepts from Healthcare IT objectives learned in the Healthcare IT Concepts course for effective real-world application. Students will achieve the national Healthcare Technology Specialist competencies and the national Healthcare Information M anagement competencies. The course will prepare students to demonstrate proficiency in Healthcare IT workforce roles integral to the implementation and management of electronic health information systems. Students will demonstrate competencies in health IT professions to assess workflows, select hardware and software, work with vendors, install and test systems, diagnose IT problems and train other staff on healthcare systems. Virtual labs and web-based stimulation will provide a practical understanding of the material. Pre/co-requisite: Healthcare IT Concepts I (CIT183) or permission of the department chair.

## CIT-299C

3 Credits
Computer Technology Internship
This course enhances the academic experience for students. All internships take place at preapproved sites. The course allows students
enrolled in computer technology courses to apply what they have learned in the "real world" environment. Students must attend a weekly oncampus seminar. Students must comply with the Internship requirements, as stated in the
"Internship Handbook", before registering for the course. In all cases, students need permission of the department chairperson to register for this course.

## CIT-299CSC

3 Credits

## Computer Science Intership

This course provides students with hands-on experience in Computer Science. The course is an internship approach to learning. It provides a solid foundation to understanding the types of jobs available to students with Computer Science skills and what it is like to work in the field. Students will acquire a first-hand perspective of employer's expectations and levels of satisfaction. Students will become more successful with the interview process since they will have had real world experience and/or understanding of what will be expected of them in the pursuit of a career in a computer science field. Prerequisites: A grade of $\mathrm{C}+$ or higher in $\mathrm{C}++$ Programming (CSC-237) and Advanced J ava Programming (CSC-285).

CIT-299N
Networking Internship
This course provides students with hands-on experience in networking. The course is divided into three sections, one that teaches the concepts for building and maintaining a networking career, another that introduces guest lecturers from industry, and finally either an internship, job shadowing, or team walk through approach to learning. This course provides a solid foundation to understanding the types of jobs available to students with network administration skills, what it is like to work in the networking field, and students will acquire a perspective of employer's expectations. Students will become more successful with the interview process since they will have had real world experience and/or understanding of what will be expected of them when they begin their networking career. Prerequisite: Permission of department chairperson.

## Computer Media Technology

## CMT-101 3 Credits

 Game Development EssentialsThis course will present the principles, concepts and components all of games and the gaming industry's processes, methodologies, and principles associated with the design, development, and distribution of computer-based games and computer-based simulations. This course is designed to provide the student with an overall comprehension of all the precepts and building blocks that are essential to every computer-based game and simulation. This course fulfills the Learning Community Seminar requirement for students in Computer Media Technology. Prerequisites: Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## CMT-103

3 Credits

## Managing Game Development

This course will cover the concepts and application of management tools and philosophies incorporated in today's game development climate for the purposes of effectively managing game production scenarios. The student will be introduced to the tasks associated with the development of a game or simulation projects and the constraints, effects,
and ramifications affecting the project components. Additionally, the student will be taught critical project management analysis techniques such as resource allocation, estimating obstacles and opportunities and how to exploit them to the project's advantage. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## CMT-111

3 Credits

## HTM L5

The purpose of this course is to teach the student the principles and concepts of designing and creating WEB pages in an HTML5 format. The course is designed to expose the student to the constructs of HTML5 tags and the responsive design techniques for page banners, images, tables, navigation menus, in-page articles, and footer sections that are available with the advent of HTM L5. Additionally the course will teach the student the utilization of dynamic graphics, lists, and background image control. Also included will be content created in Photoshop for the purpose of inclusion as a stand-alone image or as a background image in a web site. The course will explore the requirements, tools and controls used in WEB page development by lecture, in-class practical exercises, and home study exercises. Prerequisites: Writing Skills I(EN G-090) and Reading Skills I (RDG-090); or Integrated ELL Level I (ELL-101) or exemption by placing into higher level courses"

## CMT-113 <br> 3 Credits

J avaScript
This course teaches students the concepts and practical application of J avaScript programming language as a WEB authoring tool. Students learn to program WEB pages to perform such tasks as forms and form validation, image swapping, auto-scrolling text, browser detection and control and time and date extraction and conversion. The course explores designing and developing J avaScript functions using iteration loops, conditional statements, switch statements, parameter passing, location redirection, in-line J avaScript and remote access J avaScript utilization. Prerequisites: Computer Applications/Concepts (CIT-110) and HTM L5 (CMT-111).

CMT-117
3 Credits

## XML

This course introduces the student to writing Extensible Markup Language documents for the Web, using custom markup tags, Cascading Style Sheets and Extensible Style Language Style Sheets. Students will create a Document Type Definition (DTD) for validating their documents with an XML parser. Students will also learn how to transform XML documents into other formats for computers that are not capable of viewing XM L format documents. Prerequisite: HTM L5 (CMT-111).

CMT-119
3 Credits
The Human Character
This course will present concepts in the creation of 3D human character and object modeling using detailed structures based on polygon modeling design tools such as patch modeling, image planes, planar projections, and curve projections. This course will also cover in-depth NURBS modeling of 3D characters and conversion from NURBS to polygonals. These skills are requisite skills for the successful design and implementation of 3D game design and computer simulation projects. Most of these techniques were employed in the Sony Pictures animated short film "The ChubbChubbs". Prerequisite: Game Development Essentials (CMT-101).

CMT-121
Maya Foundations
This course will present the principles of designing gaming and computer simulation using the same Autodesk Maya techniques and principles as were used in the Sony Pictures feature film "Open Season". The course will cover the fundamentals of three dimensional (3D object creation, 3D object shading, shape texturing, scene and object lighting, and simple animations. Prerequisites: Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses

## CMT-123 <br> 3 Credits <br> Maya Character Modeling

This course will present advanced concepts in the creation of 3D character and object modeling using detailed structures based on polygon modeling design tools such as patch modeling image planes, planar projections, and curve projections. This course will also cover in-depth NURBS modeling of3D characters and conversion from NURBS to polygonals. These skills are requisite skills of the successful design and implementation of 3D game design and computer simulation projects. M ost of these techniques were employed in the Sony Pictures animated short film "The ChubbChubbs". Prerequisite: Maya Foundations (CMT-121).

## CMT-125

## Cascading Style Sheets

This course will cover the incorporation of modern web design controls for the formatting, placement, dynamics, interactive functionality, and animation web page content with CSS. CSS is the primary technology in use today in the fast paced world of web design and is used to present web content in a standardized manner that far exceeds the capabilities of the HTML language. CSS is in use in almost every one of the millions of web pages published in today's world and is a multi-browser, multi-language coding technology. CSS is found at all levels of the web design process and lends itself to being incorporated as an in-line component, and embedded component, and a remote component on every HTML, J avaScript, XML, ASP.net, PHP, and Ruby page written. It is prevalent and used in IE Explorer, Firefox, M ozilla, Safari, O pera, and Netscape browsers. CSS can be used to create a myriad of functions from the simple coloring of text content to the dynamics of drop-down expandable menus to the inclusion of voice content. It is a technology that has rapidly replaced the traditional namepair attribute coding scheme of the previous web design technology. Pre/Co-requisite HTML5 (CMT-111).

## Photoshop for Gaming

This course will cover Adobe Photoshop techniques as used in a 3D production pipeline. Students will learn the creative and technical processes of creating 2D concept art and illustrations for objects, environments, creatures and characters. Students will also learn how to create and use various texture maps such as color, bump, luminosity, secularity, and transparency. In combination, these maps will be used to create sophisticated materials (shaders) that can be applied to 3D models. Upon completion of the course, students will have a solid foundation and understanding of how Photoshop is used in 3D game and film production. Prerequisites: Writing Skills II (ENG095) or Integrated ELL Level III (ELL-103) and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## CMT-217

3D Modeling \& Sculpting
This course will teach the student the processes and techniques of modeling and sculpting 3D characters and objects using Autodesk Mudbox software. The student will be taught the skills required to create production-ready 3D digital artwork for the game, film, television, and design industries. The student will be taught how to paint directly onto high-resolution 3D models, paint multiple material channels, execute texture baking, create accurate normal, displacement and ambient occlusion maps, render quality results directly in the viewport, and to employ seamless integration with other 3D software applications. Prerequisite: Maya Foundations (CMT-121).

## MT-223

3 Credits

## Maya Character Animation

This course will present advanced concepts in the creation of 3D character animation from simple joint movement to complete synchronized character movement. This course will also cover blend shaping, skinning techniques, joint constraints and their effect on skinning. These skills are requisite skills for the successful design and implementation of 3D game design and computer simulation projects. Most of these techniques were employed in the Sony Pictures animated short film "The ChubbChubbs". Prerequisite: Maya Character Modeling (CMT123).

## CMT-225 <br> 3 Credits

jQuery
This course will provide the student a solid foundation in the use and application of the J avaScript layer known as jQ uery. jQ uery is an advanced form of J avaScript which provides realtime dynamic effects and multifunctional tasks on a client-side application. jQuery is often viewed in modern web design is a dynamic menu or a dynamic special effect such as a photographic slide show. jQuery is also used to traverse and manipulate the Document Object Model (DOM) and to create user interfaces for mobile devices. Prerequisite: J avaScript (CMT-113).

## J avascript 0 bject Notation

J SO N (J avaScript O bject Notation) is a J avaScript subset text-based standard for exchanging and storing data records. JSON employs data records in a human-readable form across a single domain or across multiple domains. J SON offers a faster method of reading and processing data than XML and is the data format preferred for coding in the AJ AX (CMT 5aa) coding language.

## CMT-228

3 Credits

## Web Design With Ajax

This course will provide the student the syntactical and logical requirements constructing pages using the Ajax programming language. The Ajax programming language is a language that will permit the student to create pages that deliver content in a more rapid and dynamic fashion by updating only those portions of the site that actually change. Prerequisite: J avaScript (CMT-113).

## CMT-229

3 Credits

## Creating 3-D Special Effects

This course will present advanced concepts in the creation and implementation of special effects, shadings, caustics, global illumination, mental ray rendering, and lighting, shadows, and cameras. These skills are requisite skills for the successful design and implementation of 3D game design and computer simulation projects. Most of these techniques were employed in the Sony Pictures animated short film "The ChubbChubbs". Prerequisite: Maya Foundations (CMT-121).

CMT-231
MEL Scripting in Maya
The course will cover the process of using Maya Embedded Language to manipulate and animate characters, objects, and object interactions into a complete animation scenario. MEL scripting incorporates traditional programming constructs such as loops, conditionals, functions, expressions, and nodes. In addition to traditional constructs this course will introduce specific animation and gaming constructs such as particle dynamics control, user input selection dialogs, solid body dynamics, and crowd systems.
Prerequisite: Creating 2-D Special Effects (CMT229).

## CMT-232 <br> Game Engines

This course will present the concepts and methods associated with utilizing Game Engines as the finished product tool for creating and delivering computer-based games and simulations. Game Engines bring together the ability to deliver real-time rendering with the added flexibility to control the game/simulation lighting ambience, terrains, physics, audio integration, programming, and real-time networking. Prerequisite: MEL Scripting in Maya (CMT-231) or Department Chair approval.

## CMT-233

Game Programming
The course will cover the beginning phases of programming content and movement as a component of the entire game development and managed code process. The course will be taught using the $\mathrm{C}++$ programming language and will be developed in the Microsoft Video Studio.Net Code development environment. The student will learn the fundamentals of $\mathrm{C}++$ programming as they are applied to the creation and control of computer games. Prerequisite: MEL Scripting in Maya (CMT-231).

## CMT-235

Node.js
Node.js is a technology that uses the J avaScript run-time V8 engine developed by Google. The V8 engine compiles and executes J avaScript at lightning speeds on both client and server side operations. Node.js will be used to facilitate reading/writing to network connections, reading/writing to the file system, and reading/writing to a database. All of these tasks can be found in web apps and employing Node.js allows them to execute very rapidly.

## CMT-241

3 Credits
PHP/MySQL
PHP/MySQL is a web development programming language that is used to provide dynamic interaction between web content pages and databases. PHP technology permits web developers to retrieve and maintain real-time information for presentation across the web delivery medium. The objectives of this course are to teach the student the skills required to effectively construct real-time web sites for the purposes of e-commerce and real-time information delivery. The student will learn how to design and publish web pages that interact with push/pull actions that interact directly with on-line databases. Prerequisite: J avaScript (CMT113).

## CMT-249

3 Credits

## 3D Liquids Simulation

This course will instruct the student in the techniques and processes required to simulate computer generated liquids and liquid flows. The student will be taught the techniques used in the generation of large scale simulations such as floods, oceans, and breaking waves. The student
will also be taught the principles and processes for small scale liquid simulations such as water splashes, pouring liquids, animated contained liquids, and molten materials. Additionally the student will study and design realistic interactions, splashes, and redirections that occur between liquids and solid objects. Prerequisite Creating 3-D Special Effects (CMT-229).

C MT-250
3 Credits

## Mobile Web Applications

This course will provide the student with the oundations for creating Mobile Web apps that address the cross-platform design needs of multiple platform mobile devices. Mobile Web apps require a design that considers significant factors, such as size, lighting, device speed, and a touch screen interface for mobile devices. Prerequisite: jQ uery (CMT-225).

## CMT-299

3 Credits
Web Development Internship
This course provides students with hands-on experience in Web Development. The course is an internship approach to learning. It provides a solid foundation to understanding the types of jobs available to students with Web Development skills and what it is like to work in the Web Development field. Students will acquire a firsthand perspective of employer's expectations and levels of satisfaction. Students will become more successful with the interview process since they will have had real world experience and/or understanding of what will be expected of them in the pursuit of a web development career. Prerequisite: Creating 3-D Special Effects (CMT229)

## Communication

## COM-101 <br> 3 Credits

## Film As Art

This course provides an introduction to the appreciation of film as an art form. It covers film techniques, terminology, and criticism, using film from the silent era to the present. Students are exposed to film beyond the American canon, including African American, Asian, Latinx and international works. This course satisfies the College's General Education Requirement for Creative Work. Pre/co-requisite: College Writing I (ENG-111).

COM-102
3 Credits

## American Cinema

This course brings Hollywood film making into clear focus as an art form, as an economic force, and as a system of representation and
communication. The course probes the deeper meaning of American movies through encounters with the works of famous directors such as J ohn Ford, Howard Hawks, and Martin Scorsese. This course meets General Education Requirement "Creative Work". Pre/corequisite: College Writing I (ENG-111).

## COM-110 <br> 3 Credits <br> Introduction to Communication

This course inspires students to study communication as a means to transform their lives and the world. Communication becomes a tool for cultural and professional competence, and human rights activism. Students examine how human beings have communicated with one another throughout history, and how gender, immigration, media and culture influence communication. With love, justice and empathy, students engage in storytelling and collaborate on a human rights project in the community. Students also explore ways to participate in the creative industry and other fields of communication. This course fulfills the Learning Community requirement

# COM-171 <br> Public Speaking and Professional Communication 

3 Credits

This course helps students to speak and write in an effective, ethical and professional manner. Students develop their abilities to deliver an effective speech, present for the camera, draft a resume, create and organize professional presentations, and adapt to different speaking contexts. This course draws from global classical rhetorics, using multiple world philosophies such as indigenous, western African, Hebrew, Nahua, and/or northern European. Students explore inclusive public speaking excellence and engage workplace ethics, human rights, disability and neurodiversity from a critical studies perspective.

## COM-210 <br> Interpersonal Communication

This course focuses on communication in everyday interactions. Students develop verbal and nonverbal communication skills in various interpersonal and intercultural contexts. This course addresses the sense of self and how the self is influenced by others and one's own communication. It reviews basic aspects of message production and interpretation Throughout the course, students will be encouraged to analyze their own communication behaviors and improve upon their own communication skills. Students explore their everyday interactions with issues of ethics and human rights. Students have dialogue that engages their identities, including dis/ability, race, political affiliation, religion, sexual orientation, and gender. Students have the opportunity to apply interpersonal communication skills to their career interests in the field of communication. Prerequisite COM-110.

## COM-241 <br> 3 Credits

Introduction to Today's J ournalism
This course combines reading and engaging journalism with practice writing news stories. It provides students with a foundation in the art of journalism with an emphasis on critical reading and writing. Students engage local, national, and global news. Topics covered include proofreading and drafting, audience trends, misinformation, data journalism, representation and human rights. Students collaborate and use social media platforms to tell the stories they witness in their daily lives and in their communities. Prerequisite: Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## COM-242

3 Credits

## Multimedia J ournalism

This is a journalism course where students focus on producing media for the school newspaper, including text, videos, photography, podcasts and social media posts. This is an emerging media course designed for students to get acquainted with doing the projects freelance and staffers regularly publish. Using legacy media and new media, students investigate news, plan out stories, and conduct interviews. Students consider fair representation, human rights and multiple points of view. Students develop portfolios of their work. (Prerequisite: Introduction to Today's J ournalism (COM-241).

## COM-250

3 Credits

## Analyzing Media

This course gives students the opportunity to analyze mass media products, including digital and print media, podcasts, radio, television, visual art and music. Students deconstruct and evaluate media to develop an intellectual comprehension of communication and how
various mass media are produced, and how they connect to society and culture. The course engages the process of mass communication and media literacy, including its history and evolution. Through discussions and projects, students engage with multiple views, experiences, and beliefs. Students explore ethical and human rights issues in order to become critical consumers and producers of media and art in our multicultural world. This course uses communication theory and media products for analysis. Prerequisite: ENG-095 and RDG-095 or ELL-103, or placement into ENG-111.

## COM-254

3 Credits

## Digital Media \& Performance

This course uses digital media as a tool to create cutting-edge media and live performance for storytelling and creative expression. Students are exposed to performance studies from a communication perspective and use the theory to construct digital and transformative stories. Students engage performance text and media from diverse content producers. The use of media as a performance device is utilized to develop character, expose memory, reveal interior dialogue, illustrate subtext, and construct story. Students interested in video, image, spoken word, social media, writing, and music will find opportunities to integrate these multiple media to create performances of their own content. This course culminates in a performance project. Prerequisite: VMA-262 or VMA-263.

## COM-299

3 Credits

## Internship

This course enhances the academic experience for students. Field placement is in the creative industry, including local media organizations or on campus. The course allows students enrolled in Communication to apply what they have learned to the workplace environment. All internships take place at pre-approved sites. Site experience requires $120-150$ hours, as well as a personal project related to the internship. Prerequisites: COM-171.

## Criminal J ustice

## CRJ-101

3 Credits

## introduction to Criminal J ustice

This course is an introduction to the purpose and functions of the criminal justice system. This course will provide students with the history and role of the American Criminal J ustice System, and a description of the police, courts, and corrections at the local, state, and federal levels. The course will emphasize the current growing problems of the criminal justice system, ethical issues and professionalism, as well as the future trends of the system. Introduction to criminal justice is of practical concern to professional personnel involved in the system, and also to anyone who wants to understand better the aim of criminal law and how the criminal justice system operates. The course fulfills the Learning Community Seminar requirement for students in AS Criminal Justice. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.
CRJ-102
3 Credits

## J uvenile J ustice

This course examines youthful offenders, the civil and criminal procedures used in juvenile court, and the history of the development of the juvenile courts and juvenile justice. The course presents an overview of the institutional response to the problems of juvenile delinquency, along with status offenders, gender specific offenders,
special needs offenders and a focus on dependent/neglected and abused children. It emphasizes the police, court, correctional, and child protective agencies that process young offenders. Prerequisites: Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses. Course name was changed from Delinquency, Adjudication \& Correction to J uvenille J ustice.

## CRJ - 103 <br> Criminal Law

3 Credits

This course examines the nature, purpose and development of criminal law from common law to contemporary statutory law. The course will emphasize the principles of criminal liability and elements of crime. Legal analysis, knowledge of concepts and the ability to identify them in complex fact patterns, and the application of legal principles to fact situations in a logical way will be introduced. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses

## CRJ -106 <br> Principles of Security Management

This survey course covers the organization and administration of security and loss prevention programs in industry, business, and government. The course emphasizes the protection of assets, personnel and facilities, and the concept of risk management. It focuses on physical security methods, the development and implementation of security policies and procedures, and the use of security officers. Prerequisites: Writing Skills II (ENG095), Academic Reading III (ESL098) or Reading Skills II (RDG095), or placement.

## CRJ -107 <br> 3 Credits

Introduction to Corrections
This course provides a historical and philosophical survey of the correctional system. It provides an understanding of corrections as an essential component in the criminal justice system, focusing on punishment, sentencing, probation, community corrections, jails and detention facilities, institutional corrections, inmates, parole, and reentry. The course also gives students an orientation to current correctional concepts and various correctional institutions. Prerequisites: Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## CRJ - 117 <br> 3 Credits <br> Street Law: an 0 verview of the

 American Legal SystemThis course examines the origins of the American Legal System through an analysis of its function, sources and its varied aspects. This course introduces students to fundamental criminal law and constitutional law principles, and provides a platform for guided discussions of important public policy issues concerning, crime, discrimination, healthcare, and immigration. The course uses the latest instructional technology including e-portfolios, case studies, simulated legal exercises, small group exercises and analytical thought problems to develop higherlevel thinking skills that prepare students for other course work in criminal justice, law, sociology, history, and government.

## CRJ-201 <br> 3 Credits <br> <br> Management in Criminal J ustice

 <br> <br> Management in Criminal J ustice}This course presents the principles of administration and management of criminal justice agencies. It examines organizational structure, responsibilities,
and the interrelationships of administrative, line, and staff services in police, security, court, and correctional facilities. Prerequisites: A grade of C or higher in College Writing I (ENG-111) and Introduction to Criminal J ustice (CRJ-101) and Criminal Law (CRJ-103) and Crimina Investigation (CRJ-208) or instructor approval.

## CRJ -202

3 Credits

## vidence and Court Procedures

This course examines the structure, organization, and procedures of the American Criminal Court system. The course focuses on case analysis to understand the aspect of criminal prosecution and the role of the key actors in the court. The course addresses concepts of legal analysis and the prospects of reform of the Criminal Court system. Prerequisites: A grade of C or higher in college Writing I (ENG-111) and Introduction to Criminal J ustice (CRJ-101) and Criminal Law (CRJ-103) and Criminal Investigation (CRJ-208) or chair approval.
CRI-203 3 Credits

## Rehabilitation of the Offender

This course provides an examination of community rehabilitation, current programs and services available in the corrections component of the criminal justice system. It emphasizes contemporary practices in corrections such as the community-based work-release programs, furloughs, halfway houses, and individual treatment services. Alternatives to incarceration are also examined. Prerequisites: A grade of C or higher in College Writing I (ENG-111) and Introduction to Criminal J ustice (CRJ-101) and Criminal Law (CRJ-103) or chair approval.

## CRJ -208 <br> Criminal Investigation

This course identifies the fundamentals of criminal investigation within the criminal justice system. The duties and responsibilities of the investigator, both in the field and in the courtroom, are emphasized. The course explores the fundamental components of interviewing and interrogation. Issues concerning rules and chain of custody of evidence will be explored Prerequisites: A grade of C or higher in College Writing I (ENG-111) and Introduction to Criminal ustice (CRJ-101) and Criminal Law (CRJ-103) or chair approval.

## CRJ -209 Crime Victims

This course examines theories explaining victimization, the measurement and scope of victimization, fear of crime, the experience of victimization, and victims' interaction with the criminal justice and other systems that have direct contact with victims. It pays particular attention to special victim groups and assesses current victim initiatives such as restitution, mediation, and victim rights legislation. Prerequisites: A grade of C or higher in College Writing I (ENG-111) and Introduction to Criminal J ustice (CRJ-101) and Criminal Law (CRJ-103) or chair approval.

## CRJ-210

3 Credits

## Ethics and Diversity

This course examines the impact of the policies, procedures, and interpretation of data concerning the American criminal justice system across ethnic, racial, sexual, and cultural lines. It examines cross-cultural interaction within the system and the history and institutional attitudes concerning multicultural issues. This course also gives students an overview of the ethica dilemmas facing criminal justice professionals as they interact with a diverse population.
Prerequisites: a grade of $C$ or higher in College Writing I (ENG-111) and Introduction to Crimina ustice (CRJ-101) and Criminal Law (CRJ-103) or chair approval.

CRJ-211

## riminal Procedure

This course examines the workings of those Amendments to the United States Constitution relate to the field of Criminal J ustice and that protect the rights of the people. Students will learn about habeas coupus, search and seizure practices pursuant to the Fourth Amendment; self-incrimination under the Fifth Amendment; right to counsel under the Sixth Amendment; and how the rights protected by these amendments were incorporated by the Fourteenth Amendment and made applicable to both state and federal law enforcement. Prerequisites: a grade of C or higher in College Writing I (ENG111) and Introduction to Criminal J ustice (CRJ -101) and Criminal Law (CRJ-103) or chair approval

## CRJ-212

## Community Corrections

This survey course covers the history development, trends, and role of the community based correction program in the American criminal justice system. The course includes therapeutic, support, and supervision programs for offenders. It examines pretrial release, detainment, and community services, as well as innovative programs. Students must make site visits. Prerequisites: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ 101) and Criminal Law (CRJ 103) or instructor approval.

## CRJ-214 3 Credit Negotiation, Mediation, and Conflict

 ResolutionThis course will focus on understanding the skills needed to negotiate, mediate, and resolve conflict in the criminal justice system. These techniques will be learned theoretically from case studies, and practiced so that students can improve these skills to be able to negotiate, mediate, and communicate better to resolve disputes. Prerequisites: A grade of C or higher in College Writing I (ENG-111) and Introduction to Criminal J ustice (CRJ-101) and Criminal Law (CRJ-103) or chair approval.

## CRJ-216

Street Drugs and Pharmaceuticals
This survey course covers the manner in which the criminal justice system deals with drug use and abuse in our society. Topics include the psychosocial aspects of drugs, the pharmacology of drugs, street names, cost, and current rehabilitation practices. The course analyzes prevention programs in light of what works and what doesn't as well as the cost of drugs to society. Prerequisites: Introduction to Criminal $J$ ustice (CRJ 101) and Criminal Law (CRJ 103) or instructor approval.

## CRJ - 218 <br> Information \& Electronic Security

This course introduces crimes involving the use of computers, the federal and state laws addressing them, and the preventive and investigative methods used to secure computers and defend and prosecute offenders. Part of information security is the electronics and technology needed to provide protection. Topics include budgeting, vendor selection, and security systems (biometrics, access control, closed circuit television, etc.) to meet organizational needs. Prerequisites: Introduction to Criminal J ustice (CRJ 101) and Criminal Law (CRJ 103) or instructor approval.
CRJ-219 3 Credits Terrorism \& Homeland Security
This course will provide a theoretical and empirical understanding and explanation of terrorism as well as the motivation behind terrorist initiatives. A primary emphasis of the
course is on identifying these common features both within and across terrorist organizations to better understand their motives, their objectives, and the methods used to achieve their objectives. It will identify and examine police and governmental responses to reduce or control the incidence of terrorism. Prerequisites: A grade of C or higher in College Writing I (ENG-111) and Introduction to Criminal J ustice (CRJ-101) and Criminal Law (CRJ-103) or chair approval.

## CRJ-225 <br> Policing

This course examines and introduces students to the criminal justic systemwith special emphasis on the roles and responsibilities of police officers. The function of police in contemporary society will be explored. Discussion centeres on the problems arising between citizens and police from the enforcement and non-enforcement of laws, from social changes to police accountability and problem-solving policing strategies.
Prerequisites: Grade of C of higher in College Writing I (ENG-111) and Introduction to Criminal ustice (CRJ-101) and Criminal Law (CRJ-103) or instructor permission.

## CRJ -228 <br> 3 Credits

## Criminal Investigation II

This course examines the types of analyses conducted on crime scene evidence, their value, and limitations. It covers the evidentiary value of the following types of evidence: glass, soil, hairs and fibers, firearms, tool marks, and questioned documents. This course also covers forensic concepts, methods of collecting samples, and the value of blood distribution patterns, bloodstains and other bodily fluids. Prerequisites: Introduction to Criminal J ustice (CRJ 101) and Criminal Law (CRJ 103) or instructor approval.

## CRJ -230

## American Drug Law

This course explores the problems with drugs, illicit and lawful, and the ways the laws in the United States relate to drugs, their users and distributors. Students learn the manner in which federal and state laws differ in terms of punishment. The course analyzes the dichotomy in the federal treatment of crack cocaine as opposed to powder cocaine and the attendant affect this policy has on communities of color. The course also examines the minimum, mandatory drug sentencing laws and their impact on the criminal justice system. Students also learn about the major worldwide drug smuggling routes through the Balkans, South East Asia, and South and Central America, and the way United States interdiction policies affect this smuggling. Prerequisites: Introduction to Criminal J ustice (CRJ-101) and Criminal Law (CRJ-103) or instructor approval.

CRJ -232
3 Credits

## Civil Rights \& Civil Liberties

This course explores the concepts of individual rights and liberties in America and the ways they are balanced against the rights and interests of the sovereign. It scrutinizes First Amendment issues of freedom of speech and religion. The course analyzes the Fourteenth Amendment and its impact on states' rights as they affect individuals, as well as the ever-changing concept of civil rights and liberties as they conflict with "homeland security" and the "war against terrorism". Prerequisites: Introduction to Criminal J ustice (CRJ 101) and Criminal Law (CRJ 103) or instructor approval.

CRJ -245 3 Credits
Cyber Crime: J ustice in the Virtual World
Cyber Crime: J ustice in the Virtual World
This course introduces the student to the issues, trends and problems associated with crimes facilitated by information and communications
technology and how these crimes challenge traditional investigative methods. Topics include the history of computer crime, hacking and unauthorized access, embezzlement, the collection and preservation of digital evidence, legal issues in cyberspace, and an overview of cyberterrorism and the threat to critical infrastructure. Cybercriminal behavior will be analyzed, as well as issues related to hate crimes and their impact on society.Prerequisites: a grade of C or higher in College Writing I (ENG-111) and Introduction to Criminal J ustice (CRJ-101) and Criminal Law (CRJ-103) or chair approval.

## CRJ-275

## Criminal Justice Capstone

This course provides students with the opportunity to critically examine what they have learned about the criminal justice system while exploring possible educational/career opportunities. The course will examine current events and current criminal justice trends to help students better understand the issues facing the police, courts, and correctional systems. This course will also help students build professional skills such as report and resume writing, and learn more about opportunities such as employment in the field, college transfer, and graduate or law school. Prerequisites: Students enrolling in the capstone course must have completed the core requirements of the CJ degree. Introduction to Criminal J ustice (CRJ-101) and Criminal Lab (CRJ 103) and Introduction to Corrections (CRJ-107) and Criminal Procedure (CRJ-211) and Policing (CRJ -225) and Criminology (SO C-207).

## CRJ-299 <br> 3 Credits <br> Criminal J ustice Internship

Students work 150 hours in a criminal justice facility, probation department, juvenile detention center, or house of corrections, as assigned by the contract advisor. Students work in a hands-on learning experience under an assigned criminal justice professional, participate actively in the preparation of pre-sentence reports, and conduct intake and post-conviction interviews. Students learn how to perform record checks and prepare probation recommendations, etc. Students work on inmate classification, work release programs, and in educational settings. Students may assist counselors and other staff, depending upon the type of facility to which the student is assigned. Through active participation in online functions of the criminal justice agency, students gain knowledge and understanding. The contract advisor and the assigned criminal justice officia evaluate students' work. Students meet bi-weekly with their advisors to prepare papers and work on related projects. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisites: A cumulative grade point average of at least 3.0 in the program and a grade of C or higher in College Writing I (ENG111) and Introduction to Criminal J ustice (CRJ 101) and Criminal Lab (CRJ-103) and Introduction to Corrections (CRJ-107) and Criminal Procedure (CRJ-211) and Policing (CRJ-225) and Criminology SOC-207) and Department Chair approval.

## Computer Science

## CSC-120 <br> 4 Credits <br> Intro to Computer Science \& Object

 Oriented ProgrammingThis is a first course in Object Oriented
Programming (OOP) theory, logic and design. Taught in the College's hands-on computer classrooms, this course emphasizes the program design and development process including concepts of variables, flow control, objects, classes, methods, text/stream I/O, arrays, and
vectors. and polymorphism. Students will use an Object O riented Programming language as they design code, debug and implement several programs covering the topics presented. Programs will be created to run both using the IDE and from the command line. This course fulfills the Learning Community Seminar requirement for students in AA Computer Science, AS Computer Science, AS Computer Engineering areas of study. O ther departments may allow this course to be used as a LC seminar for their students. Students in majors other than the ones listed above should obtain their advisor's or the leading faculty member's approval before registering in the course. Prerequisites: Intermediate Algebra (MAT-099) and Writing Skills II (ENG-095) and Reading Skills II (RDG-095); or Integrated ELL Level 3 (ELL-103) or placement. For more information please email CS@bhcc.edu

## CSC-125

3 Credits Python Programming
This is an introductory course designed for any student interested in learning computer programming concepts and hands on computational thinking, all in the context of the Python programming language. No prior experience in programming is necessary. Students will use their own problem solving abilities to implement programs in Python. This course will show the student how to create basic programming structures including decisions and loops. Further, students will explore unique Python data structures such as tuples and dictionaries. Students will also learn to perform basic debugging techniques. At the end of this course, the student will have learned enough concepts in computer science and programming to be able to write Python programs to solve problems on their own. This course will prepare the student to move on to the Advanced Python Programming course. Pre-requisite: Applications and Concepts (CIT-110) or IT Problem Solving (CIT-113) or Intro to Computer Science and Object Oriented Programming (CSC-120) or M aya Foundations (CMT-121) or permission of the Department Chair. All prerequisites must be completed with a C or better. For more information please email CS@bhcc.edu

## CSC-129 Mobile App Development

This course introduces application development for mobile devices such as Android, Apple, Windows, and web. Students will program simple apps on multiple devices, using standard development environments commonly used professionally, using a series of skill-based lessons. Prerequisites: Writing Skills I (ENG090) and Reading Skills I (RDG090) or Academic Writing III (ESL-099) and Academic Reading III (ESL-098); or Integrated ELL Level I (ELL-101) or placement.

## CSC-131

3 Credits
Introduction to Creating Mobile Apps
This course is designed for individuals with no experience with programming languages or previous experience creating mobile applications. The course uses a graphical-user interface blocks editor for students to build their own Android based mobile apps. The course offers reading about the editor and basic programming concepts, tutorial walk through assignments within the editor, and assessments which require students to build unique apps based on the tutorials so that they can demonstrate their understanding and knowledge of what they have learned. Specific programming concepts covered include design logic, programming conditions, variables, procedures, branching and looping. Specific app functionality covered includes sprite animation, multiple screens, and integration with
device sensors, texting, databases, video, and other web APIs. Prerequisites: Writing Skills I (ENG-090) and Reading Skills I (RDG-090) or Academic Writing III (ESL-099) and Academic Reading III (ESL-098); or Integrated ELL Level 1 (ELL-101) or placement.

## CSC-135 <br> 3 Credits <br> Design for Mobile Devices

This course introduces the central components of user interface design for mobile devices (phones, tablets, and other). Students will learn how to prototype user interface designs using a series of scaffolded, skill based lessons culminating in a mobile application interface design for an application. Prerequisites: Writing Skills I (ENG090) and Reading Skills I (RDG-090) or Academic Writing III (ESL-099) and Academic Reading III (ESL-098) or Integrated ELL Level 1 (ELL-101) or placement.

## CSC-225 <br> 3 Credits <br> Advanced Python Programming

This is an advanced course designed for any student interested in learning advanced computer programming concepts in the context of the Python programming language. In this course students will explore classes, object oriented programming, plotting, sampling and statistical thinking, using randomness to solve non-random problems, statistical thinking, graphs, and dynamic programming. Students will complete hands-on individual projects, individual assessments, group projects, and exams to assess student success at achieving the course outcomes. Prerequisite: A grade of C or higher in Python Programming (CSC-125) or equivalent experience with chair approval. For additiona information and/or a course syllabus contact CS@bhcc.edu

## CSC-229 <br> 3 Credits <br> Programming With Android I

This course introduces the central components of Android programming. Students will learn how to program in J ava using the Android Development Tools using a series of scaffolded, skill based lessons culminating in a mobile application which can be exported and placed on a device. Prerequisites: Information Technology Problem Solving (CIT-113) or Intro to Computer Science and O bject O riented Programming (CSC-120) or Mobile App Development (CSC-129) or Chair approval.

## CSC-236 <br> 3 Credits <br> SQ L Programming

This course introduces students to the fundamentals and functions of Structured Query Language (SQL), including relational database, table creation, updating, and manipulation concepts. Using a live database, students learn SQL basics and then move on to the more sophisticated and challenging aspects of SQL. Students get in-depth knowledge of the language through extensive use of Internet based, industry standard SQL programming and certification testing engines. Upon completion of this course, students have the skills and competencies required to program in SQL and the background necessary to continue to intermediate and advanced courses in database procedural programming and database administration. Prerequisite: Computer Applications/Concepts (CIT-110) or IT Problem Solving (CIT-113) or Introduction to Computer Science and Object Orient Programming (CSC120) or Cascading Style Sheets (CMT-125) or permission of the department chairperson. For additional information and/or a course syllabus contact CS@bhcc.edu

## CSC-237 <br> 4 Credits

## C++ Programming

In this course, students who already have been exposed to programming and Object Oriented thinking, develop the ability to correctly analyze a variety of problems and generate appropriate algorithmic solutions using the $\mathrm{C}++$ Programming Language. The course emphasizes the principles of top-down structured design and Object $O$ riented thinking. Topics include but are not imited to branching and looping mechanisms; arrays, functions and function overloading, arguments by reference and by value as well as optional arguments; recursion; pointers, creating libraries and namespaces, structures and classes, constructors and other methods, overloading operators; file I/O; inheritance and polymorphism. Strong analytical skills are recommended for students enrolling in this course. Prerequisite: A grade of C or higher in Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103) and College Algebra-STEM (MAT-194) and Introduction to Computer Science and O bject Oriented Programming (CSC-120) or equivalent experience with permission of the department chairperson. For additional information and/or a course syllabus contact CS@bhcc.edu

## CSC-238 <br> 3 Credits

## Programming for iOS I

This course introduces the central components of iOS programming for mobile app development. Students will learn the basics of programming using vendor approved IDE and Tools in a series of scaffolded, skill based lessons culiminating in a mobile applicaiton for iOS devices. This is firstlevel course that introduces programming concepts and structures unique to this product's language, but also addresses the iOS marketplace, what it takes to become an iOS developer, as well as the planning and budgeting required for sustained app development. Prerequisites: Python Programming (CSC-125) or Advanced Python Programming (CSC-225) or Programming With Android I (CSC-229) or SQ L Programming (CSC-236) or C++ Programming (CSC-237) or J AVA Programming (CSC-239) or Database Programming (CSC-240) or Android Development for J ava Programmers (CSC-243) or Advanced J ava Programming (CSC-285) or Batch File Programming (CIT-271) or PLA or Chair approval.

## CSC-239

4 Credits

## J AVA Programming

In this course, students who already have been exposed to programming and Object Oriented thinking, develop the ability to correctly analyze a variety of problems and generate appropriate algorithmic solutions using the J ava Programming Language. The course emphasizes the principles of top-down structured design and Object $O$ riented thinking. Topics include but are not limited to branching and looping mechanisms; arrays, functions and function overloading, arguments by reference and by value as well as optional arguments; recursion; creating packages, structures and classes, constructors and other methods, file I/O ; inheritance and polymorphism. Strong analytical skills are recommended for students enrolling in this course, plus familiarity and experience working with the Internet and basic HTML tags. The course covers creating both J ava Applications and J ava Applets including event handling, animation, and audio. Prerequisite: A grade of C or higher in Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103) and College Algebra-STEM (MAT-194) and Introduction to Computer Science and Object Oriented Programming (CSC-120) or equivalent experience with permission of the department chairperson. For additional information and/or a course syllabus contact CS@bhcc.edu

CSC-240
3 Credits

## Database Programming

This is an intermediate course in procedural programming for database management systems. Topics in this course include: anonymous and named blocks, named procedures and functions, cursors, triggers, collections and the creation and manipulation of temporary tables. Students perform mid-to advanced level manipulation of databases required for logical processing and user interaction with relational databases. Prerequisite SQL Programming (CSC-236) or permission of department chair. For additional information and/or a course syllabus contact CS@bhcc.edu.

## CSC-242

## Data Structures

This course prepares students to understand the fundamentals of data structures with an emphasis on software engineering. Topics include multidimensional arrays, records, dynamic memory allocation, stacks, queues, lists, trees, graphs, and others. Prerequisite: J ava
Programming (CSC-239) and Precalculus (MAT197). For additional information and/or a course syllabus, contact CS@bhcc.edu.
CSC-243 3 Credits
Android Development for J ava Programmers
This course is for students who are already experienced J ava programmers. It discusses not only the intricacies of Android app development, but publishing in the Market place and monetizing the apps through fees, in-app advertising, or in-app billing of selling virtual goods. Topics include but are not limited to: mobile game design principles, tools and terminology, AndEngine framework, J ava/Dalvik and Android SDK, rendering images, using sprite sheets, creating animations, sound, creating an effective game interface, resource files, working with maps, notifications, and building customer UI elements. APIs (Application Programming Interfaces) and SDK (Software Development Kits) for phones and tablets will be used. Prerequisites Grade C or higher in J ava Programming (CSC239) and Precalculus (MAT-197). Pre/corequisite: Advanced J ava Programming (CSC-285).

CSC-244 3 Credits
Android Development With Kotlin
This course is for students who are already experienced, programmers. Using the Kotlin programming language, students will create and implement Objects in a Mobile development environment. This course discusses the development of a full-stack application front-end to backend, from start to finish. Students will develop an application that may include a database back-end, using the principles of user interface, user experience, user authentication, and best practices of security issues related to mobile applications. This course further discusses the intricacies of Android app development and publishing in the marketplace, monetizing the app, and connecting the app to the latest platform service providers. Prerequisite: CSC-237 or CSC-239

CSC-284
Advanced C++/OOP
This course covers intermediate-level programming. Students learn advanced topics of $\mathrm{C}++$, dynamic memory, allocation, pointers, etc., and OOP , function and operator overloading, class design and object abstraction, ADT design, templates, inheritance, and polymorphism. Students learn to analyze a variety of problems and generate appropriate object oriented solutions. The department recommends that students taking this course have no less than a
grade of $B$ in the prerequisite course． Prerequisite：C＋＋Programming（CSC－237）and College Algebra for STEM（MAT－194）or permission of the department chairperson．For additional information and／or a course syllabus contact CS＠bhcc．edu．

## CSC－285

3 Credits

## Advanced Java Programming

This course thoroughly examines many of the sophisticated features of the J ava programming language，including interfaces，advanced graphics，some data structures，file I／O techniques，multithreading，advanced J DBC Servlets，and J ava Server Pages．Students demonstrate their mastery of the material through a series of graded projects and examinations that challenge at an extremely high level．The course not only instructs in the preparation of applications and applets that focus on business－related topics，but also teaches J AVA in an internet－based，integrative environment that utilizes cross－platform tools．Prerequisites：J ava Programming（CSC－239）and Precalculus（MAT－ 197）．For additional information and／or a course syllabus contact CS＠bhcc．edu．

## CSC－287 <br> Survey New Popular Oopl for <br> Programmers

3 Credits

This course is for students who already have deep knowledge of an Object O riented
Language（Advanced java or Advance C＋＋）．This course will cover in depth three of the most commonly requested OOPL in the job market， C\＃，Visual Basic．NET and Python（languages covered may change depending on the current job market needs）．The course will focus on the idiosyncrasies of the different new languages． Knowledge of programming structures and ability to implement lengthy and complex programming solutions，use of the debuggers and ease to adapt in deferent IDEs is assumed．Long capstone－like projects will be required for each language examined and students will be responsible to analyze and solve the problems by applying the good programming practices and styles already learned in prior semesters．
Prerequisites：Grade of C or better in Advanced ava programming（CSC－285）or Advanced C＋＋ （CSC－284），and Precalculus（MAT－197）．

CSC－299
3 Credits

## Computer Science Internship

This course provides students with hands－on experience in Computer Science．The course is an internship approach to learning．It provides a solid foundation to understanding the types of jobs available to students with Computer Science skills and what it is like to work in the field Students will acquire a first－hand perspective of employer＇s expectations and levels of satisfaction．Students will become more successful with the interview process since they will have had real world experience and／or understanding of what will be expected of them in the pursuit of a career in a computer science field．

## Computed Tomography

## CTC－111 <br> 3 Credits

## Computed Tomography I

This interactive，web－based course presents principles and physics on conventional as well as spiral／helical CT．It begins with descriptions of the hardware configurations，and progresses to include the computer science of the system， including digital image processing，data acquisition，display，and reconstruction methods． Technical factors affecting image quality，artifact， recognition and reduction，and quality control will
be discussed．Multi－slice technology will have particular emphasis，and 3D applications，CT angiography，CT fluoroscopy and other advanced applications will be presented．Radiation safety， dosimetry and contrast agents will also be included in this course．Prerequisite：Acceptance into Computed Tomography Certificate Program．

3 Credits

\section*{CTC－211

## CTC－211 <br> Computed Tomography II

This interactive，web－based course will present patient care in computed tomography，including administration of contrast agents．Imaging procedures of the head，neck，chest，abdomen， pelvis and musculoskeletal system will be discussed，as well as relevant pathology．Special procedures including but not limited to 3－D studies，biopsies，drainage and aspiration and PET／CT fusion will also be presented．
Prerequisite：Computed Tomography I（CTC－111）．

## CTC－299 3 Credits

Computed Tomography Clinical Internship
This 100－hour clinical introduction will enhance the academic experience for students by introducing them to the clinical practice of CT． Students are responsible for providing their own clinical site．Clinical sites must be pre－approved by program faculty．Students must comply with the clinical policies，as stated in the Student Manual before attending clinical．Criminal O ffender Record Information（CORI）checks will be conducted on all students before placement and the outcome may impact the student＇s ability to participate in the internship experience．Health clearance is also required prior to participation． Prerequisite：Computed Tomography I（CTC－111）

## Culinary Arts

CUL－101

## 3 Credits

Culinary Arts Seminar：If You Can＇t Stand the Heat
This course introduces students to the challenges and responsibilities encountered by culinary arts students．It provides students with an in depth knowledge of the options available within the culinary arts industry．The course prepares students with skills necessary to prepare a resume，gain interview skills and become familiar with all of the resources that the college has to offer．Topics covered will include：preparing for a career in the food service field，resume preparation，career options and specific skills necessary to create a successful career，and discovering the best use of resources available to students at BHCC．For Culinary Arts students only．

CUL－108 4 Credits Basic Baking Skills
This course will teach the fundamentals of bakeshop production．It will introduce the students to a variety of baking techniques and skills．Emphasis will be placed on the different skills needed for immediate employment in the pastry field．Students will be introduced to the math skills necessary to understand the weights and measures，as well as to comprehend conversion skills．Students will become competent in the basics of yeast bread production，quick breads，and basic dessert production．Additional expenses may include supplies，equipment，and／or uniforms．
CUL－111 3 Credits
Food Service Sanitation and Skills
Food Service Sanitation is an introduction to food production practices governed by changing federal and state regulations．Topics to be covered include prevention of food－borne illness
through proper handling of potentially hazardous foods，HACCP procedures，legal guidelines， kitchen safety，facility sanitation，and guidelines for safe food preparation，storing，and reheating． Students will also take the National Restaurant Association ServSafe examination．

## CUL－113 ${ }^{3}$ Credits <br> How Baking Works：the Science of Baking

This course explores the theory and science of baking．Students will learn how different ingredients affect a baked product．Students will explore the changes that take place during the baking process，using recipes and formulas as experiments，and will discuss these outcomes． This course is taught in the bakeshop．Additional expenses may include supplies，equipment， and／or uniforms．

## CUL－115 <br> 4 Credits

## introduction to Culinary Arts

This course introduces students to the theory behind cooking．The class covers the history of cuisine as well as the terminology，equipment use，cooking techniques，and ordering and receiving procedures．Course instruction emphasizes the techniques and skills needed to work in a commercial kitchen．The course introduces students to basic menu and food presentation．Students become proficient in the use of tools and equipment．Additional expenses may include supplies，equipment，and／or uniforms．Co－requisite：Principles of Baking（CUL－ 125）．This course is for Culinary Arts students only or by permission of the department chairperson．

## CUL－116

4 Credits

## Basic Culinary Skills

This course will provide students with knowledge in the use of tools，equipment，and knives while learning basic skills and procedures related to the preparation of food and cooking procedures． Students will become familiar with spices，and ingredients and learn basic menu construction and presentation used in a professional food service facility．The course is designed to emphasize proper terminology，equipment use， cooking techniques，use of commercial equipment as well as professional tools．Students will learn correct knife skills and become proficient in their knife skills．Additional expenses may include supplies，equipment，and／or uniforms．
CUL－119
3 Credits

## Cake Decorating

This course takes the student through the basics of cake decorating．The students will refine their cake decorating skills．The course introduces the students to the techniques used to decorate tiered cakes，calligraphy，writing with chocolate and gels，as well as working with the different mediums used to decorate special occasion cakes．Students will learn the basic techniques used for royal icing，color flow and rolled fondant．Additional expenses may include supplies，equipment，and／or uniforms．This course is for Culinary Arts students only or by permission of the department chairperson．

CUL－125
4 Credits

## Principles of Baking

This production lab course covers the fundamentals of baking．It introduces students to the methods and procedures for producing a variety of baked goods，including yeast products， quick－breads，general desserts，and pastry products．Students follow a standard recipe，do basic conversions，and apply the foundations of math as they pertain to the food service industry． The course places emphasis on their knowledge of weights and measures．The course focuses on the bakeshop and receiving areas of the kitchen．

Additional expenses may include supplies, equipment, and/or uniforms. Co-requisite: Introduction to Culinary Arts (CUL-115). This course is for Culinary Arts students only or by permission of the department chairperson.

## CUL-135

## Cafe and Bistro Cuisine

This seven-week course introduces students to the procedures of the art of Garde Manger and cold food preparation. The course covers basic cooking methods and the chemistry of cooking. The course teaches students to become responsible for menu preparation and production of the daily meal in a cafe environment. The hands-on production lab teaches students to prepare various types of basic stocks, soups, sauces, salads, and sandwiches throughout the course. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Introduction to Culinary Arts (CUL115) and Principles of Baking (CUL-125).

## CUL-145

4 Credits

## Advanced Desserts

This seven-week course takes students beyond the basic principles of baking. The students learn cake decorating and advanced pastry production techniques. The course introduces students to the proper application of mixes, laminated dough, fillings, and choux pastries. Additiona expenses may include supplies, equipment, and/or uniforms. Prerequisites: Introduction to Culinary Arts (CUL-115) and Principles of Baking (CUL-125).

## CUL-208

4 Credits

## Advanced Baking Skills

This course will teach advanced pastry production techniques. Students will be instructed in the application of icings, fillings, laminated dough, and yeast products. Students will learn the various techniques used for artisan bread production, as well as laminated dough and their uses. Students will learn and practice basic cake decorating techniques. An introduction to some European pastries will be taught. An emphasis will be placed on timing and execution of the various pastry products, as required in a professional pastry shop. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Basic Baking Skills (CUL-108) and Basic Culinary Skills (CUL-116).

## CUL-211 <br> Menu Design and Purchasing

This course introduces students to various menu types and costing of menu items. Students also learn the skills necessary to purchase all food items, properly receive and store those items, conduct yield tests and become familiar with the 'NAMP' guide and can-cutting procedures. The course emphasizes the math skills used to calculate food and beverage cost percentages.

## CUL-215 of Food Production

## Essentials of Food Production

This course goes beyond the basics of food production. The course introduces students to production and service of menus involving all aspects of cooking techniques as well as skills needed to execute service properly. It introduces students to various cooking techniques in an actual restaurant setting with emphasis on the timing and skills necessary to perform these tasks. Faculty demonstrates food-garnishing techniques. Additional expenses may include supplies, equipment, and/or uniforms.
Prerequisites: Cafe and Bistro Cuisine (CUL-135) and Advanced Desserts and Pastries (CUL-145). Co-requisite: Essentials of Dining Service (CUL225). This course is for Culinary Arts students only or by permission of the department chairperson.

CUL-216 4 Credits Advanced Culinary Skills
This course will build upon skills taught in the Basic Culinary Skills course (CUL116). Students will be immersed in an actual restaurant simulation and will learn proper timing and execution of the meal. Various stations within the kitchen brigade will be taught and students will become proficient in these stations. Students will be introduced to the various types of professional cooking careers and opportunities. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Basic Culinary Skills (CUL-116) and Basic Baking Skills (CUL-108).

## CUL-217

4 Credits
Classical and International Pastries
This course takes the student beyond the basic principles of baking. The students will continue to refine their cake decorating skills and learn European pastry production techniques. The course introduces the students to the techniques used to assemble tiered cakes, as well as the proper cutting and service of tiered cakes. The students will learn how to work with fondant, chocolate and pastillage. Students will learn the basic techniques used in candy making. Prerequisite: Advanced Desserts and Pastries (CUL-145).

## CUL-225 <br> 4 Credits

## Essentials of Dining Senvice

This course gives students a complete overview of the inner workings of the dining room. In this beginning phase of dining room service, using proper techniques, the course emphasizes the various types of service and the timing and execution of the meal. It introduces students to various service types, table settings, and food delivery systems. The course also covers all aspects of bar and beverage management, as well as preparation of guest checks, payroll, and tip credits. Additional expenses may include supplies, equipment, and/or uniforms.
Prerequisites: Cafe and Bistro Cuisine (CUL-135) and Advanced Desserts and Pastries (CUL-145). Co-requisite: Essentials of Food Production (CUL215). This course is for Culinary Arts students only or by permission of the department chairperson.

## CUL-235 4 Credits

Advanced and Ethnic Food Production
This course expands upon students' knowledge of the principles of cooking. The course teaches students to become responsible for preparation and production of a meal from a variety of ethnic cuisines that are integrated into a restaurant setting. Also, the course emphasizes the significance and influence of geography as a factor in the development of regional and international cuisine and culture. The course introduces students to advanced Garde Manger and Dessert techniques that fully complement the meal. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Essentials of Food Production (CUL-215) and Essentials of Dining Service (CUL225).

## CUL-241 <br> 4 Credits

## Chocolate and Sugar Artistry

This course is designed to familiarize students with how to work with chocolate and sugar using various techniques. Students will practice these techniques in the production of chocolate confections, such as truffles and molded chocolates. Sugar artistry, such as poured, pulled and blown sugar will be demonstrated and applied. Students will also work with pastillage, marzipan, and gum paste. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisite: Advanced Desserts (CUL-145).

CUL-243

## Hot and Cold Desserts

This course is designed to introduce students to the production of chilled and frozen desserts. Students will also be introduced to the production of hot desserts, as well as to the production of desserts using both hot and cold components. Students will design menus for a bakeshop or pastry operation and develop an understanding of the various management tools required for the operation. Students will learn to analyze and forecast sales. An emphasis is placed on plating and garnishing techniques of dessert production. Students will also be introduced to molecular cooking techniques. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisite: Advanced Desserts (CUL-145).

## CUL-245

Food and Beverage Operations
This course acquaints students with current industry technology and sales techniques. It discusses nutrition and food allergy concerns. The course exposes students to all managerial procedures required in the food service industry. Students learn how to interpret a basic financial statement and use current technology as is required in the restaurant industry. The course introduces students to the wines and spirits that might be paired with the various ethnic cuisines. In this course, students provide service for the Advanced and Ethnic Food Production course. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Essentials of Food Production (CUL-215) and Essentials of Dining Service (CUL-225).

## CUL-247 3 Credits <br> Advanced Classical Desserts and Showpiece Cakes

This course takes the students to an advanced level of pastry expertise. The students will continue to refine their cake decorating skills and learn advanced pastry production. The course introduces the students to the techniques used to assemble tiered cakes, as well as the proper cutting and service of tiered cakes. Students will learn costing techniques and conversion formulas. Students will analyze costing formulas and pricing criteria for wedding and special occasion cakes. Emphasis is placed on design, construction and preparation of showpieces using sweet and savory ingredients. Prerequisite: Advanced Desserts and Pastries (CUL-145) and Introduction to Cake Decorating (CUL-119).

## CUL-249

3 Credits

## Baking for Health

This course will explore the options available for meeting the needs of the customer with dietary restrictions. The student will be introduced to lactose-free, gluten-free, and dairy-free, sugarfree baking. Students will also work with vegan recipes, as well as honey-free and egg-free recipes. Students will also be introduced to the production of pastries using substitute ingredients for health purposes. Healthy and low fat dessert alternative will be introduced. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisite: Advanced Desserts (CUL-145).

## Culinary Arts Internship

The internship allows students the opportunity to gain practical experience in the field of culinary arts. The internship begins after completion of the first academic year and consists of 150 hours of work experience in an approved foodservice facility.

## CUL-299P

3 Credits
Pastry Arts Internship
The internship allows students the opportunity to gain practical experience in the field of baking and pastry arts. The internship begins after completion of the first academic year and consists of 150 hours of work experience in a bakery or pastry shop approved by your instructor. Prerequisite: Chair Approval.

## Early Childhood Education

## ECE-101 3 Credits <br> Guidance and Discipline

This course covers the study of effective communication in guiding behavior. The course emphasizes techniques that help children build positive self-concepts and individual strengths within the context of appropriate limits and discipline. Prerequisite: Child Growth/Development (ECE-103).

## ECE-103 <br> 3 Credits <br> Child Growth and Development

This course covers the normal development of children through the age of twelve with emphasis on the physical, cognitive, social, and emotional components of development of the infant, toddler, preschool and school age child. The course meets Department of Early Education and Care guidelines for child growth and development. Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and A cademic Reading III (ESL098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## ECE-104

3 Credits

## Curriculum in Early Childhood Education

This course is the study of early childhood education programs with emphasis on curriculum development in areas such as art, music, science, literature, math, language arts, and dramatic play. Prerequisite: Child Growth/Development (ECE103).

## ECE-106

3 Credits
Program Environments
This course covers the study of setting up and maintaining a program environment with emphasis on health and safety concerns, nutritional considerations, space utilization, equipment needs and material usage. Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.
ECE-108
3 Credits

## Infant/Toddler Curriculum Development

This course is the study of the aspects of planning and implementing group care for infants and toddlers, including developmental issues, routines and transitions in care-giving, curriculum activities, environmental designs, equipment and materials, guiding behavior including limit setting and developing security through behavioral management, and working with parents. The course meets Department of Early Education and Care requirements for Infant/Toddler Lead Teacher certification. Prerequisites: Child Growth/Development (ECE-103) and a grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.
ECE-110 3 Credits
Science Concepts \& Learning for Children
This course is a study of concept development and learning in early childhood education programs with emphasis on curriculum
development in the area of science for young children. Prerequisites: Child Growth \& Development (ECE103) and Curriculum in Early Childhood Education (ECE104) or Child Growth \& Development (ECE103) and Introduction and Foundations of Education (EDU101).

## ECE-151

1 Credit

## Respecting the Infant-Toddler Child

This course will explore the importance of building positive relationships with infants and toddlers through responsive, respectful and reciprocal interactions that follow developmentally appropriate best practices and extend the infant and toddler's learning. Prerequisite: Grade of C or better in Child Growth and Development (ECE 103) or equivalent.

## ECE-152 <br> 1 Credit <br> Language and Infant-Toddler Why \& How?

This course focuses on the development of language for infants and toddlers, how the brain growth plays an important role in language and how to help children move towards their potentials for optimal growth and development. Students will learn the reasons why this is so critical and how to engage children with language before they can even talk. Prerequisite: Grade of C or better in Child Growth and Development (ECE 103) or equivalent.

## ECE-153

## 1 Credit

Expanding the Infant/Toddler Connections
This course addresses the capacity for rapid learning by the infant-toddler child and explores how this growth is enhanced through daily experiences and supportive relationships. Students will learn ways to expand these connections and to nurture the infant-toddler through curriculum and supportive relationships. Prerequisite: Grade of C or better in Child Growth and Development (ECE 103) or equivalent.

## ECE-154 <br> 1 Credit

## Supervision for Team Building

Early care and education teachers must work closely with each other to meet the demanding needs of young children. Learn ways to build teams from diverse groups of teachers and help them work smoothly together toward shared goals. It is recommended that students be Lead Teacher certified by Department of Early Education and Care before enrolling in the course. Prerequisite: Grade of C or better in Child Growth and Development (ECE103) or equivalent.

## ECE-155

1 Credit
Trouble in the House: Handling Conflict In Supervision
Early care and education teachers have to serve the needs of many: children, parents, other teachers and staff, and supervisors. Yet, these caring people are often uncomfortable with conflict and handle the demands of conflict resolution poorly, causing more problems than are solved. This module will provide real ways to tackle these problems and build stronger teams through positive conflict resolution. It is recommended that students be Lead Teacher certified by Department of Early Education and Care before enrolling in course. Prerequisite: Grade of C or better in Child Growth and Development (ECE 103) or equivalent.

## ECE-156

1 Credit
Helping Adult Learners Move Forward
The early care and education teacher is an adult learner with his/her own personal and
professional goals. This module explores the ways for supervisors to help their teachers to
grow and develop to meet their goals while strengthening the program at the same time. It is recommended that students be Lead Teacher certified by Department of Early Education and Care before enrolling in the course. Prerequisite: Grade of C or better in Child Growth and Development (ECE103) or equivalent.

## ECE-157 1 Credit What/How of Emergent Curriculum and the Project Approach of ECE

Emergent curriculum and the project approach go beyond the traditional way of planning program activities and curriculum for young children in the classroom. Using the newest understandings to incorporate children's interests into program curriculum, this module examines the what's and how's of emergent curriculum. Recommended: Curriculum in Early Childhood Education (ECE104) prior to enrolling in the course. Prerequisite: Grade of C or better in Child Growth and Development (ECE103) or equivalent.

## ECE-158 1 Credit <br> Project Planning Emergent

Figuring out children's interests requires observation and reflection. Teachers must be attentive to what is happening around children and what they are excited by, frightened of, and curious about. Where to begin the project approach is all about the skills of observing the children around the classroom. Recommended: Curriculum in Early Childhood Education (ECE 104) prior to enrolling in the course. Prerequisite: Grade of C or better in Child Growth and
Development (ECE-103) or equivalent.

## ECE-159 1 Credit <br> Project Planning-Pushing Beyond

 BeginningsConsidering how long a project should last is tricky. How to keep the children interested and how to end the project are also essential ingredients of a successful project. How does a classroom "document" the learning that children have obtained? Recommended: Curriculum in Early Childhood Education (ECE104) prior to enrolling in the course. Prerequisite: Grade of C or better in Child Growth and Development (ECE103) or equivalent.

ECE-160 1 Credit Language and Literacy: Why So Important
Language development is a critical skill needed by every young child. This module will look at the emergence of language skills, brain development and the need for stimulation from the people and environments interacting with the child. Ways to evaluate the needs of young children and counter challenges with strong literacy environments will be addressed. Grade of C or better in ECE 103 Child Growth \& Development or equivalent. Recommended: ECE 104

ECE-161
1 Credit
Reading, Writing, Listening, Speaking Pushing It Beyond the Basics
Language development begins with listening skills and moves through speaking, pre-reading and pre-writing skills. This module will consider these areas of need and ways to help children grow and develop in their skills in all areas. Prerequisites: Students must have a grade of $C$ or better in ECE 103 Child Growth \& Development or equivalent prior to enrolling in the courses in this series. It is recommended that students will have taken ECE 104 prior to taking these courses for a better understanding of the material.

## ECE-162 <br> 1 Credit Dual Language Learners The Challenges

Because language development is so critical to growth and development of the young child, those children who are dual language learners need particular attention to help them reach their potential for strong development in all areas Ways to address these concerns in the classroom will be a focus. Prerequisites: Students must have a grade of C or better in ECE 103 Child Growth \& Development or equivalent prior to enrolling in the courses in this series. It is recommended that students will have taken ECE 104 prior to taking these courses for a better understanding of the material.

## ECE-163

1 Credit
Science and Nature With Young

## Children In Supervision

Children learn science concepts by playing the easiest place for that to occur is in the natura environment. Emphasis of this module will be on the ways children learn science and the match between young children's curiosity and science learning. Prerequisite: Grade of C or better in Child Growth and Development (ECE103). Recommended: ECE 104 prior to taking these courses for better understanding of material.

## ECE-164 <br> 1 Credit <br> Using Nature and Science to Plan In

 SupervisionScience seems scary and foreign to many teachers and children. Figuring out what to do and how to understand ways to pique children's interests requires observation and reflection. Teachers must be attentive to what is happening around children and what they are excited by, frightened of, and curious about. Where to begin with nature study and science learning is all about the skills of observing the children around the classroom. Prerequisite: Grade of C or better in Child Growth and Development (ECE103) or equivalent. Recommended: Curriculum in ECE (ECE104) prior to taking these courses for better understanding of material.

ECE-165 1 Credit
Pushing the Plan Beyond the Simple In Supervision
Considering what projects to plan and how long a project should last is tricky. How to keep the children interested and how to develop the project are also essential ingredients of a successful project. How do we help children "document" their ideas and go beyond the simple plans to more complex thinking and activity? Prerequisite(s). Grade of C or better in Child Growth and Development (ECE103)or equivalent. Recommended: Curriculum in ECE (ECE104) prior to taking these courses for better understanding of material.

## ECE-166 1 Credit

The Law, the Realities, Identification \& Care
Children with special needs, diverse abilities and atypical behavior require additional consideration when including them into traditional and typical classrooms. The law is clearly stated as to what is required for children to be included as they move to public school. But, what is the responsibility of those in programs for younger children?. How does the teacher meet these requirements and help with identification and care of all children? Prerequisites: Students must have a grade of C or better in ECE 103 Child Growth \& Development or equivalent prior to enroliing in the courses in this series. Prior to enrollment it is recommended that students will have taken ECE 111- Young Children with Special Needs or equivalent for a deeper understanding of the material of this course material.

ECE-167
Observation \& Then Curriculum
Figuring out children's needs and the ways in which they learn requires observation and reflection. Teachers must be attentive to what is happening around children and what they are excited by, frightened of, and curious about. Parents and family members must be consulted to see how to best meet the needs of all children. Prerequisites: Students must have a grade of C or better in Child Growth \& Development (ECE 103) r equivalent prior to enrolling in the courses in this series. Prior to enrollment it is recommended that students will have taken Young Children with Special $N$ eeds (ECE 111) or equivalent for a deeper understanding of the material of this course material.

ECE-168
1 Credit
Observations and Then Relational Connection
Children with special needs have social and emotional needs just like all other children. Their needs for relational skill development are sometimes quite challenging. How do we handle this in our classrooms? How to help other children to be accepting and helpful? Prerequisites: Students must have a grade of C or better in Child Growth \& Development (ECE 103) or equivalent prior to enrolling in the courses in this series. Prior to enrollment it is recommended that students will have taken Young Children with Special Needs (ECE 111) or equivalent for a deeper understanding of the material of this course.

## ECE-202

3 Credits
Issues in Early Childhood Education
This course is a study of early childhood education programs. The course includes the history of childcare, regulation, types of programs, and current trends and issues in early care and education. The needs of children and families and components of quality programs with emphasis on social, political, and economic influences on professional issues and career opportunities in the field are covered. Prerequisites: A grade of C or higher in Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## ECE-207 3 Credits Literacy Development and Learning for Children

This course is a study of concept development and learning in early childhood education programs with emphasis on curriculum development in the area of literacy development for young children. Prerequisites: Child Growth/Development (ECE-103) or its equivalent; and Curriculum in Early Childhood Education (ECE-104) or Child Growth/Development (ECE103) and Introduction and Foundations of Education (EDU-201)
ECE-208 3 Credits Exceptional Learners: Intro to Special Education
The course will be a study of children with physical, social, emotional, and/or intellectual differences, with emphasis on techniques for inclusion of children into early childhood programs and elementary school programs. This course offers an introduction to a broad range of developmental disabilities and related topics, including categories of cognitive, physical, emotional, and learning delays. The inclusion of children and adults into educational and community environments will be highlighted. Topics include the history of special education, the impact of the family, current and future
trends, early intervention, transition, and the laws which govern the integration of children and adults in society. Prerequisite: Child Growth and Development (ECE-103) with a grade of C or higher.

## ECE-209

3 Credits
Math Concepts \& Learning for Children
This course is a study of concept development and learning in early childhood education programs with emphasis on curriculum development in the area of math for young children. Prerequisite: Child Growth and Development (ECE-103) or its equivalent, and Curriculum in Early Childhood Education (ECE104) or Child Growth \& Development (ECE-103) and Introduction and Foundations of Education (EDU-201).

## ECE-210

3 Credits
Science Concepts \& Learning for Children
This course is a study of concept development and learning in early childhood education programs with emphasis on curriculum development in the area of science for young children. Prerequisites: Child Growth and Development (ECE-103); and Curriculum in Early Childhood Education (ECE-104) or Introduction and Foundations of Education (EDU-201)

## ECE-211 3 Credit

Young Children With Special Needs
This course covers the study of children with physical, social, emotional and/or cognitive disabilities with emphasis on techniques for mainstreaming and inclusion of these children into existing early childhood programs. Prerequisites: Child Growth/Development (ECE103) plus three (3) ECE or EDU courses.

## ECE-212 <br> 3 Credits

Families/Community in Early Childhood Education
This course is the study of the relationship of parents and communities to early childhood programs. The course emphasizes parental needs for early care and education, parenting skills and need for communication with parents, challenges of dealing with diverse populations and multiple family structures using an anti-bias approach which respects diversity and encourages collaborative efforts in caring for children Prerequisites: Child Growth and Development (ECE-103) plus three (3) ECE or EDU courses

## ECE-213

## Child Care Administration I

This course covers the study of program management in early childhood education including planning, implementing, and evaluating programs. The course emphasizes financial, legal personnel, and program aspects of program administration. It meets Department of Care and Education and Certification requirement. Prerequisite: Lead Teacher qualifications or permission of department chair prior to enrollment.
ECE-215 3 Credits Supervisor in Early Childhood Education
This course covers the study of child-care management with an emphasis on staffing and personnel functions within an early care and education program. Areas of study include organizational development, staffing, personnel practices, leadership, and mentoring. The course meets Department of Early Education and Care Director II certification requirements. Prerequisite: Lead Teacher qualifications or Chair approval prior to enrollment.

ECE－217
Observation／Recording Behavior
This course is the study of observing and recording behavior of children with emphasis on child study in all areas of development using a variety of observational tools and recording techniques with children from birth to age twelve． Prerequisite：Child Growth and Development （ECE－103）．

ECE－220 3 Credits
Practicum in Early Childhood Education I
This practicum experience in an early childhood setting must be completed during the final two semesters of study．The department assigns and／or approves student placement settings． Students must participate in a weekly on－campus seminars as well engaging in a minimum of 12 hours a week in an Early Childhood Education classroom with a supervising teacher and a creation of portfolio．Acceptance into the Early Childhood Development program does not assure permission to enroll in the course or a placement assignment．For complete course requirements and application procedures， contact the department chair．Prerequisites： Permission of department chair．Students must receive a grade of $C$ or higher in Child Growth and Development（ECE－103）and Guidance and Discipline（ECE－101）and Curriculum in Early Childhood Education（ECE－104）and Program Environments（ECE－106）．Students must also clear a CORI report before enrolling in the practicum．

ECE－221
3 Credits
Practicum／Early Childhood Education II
This practicum experience in an early childhood setting must be completed during the final semesters of study．The department assigns and／or approves student placement settings． Students must participate in a weekly on－campus seminars as well engaging in a minimum of 12 hours a week in an Early Childhood Education classroom with a supervising teacher and the creation of a portfolio．Acceptance into the Early Childhood Development program does not assure permission to enroll in the course or a placement assignment．For complete course requirements and application procedures， contact the department chair．Students must also clear a CORI report before enrolling in the practicum course．The course is open only to students matriculated in the Associate in Science Degree：Early Childhood Concentration．
Prerequisites：Permission of department chair． Students must receive a grade of C or higher in Early Childhood Practicum 1 （ECE－221）．

## ECE－223

3 Credits
CDA Professional Portfolio \＆Practicum
The CDA（The Child Development Associate National Credentialing Program）Professional Portfolio／Practicum Course will provide a practicum experience in an early childhood setting and assist each student in developing their reflective CDA Professional Portfolio as it relates to the 13 CDA Functional Areas specific to the program the student is working at（family child care，infant／toddler or preschool care． Students will participate in a weekly on－campus seminar as well as engaging in a minimum of 12 hours a week in an Early Childhood Education classroom with a supervising teacher．Students will complete 150 hours of a supervised practicum in a licensed early childhood center． This course will expand the scope and level of each student＇s work capability as they develop their CDA competency in 13 functional areas to prepare for earning their CDA credential． Prerequisites：A grade of a C or higher in Child Growth and Development（ECE－103）and Curriculum in Early Childhood Education（ECE－ 104）and Program Environments（ECE－106）．

ECE－224
3 Credits
CDA Professional Portfolio \＆Practicum2
The CDA（The Child Development Associate National Credentialing Program）Professional Portfolio／Practicum Course will provide a practicum experience in an early childhood setting and assist each student in developing their reflective CDA Professional Portfolio as it relates to the 13 CDA Functional Areas specific to the program the student is working at（family child care，infant／toddler or preschool care）． Students will participate in a weekly on－campus seminar as well engaging in a minimum of 12 hours a week in an Early Childhood Education classroom with a supervising teacher．Students will complete 150 hours of a supervised practicum in a licensed early childhood center．This course will expand the scope and level of each student＇s work capability as they develop their CDA competency in 13 functional areas to prepare for earning their CDA credential．ECE 224 is required for students who have less than 300 hours of documented time in an early childhood center to be eligible for their CDA credential．Prerequisites： A grade of a C or higher in CDA Professional Portfolio and Practicum（ECE－223）．

## Economics

## ECO－201 <br> 3 Credits <br> Macroeconomics

This course covers an introduction to the American economy．Topics include：scarcity，opportunity cost and the production possibility curve， unemployment，inflation，GDP and related aggregates，economic growth，classical Keynesian models of income and employment determination，government policies for full employment and price stability，and money and the banking system．This course satisfies the College＇s General Education requirement for Community and Cultural Contexts．Prerequisites： Foundations of Algebra（MAT－097）or Pre－ Statistics（MAT－098）and Reading Skills II（RDG－ 095）or Academic Reading III（ESL－098）or Integrated ELL Level III（ELL－103）exemption by placing into higher level courses．

## ECO－202 Microeconomics

This course covers an introduction to the market system．It covers basic demand and supply analysis，theory of consumer choice，demand and supply elasticity，long run and short run cost curves， and price and output determination under different market structures，such as perfect competition，monopoly and monopolistic competition．The course applies microeconomic principles for analyzing government regulations． The course satisfies the College＇s General Education for Community and Cultural Contexts． Prerequisites：Foundations of Algebra（MAT－097） or Pre－Statistics（MAT－098）and Reading Skills II （RDG－095）or Academic Reading III（ESL－098）or Integrated ELL Level III（ELL－103）or exemption by placing into higher level courses．

ECO－220
3 Credits

## Environmental Economics

This course introduces economic approaches to problem－solving in the context of contemporary environmental issues and policies．Students learn to apply economic models to analyze energy sustainability and environmental systems in local and global contexts．Topics covered will include： environmental externalities and market failure； economic assessment of environmental damages； economics of sustainable development；cost－ benefit analysis；valuation of environmental resources．Students will apply theoretical frameworks in economics to analyze policies and
practices related to environmental issues
including pollution control，natural resource use， and climate change．Prerequisites：Grade of C or better in one of the following：ENV－105 or ENV－ 110 or ENV－111 or ENV－113 or ENV－115 or ENV－ 120 or ECO－201 or ECO－202 or permission．

## Education

## EDU－102 Becoming a Teacher：a Learning <br> Community Seminar

This learning community seminar is designed for education majors who are interested in making a difference in today＇s public schools．The seminar will focus on the pressing issues in today＇s public schools：overcrowding，lack of funding，outdated curriculum，classroom chaos，and shortage of good teachers，and many others．The Learning Community Seminars enable first－year students to make successful transitions to college while developing their abilities to reflect and assess； discover their strengths；explore career interests； set goals and problem solve with critical thinking， information literacy and communication skills； and connect with peers，faculty and staff in a diverse learning environment．This seminar will focus on education as students grow in their understanding of themselves and the world of education．While recommended for Education majors，those in Early Childhood Development， and Human Services will find the material useful． Students from other majors are welcome to enroll if interested in pursuing teaching as a career in the future．Prerequisite：Student must be in first two semesters of study at BHCC with 16 college credits or less completed．

## EDU－201

3 Credits

## Introduction \＆Foundations of Education

This course is designed for students interested in entering the teaching profession with children K－ 12．Principles，history，philosophy，functions of the school，policies，and current trends are included．Field experiences in area schools are required．The course is best suited for AA Education majors，but others are welcome to enroll．Prerequisites：A grade of $C$ or higher in Writing Skills II（ENG－095）and Academic Reading III（ESL－098）or Reading Skills II（RDG－095）；or Integrated ELL Level III（ELL－103）or exemption by placing into higher level courses．

## EDU－220 <br> 3 Credits

## Practicum in Instruction

This course exposes students to various techniques of learning through the experience of tutoring．Faculty develops supervised tutoring placements in specified subject areas．The placements may be in the classroom，computer lab，Tutoring and Academic Support Center，the Center for Self－Directed Learning，and／or other areas on campus．Students must participate in a weekly on－campus seminar，in addition to two hours of tutoring per credit，per week．The seminar relates the field experience to students＇ objectives through discussions of learning styles， modes of instruction，cross－cultural awareness， tutoring techniques，and study habits．Students gain experience in tutoring，the evaluation process，and management of instructional operations．Prerequisites：Introduction and Foundations of Education（EDU－201）．

## English Language Learning

ELL－101 6 Credits Integrated ELL Level 1
This course develops integrated critical reading， writing，listening and speaking skills in English through immersion in a selected theme，
challenging academic content, and campusand/or community-based learning. Students participate in group work and connect the content to their own lives, using language in multiple ways. Students successfully completing Level 1 will produce, revise and edit written and oral assignments that demonstrate readiness for Level 2 as determined by departmental assessment processes. Students will demonstrate emerging skill with incorporating sources to develop ideas with purpose, focus, and clarity of language. Prerequisite: Placement. Depending on program of study, this course may meet General Education requirement for Creative Work or General Education Elective.

## ELL-102 6 Credit Integrated ELL Level 2

This course develops integrated critical reading, writing, listening and speaking skills in English through immersion in a selected theme, challenging academic content and campusand/or community-based learning. Students participate in group work and connect the content to their own lives, using language in multiple ways. Students successfully completing Level 2 will produce, revise and edit written and oral assignments that demonstrate readiness for Level 3 (or approaching readiness for College English) as determined by departmental assessment processes. Students will demonstrate increasing skill with incorporating sources to develop ideas with purpose, focus and clarity of language. Prerequisite: ELL 101 or Placement. Depending on program of study, this course may meet General Education requirement for Creative Work or General Education Elective.

## ELL-103 <br> 6 Credits

Integrated ELL Level 3
This course develops integrated critical reading writing, listening and speaking skills in English through immersion in a selected theme, challenging academic content and campus and/or community-based learning. Students participate in group work and connect the content to their own lives, using language in multiple ways. Students successfully completing Level 3 will produce, revise and edit written and oral assignments that demonstrate readiness for College English as determined by departmental assessment processes. Students will demonstrate proficiency with incorporating sources to develop ideas with purpose, focus and clarity of language. Prerequisite: ELL 102 or Placement. Depending on program of study, this course may meet General Education requirement for Creative Work or General Education Elective.

## ELL-110 <br> 6 Credits <br> Resilience

In this multilevel 6-credit course, we will explore true-life stories and nonfiction materials about how and why people persist through daily life and difficult circumstances. The materials for the class will consist of academic articles, short stories and videos for class discussions and writing short essays. Related topics will include cultural attitudes of resilience, brain and memory research, and persisting in language learning Beyond improving reading, writing and oral communication skills, an important goal of this class is to develop a deeper understanding of how you can build resilience to accomplish your goals. This course satisfied the General Education Creative Work requirement. Prerequisites:
placement into Academic ELL 101, 102, or 103

## ELL-111 6 Credit

Stories and Sketches of Chinatown
What makes a community unique and dynamic? Is it people, architecture, atmosphere, or other factors? In this integrated skills course we will study the Chinatown community especially Asian

Americans and Chinese Immigrants and the places where they work and reside. Students will read, write, speak, and learn about symbols commonly found in the community. Students will research symbols and complete remote field study of community-based arts projects. This course satisfied the General Education Creative Work requirement. Prerequisites: placement into Academic ELL 101, 102, or 103

## ELL-112

6 Credits

## Voices of Chelsea

What makes the Chelsea community unique and dynamic? Students in this 6-credit multi-level ELL course will read and listen to significant voices from the Chelsea community, from history to newspaper headlines to stories inherited from one generation to another. Students will also voice their own stories in prose and poetry, with the opportunity to participate in poetry readings and storytelling sessions. As the course progresses, students will identify threads and themes for deeper inquiry and analysis through writing and discussion. This course satisfied the General Education Creative Work requirement. Prerequisite: Placement into Academic ELL 101, 102, or 103.

## ELL-113 <br> 6 Credits <br> \section*{Stories of Chelsea}

In this 6-credit, multi-level ELL course, students will prepare, produce, and communicate true oral and written stories about their lives and experiences in the Chelsea community. Students will build upon narratives read and analyzed in ELL-112 and explore thematic connections between their own stories and broader issues of education, migration, racial justice, community development, and/or public health through readings, discussions, essays, presentations, and reflections. This course satisfied the General Education Creative Work requirement. Prerequisite: Placement into Academic ELL 101, 102, or 103.

## Emergency Medical Responder

## EMR-101 4 Credits

## Emergency Medical Responder

Through lectures, discussions, and hands-on practical experiences, this course is designed to provide the student with the knowledge and skills necessary to function as an Emergency Medical Responder in emergency situations. The course will prepare the student to serve as an essential link in the emergency medical services (EMS) system. The course content covers knowledge and psychomotor skills required to make appropriate decisions and provide immediate care in response to medical emergencies. The course includes Cardio Pulmonary Resuscitation (CPR) for the Professional Rescuer with Automated External Defibrillation (AED) and advanced first aid skills. Students that successfully complete practical and knowledge-based exams are eligible for the Emergency Medical Responder (First Responder) certification card which is valid for two years. This is a 40 -week course, meeting for 56 minutes each Monday through Thursday. Additional practical skill sessions may be scheduled as needed.

## Paramedics

## EMS-205 10 Credits <br> Principles of Paramedicine I

This course is the first of nine courses designed for Emergency Medical Technicians, Basic or Advanced, with at least one year of experience desiring to obtain Paramedic Certification/Licensure. Areas of study will
include, Introduction to Advanced Pre-hospital Care, Well Being of the Paramedic, EMS Systems, Roles and Responsibilities, Illness and Injury Prevention, Stress M anagement, Anatomy \& Physiology, Documentation, Communications, Therapeutic Communications, Medical/Legal Aspects and Ethical Considerations, Basic and Advanced Airway Management \& Ventilation, Wave Form Caponography, Patient Assessment, Trauma \& Medical Physical Exam Techniques, Obstetric \& Gynecological Emergencies, Pathophysiology of Shock and Intravenous Access and Mathematics for Medications. Students will demonstrate knowledge and perform manipulative skills under the supervision of the course instructor, program director, medical director, and/or skilled preceptor. The student must demonstrate and maintain current licensure/certification as an Emergency Medical Technician (EMT). Adherence to the attendance policy and a minimum final course grade of Bmust be achieved in order to advance in the program. Prerequisites: Human Biology/Lab (BIO 108) or equivalent and College Writing I (ENG111). Co-Requisite: Paramedic Clinical Rotation I (EMS-209).

## EMS-206

10 Credits

## Principles of Paramedicine II

This course builds upon the knowledge and skills learned in Principles of Paramedicine I. Topics: Pharmacology, Introduction to Cardiology, Rhythm Interpretation, Introduction to 12 Lead ECG, Advanced Cardiac Life Support (ACLS), Management of Cardiac Emergencies, Medical Emergencies, Pulmonology, Neurology, Stroke Management, Endocrinology, M etabolic Emergencies, Anaphylaxis, Gastrointestinal Emergencies, Urological and Renal Emergencies, Toxicology, Substance Abuse, Hematological Emergencies, Infectious Diseases, and Behavioral Emergencies. Students will demonstrate knowledge and perform manipulative skills under the supervision of the course instructor, program director, medical director, and/or skilled preceptor. Adherence to the attendance policy and minimum final course grade of $B$ - must be achieved in order to advance in the program. Prerequisites: Principles of Paramedicine I (EMS205) and Paramedic Clinical Rotation I (EMS-214). Co-requisite: Paramedic Clinical Rotation II (EMS215).

## EMS-207

4 Credits

## Principles of Paramedicine III

This course builds upon the knowledge and skills learned in Principles of Paramedicine I \& II. Topics: Pediatrics, Assessment of the Pediatric Patient, Pediatric Advanced Life Support (PALS), Geriatrics, Traumatic Systems and Mechanisms of Injury, Hemorrhage and Shock, Head and Facial Trauma, Thoracic Trauma, Abdominal Trauma, and Musculoskeletal Trauma. Students will demonstrate knowledge and perform manipulative skills under the supervision of the course instructor, program director, medical director, and/or skilled preceptor. Adherence to the attendance policy and minimum final course grade of B- must be achieved in order to advance in the program. Prerequisites: Principles of Paramedicine II (EMS-206) and Paramedic Clinical Rotation II (EMS-215). Co-requisite: Paramedic Clinical Rotation III (EMS-216).

## EMS-208 <br> Principles of Paramedicine IV

This course builds upon the knowledge and skills learned in Principles of Paramedicine I, II, \& III. Topics: International Trauma Life Support (ITLS), Hazardous M aterials, Responding to Terrorist Acts, Rescue Awareness, Medical Incident Command, Abuse \& Assault, Crime Scene Response, EMS Stress Management, Ambulance Operations and Acute Interventions for Chronic

Care Patients. Students will demonstrate knowledge and perform manipulative skills under the supervision of the course instructor, program director, medical director, and/or skills preceptor Adherence to the attendance policy and a minimum final course grade of $B$ - must be achieved in order to advance in the program Prerequisites: Principles of Paramedicine III (EMS 207) and Paramedic Clinical Rotation III (EMS216). Co-requisite: Paramedic Clinical Rotation IV (EMS-217).

## EMS-214 <br> 3 Credits <br> \section*{Paramedic Clinical Rotation I}

Work-based learning experience conducted in a hospital/clinical setting that enables the paramedic student to apply specialized occupational theory, concepts, and skills learned in Principles of Paramedicine I (EM S-201). Students will complete a minimum of 150 hours in this clinical practicum. Students will integrate instruction with clinical experience under the supervision of a preceptor. Clinical rotations will be conducted in a variety of medical-related facilities to include, emergency divisions, respiratory therapy, anesthesia, surgical units, and labor and delivery. Students will be required to document all clinical time and complete program requirements for patient assessments,
intubations, medication administrations, IV Bolus, infusions, live births, and cannulations.
Adherence to the program requirements,
attendance policy, and receipt of satisfactory clinical evaluations must be achieved in order to advance in the program. Students are required to take and pass a terminal skill competency practical conducted by the program and/or medical director at the conclusion of this course. Co-requisite: Principles of Paramedicine I (EMS205).

## EMS-215

3 Credits

## Paramedic Clinical Rotation II

This course is a continuation of Paramedic Clinical Rotation I (EM S-214). It is a work-based learning experience conducted in a hospital/clinical setting that enables the paramedic student to apply specialized occupational theory, concepts, and learning skills in Principles of Paramedicine I (EMS-205) and Principles of Paramedicine II (EMS-206). Students will complete a minimum of 150 hours in this clinical practicum. Students will continue to integrate instruction with clinical experience under the supervision of a preceptor. Clinical rotations will be conducted in a variety of medical-related facilities to include: emergency divisions, intensive care/critical units, psychiatric and pediatrics. Students will be required to document all clinical time and complete program requirements for ECG interpretations including 12 lead, Advanced Cardiac Life Support (ACLS), patient assessments in psychiatric, pediatrics, geriatrics. Adherence to the program
requirements, attendance policy, and receipt of satisfactory clinical evaluations must be achieved in order to advance in the program. Students are required to take and pass a terminal skill competency practical conducted by the Program Director and/or the medical director at the conclusion of this course. Prerequisites: Principles of Paramedicine I (EM S-205) and Paramedic Clinical Rotation I (EM S-214). Co-requisite: Principles of Paramedicine II (EMS-206).

## EMS-216 <br> 1 Credit

## Paramedic Clinical Rotation III

This course is a continuation of Paramedic Clinical Rotation II (EM S-215). It is a work-based learning experience conducted in a hospital/clinical setting that enables the paramedic student to apply specialized occupational theory, concepts, and learning skills in Principles of Paramedicine I (EMS-205),

Principles of Paramedicine II (EMS-206), and Principles of Paramedicine III (EMS-207). Students will continue to integrate instruction with clinical experience under the supervision of a preceptor. Clinical rotations will be conducted in a variety of medical-related facilities to include: emergency divisions, intensive care/critical units, psychiatric, and pediatrics. Students will be required to document all clinical time and complete program requirements for ECG interpretations including 12 lead, Advanced Cardiac Life Support (ACLS), patient assessments in psychiatric, pediatrics, geriatrics. Adherence to the program
requirements, attendance policy, and receipt of satisfactory clinical evaluations must be achieved in order to advance in the program. Students are required to take and pass a terminal skill competency practical conducted by the Program Director and/or the medical director.
Prerequisites: Principles of Paramedicine II (EMS206) and Paramedic Clinical Rotation II (EMS215). Co-requisite: Principles of Paramedicine III (EMS-207).

## EMS-217 <br> 1 Credit

## Paramedic Clinical Rotation IV

This course is a continuation of Paramedic Clinical Rotation III (EMS-216). It is a work-based learning experience conducted in a hospital/clinical setting that enables the paramedic student to apply specialized occupational theory, concepts, and learning skills in Principles of Paramedicine I (EMS-205), Principles of Paramedicine II (EMS-206), Principles of Paramedicine III (EMS-207), and Principles of Paramedicine IV (EM S-208). Students will complete 50 hours in this clinical practicum. Students will be required to document all clinical time and complete program requirements for ECG interpretations including 12 lead, Advanced Cardiac Life Support (ACLS), patient assessments in psychiatric, pediatrics and geriatrics. Adherence to the program
requirements, attendance policy, and receipt of satisfactory clinical evaluations must be achieved in order to advance in the program. Students are required to take and pass a terminal skill competency practical conducted by the Program Director and/or the Medical Director.
Prerequisites: Paramedicine III (EMS-207) and Paramedic Clinical Rotation III (EMS-216). Corequisite: Principles of Paramedicine IV (EMS 208).

EMS-218
3 Credits
Paramedic Field Internship
Students will apply theory and acquired clinical skills while performing pre-hospital treatment under the supervision of experienced, certified paramedics. Upon successful completion of the course, students will have a working knowledge of entry-level paramedic skills, hospital/clinical operations and requisite field experience. At the conclusion of the course, students will have a terminal competency assessment which will be conducted by the program coordinator and/or medical director. Students will complete a minimum of 100 hours during this internship. Students must meet the minimum patient contacts set forth by the Massachusetts Office of Emergency Medical Services and/or the Committee on Accreditation of Education Programs for the Emergency Medical Services Professions (CoAEMSP). Adherence to the program requirements, attendance policy, and receipt of satisfactory field internship evaluations, and a final overall course grade of B- must be achieved in order to be eligible to sit for the National Registry of Emergency Medical Technicians, Paramedic written and practical exam. Prerequisites: Principles of Paramedicine IV (EMS-208 )and Paramedic Clinical Rotation IV (EMS-217) and permission of the Paramedic program director and/or medical director.

## Emergency Medical Technician

## EMT-103 <br> 7 Credits <br> Emergency Medical Technician

This course covers the rendering of emergency care to the sick and injured promptly and efficiently. It conforms to the EMT-B nationa standard curriculum, as adopted by the Commonwealth of Massachusetts, and is a prerequisite for taking the state EMT Exam. Students are responsible for taking the certification examination for EMT. Additional expenses may include supplies, equipment, and/or uniforms.

## English

## ENG-090

## Writing Skills I

The first part of a two-semester basic writing sequence, this course develops writing skills needed to begin work in the College Writing program. The course places primary emphasis on the development of good sentence writing skills through frequent practice. Such practice may take the form of writing journals, paragraphs, and short essays. Faculty provide attention to difficulties with grammar, punctuation, and spelling primarily on an individual basis. The course does not satisfy any part of the College Writing requirement for graduation. Placement is determined by assessment testing or faculty referral. Upon completion of Writing Skills I ENG090) with a grade of C or better, students enroll in Writing Skills II (ENG095).

## EN G-095 <br> Writing Skills II

3 Credits

This course develops language skills needed to communicate effectively in college study, in the professions, and in the business world. The course includes sentence formation, applied grammar, spelling, mechanics, and paragraph development. Note: Students must pass the Basic Writing Competency Exam in order to receive a passing grade for this course. The course does not satisfy the college writing requirement for graduation. Prerequisite: Grade of C or higher in Writing Skills I (ENG-090) or Academic Writing I (ESL-099) or Integrated ELL Level I (ELL-101) or exemption by placing into higher level course.

## ENG-111

3 Credits

## College Writing I

This course emphasizes writing as a process, from planning and drafting through revising and editing. Using personal experience, readings, and other sources, students write unified, coherent, well-developed essays and practice paraphrasing, summarizing, and using sources responsibly. To be eligible to take College Writing II (ENG112), students must earn a grade of $C$ or better for this course. The course meets General Education requirement "Academic Discourse". Prerequisite: A grade of $C$ or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG 095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## College Writing II

This course focuses on the research paper, the longer essay, argumentation, critical writing, and reading. The course satisfies the College's General Education requirement for Research Writing. Prerequisite: Grade of $C$ or higher in College Writing I (ENG-111).

## ENG-115 <br> riting Tutor Seminar

3 Credits
The course prepares skilled writers to work as peer tutors in the college's Writing Place. It provides advanced instruction in writing theory, peer tutoring practice, grammar and composition, with special emphasis on the writing process. Along with class time, students will spend 3 hours tutoring in the Writing Place each week beginning in Week 4. Throughout the semester, students develop strategies, problemsolving skills and greater understanding of composition theory and practice. Prerequisites: Grade of B+ or better in ENG 111 or course equivalent, professor recommendation, interview and permission of ENG 115 instructor.

ENG-203 3 Credits Creative Writing Workshop
This course introduces students to the writing of poetry, short stories, plays, and autobiographies. The course includes some model readings, but the main work is student writings in all four genres. The course satisfies the College's General Education requirement for "Creative Work." Prerequisite: Writing Skills II (ENG-095) or Intergrated ELL Level 3 (ELL-103) or placement in College Writing I (ENG-111).

## ENG-231 <br> Introduction to Fiction Writing

Everyone tells stories, but what makes a story" good"? Why are there some we want to hear over and over, tirelessly, even though we know what will happen in the end? In this class, students will look at solid story structure, the elements that make up a "good" compelling story, and ways to tell the tales we have to tell in the best possible way to capture an audience. Students will participate as both writers and critical readers in examining creative work of their own, their peers and of established authors. This course satisfies the College's General Education Requirement for "Creative Work." Pre/Corequisite: College Writing I (ENG-111).

## ENG-232 <br> 3 Credits

Introduction to Poetry Writing
This course offers a thorough, hands-on exploration of the principles of writing poetry with emphasis on the elements of craft, voice, form, and analysis of the techniques, structures and styles of established poets. Through extensive reading and writing exercises, students will be able to develop a deeper understanding of the historical and global context of the craft, how it resonates within contemporary culture, while strengthening their own poetic voice. By the end of the course, students will have produced a body of work that expresses his/her ideas or ideals in an original and coherent manner. The course satisfies the College's General Education requirement for "Creative Work." Pre/Co-requisite: College Writing I (ENG111).

## ENG-233 <br> 3 Credits

Intro to Creative Nonfiction Writing
This course offers an in-depth exploration of a unique and broadly-defined creative writing genre. By reading published works and writing original essays and memoir-style pieces, students will learn to employ literary techniques often ascribed to poetry and fiction in works of nonfiction. This course gives students experience with various sub-genres of creative nonfiction (narrative nonfiction, researched journalism, memoir) and also addresses the creative challenges unique to a genre whose name implies inventive truth-telling. Students will address the puzzling question of how to add vibrancy to true stories without changing their essential truths. Through the reading and writing
this course requires, students will develop thei voices, deepen intercultural competencies, and create a series of polished nonfiction works. This course meets the General Education requirement for Creative Work. Pre/Co-requisite: College Writing I (ENG-111).

## ENG-234 <br> Literary Publishing

3 Credits
This is an experiential learning course in which students take on the roles of writers, editors, administrators, and designers in order to publish a college literary magazine. Students will critically address all aspects of magazine production. Activities include writing and developing creative content; selecting manuscripts and artwork for publication; editing, designing and formatting magazine pages and covers; corresponding with contributors; magazine proofreading, producing, promoting; and coordinating a public reception. This course meets the General Education requirement for Creative Work. Pre/Co-requisite. College Writing I (ENG-111).

## Engineering

## ENR-101

4 Credits

## Introduction to Engineering/Lab

This course provides an overview of the engineering profession. Topics to be discussed include fields of study within engineering; the engineering profession, including engineering ethics; and engineering design and problemsolving. Emphasis is on team-building and a teamwork approach to engineering projects. Course meets 3 hrs. lecture -3 hrs. lab.
Prerequisite: A grade of C or higher in College Algebra for STEM (MAT-194) or exemption by placing into higher level course.

## ENR-103 3 Credits <br> Fundamentals of Computer-Aided <br> Drawing And Design

This course will introduce students to the use of computer software for creating engineering drawings and developing engineering designs and design models. Students will use the AUTOCAD software package as they learn standard views and dimensions for engineering drawings, replicate standard geometrical models, and create models and drawings for selected 2D and 3D engineering designs and projects. Pre/corequisite: Introduction to Engineering (ENR-101).

## ENR-260

3 Credits

## Engineering Statics

This course will apply the laws of Newtonian mechanics to help students attain the basic engineering science concepts that serve as the building block for further courses in engineering analysis and design. The course applies the equations of mechanics to the general engineering sciences, including solid, fluid mechanics, and materials, thereby contributing to the success of students as practicing engineers after graduation. Course meets: 3 hour lecture Prerequisite: Grade of C or higher in College Physics I/Lab (PHY-251). Pre/co-requisite: Grade of C or higher in Calculus II (MAT-282),

## ENR-265

3 Credits

## Engineering Dynamics

The course covers Kinematics and Kinetics of particles and rigid bodies, with the application of Newton's Second Law and the principles of workenergy and impulse. The course enables students to distinguish statics problems from dynamics problems and to identify inertial effects. The course also enables students who are interested in Engineering Mechanics or related disciplines to comprehend the vast applications of the
principles of dynamics ranging from structural design of vehicles, electro-mechanical devices such as motors and movable tools, biomedical devices such as artificial hearts and bladders, to predictions of the motions of satellites,
spacecraft, etc. Course meets 3 hours lecture. Prerequisite: Grade of C or higher in Engineering Statics (ENR-260). Co-requisite: O rdinary Differential Equations (MAT-285).

## ENR-270 <br> Strength of Materials

The course extends the equilibrium analysis covered in statics to deformable bodies, especially to various members that make up structures and machines. Students will learn the three fundamental concepts in this course, i.e. Equilibrium, Force-Temperature-Deformation Behavior of Materials, and Geometry of Deformation. The course includes the following concepts: stress and strain, stress transformation, temperature stresses, stress and deformation in bodies under axial, shearing, flexural, torsional and combined loadings, shear and bending moment diagrams, and Euler's columns. Course meets: 3 hour lecture. Prerequisite: Grade of C or higher in Engineering Statics (ENR-260). Corequisite: Ordinary Differential Equations (MAT285).

## Circuit Analysis and Design I/Lab

This is the first course of a two-course sequence in circuit analysis required for all Electrical Engineering Transfer Option students. An Introduction to electric circuits is presented, and circuits under continuous current are resolved. Basic circuit components (resistance, capacitance inductance, and operational amplifiers) are introduced, and RL, RC, and RLC circuit responses are analyzed as a function of different initial conditions. This course contains a laboratory component that is complimentary to the theory. Course meets: 3 hours lecture, 3 hours lab. Prerequisites: A grade of C+ or higher in Calculus II (MAT-282) and College Physics I/Lab (PHY-251) and Introduction to Engineering/Lab (ENR-101). Co-requisite: College Physics II/Lab (PHY-252).

## ENR-272 <br> 4 Credits <br> Circuit Analysis and Design II/Lab

This is a required course for the Electrical Engineering Transfer Option, and the second course in a two-course sequence covering circuit design. This course presents the basic tools to analyze frequency-dependent circuits using phasors, Laplace transformations, and Fourier analysis. Sinusoidal steady state, frequency response, and filters are also analyzed in detail. Course meets: 3 hours lecture, 3 hours lab. Prerequisite: Grade of C+ or better in Circuit Analysis and Design I/Lab (ENR-271). Pre/Corequisite: Ordinary Differential Equations (MAT285).

## EN R-275 <br> 4 Credits <br> Dogic Systems/Lab

This is a required course for the Electrical Engineering Transfer Option. This course provides the fundamentals of logic and number theory, combinational logic applied to circuits, sequential logic involved in operations on circuits, and register-level logic related to datapath and control circuits. Course meets: 3 hours lecture, 3 hours lab. Prerequisite: A grade of C+ or higher in Circuit Analysis and Design I/Lab (ENR271). Co-requisite: Calculus III (MAT-283).

## Environmental Science

## ENV-105 4 Credits <br> Environmental Science/Lab

This course is an introduction to the physical, chemical, and biological processes of the natural world. Emphasis is placed on the science of environmental processes, problems, and solutions. Case studies about land, air, and water pollution will be integrated throughout the course. The laboratory will introduce basic field techniques, internet research, laboratory skills, report writing, and data analyses. This course will lay the foundation for understanding the key concepts required for Environmental Science majors. This course satisfies the General Education requirement for Scientific Reasoning (previous area title Science and Technology) for all programs. Prerequisites: Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## ENV-110 <br> 4 Credits <br> Sustainable Resource Conservation

This course is an introduction to fundamental concepts of sustainability and resource conservation as related to environmental policy and environmental management. Through lectures, laboratories, and dialogue, students develop literacy in sustainability topics including environmental values and ethics; natural resource economics; environmental policies and regulations; sustainability management; sustainable development; ecosystem resources and management, biodiversity and wildlife conservation; forest and soil conservation, water conservation and quality, air quality, climate change and climate action planning. This course meets the General Education Requirement Scientific Reasoning (formerly area 5). Course meets 3 hours lecture; 3 hours lab. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## EN V-111 4 Credits <br> Survey of Renewable Energy

This course investigates the potential of renewable energy technologies to help solve environmental and economic problems within society. Areas of investigation include solar energy, wind power, hydropower, geothermal, fuel cells, biomass, ocean wave power, and alternative transportation options. Also addressed are conventional energy sources including oil, coal, natural gas, and nuclear energy. Consideration will be given to related issues such as costs, externalities, system efficiencies, emissions and other environmental impacts, financing incentives, and the regulatory and market forces impacting the alternative energy industry. Students will learn how to assess the viability of incorporating renewable technology, such as solar or wind power, for residential and commercial applications. This course satisfies the General Education requirement for Scientific Reasoning (previous area title: Science and Technology) for all programs. Class meets: 3hrs. lecture; 3 hrs. lab. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

EN V-113 4 Credits Introduction to $\mathbf{O}$ ceanography/Lab
This course integrates the physical, chemical, geological, and biological characteristics of the world 's oceans with emphasis on the New England coast and Boston Harbor. Topics include plate tectonics and the evolution of ocean basins, ocean sediments, coastal processes and landforms, physical and chemical properties of sea-water, atmospheric and oceanic circulation, the origins and dynamics of waves and tides, the coastal ocean, marine life, ocean productivity and resources, marine environmental concerns, marine policies, and cutting-edge marine technologies. Laboratory activities and online activities provide hands-on experiences or simulations about real-world oceanographic issues using oceanographic materials and techniques in the laboratory and in the field. Course meets 3 hrs. Lecture; 3 hrs. Lab This course satisfies the General Education requirement for Scientific Reasoning (previous area title: Science and Technology) for all programs. Prerequisites: Writing Skills II (ENG095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## ENV-115 <br> Earth Science <br> A study of the materials, principles, and

 processes that define and govern the Earth system. This course covers the fundamentals of geology: rocks, minerals, the rock cycle, geologic time, plate tectonics, earthquakes, volcanoes, geologic structures, weathering and erosion, hydrologic cycle, groundwater, glaciers and geologic hazards. Laboratory activities include mineral and rock identification, geologic structure and landform identification, interpretation of geologic maps and cross-sections, field geology, and other fundamental topics. This course satisfies the General Education requirement for Scientific Reasoning (previous area title: Science and Technology). Class meets 3hrs. lecture; 3 hrs. lab. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and a C or higher in Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.
## ENV-120 <br> 4 Credits

## Tropical Field Studies

This course is an investigation of the ecology, conservation, and diversity of tropical ecosystems. As part of a study-abroad student team, students will learn and participate in scientific field research methods on location in a tropical country. By participating in a variety of trips, and activities students will also investigate the interrelationship of local culture, ecotourism, and conservation. Students will be required to complete a self-designed scientific field research project and participate in a community services project while in the country of study. Past studies have occurred in Costa Rica and Nicaragua but future trips are not limited to these two tropical countries. Course requires additional travel fees and purchase of personal field supplies. This course will satisfy the General Education requirement for Scientific Reasoning (previous area title: Science \& Technology) for all programs Study-Abroad scholarships are available for qualified students. Class meets: 3 hours lecture 3 hours lab. Prerequisite: Submission of studyabroad application and approval of the Biology \& Chemistry Department. No previous science background required.

ENV-222 3 Credits Environmental Policy, Law, and Managemnt
This course covers the basic concepts in policy, the major environmental laws in the U.S, how policies are made, international conventions, and new management approaches. Topics will include environmental policy and politics; policy-making stakeholders and their role; major international agreements; enforcement; community-based planning; sustainability goals; and green plans. Linkages will be made to environmental topics and the management of food and agricultural production, biodiversity, development, pollution control, land-use, climate change, and sustainability goals. This is a central class for those interested in working in environmental policy and the management of natural resources. Prerequisite: ENV 105 or GOV 101 or GEO 101 or permission of instructor

## ENV-250

Global Environmental Change
Global Environmental Change draws from various scientific disciplines to explore the causes of, consequences of, and solutions to global-scale environmental issues affecting our planet and societies. The focus of this course is a study of Earth as a complex system and the role that natural and human influences play (and have played) in changing the Earth system throughout geologic and human history. This course provides an in-depth investigation of the science behind climate change, its history on our planet, the impact of humans on the climate system, the impact of climate change on humans and the natural world, and how the world has responded to and is preparing for climate change impacts. Also addressed are other pressing global environmental changes effecting Earth's oceans, soils, biodiversity, and atmosphere. Students in this course should be comfortable solving problems using computation, using computers or datasets to generate data, and visually interpreting or representing data. Prerequisite: ENG111, Completion of Q uantitative Problem Solving requirement (MAT 174 or MAT 181 or MAT 197), or permission of instructor.

## Electric Power Utility

## EPU-101 4 Credits <br> DC Circuit Theory \& Lab

This course provides an introduction to the nature of electricity in general, in-depth coverage of direct current electrical theory and laboratory practices. Topics covered include static electricity, the Bohr Atom, Ohm's Law, Kirchhoff's Law, network theorems, and magnetism. Course meets: 3 hrs. lecture: 3 hrs. lab. Pre/corequisite: Topics of Algebra/Trigonometry (MAT-193) or exemption by placing into higher level course.

## EPU-104 AC Circuit Theory/Lab

This course provides in-depth coverage of alternating current electrical theory. Topics covered include inductance, transformers, capacitance, reactance, impedance, and resonance. The j-operator is employed. Course meets 3 hrs. lecture/3 hrs. lab. Prerequisite: DC Circuit Theory/Lab (EPU-101).

## EPU-151 4 Credits

Fundamentals of Single Phase and Polyphase Metering
This course introduces students to the fundamentals of Single Phase \& Polyphase Metering, such as terminology and basic principles of meters. Students review basic math specific to metering, and gain knowledge of basic electricity and magnetism principles.

Students will be introduced to meter testing equipment, meter diagrams and standards, and learn technical data and how to read watt-hour and demand meter schematics. They will also learn about power factor analyzers, high amperage current transformer cabinets, meter demand theory and demand registers. Students are introduced to various instrument
transformers, their design, application and troubleshooting. They learn about high voltage metering equipment and how to safely install the equipment. In addition all students will learn how to connect electrical secondary services up to 600 volts from the pole to the house working off a ladder. Prerequisite: Admission to the Electric Power Utility Program.

## EPU-203 4 Credits Intro to Underground Operations

This course introduces students to the basic operation of underground systems. Through classroom instruction and extensive hands-on experience, students will become familiar with the underground network electrical system and the various job responsibilities of underground personnel. Students will learn how to use the power formula to determine wire sizes. Correct manhole entry/exit procedures will be demonstrated. Underground safety issues including emergency rescue procedures will be covered. The sizing, installing and splicing of underground cables will be taught. An equipment orientation will be performed to provide students with a basic understanding of all underground apparatus. (Note: This course covers many of the same topics as Underground and Substation O perations (EPU-153), but in greater detail and with more depth and hands-on practice.) Prerequisite: Acceptance into Electric Power Utility Technolology Program.

## EPU-205 <br> 4 Credits

Introduction to Substation 0 perations
This course introduces students to electric substations. Through classroom instruction and extensive "hands-on" experience students will learn about the basic purpose and operation of substations as key parts of power distribution systems. Students will learn the various job responsibilities of substation personnel. Safety procedures including vault entry/exit and rescue procedures will be discussed and demonstrated. Students will learn how to read and interpret substation prints. Substation equipment orientation will be performed to provide students with an understanding of substation equipment. Students will become familiar with the dispatch center and its functions. (Note: This course covers many of the same topics as Underground and Substation O perations (EPU-153), but in greater detail and with more depth and hands-on practice.) Prerequisite: Acceptance into the Electric Power Utility Technology Program.

## EPU-207

Introduction to 0 verhead Linework
This course introduces students to the basic fundamentals of overhead linework, and installation techniques. During this intensive training period students will learn to become comfortable working with the tools and equipment used to build an overhead distribution system. Students will be introduced to and become familiar with important sections of safety in the utility industry including the effects of electrical shock and burns. Basic hand tools will be assigned and students will learn how to care for and use the equipment. Students will also be trained in CPR-AED and OSHA 10. Students will be trained in the use of company derricks and buckets. For those students who express a desire to learn to climb utility poles, instruction will be provided. Prerequisite: Acceptance into the Electric Power Utility Technology Program.

EPU-251
3 Credits
Electric Power/Utility Tech Internship
This course will cover a variety of topics that consist of practical work experience in the NSTAR workforce environment involving working on line trucks and learning and performing all of the tasks of an overhead line worker. The course will also cover the instruction and practical exercise of soft skills in today's work environment. Soft skills are those skills used every day in the workplace to assist in making assigned tasks easier to accomplish through teamwork and collaboration in a multi-cultural environment. Soft skills are increasingly being incorporated in job descriptions throughout the workforce as companies and institutions seek to employ students that have had successfully incorporated soft skills as part of their curriculum. Prerequisites: College Writing I (ENG111), Fundamentals of Single Phase and Polyphase Metering (EPU151), Underground \& Substation Operations (EPU153), and Group Dynamics (PSY107).

## EPU-257

3 Credits

## Power and Distribution Systems

This course introduces the basic concepts of electrical power systems. Subject areas include electrical power generation, transmission, and distribution. Distribution system layout, distribution transformers, transmission line fault calculations and transmission line protection will also be covered. Prerequisite: AC Circuit Theory (EPU-104).

## English As a Second Language

## ESL-074 3 Credits

Listening Comprehension \& Discussions
In this low-intermediate course, students develop academic listening skills and participate in small group and whole class discussions based on articles, lectures, and multi-media sources. Students will learn grammar and vocabulary in the context of the materials used for listening, speaking, reading, and writing activities. Students must earn a C or better in order to pass the course. Prerequisite: Placement into ESL level I.

## ESL-075

3 Credits
Grammar Structures \& Editing
This low-intermediate course focuses on improving grammar and editing skills through weekly grammar lessons, writing assignments, class discussions and assessments. Students will develop their ability to compose grammatically correct and comprehensible sentences and short writings. Students receive individual feedback that targets their needs. Students must earn a C or better in order to pass the course.
Prerequisite: Placement into ESL Level I.

## ESL-078 <br> 3 Credits

## Academic Reading I

In this low-intermediate course, students learn pre-reading skills, organizational styles, academic vocabulary, dictionary use, referents, critical reading, basic verb tenses and parts of speech, and how to summarize, paraphrase, and identify main ideas and supporting details. Students will learn to complete homework assignments in basic MLA format. Students must earn a C or better in order to pass the course. Prerequisite: Placement into ESL Level I.

ESL-079
3 Credits
Academic Writing I
In this low-intermediate course, students learn to write paragraphs and short essays through an academic writing process in a variety of rhetorical styles using basic M LA format. Student will write from personal experience and respond to reading by paraphrasing and quoting. Students will learn
to write different sentence types, using coordinators and subordinators. Punctuation and grammar will be taught, and students will apply their knowledge by revising and editing their papers. Students must pass the ESL079 Writing Competency Exam and earn a C or better in order to pass the course. Prerequisite: Placement into ESL Level I.

ESL-086
3 Credits

## Academic Listening \& Note-Taking

This high-intermediate course focuses on
listening and note-taking skills. Students develop a system for note-taking and learn how to use their notes to answer comprehension questions as well as to complete writing assignments. All listening and note-taking activities include reading and writing exercises. Students learn grammar in the context of the materials used for listening activities and student generated writing. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.

ESL-087
Contemporary Issues \& Conversations
In this high-intermediate course, students practice and demonstrate effective speaking functions in small-group and whole-class discussions of academic reading materials. Students develop a method for delivering an oral presentation to a large group. All speaking activities are organized around reading and writing exercises. Students learn grammar and build their level-appropriate academic vocabulary in the context of speaking, in the context of the reading materials, and in the context of student generated writing. Students must earn a C or better in order to pass the course Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.

## ESL-088

Academic Reading II
In this high-intermediate course, students increase their level-appropriate vocabulary and develop their reading skills and strategies as they analyze, discuss, and write about longer readings Students are also introduced to critical thinking skills such as drawing inferences, understanding idioms and figures of speech, and recognizing purpose and perspective. Students learn grammar in the context of the reading materials and in student generated writing. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.

## ESL-089

Academic Writing II
In this high intermediate course, students develop their writing skills with a focus on the process of college writing from planning and drafting to revising and editing. Students demonstrate their critical thinking skills by writing paragraphs and essays from their personal experience and from readings of moderate complexity. Students practice correct grammar and mechanics in the context of the readings and their own writing. Students must pass the ESL089 Writing Competency Exam and earn a grade of C or better in order to pass the course. Students must earn a C or better in order to pass the course Prerequisites: Grade of C or better in ESL074 ESL075, ESL078, and ESL079, or placement.

## ESL-096 <br> Lecture Comprehension \& Academic Vocabulary

In this advanced course, students develop an academic note-taking system as they listen to lectures and authentic sources. Students practice using their notes to answer comprehension questions, write summaries of sources, and
compose responses to critical thinking questions Students learn advanced academic vocabulary and grammar in the context of advanced level readings, websites, and lectures. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089 or placement.

## ESL-097

3 Credits
Academic Discussions \& Presentations
This advanced course focuses on the communication skills necessary in an academic setting. Students develop and on understanding and analyzing main ideas and supporting details of articles improve a method for delivering an oral presentation to a large group using effective delivery, visual aids, secondary sources, and levelappropriate academic vocabulary. Students practice comprehensible pronunciation along with stress and intonation patterns. All speaking activities are organized around academic reading materials which students will write about and discuss in small groups. Students must earn a C or better in order to pass the course.
Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089 or placement.

## ESL-098

3 Credits

## Academic Reading III

This advanced course focuses on the critical and analytical reading skills necessary for success with college level materials. Students demonstrate comprehension of level-appropriate readings through class discussions, writing assignments, and other assessments. Students also develop critical (higher order) thinking skills by interacting with the readings and by summarizing,
paraphrasing, quoting, responding to, and evaluating readings. Students do extensive work on understanding and analyzing main ideas and supporting details of articles and essays. Students learn grammar and academic vocabulary in the context of the reading materials. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089, or placement.

## ESL-099

3 Credits

## Academic Writing III

This advanced course focuses on the academic writing skills necessary for success in college content courses. Students develop their abilities with sentence structure, paragraph writing, and essay writing through extensive practice with multiple drafting, revising, editing, and proofreading. Students write from personal experience, answer essay questions from readings of substantial complexity, and write essays using research sources. Students learn grammar in the context of the readings and student generated writing. Students must pass the ESL099 Writing Competency Exam and earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089 or placement.

## Environmental Sustainability

| ESM -105 | 3 Credits |
| :--- | :--- |
| Green Buildings |  |

## Green Buildings

This course provides a framework for making practical design and construction decisions that are environmentally responsible by focusing on LEED (Leadership in Energy and Environmental Design) building standards. After completing the course, students will have the ability to sit for the LEED Green Associate Exam. Topics include trends in green building, costs and benefits of green buildings, third party certifications and rating systems, site selection and orientation, sustainable landscapes, storm water management, water efficiency, energy demand, energy
efficiency, renewable energy in buildings, ongoing building performance, waste management, building materials, and indoor air quality. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and Foundations of M ath (MAT-093) or exemption by placing into higher level courses.

## ESM-115

Sustainable Facilities Management
This course highlights the responsibilities, policies, and practices involved with managing the built environment to achieve sustainable goals. Students will gain an understanding of facilities operation, maintenance, architectural blueprint interpretation, health \& safety awareness, and occupant engagement. Students will learn how to select and assess energy usage of HVAC systems, electrical systems, lighting systems, and heating systems. Course content will center on facilities management as a process, and its relationship to other functions within an organizational setting. Students will explore the most current strategies and issues in the industry today, including sustainability, productivity, green buildings, as well as human and environmental factors. This course will utilize a combination of classroom techniques (presentation, discussion, team projects, case studies, and guest speakers) to give the students a full understanding of the issues and complexities of sustainable facilities management. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and Foundations of M athematics (MAT-093) or exemption by placing into higher level courses.
ESM-205
3 Credits
Green Existing Buildings: Operation and Maintenance
This course is designed for ESM students and professionals who are looking to gain project experience on existing Leadership in Energy and Environmental Design (LEED) projects. This course is for students interested in enhancing operations and maintenance in existing buildings. Students will learn the requirements and calculations required for the following LEED credits: Sustainable Sites, Water Efficiency, Energy \& Atmosphere, M aterials \& Resources, and Indoor Environmental Quality. Students may accrue continuing education units that are required to advance to the LEED AP level, or maintain their accreditation by achieving mandatory Credentialing M aintenance Program hours by using BHCC's Health and Wellness Center which earned LEED Gold certification under version 2.2 of the United States Green Building Council's green building program. Students may learn to manage LEED project details, complete documentation requirements for LEED credits and prerequisites, upload supporting files, submit applications for review, receive reviewer feedback, and track their certification process using LEED-O nline, a primary resource for managing the LEED documentation process. This course will help prepare students to sit for the LEED AP existing Building $O$ perations and $M$ aintenance exam. This course is ideal for developers, contractors, architects, lawyers, builders, engineers, product representatives, real estate brokers, and anyone interested in understanding green building principles. Prerequisite: Green Buildings (ESM105) or possession of LEED GA accreditation with approval of program director.

## ESM-211

3 Credits Project Management and Finance for Energy
This course examines the theory and practice of Project Management as applied to renewable energy and energy efficiency projects. The course also explores financial considerations for
sustainable energy projects, as well as a variety of funding mechanisms. Special focus will be applied to project life-cycles, planning, controlling, and coordinating efforts of multiple individuals and/or working groups. Students will gain an understanding of financial measures of project performance, budgeting, feasibility, and explore various funding mechanisms including government incentives, specialized loans, and performance contracts through case studies. Prerequisite: Survey of Renewable Energy/Lab (EN V-111).

## ESM-299

3 Credits

## Energy \& Sustainability Internship

This course provides relevant field and/or research experience integrating theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the clean energy and sustainability management fields. Prerequisites: Enrollment in the Energy and Sustainability M anagement Program, have completed a minimum of 10 credits in ESM courses with a B average or higher, or approval of ESM program directors. Students who do not meet attendance standards for the ESM program may not be eligible to participate in the internship.

## Finance

## FIN-106 <br> 3 Credits Introduction to Corporate Finance

This course is an introduction to corporate finance. The objective of the course is to introduce concepts and techniques of finance. This course will provide an introduction to present value techniques, capital budgeting principles, asset valuation, the operation and efficiency of financial markets, the financial decisions of firms, and international finance. This course is open to all majors.
FIN-111
3 Credits Investments
Students will be introduced to the dynamic world of investing by evaluating strategies endorsed by many of the pioneers within the investment industry. A major objective of the course will be to analyze techniques to successfully manage risk and achieve high returns. An in-depth examination of key economic reports will enable students to prepare a balanced portfolio of investments. Students will be exposed to the following investment vehicles; cash equivalents, bonds, mutual funds, stocks, real estate, and leveraging with options and futures. Prerequisite: Principles of Accounting II (ACC-102).

## FIN-112

3 Credits

## Personal Finance

An overview of personal financial planning, this course covers the following topics: the intelligent use of consumer credit, budgets, banking, the time value of money, investments, insurance, retirement, and other long-term planning and their tax ramifications. It is intended for students at all levels and for all programs of study.

FIN-210
3 Credits

## Financial Management

This course uses the tools of financial analysis such as ratios, budgets, forecasting techniques, present value concepts, and cash flow. The course also explores short, intermediate, and long-term sources and uses of cash. Prerequisite: Principles of Accounting II (ACC-102).
FIN-211
3 Credits
Money and Banking
This course covers an economic analysis of financial institutions and markets in the world economy. It covers institutional and economic factors in the determination of the money supply.

The course includes the commercial banking system and the money and capital markets. Current policy issues are debated. Prerequisites: Macroeconomics (ECO-201) and Microeconomics (ECO-202).

FIN-213
3 Credits
Mutual Fund Industry
This course introduces the myriad aspects of the mutual fund business including the way mutual funds are structured, regulated, marketed, and distributed. In addition, the course explores shareholder serving systems and technology. Prerequisites: Principles of Accounting II (ACC102) and Investments (FIN-111).

## Fire Science

## FPS-107

3 Credits
Fire Company Officership
This course examines the scope and functions of the fire company officer. Topics include the role of the fire service, departmental organization administrative and management procedures, training, public relations, tactics and strategy, and fire prevention.

3 Credits
Fire Service, This Century and the Next, What Should We Expect?
This course provides the student with the history of the fire service and its culture. The student will research the ways that the fire service has changed over the past century and how it is expected to change in the next century. Topics will include the history of the fire service, changes in the fire service past and future, the evolution of equipment in the fire service, firefighter deaths and statistics as they pertain to the National Fallen Firefighters Foundation and its 16 Firefighter Life Safety Initiatives, as well as a field trip to the $N$ ational Fire Protection Association (NFPA) and the role of the state training centers and a field trip to the Massachusetts Firefighting Academy in Stow, MA. These topics will be discussed with particular focus on the National Fire Administration's Fire and Emergency Services Higher Education (FESHE) Professional Development Model and its explanation of how education, training, experience and individual development is needed for a successful job in the fire service. This course incorporates the learning outcomes of BHCC's Learning Community Seminar and fulfills the Seminar's requirements for first-time college students.

FPS-119 3 Credits Principles of Fire and Emergency Services Safety and Survival
This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. Prerequisites: Grade of $C$ or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG-095) and Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## FPS-123

3 Credits
Principles of Emergency Services
This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems;
introduction to fire strategy and tactics; and life safety initiatives. Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses

## FPS-125

3 Credits

## Hazardous Materials Chemistry

This course provides an overview of basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity, and health hazards encountered by emergency service. Prerequisites: A grade of $C$ or higher in Writing Skills II (EN G-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## FPS-127

3 Credits

## Fire Protection Hydraulics and Water

 SupplyThis course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems. Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103); and a grade of C or higher in Foundations of Algebra (MAT-097) or Pre-Statistics (MAT-098) or exemeption by placing into higher level courses.

FPS-133
3 Credits

## Fire Protection Systems

This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. Prerequisites: A grade of C o higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG 095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## FPS-135 3 Credits <br> Fire Behavior and Combustion

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.
FPS-139 3 Credits

## Fire Prevention Services Safety and

 SurvivalThis course provides fundamental knowledge relating to the field of fire prevention. Topics include: the history and philosophy of fire prevention; the organization and operation of a fire prevention bureau; the use and application of codes and standards; plans review; fire inspections; fire and line safety education; and fire investigation. Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## FPS-221 <br> 3 Credits

## Strategy and Tactics

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents. Prerequisites: Principles of Emergency Services (FPS-123) and a grade of C or better in Writing Skills II (ENG-095) and Academic Reading III (ESL098) or Reading Skills II (RDG0-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

FPS-223
3 Credits Building Construction for Fire Protection
This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integated ELL Level III (ELL103) or exemption by placing into higher level courses and Principles of Emergency Services (FPS-123).

## French

## FRE-101 <br> Elementary French I

This course introduces students to the sounds and structures of French with emphasis on the acquisition of a limited but useful vocabulary and is offered for students with little or no previous knowledge of French. The course is not intended for native speakers or for students who have studied this language within the last three years.
FRE-102
Elementary French II
This course covers a continuation of Elementary French I (FRE101) and places emphasis on speaking and reading skills. This course satisfies General Education requirement "Creative Work". Prerequisite: Elementary French I (FRE-101) or one year of high school French.

## FRE-201

3 Credits

## Intermediate French I

This course is a review of basic French language skills with emphasis on conversational skills and graded reading selections for the acquisition of a broad, active vocabulary. Prerequisite: Elementary French II (FRE-102) or two years of high school French.

## FRE-202 <br> 3 Credits

## Intermediate French II

This course is a continuation of Intermediate French I with emphasis on self-expression through speaking and writing. Prerequisite: Intermediate French I (FRE-201) or three years of high school French.

## Geography

## GEO-101

3 Credits

## World Regional Geography

This course examines the physical and human geographical context of major social, cultural, economic, and political issues in selected regions of the world, including but not limited to the following concerns-globalization, urbanization, environmental and climate studies, demographics, geopolitics, colonialism, plate tectonics, earth hazards-and develops a mastery of maps and other visual aids as means of learning and communication. Regions covered include the Americas, SubSaharan Africa, Europe, the Russian Domain, North Africa/SW Asia, Central Asia, East Asia, South Asia, Southeast Asia, Australia, and Oceania. This course meets the General Education requirement for Community and Cultural Contexts. Prerequisites: Grade of C or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG-095); and Writing Skills I (ENG-090) or Academic Writing III (ESL-099); or Integrated ELL Level III (ELL-103) or exemption by placeing into higher level courses.

## German

## GER－101

3 Credits
Elementary German I
This course teaches students to read，speak，and write elementary German including mastery of approximately five hundred basic vocabulary words． The course covers the basic structure of the language．The course is offered in alternate years．

## G ER－102

3 Credits
Elementary German II
This course builds upon the skills learned in Elementary German I（GER101）by advancing the language structures，word forms，and vocabulary． The course meets General Education requirement for Creative Work．Prerequisite：Elementary German I（GER－101）．This course is offered in alternate years．

## Geographic Info Systems

## G IS－224

4 Credits
Intro to Geographic Information Systems
Geographic Information Systems（GIS）are a powerful way to access，map，and analyze geographic information．This course introduces the concepts of GIS and geospatial analysis of databases．Through a series of lectures，hands－on computer－based exercises，and web enhanced modules，students will learn the essential elements of a GIS，hardware requirements，GIS software，data acquisition，data structures，spatial databases，methods of data analysis and spatial modeling，and applications of GIS．This course is designed as a core requirement for the A．S． Environmental Science program but can also be used as a stand－alone course to compliment a wide range of academic disciplines to map resources and other mapping related functions of planning and management．Prerequisite： Statistics I（MAT－181 or Precalculus（MAT－197）or exemption by placing into higher level course．

## Government

## GOV－101

3 Credits
Government／Politics in US
This course provides an overview of the foundations，processes，and institutions of the United States federal government．Topics covered include the Constitution，federalism，civil liberties，civil rights，public opinion，the media， political participation，campaigns，elections， public policy，and the organization and functions of the three branches．Special emphasis is placed on the various channels of citizen influence．This course meets the General Education requirement for Community \＆Cultural Contexts．Prerequisites： Grade of C or better in Academic Reading III （ESL098）or Reading Skills II（RDG 095）；and Writing Skills I（ENG090）or Academic Writing III （ESL099）or exemption by placement testing．

## GOV－211

3 Credits

## Comparative Governments

This course will discuss governments and politics in a global setting．Students will consider political and social institutions in a variety of countries and then analyze issues of power and economic development in the context of globalization． Prerequisite：at least 9 college－level credits．

## G OV－220 <br> 3 Credits <br> Introduction to International Relations

This course introduces students to the major theoretical debates in International Relations and situates the field within the context of the discipline，Political Science．It focuses on
significant ideas，processes and institutions which explain the interrelations between the various actors in the international system，looking specifically at nation states and supranational and international organizations．Special attention is given to research methodologies and to questions of ideology，conflict，trade，finance human rights，identity based differences （ethnicity，gender，etc．），and the dynamics of globalization．Prerequisite：Grade of C or better in College Writing I（ENG 111）．Prerequisite：ENG 111.

## Gas Utility

G UT－101 4 Credits
Introduction to the Utility Industry
This lab course presents an introductory
examination of the history，concepts and applied techniques of the natural gas and associated utilities including communications（fiber optics）， electric，steam and condensate，and water and sewer．Special focus will be placed on providing the background and context for students to understand the evolution of the utility industry． The lab portion of the course will provide students with the knowledge and skills required to demonstrate the competencies required to obtain eight Basic O perator Q ualifications used in the winter intersession two week work experience and the summer internship．Students will be introduced to heavy equipment， specialized tools and materials used in the utility industry．Prerequisites：Acceptance into the Gas Utility Technology Degree Option Program．

## G UT－102

4 Credits
G as Utility Technology I
This lab course further defines the tools， challenges，processes，and safety measures used in the natural gas utility industry and explores the components that make up the complex transmission and processing methods．The lab portion of the course will be a hands－on learning experience focused on teaching students about specific task operator qualifications（ $O Q$＇s）that are necessary to work in the natural gas industry in order to ensure safety and quality．Students may earn between 8－15 additional task specific OQ＇s which will allow them to take on more responsibility in the field．Prerequisites：Grade of C or higher in Introduction to the Utility Industry （GUT－101）．

## G UT－103 <br> 4 Credits <br> Gas Utility Technology II

This lab course creates a deeper understanding of the natural gas industry and discusses the future of natural gas as an energy source both domestically and globally．This course explores environmental concerns（i．e．with land，air，and water）that could be affected due to pollution by byproducts of the tracking process．The lab portion of the course further explores specific operator qualifications．Students will be immersed in best practice discussions with subject matter experts and exposed to some of the more challenging tasks within the industry． Prerequisite：Grade of C or higher in Gas Utility Technology I（GUT－102）．Co－requisite：Utility Industry Regulations，Ethics and Safety Standards （GUT－104）．
G UT－104 3 Credits

## Utility Industry Regulations，Ethics，and

 Safety StandardsThis course will provide students with an introduction to local，state and federal regulations governing the utilities industry． Emphasis will be placed on regulatory compliance，safety standards，and，business ethics．Special focus will be placed on Pipeline
and Hazardous M aterial Safety（PHMSA）
regulations governing the transportation of hazardous materials and spill response； O ccupational Safety and Health Administration＇s （OSHA）regulations；CPR and First Aid requirements and training；M anual for Uniform Traffic Control Devices（MUTDC）；M assachusetts Department of Public Utilities＇（DPU）regulations， and local permitting requirements．Prerequisite： Gas Utility Technology I（GUT－102）．Corequisite：
Gas Utility Technology II（GUT－103）．

## G UT－105

4 Credits
Leadership for the Utility Professional
This lab course introduces the traits required for effective leadership and advancement to foreman in the utility industry．It begins with an introduction to customer service，transitions to a more in depth exploration of safety and compliance issues，quality workmanship，and reliability standards．Students are then introduced to global economics，geopolitics，and the environment．The course continues to explore tracking，hydraulic fracturing，horizontal drilling， and the development of a worldwide natural gas infrastructure．Students will also be introduced to additional tools and technology utilized in the natural gas pipeline replace，repair，and maintenance industry．The lab portion further explores specific operator qualifications．Students will be immersed in best practice discussions with subject matter experts and exposed to some of the more challenging tasks within the industry． Students have an opportunity to earn an additional 8－15 O perator Q ualifications（ 0 Q＇s）． Prerequisites：Grade of $C$ or higher in Gas Utility Technology II（GUT－103）and Utility Industry Regulations，Ethics and Safety Standards（GUT－ 104）．

G UT－299
3 Credits
Gas Utility Technology Summer Internship
This course enhances the academic experience for students enrolled in the Gas Utility Technology Degree Option Program．All internships take place at Feeney Brothers Excavation，LLC or another utility company． Students engage in activities that improve knowledge of the practical world of work and help them gain professional experience．The internship experience applies resources gained from students＇study in the classroom and lab components．This is accomplished while in a supervised on－the－job（OJT）training environment with assigned mentors．A faculty coordinator supervises and grades all courses．Students are responsible for following all guidelines in the BHCC Internship Handbook．Prerequisite：A grade of C or higher in Gas Utility Technology I （GUT－102）and permission of Department Chair．

## History

## HIS－102

3 Credits

## History of Modern Europe in Global

 Cont RenaissanceThis history course is a survey of the major intellectual，social，economic，artistic and political developments within the European continent， and beyond，since the 16th century．It will cover the processes of state－building，colonization and decolonization to better understand the roots of contemporary institutional and ideological problems．This course meets the General Education requirement for Community and Cultural Contexts．Prerequisites：A grade a C or higher in Academic Reading III（ESL－098）or Reading Skills II（RDG－095）and Academic Writing III（ESL－099）or Writing Skills II（ENG－095）；or Integrated ELL Level III（ELL－103）or exemption by placing into higher level courses．

## HIS-103

3 Credits
Ancient, Classical \& Medieval History
A multi-disciplinary survey of the historic evolution of the European continent from its roots in the ancient world through the Classical and Medieval periods. Artistic, ideological, economic, social and political questions are examined in order to understand the foundation of the ideas and institutions of the modern world. This course meets the General Education requirement for Community and Cultural Contexts. Prerequisites: A grade a C or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG-095) and Academic Writing III (ESL-099) or Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses

## HIS-111

3 Credits
History of Pre-Modern World
This course examines similarities and differences among the major world civilizations before the modern era. Topics include traditions of governance, art, religion and philosophy, technology, family structure, and everyday life. The course satisfies General Education requirement "Community and Cultural Contexts". Prerequisites: Grade of C or higher in A cademic Reading III (ESL-098) or Reading Skills II (RDG-095) and Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## HIS-112 <br> 3 Credits

Modern World History
This course offers a study of the major world civilizations of the modern period from approximately 1500 to the present. This will include analysis of the defining characteristics of various world regions and their interactions in the accelerating process of globalization. Communities and contexts will be examined in light of the modernizing revolutions in science, philosophy, politics and technology; religion, colonization and decolonization, world wars, and the creation of the interconnected modern world system. No previous history course is required. This course fulfills the requirements for the General Education Area "Community and Cultural Contexts". Prerequisites: Grade of C or higher in Academic Reading III (ESL-098) and Academic Writing III (ESL-099) or Reading Skills II (RDG-095) and Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## HIS-117

Women in U.S. History
This class will explore women's roles in American history. It will provide a chronology of the progress of their role from chattel to citizens. Cultural phenomenon including gender identity, economics, government and law, and mass media will be examined in relation to their impact on women. This course will provide students with valuable insight into the women's movement and provide them with a working definition of feminism and its goal. Prerequisites: Grade of C or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG-095) and Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## HIS-121 <br> 3 Credits <br> Found. of Historical Thinking \& Analysis

This course introduces foundational methods, approaches, and conceptual frameworks for doing history. Students practice constructing historical narratives and explanations grounded in analyzing primary sources, critically reading secondary works, and communicating historical knowledge to various audiences. Students
evaluate evidence from primary sources and contextualize it using secondary works. Students analyze how social power shapes and reflects the construction of archives, evidence, narratives, and public history education. Students reflect on their own perspective as a historian, and consider their distinctive intellectual assets and specific forms of community accountability. Students consider some ways of knowing characteristic of the discipline of history, and analyze secondary works by historians to identify various approaches to gathering evidence from primary sources. Students assess gaps in historical narratives and archives; read scholarly works that have used creative approaches to gather evidence toward rectifying historical silences; and put their historical imagination into practice by creating signature work. Prerequisites: College Writing I (ENG 111) and Modern World History (HIS 112)

## HIS-151

US History: Colonization through the Civil War
This course traces the growth and development of America from colonial beginnings through the Civil War. The course devotes major attention to the people, critical issues, and significant forces that determined the course of events that shaped our civilization. The course satisfies General Education Standard "Community and Cultural Contexts". Prerequisites: Grade of $C$ or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG-095), and Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.
HIS-152
3 Credits

## US History: Reconstruction to Present

This course covers the rise of the United States from the turmoil of the Civil War to superpower status. The course examines the cultural, economic, diplomatic, and political forces that have given the nation its shape. The course meets General Education requirement for Community and Cultural Contexts. Prerequisites: Grade of C or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG-095), and Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## HIS-230 3 Credits

## The American Civil Rights Move

This course examines the start of the modern American civil rights movement from the Brown v. Topeka decision to the women's liberation movement. The evolution and impact of major organizations such as the SNCC, SCLC, CORE, NAACP and others will be studied. The course will also critique the impact of national figures such as M artin Luther King J r., M alcolm X, J ames Farmer, Huey Newton and others as well as the impact of the movement on white students and the anti-war movement. Lastly, it will examine the impact of contemporary movements on today's America, such as the Black Lives M atter movement and others. Prerequisites: A grade of C or higher in College Writing 1 (ENG-111) and a history course (HIS-102, HIS-112, HIS-151 or HIS152) or by permission of the instructor.

## HIS-231

3 Credits

## African American History

This course offers an intensive study of how African Americans shaped and contributed to American history. The course focuses on the experiences of African Americans in the social economic, and political history of the United States from the era of Reconstruction to the present. Topics include the lives of African Americans during Reconstruction, the Great Migrations, the Harlem Renaissance, responses to anti-black racism, the rise of the modern civil
rights movement, and the evolving complexities of black identity. The course engages students in a critical examination of the variegated patterns of African Americans' perspectives on American social conditions in the late nineteenth, twentieth, and twenty-first centuries. Students consider landmark contributions in African American historiography. Students produce a research paper, review essay, or similar signature work in history aligned with the course topics. Prerequisite: Grade of C or better in College Writing 1 (ENG 111) and a history course (HIS 102, HIS 112, HIS 151 or 152) or by permission. To request permission, email: history@bhcc.edu

## HIS-232

Asian American History
This course offers a sweeping overview of the themes and issues that have animated the history of Asian-descended peoples in the United States. Through explorations of immigration, assimilation, empire, labor organizing, transnational political and economic forces, political ideologies, community organizing, racial identity formation, various types of intergroup solidarity, and more, students will get a wellrounded sense of Asian American history which will better prepare them to live in our diverse, polycultural world. Given our location, special attention will be paid to local Asian American history and communities here in Greater Boston. Students in the course will conduct original historical research and produce papers and/or multimedia representations of their research. Students will critically engage historiography and secondary literature relevant to the study of Asian American history. Prerequisite: College Writing (ENG-111)

## Honors

HON-200

## Honors Seminar

This interdisciplinary seminar treats a selected theme through perspectives available from the humanities, social, and natural sciences. Presenters and topics differ each semester depending on current student interests and faculty availability. The course is required for all students enrolled in the honors program. Students who are not enrolled in the honors program may be admitted with permission of the instructor. The course meets General Education Requirement for General Education Elective.

## Hospitality

HRT-105

## Hospitality Seminar

This course provides students with an in depth, experiential understanding of the options available within the hospitality industry. Topics covered include industry specific areas such as hotels, resorts, cruises, tours, convention and visitors' bureaus and travel agencies with particular focus on the skills and abilities that each individual needs to create a successful career. Guest speakers and site visits are an integral part of this course.

## HRT-109

3 Credits
Hospitality Marketing Management
This course examines the market environment in which a firm operates. The course covers communications principles and their application to sales goals. It considers effective utilization of tools and techniques of merchandising in hotels and restaurants. Prerequisite: Principles of Management and Service in Hospitality (HRT121).

## HRT－112 <br> 3 Credits <br> ood \＆Beverage for Hospitality Prof

This course covers the operations of dining and lounge services as they relate to the tasks of effective use of dining space，job assignments， and labor cost control．The course also covers these elements in relationship to optimum staffing，scheduling and productivity analysis．In addition，students discuss and practice issues in training，supervision，and quality guest services． A special emphasis is placed on brand recognition，company philosophy，marketing， sales，and beginning hospitality accounting to include basic financial statements．

## HRT－117

3 Credits

## Hospitality Law

This course examines the common and statutory law of the hospitality and tourism industry．The legal aspects of hotel and restaurant operations， employment law，tort liability，civil rights law and Americans with Disabilities Act compliance are also addressed

## HRT－119 Basics of Meeting Management

This course covers applied knowledge and skills that students need to plan professional meetings and conferences．The course takes students through the step－by－step process that exposes them to the decisions，problems，and concerns of planning effective meetings and programs that constitute a professional conference．The class format requires students to undertake a team project based on a variety of typical professional specifications．

## HRT－121

3 Credits
Principles of Management and Service in Hospitality
This course introduces the principles of sound business management，focusing specifically on the unique needs of service industries．Students will understand the business structures and strategies used in hospitality．Particular focus will be paid to communication skills，managing people，and ensuring quality service within the hospitality and travel industries．

## HRT－122

3 Credits

## Managing Groups

This course introduces students to group sales， support and tour management．Students will learn the skills necessary to handle the management of large groups of people over different modes of travel and to different destinations．Prerequisite：Basics of Meeting Management（HRT－119）．

## HRT－125

3 Credits
Principles of Hospitality Finance and Accounting
This course encompasses basic accounting principles within the unique context of the hotel industry and financial management strategies of tourism－based businesses．Emphasis is placed on how to administer accounting procedures to minimize cost and maintain a full range of customer services．Topics include：cash flow cycle，accounting principles and procedures， elements of financial statements，maintaining financial statements，and analysis of financial records．Prerequisite：Principles of Accounting I （ACC101）．
HRT－131

## Front 0 ffice 0 perations

This course covers the responsibilities of management including principles of front－office procedures，accounting fundamentals and supervisory and communication skills as they relate to the various support departments that impact the guest cycle．It includes training on front desk software．

HRT－133
3 Credits
Culinary Theory in Hospitality
Students gain knowledge in the use of tools and equipment while learning basic procedures related to preparation and cooking．Students learn basic menu construction and presentation used in the development of full menus utilized in a quantity food production facility．The course emphasizes cooking techniques，terminology， equipment use，and commercial kitchen operation，as well as proficiencies in knife skills and uses of various culinary tools．Additional expenses may include supplies，equipment， and／or uniforms．
HRT－151 3 Credits

## Casino Operations Management

This course provides the student with an overview of the Casino Industry．It covers forms of gaming，gambling，destinations，and organization of a Casino Resort．The course offers students insight into the various career paths available within this unique and thriving industry．

## HRT－210 3 Credits

Hotel／Rest／Tour Field Exp Internship
This course integrates classroom study with practical work experience．Under the guidance of a site supervisor and a faculty member，the experience helps students to shape career goals and to gain valuable work experience． Prerequisite：Principles of Management and Service in Hospitality（HRT－121）．

## HRT－223 <br> 3 Credits

## Event Planning

This course covers applied knowledge and skills that students need to plan professional and non－ profit events．The course takes students through the step－by－step process and the decisions， problems，and concerns of planning special events．The class format requires students to undertake a team project based on a variety of typical professional specifications．The specific needs of producing social functions，concerts， corporate events and sporting events are discussed in detail．The needs and goals of various fund－raising programs are also explored． Prerequisite：Basics of Meeting Management （HRT－119）．

## HRT－229

3 Credits
Corporate Travel Management Hospitality
This course discusses the budget－driven needs of corporate travel purchasers and the convenience－ based needs of the corporate traveler．The goal of the course is to use knowledge acquired in previous courses to control the travel spending of a corporation．This changes the focus from service，which is stressed in almost every other Hospitality course，to cost control．The role of the effective Travel Manager，who is challenged to balance these two competing needs in a corporate travel department，is studied．

## HRT－231 <br> 3 Credits

## Advanced Lodging Operations

This course continues to explore the functions of hotel management including Food and Beverage，Engineering，Housekeeping，Security and other＂back of the house＂issues．Students will complete their understanding of management technique and the lodging environment．Prerequisite：Front Office Operations with Technology Component （HRT131）．

## Human Services

## HSV－101 <br> 3 Credits <br> Intro Human Services W／Field Practice

This introductory course covers the historical aspects of human services，the requirements and skills of the human services worker，administration and funding of agencies，and the dynamics of work in the profession with a 15 contact hour（per semester）service learning requirement at a human service organization．Prerequisites： Prerequisites：A grade of $C$ or higher in Writing Skills II（ENG－095）and Academic Reading III（ESL－ 098）or Reading Skills II（RDG－095）；or Integrated ELL Level III（ELL－103）or exemption by placing into higher level courses

## HSV－112 <br> 3 Credits

## Addiction

This course investigates the biological， psychological，and emotional forces involved in the addiction process．The course covers the major classes of psychoactive drugs by examining drug action，uses，and limitation．Social problems and the role of human services in prevention and intervention play an integral role in the course． Prerequisite：Principles of Psychology（PSY－101） and grade of C or higher in Academic Reading III （ESL－098）or Reading Skills II（RDG－095）and Writing Skills II（ENG－095）；or Integrated ELL Level III（ELL－103）or exemption by placing into higher level courses．

## HSV－214

3 Credits

## Ethics in Human Services

This course provides students with the knowledge and skills required to identify ethical issues and to resolve ethical dilemmas when confronted with conflicting duties and choices that occur within the context of professional human service work at all levels of practice． Prerequisites：College Writing I（ENG－111）and Introduction to Human Services w／Field Practice （HSV－101）and Addiction（HSV－112）．

HSV－215
3 Credits
Introduction to Substance Abuse Counseling
This course provides an introduction to human services and addictions，including the types of clients served，the duties of human service personnel，philosophy and dynamics of addictions treatment and an overview of state and community resources．Case studies are used to examine the development，identification， dynamics and recovery of addicts．Prerequisites： Addiction（HSV－112）and Counseling（PSY－215）．
HSV－216 3 Credits

Pre－Practicum Prep With Field

## Experience

This course is designed to provide an orientation to practicum experiences in the human services program．Students will review the process for setting up a placement，understanding professional requirements for an interview，and complete a series of critical thinking and reflective assignments．A placement experience in a human service agency is required by the course following a CORI background check．A grade of $B$ or higher is required in this course to allow for enrollment in further practicum coursework in the program．Prerequisite：College Writing I（ENG－111）．Pre／corequisites：
Introduction to Human Services with Field
Practice（HSV－101）and Addiction（HSV－112）and Counseling（PSY－215）and Adolescent and Adult Development（PSY－224）．

## HSV-217

3 Credits
ins in Human Services
This course is the study of current issues in the human services delivery system with emphasis on human, legal, and civil rights, service delivery, and resource availability. Economic, political, and social changes in society that affect the delivery of human services with particular attention to the needs of housing, employment, health, nutrition, and well-being of participants in the system will be examined. Prerequisites: Introduction to Human Services with Field Practice (HSV-101) and Principles of Psychology (PSY-101) and Counseling (PSY-215) and Adolescent and Adult Development (PSY-224).

HSV-218
3 Credits
Case Management in Human Services
This is an introductory course on case management that uses the framework of the strengths-based model in working with different populations. Through an integration of classroom lecture and discussion with experiential learning activities, key issues will be explored and examined in depth. Prerequisite: Counseling (PSY-215) and grade of C or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG095) and Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

HSV-219 3 Credits
Current Issues for the Community Health Worker
This course is designed to prepare community health workers to effectively support and assist their communities to achieve optimal levels of health and well-being. Prerequisites: Health Employment Issues (AHE104) and Counseling (PSY215).

## HSV-220

Practicum in Human Services I
Practicum experiences in a human services setting to be completed the final semesters of study, including the 90 -hour training in the national Family Development Credentialing program. Course runs during fall, spring, and early summer semester and must be started in the fall semester. The department assigns placement settings. Students must make application for placement and enrollment spring semester prior to fall registration. Acceptance into the human services program does not assure permission to enroll in the course or a placement assignment. A Criminal Offense Records Investigation (CORI) is required of all practicum students. For complete course requirements and application procedures, contact the department chair of Early Childhood, Education \& Human Services. Course is graded on a pass/fail scale. HSV-220 and HSV-221 are to be taken in sequence beginning in the fall semester and concluding in the first term of the summer semester. Prerequisite: Permission of department chairperson

## HSV-221

3 Credits

## Practicum in Human Services I

Practicum experiences in a human services setting to be completed the final semesters of study, including the 90 -hour training in the national Family Development Credentialing program. Course runs during fall, spring, and early summer semester and must be started in the fall semester. The department assigns placement settings. Students must make application for placement and enrollment spring semester prior to fall registration. Acceptance into the human services program does not assure permission to enroll in the course or a placement assignment. A Criminal Offense Records Investigation (CORI) is required of all practicum
students. For complete course requirements and application procedures, contact the department chairperson of Early Childhood, Education \& Human Services. Course is graded on a pass/fail scale. HSV- 220 and HSV-221 are to be taken in sequence beginning in the fall semester and concluding in the first term of the summer semester. Prerequisite: Practicum in Human Services I (HSV-220).

## Humanities

## HUM-120 3 Credits <br> , Culture and Society

This course uses a critical lens to examine the interrelationship among self, culture and society by integrating academic knowledge with personal experiences. Students engage in inclusive dialogue, create knowledge using diverse forms of media, personalize and map future goals, and explore career pathways. This course is designed to cultivate community among classmates and provide opportunities for mentorship by faculty, peers, and advisors. Students reflect on their role in creating a more just society that advances equity and values community cultural wealth. Each course section examines self, culture and society through a specific academic theme. Students choose a section based on their interests. This course satisfied the General Education Elective requirement.

## Interdisciplinary

## INT-101 <br> Introduction to Yoga Studies

This course explores yoga, a diverse form of artistic human expression through an interdisciplinary perspective-from its origins to present day therapeutic applications for the mind, body, and spirit. Students will also examine multi-cultural beliefs on healing and healing traditions. Through writing assignments, students will reflect critically on their own practice and on topics introduced in the readings/discussions. The course will include an in-class yoga practice that will allow students to integrate course concepts with their yoga practice "on and off the mat" as students will apply yogic principles to their lives through self-reflection, civic engagement and service. This course is geared to students with no prior yoga experience. Students need to wear clothing that allows for freedom of movement as there will be a physical practice in each class meeting. This course meets the General Education Elective Area.
Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## INT-110

3 Credits

## American Culture

This interdisciplinary course focuses on the historical evolution of American beliefs and values and is designed for students from other cultures. Students study the way these values have shaped U.S. contemporary institutions such as education, business, the government, and the family. The course examines extensive crosscultural comparisons with the students' native cultures. Materials include film, music, and short works of literature. The course satisfies the College's General Education requirement for "Creative Work." Prerequisite: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course.

INT-123
3 Credits Parenting Across Cultures
This is an interdisciplinary course that compares and contrasts various parenting methodologies as they express a culture's underlying values and system of beliefs. We will look at the effects of parenting styles on child development and the parent-child relationship. Students will examine the way in which they were parented and will reflect on how they intend to parent their own children. Cross-cultural comparisons will be made with classmates from other cultures and backgrounds. Special attention will be given to parenting in bi-cultural families, and the issues that ensue when there are contrasting parenting styles within one family. Competing parenting styles in non-traditional cultures like the U.S. will also be examined. Prerequisites: A grade of $C$ of better in Academic Reading III (ESLO98) and Academic Writing III (ESLO99) or Reading Skills II (RDG095) and Writing Skills II (ENG 095), or exemption from reading and writing requirements by placement testing.

## IN T-299B 3 Credits Learn and Earn Business Internship

Interdisciplinary internship course.

## INT-299BI <br> 3 Credits <br> Learn and Earn Biotech Internship

Interdisciplinary internship course.

## INT-299CSC 3 Credits

Learn \& Earn Computer Science Intern
Interdisciplinary internship course.

## IN T-299CU 3 Credits

Learn and Earn Culinary Internship
Interdisciplinary internship course.
IN T-299E 3 Credits
Learn and Earn Engineering Internship
Interdisciplinary internship course.

## IN T-299G 3 Credits

 Learn and Earn Graphic InternshipInterdisciplinary internship course.

## IN T-299H 3 Credits

 Learn and Earn Hospitality InternshipInterdisciplinary internship course.
INT-299HO 3 Credits

Learn and Earn Hospitality Internship
Interdisciplinary internship course.
IN T-299IT 3 Credits

Learn and Earn Info Tech Internship
Interdisciplinary internship course.
INT-299MC
Learn and Earn Media Internship
Interdisciplinary internship course.
INT-2990
Learn and Earn O IM Internship
Interdisciplinary internship course.
INT-299P
Learn and Earn Paralegal Internship
Interdisciplinary internship course.

## Italian

## ITL-101 <br> 3 Credits <br> lementary Italian I

This course introduces students to the sounds and structures of Italian with emphasis on the acquisition of a limited but practical vocabulary and is designed for students with little or no previous knowledge of Italian.

ITL－102

## Elementary Italian II

This course is a continuation of Elementary Italian （ITL101），emphasizing speaking and reading skills．The course satisfies General Education requirement＂Creative Work＂．Prerequisite：
Elementary Italian I（ITL－101）or one year of high school Italian．This course is offered in alternate years．

## ITL－201 <br> 3 Credits Intermediate Italian I

A review of basic language skills with increasing emphasis on conversational and readings skills． Prerequisite：Elementary Italian II or two years of high school Italian．

## TL－202

3 Credits
Intermediate Italian II
A continuation of Intermediate Italian（ITL201） with greater emphasis through speaking，reading， and writing．Prerequisite：Intermediate Italian I （ITL201）or three years of high school Italian．

## Japanese

## PN－101

3 Credits
Elementary J apanese I
This course is an introduction to the sounds and structures of the J apanese language with emphasis on the acquisition of a limited but useful vocabulary．The course is designed for students who want to learn essential J apanese as quickly and as effectively as possible．Students read and write with Hiragana and look into the world of Kanji．This course is not intended for native speakers or students who have studies this language within the last three years．

J PN－102
3 Credits
Elementary J apanese II
This course covers a continuation of the study of basic structures of the J apanese language．The course stresses additional useful vocabulary through reading，writing，and conversation．The course covers material that allows students to learn essential J apanese as quickly and effectively as possible．The course emphasizes encouraging and helping students to obtain the ability to use the J apanese language in practical situations．It emphasizes student ease in interacting and communicating in an uncomplicated but adult language．Students read Kana and some basic Kanji．The course meets General Education requirement for Creative Work．Prerequisite： Elementary J apanese I（J PN－101）．

## PN－201

3 Credits

## Intermediate J apanese I

This course offers instruction in intermediate apanese．Students will learn how to communicate and express various ideas．Students will learn how to form long and detailed sentences with emphasis on conversational skills． in addition，they will learn how to read and write some basic Kanji．Various aspects of J apanese culture and customs will be introduced and discussed throughout the semester．Prerequisite Elementary J apanese（J PN 102）or equivalent．

## PN－202

Intermediate J apanese II
This course turns to the basics of J apanese syntax in order to lead the student to the acquisition of increased proficiency in the modern J apanese language．The course is designed to help learners consolidate their understanding of syntactical structures through lessons that focus on how to talk about topics relevant to daily life． This will increase students＇comprehension skills， and it will lead to stronger skills in reading and writing．Students at this stage are expected to
become familiar with different forms of verbs （tense and aspect，etc．），time expressions， conditional clauses and other topics that prepare them to have a solid grasp of context and speaker intent．Students also learn more Kanji． Prerequisite：Intermediate J apanese I（J PN 201）or equivalent．

| Lterature |
| :--- |
| LIT－201 |
| Introduction to Literature |
| This course develops students＇ability to |
| interpret，analyze，evaluate，and respond to ideas |
| about literature．Students explore the nature， |
| structure，and form of poetry，short stories，and |
| drama．This course meets the General Education |
| requirement for Creative Work．Pre／corequisite： |
| College Writing I（ENG－111）． |

LIT－203 3 Credits
Literature in America I
This course traces the physical，moral，and psychological development of an emerging nation through its literature．The course examines themes of sin，guilt，justice，and equality in the historical movement of the nation from colonial settlement to westward expansion．The course includes works representative of the ethnic and racial diversity of American culture．This course meets the General Education requirement for Creative Work．Pre／corequisite：College Writing I （EN G－111）．

## LIT－204

Literature in America II
This course analyzes the crises of the nation from the Civil War through the twentieth century，as shown through its literature．The course examines the themes of progress，materialism，alienation， and corruption against the yardstick of opportunity，heroism，and individualism，which represent the traditional American dream．The course includes works representative of the ethnic and racial diversity of American culture． This course meets the General Education requirement for Creative Work．Pre／corequisite： College Writing I（ENG－111）．

## LIT－205

3 Credits

## English Literature I

This course examines major themes，techniques， and genres in English literature from Beowulf to Samuel J ohnson．Students read and discuss such authors as Chaucer，Spencer，Shakespeare，
Donne，Milton，Swift，Pope，Addison，Gray，and J ohnson．The list may vary．The course meets General Education Humanities Requirement Area 6．Pre／corequisite：College Writing I（ENG－111）．

## LIT－206

## English Literature II

This course continues the survey of English literature by studying themes，techniques，and genres from the Romantic poets to the modern writers such as J oyce，Lawrence，and Eliot．The list may vary．This course meets the General Education requirement for Creative Work． Pre／corequisite：College Writing I（ENG－111）．

## LIT－207

## Literature and Society I

This course explores the role of literature as a mirror of the values and conflicts of a changing society．It also examines stereotypes associated with minorities and illustrates the role of literature in alerting society to social and moral injustice．
This course meets the General Education requirement for Creative Work．Pre／corequisite： College Writing I（ENG－111）

## IT－211

3 Credits

## Masterpieces of World Literature

This course considers the landmarks of literature， from ancient times to the eighteenth century， which have shaped，reflected or criticized Western thought．The faculty select readings from Homer，Greek Drama，the Bible，Dante， Medieval Romance，and Shakespeare．Faculty may couple these readings with their contemporary versions or transformations by such twentieth century writers as Sartre，O＇N eill， MacLeish，Stoppard，and J oyce．The list may vary． The course satisfies General Education requirement＂Creative Work＂．Pre／corequisite： College Writing I（ENG－111）．
LIT－212
3 Credits

## Masterpieces of World Literature II

This course continues the examination of the great works of the humanist tradition．Faculty select readings from the eighteenth century to the twentieth century from Moliere，Swift， Voltaire，Chekhov，Ibsen，Tolstoy，Conrad， Turgenev，Zola，Kafka，Singer，Bellow，Mishima， Orwell and Eliot．The list may vary．The course also includes an international studies module of the contemporary literature of Africa，Asia，and Latin America．The course satisfies General Education requirement＂Creative Work＂ Pre／corequisite：College Writing I（ENG－111）．

## LIT－217

## Children＇s Literature I

This course introduces students to children＇s literature in all its forms，from fables to fairy tales， from realistic fiction to fantasy，from nonsense to narrative poetry．The course covers works both classic and contemporary．The course satisfies General Education requirement＂Creative Work＂ Pre／corequisite：College Writing I（ENG－111）．

## LIT－218

## Children＇s Literature II

As follow－up to Children＇s Literature I（LIT－217）， this course focuses on one of the most significant themes in literature，particularly in works written for children and young adults：the search for identity．The course examines full－length works， classics，contemporary novels and works of fantasy－that explore this theme．Discussion topics may include hero－worship，self－reliance，society＇s view of the child，the impact of environment，and peer pressure．The course closely examines narrative techniques，especially point of view．The department recommends that students complete Children＇s Literature I（LIT217）prior to taking this course．This course meets the General Education requirement for Creative Work．Pre／corequisite： College Writing I（ENG－111）．

## LIT－219

3 Credits

## African Literature

This survey course of contemporary African literature exposes students to the diversity of the themes，styles and modes of expression peculiar to the enormous continent of A frica．Students study the oral tradition as it is reflected in folktales，stories，and poems．In addition to reading essays and articles about social and historical conditions that affect the literature of the continent，students read numerous short stories and at least three novels，each reflecting the culture of a different region of the continent． This course meets the General Education requirement for Creative Work．Pre／corequisite： College Writing I（ENG－111）．

## UT－220 3 Credits

Contemporary African American Literature
The course will survey literature by African American authors from the last half of the twentieth century to the present day．We will examine poems，essays，novels and lyrics to
explore the Civil Rights Era, Black Feminism, Hip Hop, LGBTQ issues, and the growing number of authors across the African diaspora who write about the African/African American experience Among the topics we will explore are the oral tradition; the positive and negative effects of the Black arts movement; the re-envisioning of slavery in the modern imagination; intersections of race and sexuality; and cross cultural identities. Students will also explore Boston as a living site for the development of African American literature by visiting museums, landmarks, and attending readings by local African American authors. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## LIT-221 <br> 3 Credits <br> Latin American Literature

This course examines the uniqueness of the Latin American experience as expressed in its literature. The course gives particular attention to those works that reflect the social, political, ethnic, or cultural values of Latin America. The course also examines the impact of Latin American themes and literary techniques on contemporary world literature. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## LIT-223

3 Credits
Immigrant Experience in Literature
The course explores the experience and contributions of the many ethnic groups who have shaped American culture. Short stories, novels, plays, essays, and poems present the bicultural American story told both by those whose roots have been long established in this country and by those who have more recently arrived. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## LIT-224 <br> 3 Credits

## Middle East Literature

This course examines the literature of the Middle East and provides students with an understanding of the impact of religion, tradition, and politics on the lives of people. Students read, analyze, and discuss a variety of letters, historical documents, short stories, and novels in an effort to understand Middle East cultures in their dimensions. The course fulfills a requirement for World Studies Emphasis certification. The course satisfies General Education requirement "Creative Work". Pre/co-requisite: College Writing I (ENG-111).

## LIT-225

Introduction to Dramatic Literature
This course examines selected plays in an historical context to provide students with a basic awareness of theater development from ancient Greek drama to contemporary plays. The selection may vary from semester to semester. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## LIT-227 <br> 3 Credits

## African American Literature

This course is an introduction to the study of African American literature from slave narratives to classic twentieth century novels to contemporary poetry and short stories. The course satisfies General Education requirement "Creative Work". Pre/co-requisite: College Writing I (ENG-111).

## LIT-229

3 Credits

## Sophocles \& Shakespeare

Through an exploration of plays by Sophocles and Shakespeare and critical readings based on the plays, the course will focus on themes that include prophecy and free will; speaking the truth to power; defining evil; and, finally, confronting
evil. This is an Honors course, which counts as an Honors requirement for students in the Commonwealth Honors Program.
Prerequisite:College Writing I (ENG-111) with a grade of $B$ or higher or permission of the instructor.

## LIT-230 <br> 3 Credits

## Asian American Literature

This course interrogates the experiences of Asian American women and men living in the Americas. Although Asian Americans have lived in the U.S. since the 1700 s, their stories have remained largely untold in mainstream American literature, the media, and the dominant society. Therefore, the purpose of this course is to examine these histories through literature and film. The course explores similarities and differences of women and men who are from various parts of Asia and immigrate to the Americas and the challenges Asian American women and men face. Topics the course addresses include national origin, class, sexuality, and language. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## LIT-231

## Mystery and Detective Fiction

The course will introduce students to the art of mystery and detective fiction, surveying the short story and novel form from its Edgar Allen Poe roots through contemporary developments in the genre. It will include works by well-known mystery writers such as Arthur Conan Doyle Raymond Chandler, Agatha Christie, Sara Paretsky, and Walter Mosely as well as literary authors whose work shares elements of the mystery genre. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## LIT-233 <br> 3 Credits

Gender and Literature And the Fool
How has our idea of "femininity" and "masculinity" changed over time? In what ways do social and cultural influences affect our understanding of what it means to be a man or woman? By examining some of the theories contributing to the gender debate in the west, and applying critical reading to a variety of literature, students will seek a deeper understanding of gender identity and gender roles. In doing so, the class will examine the many ways sex and gender are influenced by distinctions of race, class and ethnicity. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## LIT-241 <br> 3 Credits

## Supernatural \& Horror Literature

This course will analyze short and long works that deal with a variety of aspects of the supernatural. Students will read both classic and contemporary works by authors such as Bram Stoker, Robert Bloch, Ira Levin, M ary Wollstonecraft Shelly, Henry J ames, Edgar Allen Poe, Stephen King, Shirley J ackson, and H.P. Lovecraft. The course explores the metaphorical roles that belief in and interest about the supernatural play in our culture and in our lives. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## LIT-242

3 Credits

## LGBTQ Literature

This course introduces students to contemporary literature by and about LGBT/Q ueer people. We will examine the intersections of LGBT/Q people across gender identity, race, class, ability, etc. Through engagement with novels, short stories, and movies, we will identify and discuss major social and political issues that shape LGBT/Q experiences. To frame these conversations and
deepen our understanding, primary works will be paired with cultural criticism. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG111).

LIT-250
3 Credits
Black Women in Literature
This course examines literature by and about Black women from diverse cultural backgrounds. We will investigate the intersections and divergent experiences of Black women across gender, class, sexuality, ideology, as well as the influence of colorism. Our exploration of novels, short stories, poetry, creative non-fiction, music, and drama will help us to analyze how these cultural categories attempt to define Black womanhood. This course meets the General Education requirement for Creative Work. Pre/corequisite: College Writing I (ENG-111).

## Mammography

## MAC-111

3 Credits

## Mammography Principles

This interactive, web-based course presents the concepts of equipment design, technical factors and compares analog to digital mammography equipment and techniques. Quality assurance and special patient situations, as well as interventional procedures will also be discussed. Prerequisite: Acceptance into Mammography Certificate Program.

## MAC-211 3 Credits <br> Mammography Clinical Internship Mammography Principles II

This interactive, web-based course presents the Mammography Principles II concepts of equipment design, technical factors and compares analog to digital mammography equipment and techniques. Quality assurance and special patient situations, as well as interventional procedures will also be discussed. Prerequisite
Mammography Principles I (MAC-111)

## MAC-299 3 Credits <br> Mammography Clinical Internship

This 100-hour clinical introduction will enhance the academic experience for students by introducing them to the clinical practice of mammography. Students are responsible for providing their own clinical site. Clinical sites must be pre-approved by program faculty. Students must comply with the clinical policies, as stated in the Student Manual before attending clinical. Criminal Offender Record Information (CORI) checks will be conducted on all students before placement, and the outcome may impact the student's ability to participate in the internship experience. Health clearance is also required prior to participation. Prerequisite: Mammography Principles I (MAC-111).

## Management

## MAN-105

Principles of Marketing
This course is a study of the basic principles of marketing and the application of these principles in today's changing competitive environment. The focus of this course is on the behavior of the consumer market and the product, pricing, promotion and distribution decisions employed to create consumer satisfaction. Prerequisites: Academic Reading III (ESL-098) or Reading Skills II (RDG-095) and Academic Writing III (ESL-099) or Writing Skills I (ENG-090); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## MAN-106

## International Marketing

This course covers the study of marketing strategies adapted to fit the special requirements of international marketing structures, as well as the differing cultural, political, and legal environments. Students examine the marketing forces that play an important role in deciding the feasibility of internationalizing a product. Prerequisite: Principles of M arketing (MAN-105).

MAN-107
Introduction to Entrepreneurship
This is an introductory course for those interested in starting or running their own business. Students will assess how technology and innovation, demographics, economics and social changes create business opportunities. Students will evaluate the feasibility of business ideas based on strengths, weaknesses, financial goals and competitive threats. Students will also identify desirable characteristics of leading entrepreneurs to identify skills and behaviors which lead to success. Prerequisites: Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level II (ELL-103) or exemption by placing into higher level courses.

## MAN-111

3 Credits

## Principles of Management

The skills and functions, theories and principles of management are studied in respect to the sociocultural environment within which a firm operates. An emphasis on decision-making, organizational strategy, planning and system design provides a framework for examining the application of management concepts in the modern business world and the evaluation of organization problems and issues. Prerequisites: Introduction to Business (BUS-101) for Business Concentration,
Management and Finance options only. A grade of C or better in Academic Reading III (ESL-098) and Academic Writing III (ESL-099) or Reading Skills II (RDG-095) and Writing Skills I (ENG-090); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses

## MAN-112 <br> 3 Credits

## Organizational Behavior/Design

Organizational behavior and design, social systems and contemporary management issues are explored and experienced, with an emphasis on the interrelationship of culture, organizational structure and policies upon individual, group and organizational performance. Topics include: leadership styles, learning, motivation, group structure, decision-making, group dynamics, and problem solving. Concepts and issues of power, conflict, change and organizational processes that impact interpersonal or social settings, group interactions or the workplace environment are examined. This course satisfies the General Education Elective requirement. Prerequisite: Academic Reading I (ESL-098) and Academic Writing III ESL-099) or Reading Skills II (RDG-095) and Writing Skills (ENG-090); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## MAN-201

3 Credits
Management Seminar
Engaged in diagnosing business issues and managerial problems posed through actual real life case studies, students conduct strategic analysis in a variety of individual and competitive situations. Teams identify strategic issues; propose workable plans of action; explain, present and defend their assessments; where applicable, drawing upon prior course study/life experiences and library and Internet research to convert a sound industry/business analysis into a sound, realistic, action agenda supported by evidence.

Note: This course is a Capstone course and should be taken in the student's final semester. Prerequisite: Principles of Management (MAN 111) and Principles of M arketing (MAN-105).

## MAN-204

Entrepreneurship and Innovation
In this course, students develop the skills and creativity to cultivate and market innovative ventures. This course uses an experiential approach to provide students with a foundation for innovative thinking and to prepare them for entrepreneurial projects. The class examines entrepreneurial theories, practices and thought processes. In critical thinking exercises, students examine the difference between entrepreneurship and innovation. Through case study reviews and other activities, the class evaluates the viability of new business enterprises and develops strategies to market them successfully. Prerequisite: Introduction to Entrepreneurship (MAN-107) or instructor approval

## MAN-207

3 Credits
Small Business Management
Starting and managing a small business requires strong leadership capabilities and unique business and management skills. The purpose of this course is to introduce students to the issues smal business owners must understand to become a successful start-up or to manage an existing business successfully. This practitioner-oriented course focuses on helping students understand their leadership capabilities and to compare their capabilities with the necessary requirements. Students will prepare a business plan to help understand the importance of effective planning and conduct a field study that involves surveying successful small business owners to understand how these owners successfully manage their businesses. Prerequisite: Principles of Accounting II (ACC-102) or Accounting Information Systems (ACC-105); and Principles of M anagement (MAN 111) and Principles of M arketing (MAN-105) or permission of instructor.

## MAN-215

3 Credits

## Project Management

This course examines concepts and applied techniques for cost-effective management of both long-term development programs and smaller short-term projects. Special focus on planning, controlling, and coordinating efforts of multiple individuals and/or working groups, such as those found in large scale software and engineering programs, and in critical research and development projects. Case studies and classroom simulations are used extensively to teach students the effective integration of analytical/technological tools and organizational design and supervisor approaches. Prerequisites: Application/Concepts (CIT-110) and Foundations of Algebra (MAT-097) and Principles of
Management (MAN-111). Students enrolled in the Gas Utility Technology degree must complete IT Problem Solving (CIT-113) and Foundations of Algebra (MAT-097) or Pre-Statistics (MAT-098) and Pre/corequisite: Leadership for the Utility Professional (GUT-105).

## MAN-299 <br> Business Internship

This course enhances the academic experience for students. All internships take place at preapproved sites. Students engage in activities that improve knowledge of the practical world of work and help them gain professional experience. The internship experience applies resources gained from students' study to improve the quality of their contributions to the employer. A faculty coordinator supervises and grades all courses. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisite: Permission of the department chair.

## Math

## \section*{MAT-093} <br> Foundations of Mathematics

Topics include solving applied problems with whole numbers, decimals and fractions; ratios and proportions; rates; percentages and applications in sales tax, interest, commissions, and discounts; determining numerical averages and medians; exponents and square roots; measurement; and geometry. Technology is incorporated to facilitate problem solving. This course does not satisfy degree requirements. Course requires an additional lab hour. Upon completion of this course with a grade of C or higher, students enroll in Foundations of Algebra (MAT-097).

## MAT-097 <br> Foundations of Algebra

3 Credits

This course is a continuation of Foundations of M ath (MAT-093). Topics include algebraic expressions, solving and graphing linear equations and inequalities, exponents and scientific notation, introduction to polynomials, and systems of linear equations and their graphs. Technology is incorporated to facilitate problem solving. This course does not satisfy degree requirements. Prerequisite: Grade of C or higher in Foundations of M athematics (M AT-093) or exemption by placing into higher level course Course many require an additional lab hour.

## MAT-098 <br> Pre-Statistics

3 Credits

This course is designed as a substitute for Foundations of Algebra (MAT-097) for non-STEM students who will be taking Statistics I (MAT-181) for their program requirements. Topics include being able to summarize and analyze data distributions both numerically and graphically. Evaluating linear equations while understanding the concepts of slope, intercepts, inequalities, correlation and regression will be discussed. The concept of probability and probability distributions will be introduced for both discrete and continuous variables. This course does not satisfy degree requirements. Prerequisite: Grade of $C$ or higher in Foundations of $M$ athematics (MAT-093) or exemption by placing into higher level course.

## MAT-099

3 Credits

## Intermediate Algebra

This course is a continuation of Foundations of Algebra (MAT-097). Topics in this course include polynomial arithmetic, introduction to functions, factoring, roots and radicals, rational expressions, absolute value inequalities, quadratic equations and the quadratic formula, and solving applied problems. This course does not satisfy degree requirements. Prerequisite: Grade of C or higher in Foundations of Algebra (MAT-097) or exemption by placing into higher level course Course may require an additional lab hour.

## MAT-100

3 Credits

## Topics in Career Math

This course applies basic arithmetic techniques to the following business topics: percentage, trade and cash discounts, merchandising, depreciation, simple and compound interest, and present value. The course covers additional topics that faculty choose from taxes, payroll, statistics, insurance, notes and drafts, installment buying, checking accounts, inventories, costing out, and the metric system. This course is appropriate only for Associate in Science students in Culinary Arts. Prerequisite: Grade of C or higher in Foundations of $M$ athematics (MAT-093) or exemption by placing into higher level course.

MAT-133
1 Credit
Introduction to Metric System
This course enables students to recognize and use metric terms, roughly measure using body parts, and use estimation within the metric system.

## MAT-171

3 Credits

## Finite Mathematics

Set theory, coordinate systems and graphs, matrices and linear systems, linear programming, and probability are considered in this course. Applications to business and the social sciences are emphasized. This course meets General Education requirement for Quantitative Problem Solving. Prerequisites: Grade of C or higher in Foundations of Algebra (MAT-097) or PreStatistics (MAT-098) or exemption by placing into higher level course.

## MAT-172

Contemporary Math I
This course covers varied mathematical topics that have applications in contemporary society. Topics include mathematical logic (inductive/deductive reasoning, truth tables, statements, inverse, converse, contrapositive), the real number system, modular arithmetic, numeral systems (base n ), number theory (primes, GCF, LCM, Euclidean Division), and patterns and sequences. The course encourages students to interpret, analyze, and evaluate from a mathematical perspective and will incorporate the use of technology or digital media as appropriate. The course meets the General Education requirement for $Q$ uantitative Problem Solving. Prerequisite: Grade of C or higher in Foundations of Algebra (MAT-097) or PreStatistics (MAT-098) or exemption by placing into higher level course.

## MAT-174

## Q uantitative Reasoning

This course is designed for students in non-STEM programs of study and fulfills the General Education Requirement for Quantitative Problem Solving. Topics include descriptive statistics, probability, growth phenomena (linear, exponential, and logarithmic), and financial mathematics. There is an emphasis on applications using technology. Spreadsheet software will be integrated into the course and a scientific calculator is required. Prerequisite: A grade of $C$ or higher in Foundations of Algebra (MAT-097) or Pre-Statistics (MAT-098) or exemption by placing into higher level course.

## MAT-181

Statistics I
This course covers statistical concepts and methods. Topics include data organization, averages and variation; elementary probability; binomial, normal, and t -distributions; estimation and hypothesis testing; and linear correlation and regression. The course meets the General Education requirement for Quantitative Problem Solving. Prerequisite: Grade of C or higher in Foundations of Algebra (MAT-097) or PreStatistics (MAT-098) or exemption by placing into higher level course."

## MAT-193

3 Credits
Topics in Algebra/Trigonometry
This course provides an intensive one-semester survey of topics in algebra and trigonometry. Topics include powers of ten, formulas, graphs, simultaneous equations, logarithms, right triangle trigonometry, vectors, sine waves, and complex numbers. Topics are illustrated by applications from electronics and other fields. Use of scientific calculator is required. Prerequisite: Placement or grade of $C$ or higher in Fundamentals of Algebra (MAT-097) or exemption by placing into higher level course.

## MAT-194

## College Algebra for STEM

4 Credits

This course is designed for science, technology, engineering, computer science, and mathematics students and provides a solid preparation for Precalculus. Course study will focus on functions and their graphs (polynomial, absolute value rational, radical, piecewise, exponential and logarithmic functions, algebra of functions, analyzing functions, and related applications). Additional topics include: equations and inequalities, complex numbers, conic sections, systems of equations, partial fractions, linear programming, and an introduction to matrices Technology and digital media resources will be incorporated. Prerequisite: Intermediate Algebra (MAT-099) with a grade of C or higher or exemption by placing into higher level course. The course meets the General Education requirement for Q uantitative Problem Solving.

## MAT-197

4 Credits

## Precalculus

This course covers the following topics: functions and their graphs, polynomial functions, rational and radical functions, exponential and logarithmic functions, elements of trigonometry and trigonometric functions, analytic trigonometry, and sequence and series notation. A graphing calculator is required. Prerequisite: A grade of C or higher in College Algebra-STEM (MAT-194) or exemption by placing into higher level course.

## MAT-231 4 Credits <br> Calculus for Management Science

This one-semester course covers topics designed for students in business, economics, and the social sciences. Topics include limits,
differentiation and integration of algebraic exponential and logarithmic functions, optimization, and other applications. A graphing calculator is required. Prerequisite: A grade of C or higher in College Algebra for STEM (MAT-194) or exemption by placing into higher level course.

## M AT-281

4 Credits

## Calculus

This course reviews concepts of functions, graphs and trigonometry to support the exploration of limits, derivatives, and basic integration. Topics will include limits, continuity, algebraic and trigonometric differentiation, applications of the derivative, the definite and indefinite integral, methods of integration, application of integration to determination of area, the Fundamental Theorem of Calculus and integration by substitution. A graphing calculator required Prerequisite: $A$ grade of $C$ or higher in Precalculus (MAT-197) or exemption by placing into higher level course.

## M AT-282

4 Credits Calculus II
This course is a continuation of Calculus I (MAT281) and begins with a study of numerical integration. Techniques of integration are applied to the following topics: transcendental functions (including their derivatives), area of region between two curves, volume, integration by parts, trigonometric substitution, partial fractions, and improper integrals. Sequences and series are examined with an emphasis on determining convergence or divergence. Taylor and Maclaurin series will also be studied. A graphing calculator is required. Prerequisite: A grade of C or higher in Calculus I (MAT-281) or exemption by placing into higher level course.

## M AT-283 <br> Calculus II

4 Credits

This course is a continuation of Calculus II (MAT282) and includes plane curves, parametric equations, vectors, vector-valued functions,
tangent and normal vectors, arc-length and curvature, functions of several variables, directional derivatives, gradients, extrema of functions of several variables, Lagrange multipliers, line integrals, Green's Theorem surface integrals, the Divergence Theorem, Stokes' Theorem, and applications to physical sciences and engineering. A graphing Calculator is required. Prerequisite: A grade of C or higher in Calculus II (MAT-282) or exemption by placing into higher level course.

## MAT-285 <br> 4 Credits <br> Ordinary Differential Equations

This course will include first and higher order differential equations and applications, series solutions of differential equations, Laplace transforms, systems of linear first order differential equations and numerical solutions of ordinary differential equations. Emphasis will be placed on analytical techniques and engineering applications aided by the use of computer software. M aterial on linear systems will be incorporated. Prerequisite: Grade of C or higher in Calculus II (MAT-282)

## MAT-291

Linear Algebra
This course will include linear systems of equations, matrix operations, determinants, linear dependency, vector spaces, linear
transformations, eigenvalues and eigenvectors. Proofs by mathematical induction and contradiction will be incorporated. Emphasis will be placed on mathematical structure and axiomatic reasoning aided by the use of computer software. Prerequisite: G rade of C or higher in Calculus I (MAT-281).

## Medical Imaging

## MIG-101

2 Credits

## Introduction to Ultrasound

This course provides introductory exposure to the field of diagnostic medical sonography. The history and development of the modality as well as relevant medical terminology and vocabulary will be presented. Other topics discussed include caring for patients across cultural lines, the role of a sonographer in the medical field, and the prevention of repetitive strain injuries.
Prerequisite: Acceptance into the Cardiac Sonography Program or the General Sonography program.
MIG-105 3 Credits Ultrasound Physics and Instrumentation
This course provides students with the theory of ultrasound physics and instrumentation. Topics will include the characteristics of sound waves and the way in which ultrasound is utilized in imaging. Propagation of sound, attentuation and acoustic impedance as well as reflection and scattering will be discussed. Ultrasound equipment components, including transducer construction and recording devices will be covered in great detail. Doppler principles including color Doppler will be examined. Prerequisite: Acceptance into the Cardiac or General Sonography Program.

## MIG-106 <br> 2 Credits

## Introduction to Cardiac Scanning

This course prepares the adult echo student for future clinical placement. Emphasis in this course will be placed upon orienting the student to the on campus ultrasound lab and the ultrasound systems. Topics covered will include cardiac anatomy, and standard imaging planes and acoustic views utilized in Cardiac Ultrasound. The student will begin to practice necessary scanning skills for placement into Cardiac Sonography Clinical I. Prerequisite: Acceptance into the

Cardiac Sonography Program. Corequisites:
Introduction to Ultrasound (MIG-101) and
Ultrasound Physics and Instrumentation (MIG105) and Patient Care in Medical Imaging (MIG109).

## M IG-107

2 Credits
Introduction to Medical Radiography
This course covers introductory exposure to the fields of medical radiography and ultrasound. The course covers the history of development of the two modalities, as well as an introduction to radiation protection. The importance of communication between the radiographer and the patient in a diverse environment will be stressed. Other topics will include legal and ethical issues in radiography and medical terminology. This will be a hybrid course, with a web-delivered component. Prerequisite: Admission to the Medical Radiography Program.

MIG-109 4 Credits
Patient Care for Medical Imaging
This lab course covers organization and standards of the medical establishment: basic patient care procedures including vital signs, safety,
immobility, body mechanics, and medical asepsis; CPR; and basic EKG, oxygen administration, and venipuncture skills. The importance of communication between the radiographer and the patient will be stressed. Simulated laboratory sessions offer students an opportunity to return demonstrated techniques. Co-requisite: Introduction to Medical Radiography (MIG107) or Introduction to Ultrasound (MIG101).

## MIG-111 <br> Imaging Technology I

3 Credits

This course covers topics in physics of special significance in radiography. Specific areas include Newton's Laws, and the concepts of mass force, energy, work, and power. It includes heat and its production and transfer. It emphasizes the physics of wave motion. The course covers some general concepts of modern physics including Einstein's energy equation, the Heisenberg Principle, and quantum concepts. A computer component introduces students to the principles and background of computers. Prerequisite: Acceptance to Medical Radiography Program, Cardiac Sonography or General Sonography Program, or standby status in Cardiac Sonography or General Sonography Program.

## MIG-112

3 Credits
Echo I
This course covers a comprehensive study of adult echocardiography. It begins with an introduction to cardiac embryology, M-mode, two-dimensional and Doppler, and color Doppler technique. The course also covers transducer orientation and ultrasound appearance of the normal heart and abnormal echo findings in such conditions as valvular heart disease, prosthetic heart valves, pericardial disease, and cardiac tumors. Prerequisite: Introduction to Ultrasound (MIG101).

## M IG-115

4 Credits
Interpretation I
This course covers an integrated approach to the echocardiography technique. Students view the Mayo Clinic tapes and discuss the basic anatomy, transducer positions, and patient preparation that are necessary in the performance of these examinations. Students practice their skill in a hands-on setting and relate this experience to the didactic material presented in their echo classes and on the Mayo tapes. Students discuss pathologic processes to further enhance their understanding of the echo presentation of various valvular heart diseases. Prerequisite: Patient Care for Medical Imaging (MIG109).

## MIG-119

3 Credits
Echo II
This course is a continuation of the material introduced in Echo I and Interpretation I. The focus of this course will be on left ventricular function in both systole and diastole. Other topics covered in detail will include cardiomyopathies, and coronary artery disease. A strong emphasis will be placed on cardiovascular physiology as it relates to the disease entities discussed. Sonographic technique,including Doppler will be covered as it relates to the evaluation and diagnosis of cardiac diseases. Prerequisite: MIG-112 \& MIG-115. Co-requisite: MIG-205

## M IG-120

3 Credits

## Radiologic Imaging I

Using lecture and lab sessions, this course presents an introduction to the basic elements necessary for the production of the radiographic image. Course content will include but not be limited to: the role of the radiologic technologist on the healthcare team, the function of the PACS in today's digital department, digital image receptors (CR, indirect and direct DR), analog imaging systems, latent image formation, processing, filtration and beam restrictors, and technique. Prerequisite: Introduction to Medical Radiography (MIG 107).

## MIG-122 <br> 3 Credits <br> Positioning I

This course covers basic principles of patient positioning as applied to medical radiography. The course provides both lecture and lab experiences to help students achieve competency in radiographic examination of the chest, abdomen, and upper and lower extremities. Co-requisite: Full-Time Medical Radiography Clinical I (MIG124F) or Part-Time Medical Radiography Clinical I (MIG124P).

## MIG-124F

## FT Medical Radiography Clinical I

This course introduces students to the hospital and its radiology department. The course centers activities on observation and assisting with various basic radiographic procedures. Students begin to develop competency in the performance of radiographic examinations of the chest, abdomen, and upper extremities.
Additional expenses may include supplies, equipment, online tracking software, and/or uniforms. Course meets two (2) days/week with 16 hours of clinical practice weekly.

## MIG-124P

Part Time Medical Radiography Clinical
This course introduces students to the hospital and its radiology department. The course centers activities on observation and assisting with various basic radiographic procedures. Students begin to develop competency in the performance of radiographic examinations of the chest, abdomen, and upper extremities. Additional expenses may include supplies, equipment, online clinical tracking software, and/or uniforms. Course meets two (2) evenings/week with 8 hours of clinical practice weekly.

MIG-126
3 Credits

## Positioning II

Using lecture and lab sessions, this course helps students achieve competency in the performance of radiographic examinations of the vertebral column and pelvic girdle. In addition, students study the principle of contrast agent administration in conjunction with radiographic examination of the urinary system, upper and lower gastrointestinal tract and gall bladder. Prerequisite: Positioning I (MIG 122). Co-requisite:

Full Time Medical Radiography Clinical II (MIG128F) or Part Time Medical Radiography Clinical II (MIG128P).

## MIG-128F

2 Credits
Full Time Medical Radiography II
This course covers a continuation of the clinical experience. Students assist in and observe an increasing number of different radiographic examinations as studied in Positioning I (MIG122). Additional expenses may include supplies, equipment and/or uniforms. Course meets two (2) days/week, with 16 hours of clinical practice weekly. Prerequisite: Full-Time Medical Radiography Clinical I (MIG124F).

## MIG-128P

1 Credit
Part Time Medical Radiography Clinical II
This course covers a continuation of the clinical experience. Students assist in and observe an increasing number of different radiographic examinations as studied in Positioning I
(MIG122). Additional expenses may include supplies, equipment and/or uniforms. Course meets two (2) evenings/week with 8 hours of clinical practice weekly. Prerequisite: Part-Time Medical Radiography Clinical I (MIG124P).

## MIG-131

4 Credits
Imaging Informatics I
This introductory hybrid course presents major concepts of state-of-the-art imaging informatics and Picture Archiving and Communication Systems (PACS) administration. Topics presented include but are not limited to: DICOM, DICOM associations, ACR guidelines, the PACS system components, functions and required infrastructure, modality integration, security, and HIPAA compliance. The integration of the PACS system with the Hospital Information (HIS) and Radiology Information (RIS) Systems, and the perspective of various stakeholders of the Imaging Informatics/PACS enterprise environment will be a major focus of this course, with a particular emphasis on the responsibilities of the PACS administrator. Upon completion of this course the student will have the basic knowledge, skills and competencies necessary to administer a PACS system at a fundamental level. Corequisite: Intro to Diagnostic Imaging and PACS (MIG161).

## MIG-133 <br> 4 Credits

## Imaging Informatics II

This hybrid course covers the more complex aspects of Imaging Informatics/Picture Archiving \& Communication Systems and proceeds to advanced topics including but not limited to Data management and image distribution, teleradiology, PACS system security, clinical PACS acceptance, implementation, monitoring and evaluation, common pitfalls and challenges, oading of software onto client servers, archive back-up, disaster recovery, DICO M-based Medical Imaging Informatics, the Electronic Health Record, Computer Aided Diagnosis and integration with PACS, training considerations for staff, and new directions in PACS and Imaging Informatics. This course continues to focus on the duties of PACS administration professionals and covers in more depth the relation to and interaction with the Hospital Information (HIS) and Radiology Information (RIS) Systems as well as PACS Internet applications. Upon completion of this course students will have the knowledge, skills and competencies necessary to administer PACS systems. Prerequisite: a grade of C or better in Imaging Informatics I (MIG131).

MIG-161 3 Credits
Intro to Diagnostic Imaging and PACs
Designed for students with previous experience in Medical Imaging or Computer Science who wish to pursue a career in PACS administration,
this course introduces the students to the history of medical imaging with a focus on state-of-theart diagnostic imaging, the DICOM standard, and the clinical relevance of PACS to the members of the Radiology Department, referring physicians, the overall delivery of healthcare. For additional information and/or syllabus contact CITDepartment@bhcc.mass.edu. Prerequisite: Admission to PACS certificate program.

## M IG-201 <br> 4 Credits <br> Echo III

This continuation course of Echo I and II covers advanced cardiac interpretation and echo features of coronary artery disease and valvular heart disease. Students discuss a basic overview of pediatric echo and congenital heart disease. The course reviews related echo material before placement in the clinical sites. Prerequisite: Echo II (MIG119).

## M IG-203

3 Credits
Interpretation II
This continuation course of Interpretation I covers an integrated approach to the echocardiography technique. Students review the Mayo Clinic tapes and discuss the development of skills necessary to exercise independent judgment and discretion in the performance of echocardiographic examinations. Students review and critique weekly case studies. The class uses group demonstrations to highlight the patient/sonographer/physician interactions Students learn pathologic processes in order to build on their knowledge base in the
interpretation of normal and abnormal echo features. Prerequisite: Interpretation I (MIG115).

## MIG-205

3 Credits

## Vascular Ultrasound

This course covers an introduction to the fundamentals of vascular ultrasound. It includes hemodynamics, Doppler spectral analysis, and duplex visualization of the cerebrovascular system. Content includes carotid, venous and transcranial Doppler techniques. Additional topics include physiological testing of the arterial system. Prerequisite: MIG 105

## MIG-207 2 Credits

Ultrasound Physics and Instrumentation for the Cardiac Sonographer
This course is a continuation of Ultrasound
Physics and Instrumentation and is designed for the cardiac sonography student to integrate their knowledge of ultrasound physics and instrumentation with clinical practice of actually producing a high-quality diagnostic image. Image quality will be stressed throughout this course through the use of hands-on applications in the ultrasound lab. Additional topics discussed will include: spectral display, image artifacts, bioeffects and safety, as well as discussions relating to 3D ultrasound and contrast agents Prerequisites: Ultrasound Physics and Instrumentation (MIG105) and Echo II (MIG119).

## MIG-211 <br> 3 Credits <br> Cardiac Sonography Clinical I

This course covers the development of students' skills in the performance of echocardiograms at the clinical sites. Under supervision of their clinical instructor and the BHCC clinical coordinator, students gain knowledge through scanning patients in the clinical setting. Students performances are evaluated through clinical competencies in each related echo area. Additional expenses may include supplies, equipment, and/or uniforms. Course meets three (3) days/week. Prerequisite: Echo II (MIG119). Corequisite: Echo III (MIG201).

## MIG-213

4 Credits
Cardiac Sonography Clinical II
This course covers a continuation of clinical practical experience in echocardiography and further refines students' skill in the performance of echocardiograms. Under supervision of their clinical instructor and the BHCC clinical coordinator, students enhance their interpretive skills and continue hands-on experience at the clinical sites. Students' performances are evaluated through clinical competencies in each related echo area. Additional expenses may include supplies, equipment, and/or uniforms. Course meets four (4) days/week. Prerequisite: Medical Radiography Clinical I (MIG211).Corequisite: Echo IV (MIG215).

## MIG-215 <br> 4 Credits

## Echo IV/Interpretation

This course covers a continuation of Echo I, II, and III, and deals with advanced echo technique and interpretation. The course covers related procedures such as angio, thallium, muga studies, EKG, and coronary artery sonography. Students compile a folder of exams, videos, and related medical findings to present in class. The class focuses on helping students coordinate the multi-facets of an examination including the interpersonal relationships and professional or ethical situations that may arise. Prerequisite: Interpretation II (MIG203).

## MIG-216

2 Credits

## Advanced Interpretation Seminar

This is an interactive course that provides the cardiac sonography student an opportunity to enhance their cardiac sonography interpretation skills through the use of slides, videos, and CD Rom material of actual case studies. A review of cardiovascular principles and instrumentation will occur and the student will participate in mock registry question segments through the use of ARDMS registry preparation material.
Prerequisites: Cardiac Sonography Clinical I (MIG211) and Cardiac Sonography Clinical II (MIG203). Co-requisite: Echo IV/Interpretation (MIG215).

## MIG-217 <br> 4 Credits

## ardiac Sonography Clinical III

This course covers a continuation of clinical practical experience in echocardiography. Under supervision of the clinical instructor and the BHCC clinical coordinator, students enhance their skills in performing echocardiograms. Faculty evaluate students' performances through clinical competencies in each related echo area. Students gain competency in the performance of echocardiograms. Students also obtain related experience in examinations such as stress echo and transesophageal. Additional expenses may include supplies, equipment, and/or uniforms. Course meets five (5) days/week. Prerequisite: Cardiac Sonography Clinical II (MIG213).

M IG-220
2 Credits

## Positioning III

This course applies the fundamentals of Positioning I and II to advanced level radiographic examinations. Lecture and lab sessions cover anatomy and radiography of the skull, facial bones, and sinuses, TMJ, mastoids, and other advanced skull exams. The course provides an introduction to advanced exams including arthrograms and myelograms. Prerequisite: Positioning II (MIG126).

## MIG-222F

3 Credits

## Full-Time Medical Radiography Clinical III

This course allows students to expand upon skills developed during earlier clinical experience. Students assume more direct responsibility for specific radiographic examination. Additional
expenses may include supplies, equipment, and/or uniforms. Course meets four (4) days/week with 32 hours of clinical practice weekly. Prerequisite: Full-time Medical Radiography Clinical II (MIG128F).

## MIG-222P

1 Credit

## Part Time Medical Radiography Clinical III

This course allows students to expand upon skills developed during earlier clinical experience. Students assume more direct responsibility for specific radiographic examinations. Additional expenses may include supplies, equipment, and/or uniforms. Course meets two (2) evenings/week, with 8 hours of clinical practice weekly. Prerequisite: Part-Time Medical Radiography Clinical II (MIG128P).

## MIG-224

Radiologic Technology II
Using lecture and lab sessions, this course presents the x-ray circuit in form and function. Topics include, but are not limited to, characteristics of $x$-rays, wave-particle duality, $x$ ray production, target interactions, photon interactions with matter, digital and conventional fluoroscopy, and electronic imaging units. Prerequisite: Imaging Technology I (MIG111).

## MIG-226

Radiologic Imaging II
Using lecture and lab sessions, this course explores the concepts of quality assurance, quality control and film critique. Additional topics include but are not limited to: advance digital concepts, cardiovascular and interventional techniques, computers in imaging, and special radiographic procedures. Prerequisite: Radiographic Imaging I (MIG120).

## MIG-227 1 Credit Pharmacology of Radiology

This course is designed to provide basic concepts of pharmacology to the medical radiography student. Content includes chemical, generic and trade names for select drugs; pharmacokinetic and pharmacodynamic principles of select drugs; classification of drugs; action, effects, uses and side effects of select drugs on imaging procedures; categories of contrast agents; pharmacology of barium and iodine compounds; dose calculations for adult and pediatric patients; legal and ethical status of the radiographer's role in drug administration; and the radiographer's professional liability concerning drug administration. This course has a web-based component. Prerequisites: Patient Care for Medical Imaging (MIG109) and Anatomy and Physiology II/Lab (BIO 204).

## MIG-228F

3 Credits
Full-Time Medical Radiography Clinical V
This course allows students to develop additional experience in the materials covered in Positioning I, Positioning II, and Positioning III, and to further expand their clinical skills. Additional expenses may include supplies, equipment, and/or uniforms. Course meets three (3) days/week with 24 hours of clinical practice weekly. Prerequisite: Full-time Medical Radiography Clinical III (MIG222F).

## MIG-228P

5 Credits
Part-Time Medical Radiography Clinical V
This course allows students to develop additional experience in the materials covered in Positioning I, Positioning II, and Positioning III, and to further expand their clinical skills. Additional expenses may include supplies, equipment, and/or uniforms. Course meets five (5) days/week, with 35 hours of clinical practice weekly. Prerequisite: Part-time Medical Radiography Clinical III (MIG222P).

M IG－230
3 Credits

## Radiation Protection

This course covers an overview of the effects of ionizing radiation on the human body and the protective measures available to minimize those effects．The course examines the effects that produce somatic as well as genetic changes．This course stresses methods of limiting and monitoring radiation exposure to personnel， patients，and the general population．Students gain a personal frame of reference regarding the mportance of this issue today．Prerequisite： Radiologic Imaging II（MIG226）for day option only．Co－requisite：Radiologic Imaging II （MIG226）for evening option．

## MIG－234 <br> CT／Cross Section Anatomy

2 Credits
This course introduces students to CT （Computerized Axial Tomography）history，the development of CT equipment configuration， and the basic scanning protocols．The course exposes students to cross－sectional anatomy， which is necessary for proficiency in the areas of CT，Ultrasound，and MRI．Prerequisite：
Anatomy／Physiology II／Lab（BIO 204）．
MIG－236F
3 Credits
FT Medical Radiography Clinical V
This final phase of medical radiography
instruction allows students an opportunity to review and assess clinical skills acquired during their training．At the end of this rotation students are clinically proficient in general radiography． Additional expenses may include supplies，
equipment，and／or uniforms．Course meets three （3）days／week with 24 clinical hours of practice weekly．Prerequisite：Full－Time Medica
Radiography Clinical IV（MIG228F）．

## MIG－236P

PT Medical Radiography Clinical V
This final phase of medical radiography instruction allows students an opportunity to review and assess clinical skills acquired during their training．At the end of this rotation students are clinically proficient in general radiography． Additional expenses may include supplies， equipment，and／or uniforms．Course meets five （5）days／week with 40 clinical hours of practice weekly．Prerequisite：Part－Time M edical
Radiography Clinical IV（MIG228P）．

## MIG－238

2 Credits

## Advanced Medical Radiography Seminar

The focus of this capstone course is the transition from student technologist to entry－level
technologist．A variety of learning activities， including case studies and a research project，will be utilized to promote critical thinking．The course will also focus on professional development，credentialing，lifelong learning， and cultural competence in the workplace．A review module will prepare students for success on the American Registry of Radiologic Technologists Examination．Additional expenses will include certification mock exam software． Prerequisites：Radiologic Technology II（MIG224） and Radiologic Imaging II（MIG226）．
M IG－251
3 Credits
Advanced PACS Seminar
This capstone seminar explores the day－to－day responsibilities of a PACS administrator．Topics discussed include the responsibilities of the position，the expectations of various stakeholders in healthcare delivery，and the impact of PACS performance on healthcare delivery．The issues of maintenance，considerations for purchase of a system，frequently asked questions，and the process of rolling out a new system are also explored．Co－requisite：PACS Administration I （CIT141）．Prerequisite：Intro to Diagnostic Imaging and PACS（MIG161）．

## MIG－261

Sectional Anatomy
This interactive，web－based course is designed to provide an in－depth look at sectional anatomy， and its particular relevance to the fields of CT and MR．Prerequisites：Anatomy／Physiology I （BIO 203），Anatomy／Physiology II（BIO 204），or current ARRT，NMTCB or ARDMS registry status．

## MIG－299

PACS Administration Internship
This course enhances the academic experience for students．All internships take place at pre－ approved sites．The course allows students to apply learned skills in the actual medical environment．Students must complete weekly didactic work in addition to the clinical hours． Students must comply with the Internship requirements，as stated in the Internship Handbook，before registering for the course． Criminal Offender Record Information（CORI） checks will be conducted on all students befor placement，and the outcome may impact the student＇s eligibility to participate in the internship experience．Admission to the PACS Certificate Program does not guarantee internship placement．Prerequisite：Acceptance in PACS Administration Certificate．

## MIG－299B

3 Credits
PACS Business Internship
This 100－hour internship enhances the academic experience for students．All business internships take place at pre－approved industry sites with mentoring by industry representatives．
Professionals with clinical experience will benefit from the industry perspective of relevant training for imaging informatics，including daily challenges such as the identification of customer needs， collaboration with healthcare stakeholders in designing appropriate PACS systems， implementation concerns and actual issues，as well as the evaluation of customer satisfaction． This 100－hour business internship will also enable students to explore career options in the business sector of imaging informatics．Students are responsible for providing their own transportation to and from the business internship site．Students must comply with all corporate policies，as directed by the industry mentor at the site，as well as all BHCC policies．Prerequisite：Admission to the Imaging Informatics O nline Certificate Program．

## Medical Laboratory Assistant

## M LA－120 <br> 1 Credit <br> Medical Terminology Clinical Lab Prof

This course explores the roots of all medical terminology as it pertains to clinical laboratory professionals．Prerequisite：Admission to the Program．

## MLA－121 4 Credits

## MLA I：Phlebotomy \＆Specimen Processing

This course explores the nature and scope of phlebotomy and specimen processing．The primary focus will be on the role of proper collection and handling of patient samples． Students will learn the methods needed for proper specimen processing，set up，and waived testing procedures．Prerequisite：Admission to the Program．

## MLA－222 4 Credits

MLA II：Clinical Laboratory Techniques
This course is designed for the Medical Laboratory Assistant（MLA or CLA）．This course consists of the clinical laboratory techniques needed to develop skills with the use of a microscope，instrumentation management including quality control and maintenance， proper pipetting skills，laboratory information
system（LIS）and how to support clinical laboratory staff．Prerequisite：Medical Terminology and M LA I with a grade of B－or better．

## MLA－223 <br> 4 Credits <br> MLA III：Clinical Practicum

Students acquire knowledge and experience of laboratory practices and procedures at one of the college＇s clinical laboratory affiliates．The practicum prepares the student in an actual clinical work environment．Rotation order through departments is subject to affiliate laboratory schedules．Prerequisites：Successful completion of M LA I and MLA II with a grade of B－or better．

## Medical Lab Technician

## M LT－101 <br> 4 Credits <br> Introduction to Medical Lab Science and Urinalysis

This course explores the nature and scope of work in the clinical laboratory．The primary focus will be the role of the laboratory in the healthcare system，duties of the Medical Laboratory Technician and professional conduct，safety in the laboratory， laboratory mathematics and quality control．The laboratory will include exercises that reflect each of the major clinical laboratory sub－disciplines： Clincal Chemistry，Diagnostic Microbiology， Hematology，and Blood Banking．Additiona laboratory exercises will focus on routine urinalysis as well as normal and abnormal physiological functions of the renal system．A phlebotomy unit will teach the fundamental skills required to collect blood specimens for testing． Class meets： 3 hrs．lecture；3hrs．lab Prerequisite： Admission to the Medical Laboratory Technician program．

## MLT－211

4 Credits

## Hematology \＆Hemostasis

This course consists exploring the theory and practice of routine hematology．Topics include the collection and handling of clinical specimens， the origin，development，and function of human blood cells in health and disease，hemostasis， and coagulation，automation，and quality control． Routine hematology and coagulation testing will be emphasized．Class meets 3hrs．lecture；3hrs． lab．Prerequisites：A grade of B －or higher in Introduction to Medical Laboratory Science and Urinalysis（MLT－101，M edical Microbiology and Lab（MLT－212），Immunology and Serology（M LT－ 213），Immunohematology（M LT－241），and Clinical Chemistry（MLT－242）．

## MLT－212 <br> 4 Credits

## Medical Microbiology \＆Lab

This course is a comprehensive study of both theory and practical aspects of clinica microbiology．Emphasis will be placed on the collection and handling of clinical specimens as well as the primary isolation and identification of the most frequently encountered bacteria pathogenic to humans．Other topics discussed include antimicrobial chemotherapy and host resistance．Other organisms examined include fungi and parasites．This course is open only to admitted CLS students．Class meets 3 hrs．lecture； 3 hrs．lab．Prerequisites：A grade of $B$－or higher in Introduction to Medical Laboratory Science and Urinalysis（MLT－101）and Immunology and Serology（MLT－213）．
MLT－213 4 Credits Immunology \＆Serology
This course introduces the theoretical principles of immunology which involve the structure，function， and interactions of the immune system．The serological techniques useful in the diagnosis of many diseases will be reviewed and performed．
Class meets：3hrs．lecture；3hrs．lab．
Prerequisites：Admission to program

## M LT-241 <br> 4 Credits mmunohematology

This course consists of the study of the genetic basis and immunological interaction of the major blood group antigens and antibodies. Topics will include compatibility testing, antibody screening and identification techniques, blood donation, transfusion therapy, record keeping, and quality control techniques. Class meets: 3hrs. lecture; 3hrs. lab. Prerequisites: A grade of B- or higher in Introduction to Medical Laboratory Science and Urinalysis (MLT-101) and Immunology and Serology (MLT-213).

## MLT-242 4 Credits Clinical Chemistry

The primary focus of the course is the biochemical analysis of blood and body fluids in health and disease. Topics include routine manual and automated testing methods, electrophoresis, molecular techniques, safety practices and quality control.Class hours: 3 hrs. lecture; 3 hrs. lab. Prerequisites: A grade of B- or higher in Introduction to Medical Laboratory Science and Urinalysis (MLT-101) and Immunology and Serology (MLT-213)

M LT-251
12 Credits
Clinical Laboratory Sciences Practicum
This course consists of practicum experiences at one of the college's clinical affiliates in which the student acquires knowledge and experiences in laboratory practices and procedures.
Prerequisites: A grade of B- or higher in Immunohematology (MLT-241) and Clinical Chemistry (MLT-242).

## Magnetic Resonance (MR)

## MRC-111 <br> MR Concepts I

3 Credits
This interactive, web-based course begins with MR screening and safety, legal and ethical principles, patient assessment, monitoring and management and interpersonal communications. Other content includes infection control, MR instrumentation, fundamental principles, data manipulation and sequence parameters and options. Prerequisite: Acceptance into MR Certificate Program.

## MRC-211 <br> MR Concepts II

This interactive, web-based course presents MR imaging procedures of the head and neck, spine, thorax, abdomen, pelvis and musculoskeletal system, including protocol considerations, contrast, and patient positioning. Other content includes but is not limited to sequence parameters, image quality, quality assurance, and quality control. Prerequisite: MR Concept I (MRC111).

## M RC-299 <br> 3 Credits <br> MR Clinical Internship

This 100-hour clinical introduction will enhance the academic experience for students by introducing them to the clinical practice of MRI. Students are responsible for providing their own clinical site. Clinical sites must be pre-approved by program faculty. Students must comply with the clinical policies, as stated in the Internship Handbook, before attending clinical. Criminal Offender Record Information (CORI) check will be conducted on all students before placement, and the outcome may impact the student's ability to participate in the internship experience. Health clearance is also required prior to participation. Prerequisite: MR Concepts I (MRC-111).

## Music

## MUS-101

3 Credits

## Music Fundamentals

This course serves as an introduction to reading and making music. Topics include pitches, rhythms, scales, intervals, chords, and other music terminology. This course also introduces ear training, performance skills, and critical thinking about music. No prior musical experience is required. This course satisfies General Education requirement "Creative Work". Prerequisites: Grade of $C$ or higher in Academic Reading II (ESL-088) and Academic Writing II (ESL-089); or Reading Skills I (RDG-090) and Writing Skills I (ENG-090); or Integrated ELL Level I (ELL-101); or execmption by placing into higher level courses.

## MUS-105

4 Credits

## Music Theory and Aural Skills I

In this course, students develop an understanding of how music works. Through analysis, composition, and other exercises, students learn the theory of music, with particular emphasis on chord progressions and their relationship to melody and song structure. Additionally, in the laboratory component of this course, students will develop their musicianship skills through the sight-reading of melodies, rhythms, and chords, as well as recognizing them by ear. This course is designed for music majors, but is open to any student with introductory music reading ability. Prerequisite: Music Fundamentals (MUS-101) or permission of the department chair.

## MUS-106

4 Credits

## Music Theory and Aural Skills II

This course continues the development of analytical and practical music skills begun in Music Theory and Aural Skills I. Through the examination and composition of music, students explore more advanced theoretical elements, including chromatic harmony and musical form. In the laboratory compoenent of this course, students will continue to develop their sightreading and dictation abilities. Prerequisite: Music Theory and Aural Skill (MUS-105) or permission of the department chair

## MUS-113 1 Credit <br> \section*{J azz Ensemble}

This course focuses on the rehearsal and performance of jazz and related syles of music Students develop their music reading and improvisation ability, in addition to general performance skills associated with the small jazz ensemble. This course is designed for students with previous experience in music. An audition is required. This course may be repeated for credit. Prerequisite: Audition

## M US-116 <br> 1 Credit

## Popular Music Ensemble

This ensemble rehearses and performs a variety of modern popular music, including rock, $R \& B$, pop, hip hop, country, and other styles. Students will develop their instrumental or vocal ability, musicianship, and other performance skills. This course is designed for students with previous experience in music. An audition is required. This course may be repeated for credit. Prerequisite: Audition

MUS-120 1 Credit

## College Choir

The College Choir rehearses and performs a diverse repertoire of vocal music, from classical to pop and other styles from around the world. In this course, students will develop their singing ability, musicianship, and general performance
skills. This course is open to singers of all skill levels and experience, but an audition is required. This course may be repeated for credit. Prerequisite: Audition

MUS-130
3 Credits

## Music Appreciation

An introduction to listening to and discussing music, this course draws on music from a variety of styles, eras, and nations. Through a broad exploration of music's evolution through history, this course examines the core components of music and their connection to society and culture No prior musical experience is required. This course satisfies General Education requirement "Creative Work". It is not an eligible Music Elective for students in the Music Concentration. Prerequisites: A grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL 098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## MUS-133 <br> 3 Credits <br> Music History I

This course is a survey of the history of music from antiquity through the Classical period (around 1800). While focusing on art music of the Western world, this course aims to relate course topics to music of all time periods, cultures, and styles. Students will develop an understanding of the evolution of music through the centuries, as well as the culture, politics, technology, and human drama that shaped that music. This course is designed for music majors, but is open to any students with rudimentary knowledge of music. Prerequisites: Music Fundamentals (MUS-101) or permission of department chair and a grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher leve courses.

## MUS-134

3 Credits

## Music History II

This course continues the survey of the history of music covering the Romantic period (around 1800) through the present. While focusing on Western art music this course aims to connect the music covered in class to the music of other cultures, eras, and styles. Students will examine the development of music through the emergence of the modern world, as well as the culture, politics, technology, and human drama that shaped it. This course is designed for music majors, but is open to any students with rudimentary knowledge of music. Prerequisites: Music History I(MUS-133) or permission of department chair and a grade of C or higher in Writing Skills II (ENG-095) and Academic Reading III (ESL-098) or Reading Skills II (RDG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## MUS-141

3 Credits

## Rock \& Roll History

This course is a survey of rock music and its history. This course covers the various styles of rock, from its early roots to the music of the present, in addition to other closely-related styles of music. Students will examine the musical aspects of the genre and its major figures, as well as the social,economic, political, and technological factors that shaped its development. No prior musical experience is required. This course meets the General Education requirement for Creative Work. Prerequisites: A grade C or higher in Academic Reading II (ESL-088) and Academic Writing II (ESL-088); Writing Skills I (ENG-090) and Reading Skills I (RDG-090); or Integrated ELL Level I (ELL101) or exemption by placing into higher level courses.

## MUS－144

3 Credits
World Music
Formerly MUS－161，this course serves as an introduction to the diverse musical traditions of the world．Students will explore the music of a variety of cultures and regions，and come to understand how it is shaped by social customs， geography，history，and cross－cultural interaction． No prior musical experience is required．This course satisfies General Education requirement ＂Creative Work＂．Prerequisites：A grade of C or higher in Academic Reading II（ESL－088）and Academic Writing II（ESL－089）；or Reading Skills I （RDG－090）and Writing Skills I（ENG－090）；or Integrated ELL Level 1 （ELL－101）or exemption by placement testing．

## MUS－147 <br> 3 Credits

## Music in the United States

A survey of musical traditions in the United States，this course covers the development of folk，popular，and art music from the Colonial period to the present．Students will explore how social，historical，political，and economic factors have affected the development of American music．No prior musical experience is required． This course meets the General Education requirement for Creative Work．Prerequisites：A grade of C or higher in Writing Skills II（ENG－095） and Academic Reading III（ESL－098）or Reading Skills II（RDG－095）；or Integrated ELL Level III （ELL－103）or exemption by placing into higher level courses＂

## MUS－151

2 Credits
Piano I
This course provides group keyboard instruction for the beginner．Students develop introductory keyboard technique，musicianship skills，and sight－reading ability through the performance of simple pieces from a variety of musical styles． This course is open to all students regardless of prior experience．Prerequisites：None．
MUS－152
2 Credits

## Piano II

A continuation of Piano I（MUS151），this course provides further instruction in keyboard skills． Students continue to develop technical and musicianship proficiency through the performance of elementary and intermediate repertoire．Prerequisites：Piano I（MUS151）or chair approval．

## MUS－156 <br> 2 Credits

## Beginning Guitar

This course provides group instruction in guitar for the beginner．In playing music from a variety of styles，students will learn foundational techniques，including chord shapes，strumming， picking，scales，and basic music reading．This course is open to all students，regardless of prior experience．

## MUS－162

2 Credits

## Beginning Voice

This course provides group vocal instruction for singers of all skill levels．Students develop their vocal technique，musicianship skills，and performance ability while singing a variety of musical styles．This course is open to all students， regardless of prior vocal experience．

## M US－171

3 Credits
Intro to Music Technology
This course serves as an introduction to the use of technology in the creation of music．Using digital audio software，students learn the basics of sound manipulation，including sequencing， editing，synthesis，and mixing．Additional course topics include the properties of sound，basic recording technology，and music notation software．This course is designed for both music majors and non－majors．

MUS－180
Introduction to the Music Business
This course provides an overview of the modern music industry，gained through discussion，hands－ on projects，and guest presentations from music business professionals．Course content includes the recording industry，copyright，publishing， promotion，and entrepreneurship，with special attention given to the role of the Internet in the music business．This course also examines the diverse career options available in music．This course fulfills the Learning Community Seminar requirement for first－year，full－time students．

## MUS－195

## Applied Music I

This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student．Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－195A <br> Applied Music I：Voice

1 Credit
This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student． Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－195B <br> 1 Credit

## Applied Music I：Guitar

This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student． Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－195C <br> 1 Credit

## Applied Music I：Keyboards

This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student． Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－195D

1 Credit

## Applied Music I：Percussion

This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student． Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－195E <br> 1 Credit <br> Appllied Music I：Brass

This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student．Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for
placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－195F <br> 1 Credit

## Applied Music I：Strings

This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student．Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－195G <br> 1 Credit

## Applied Music I：Woodwinds

This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student．Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．
MUS－195H
1 Credit
Applied Music－Conducting
This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student．Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of department chair．

## MUS－195I

1 Credit

## Applied Music I：Composition

This course provides individual instruction in Music Composition．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student． Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－195J

Applied Music I：Bass
This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student．Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of department chair．

## MUS－195X

1 Credit
Applied Music I：Specialized Studies
This course provides individual instruction in voice or a musical instrument．Course topics include technique，performance practice，and repertoire appropriate for the skill level of the student．Where applicable，students are required to provide their own instrument．This course is open to all students，but requires an audition for placement．Prerequisite：Audition and consent of instructor or department chair．

## MUS－208

3 Credits
Songwriting
This course serves as an introduction to popular songwriting．Through writing original songs and examining a wide variety of popular music， students will examine concepts such as melody， lyrics，chord progressions，and structure． Prerequisite：M usic Fundamentals（MUS 101）or permission of the instructor．

MUS-272

## 3 Credits

## Advanced Music Production

This course further develops student ability in the production of music, especially in relation to post-production in the home studio. Course topics include the advanced use of signa processors, mixing, the quantization and pitch correction of audio, and advanced use of synthesizers and samplers. Prerequisite: Introduction to Music Technology (MUS171) or permission of instructor.

## MUS-295

1 Credit

## Applied Music II

This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295A <br> Applied Music II: Voice

This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295B <br> 1 Credit

## Applied Music li: Guitar

This course provides individual instruction in voice or a musical instrument. Course topics will include technique, performance practice, and repertoire appropriate for the skill level of the student. Where applicable, students are required to provide their own instrument. This course is open to all students, but requires an audition for placement. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295C

1 Credit

## Applied Music II: Keyboards

This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295D

1 Credit
Applied Music II: Percussion
This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music
majors, but is open to all students who
demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295E <br> 1 Credit

## Applied Music li: Brass

This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295F

1 Credit

## Applied Music II: Strings

This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295G <br> Applied Music II: Woodwinds

1 Credit
This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## Applied Music li: Conducting

This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295I <br> Applied Music li: Composition

This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-295J <br> Applied Music li: Bass

1 Credit

This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of department chair.

MUS-295X
1 Credit
Applied Music II: Specialized Studies
This course provides individual instruction in voice or a musical instrument for students with well-developed performance skills. Course topics include advanced technique, performance practice, and repertoire appropriate for the skill level of the student. This course requires students to perform in a public recital. Where applicable, students are required to provide their own instrument. This course is designed for music majors, but is open to all students who demonstrate the requisite performance ability in an audition. Prerequisite: Audition and consent of instructor or department chair.

## MUS-XXX <br> Introduction to Music Technology

This course serves as an introduction to the use digital audio software, students learn the basics of sound manipulation, including sequencing, editing, synthesis, and mixing. Additional course topics include the properties of sound, basic recording technology, and music notation software. This course is designed for both music majors and non-majors.

## Medical Coding

NHP-180 3 Credits

## Medical Terminology

This course provides instruction in the development of basic medical terminology. Competency in medical terminology promotes effective communication among members of the healthcare team.

## Nursing <br> NUR-095 <br> 3 Credits <br> Success in Nursing

This introductory course focuses on assisting students to adapt to the upcoming challenges in the nursing curriculum. The course emphasizes test-taking skills, study skills, critical thinking, learning styles, and therapeutic nurse-patient communication and beginning nursing concepts. The course is designed for nursing students accepted to the nursing program in the fall semester and those students planning to apply to the Nursing Program. Course meets: 3 hrs. lecture

## UR-099

2 Credits

## Nursing Pathways

This course is designed for students who are seeking readmission to the nursing program. This course will assist students in analyzing their study skills, and designing a path for successful completion of the nursing program. Topics include time management, stress reduction, adapting study skills, and test-taking techniques and practice. Students are encouraged to use introspection and critical thinking as they
formulate a plan that will enable them to complete the nursing program and take the licensure exam after graduation. Computer software and small group work for problem solving in answering multiple-choice questions will be utilized

## NUR-120

0 Credits

## Foundation of Patient Centered Care

This course provides an introduction to nursing and roles of the nurse as well as professional related and patient care concepts. Emphasis is placed on the knowledge, skills and attitudes needed to provide safe, quality care. It provides the framework for preparing students to perform a basic health assessment on adult patients including older adults. The theoretical foundation for basic assessment and skills is presented, and the student is given an opportunity to demonstrate these skills in the laboratory and clinical setting. An introduction to the nursing process provides a decision-making framework to assist students in developing effective clinical judgement. Additional expenses may include supplies, equipment and/or uniforms. Course meets: 7 hours lecture; 3 hours simulation lab; 6 hours clinical practice in selected health care facilities. Prerequisites: Acceptance into the nursing program, Anatomy/Physiology/Lab (BIO 203) and College Writing (ENG-111)

## NUR-150

10 Credits
Patient-Centered Care-Adult \& Mental Health
This course focuses on the care of adult patients with health alterations that require medical and/or surgical intervention as well as patients who are experiencing cognitive, mental and behavioral alterations. Emphasis is placed on the care of patients with alterations in mental health selected body functions. Concepts of client centered care, cultural sensitivity, informatics, safe practice, and professionalism are integrated throughout the course. Concepts of crisis intervention, therapeutic communication, anger management and coping skills are also integrated. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe client care to adults in a variety of settings. Additional expenses may include supplies, equipment, and/or uniforms. Course meets 6 hours lecture; 1.5 hours simulation lab; 12 hours clinical practice in selected health care facilities. Prerequisites: Anatomy/Physiology II BIO-204 and Foundations of Patient-Centered Care N UR-120.

## NUR-213

1 Credit

## Nursing Seminar

This seminar focuses on current health care issues and the ethical, legal, and professional framework necessary for nursing practice. The course assists in the transition from student nurse to beginning practitioner. The course utilizes a variety of learning activities that promote critical thinking. The course explores topics such as conflict resolution, cultural competence, health care access, empowerment, and lifelong learning. Course meets: 1 hr . lecture. Prerequisite: Nursing III (NUR211).

NUR-220
10 Credits
Patient-Centered Care of Adults \& Families
This course focuses on patient-centered care of adults with complex health alterations as well as an integrated family approach to mothers, newborns, and children. Emphasis is placed on helping adult patients cope with alterations in body functions. Additional focus is placed on normal growth and development, common pediatric conditions, and the child-bearing family. Concepts of quality improvement, leadership, professionalism, evidence based practice.

Informatics, teamwork and collaboration will be integrated throughout the course. Clinica experience provides an opportunity to apply theoretical nursing concepts and implement safe care to patients across the lifespan. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 6 hours lecture; 1.5 hours simulation lab; 10.5 hours clinical practice in selected health care facilities. Prerequisites: Microbiology/Lab BIO-205, Human Growth \& Development PSY-213, Patient Centered Care of Adults and Mental Health Concepts NUR-150.

## NUR-250

9 Credits
Patient-Centered Care of Adults with Multisystem Disorders and Transition to Practice
This course focuses on advanced concepts of nursing care of adult patients with complex, multisystem alterations in health. Complex clinical skills, as well as concepts of patientcentered care, safety, quality improvement, professionalism and leadership, are integrated throughout the course. Focus on time management and organizational skills while managing the care of patients with multiple needs and collaborating with the interprofessional team are integrated in this course. This course also facilitates the transition of the student to the roll of professional nurse. Developing the skills of delegation, conflict management, and leadership will be addressed. Legal and ethical issues are discussed with ta focus on personal accountability and responsibility. Standards of practice and the significance of functioning according to state regulations and statues are analyzed. Clinical experiences provide the student with the opportunity to apply theoretical nursing concepts and implement safe care to patients will functioning in a leadership role. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 6 hours lecture; 1.5 hours simulation lab; 7.5 hours clinical practice in selected health care facilities. Prerequisites: Patient Centered Care of Adults \& Families NUR-220

## Office \& Information Mgmt

## O IM-100 <br> PC Keyboarding Techniques

1 Credit

This is an introductory course in college keyboarding designed for students with little or no keyboarding proficiency as well as those looking to upgrade or refresh their skills. Learning to type properly has never been more important. Using state-of-the-art, hands-on, self-paced software, students proceed from basic lessons through accuracy and speed-building exercises designed to prepare them for careers requiring keyboarding proficiency. Taught through BHCC's on-line eCollege, students submit hands-on progress reports to the course instructor as they proceed through each lesson. Upon completion of this course, students will gain the skill and knowledge necessary to type accurately based on one (1) minute timings at a minimum of 20 words per minute with one (1) error or less. For additional information and/or a course syllabus, contact CITDepartment@bhcc.mass.edu.

## O IM-101

 3 Credits
## Keyboarding: Document Generation I

This course focuses on learning the keyboard and developing keyboarding technique, speed, and accuracy. It introduces the Windows environment and basic word processing skills, such as editing, saving, changing appearance, using spell check, and printing using Microsoft Office 2010. It covers formatting for basic business documents,
such as resumes, letters and memorandums, and discusses health issues and computer concepts as related to keyboarding. Note: The department schedules an exemption test each semester for students with previous keyboarding experience. Students should contact the Prior Learning Coordinator in the Center for Self-Directed Learning (CSDL) or department chair for more information.

O IM-102
3 Credits

## Medical Computer Applications

This course uses Microsoft Word, Access, and Excel to cover applications commonly used in the medical office. Students learn the correct form for business letters, merge documents,
memorandums, tables, business reports, electronic forms, and medical documents. Emphasis is place on accurate proofreading of documents for format and content. Note: For Allied Health Students or by permission of department chairperson.
OIM-103
3 Credits
Microsoft Word I
(Formerly OIM 101) This course uses Microsoft Word and covers applications, including but not limited to font and paragraph settings, page setup, table format, headers and footers, page numbering in sections, footnotes, citations, bibliographies, mail merge and envelopes, spell check and thesaurus, and electronic forms. Students create documents commonly used within academic and business settings. Students develop correct keyboarding technique in order to meet the industry standard for speed and accuracy. N ote: An exemption exam for students with previous keyboarding experience is available through the Center for Self-Directed Learning each semester by contacting the Prior Learning Coordinator.

## 0 IM-104

1 Credit

## OIM Career Exploration

This online course provides students with the tools needed to evaluate their career goals and to explore strategies for securing employment within the office and/or medical office job market. Students will complete modules that engage them in activities designed to evaluate values, skills, and interests as related to their prospective careers. Students will use resources on the BHCC portal and elsewhere to explore individual careers and research employers and the local job market. Resumes and cover letters will also be completed.

## O IM-105 <br> 3 Credits

Skills for Administrative Success
(Formerly OIM-199) Students explore career opportunaties in related office administration fields. This course includes critical thinking and teamwork projects to help students develop the ability to give and receive constructive criticism in a supportive environment. Students complete individual and team projects that use Internet research and library resources. Based on research related to office and information management issues, they develop written and oral presentation skills. Time management, listening, note-taking, and test-taking skills are emphasized. Security issues, legal and ethical issues, and cultural diversity are covered. Current students, alumni, and business personnel will provide perspectives on how to succeed in academia and in the business world. This course will fulfill the Learning Community Seminar requirement for Office and Information Management students. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading (ESL098) or Reading Skills II (RDG 095) or placement. Pre/co-requisite: MS Word I (OIM 103) or Document Generation I (OIM 101).

## OIM-106 <br> 3 Credit <br> Records and Information Management

This course provides an introduction to records and information management (RIM) including alphabetic, subject and geographic filing guidelines, as well as the components of the records management lifecycle, and associated regulatory, privacy, compliance and risk issues. Paper-based systems and electronic file systems will be included. Students will complete hands-on projects using a records management online learning platform as well as use of the Moodle online platform, which is required. Business research using Internet Explorer is integrated with PowerPoint presentations and team assignements to tie together all the various professional skills using a qualitative approach. Pre/co-requisite: Applications/Concepts (CIT110) or Introduction to Microsoft Office (CIT133)

## OIM-110

3 Credits

## Document Generation II

This course assists students in using Word to create common business documents such as business letters, memorandums, reports with footnotes and endnotes, bibliographies, tables of contents, tables, on-line forms, resumes and newsletters using current industry standards. Students learn to use accelerator keys, macros, templates, bullets and numbering, leaders, merging, sorting, hyperlinks, section breaks, styles, formulas, clip art, WordArt, and column layout. Diagnostic and speed-building exercises are used to improve keyboarding accuracy and speed. A minimal speed of 30 words per minute is strongly recommended. Students acquire skills that are recommended for preparation for MOUS (M icrosoft Office User Specialist) certification. Prerequisites: Grade of C or better in Keyboarding Document Generation I (OIM 101) and Applications \& Concepts (CIT110) or department chair approval.

## OIM-112

3 Credits

## Microsoft Word II

This course covers intermediate and advanced Microsoft Word applications to create common business documents such as letters, memorandums, tables, reports, desktop publishing flyers, and electronic forms. Students learn to use accelerator keys, macros, templates, bullets, and numbering, headers, merging, sorting, hyperlinks, section breaks, styles, formulas, clip art, WordArt, and column layout. Diagnostic, and speed building exercises are used to improve keyboarding accuracy and speed. A minimal speed of 40 words per minute is strongly recommended. Students acquire skills that prepare them for MOUS (Microsoft Office User Specialist)certification. Prerequisite: Grade of C or better in MS Word I (OIM 103) or Keyboarding:Document Generation I (OIM 101) and Applications/Concepts (CIT110) or by permission of the department chairperson.

OIM-115
3 Credits
Administrative Technology and Procedures
This course introduces administrative skills vital for employment in business and industry, including telecommunications; mail and copy services; travel, meeting, and conference arrangements; teleworkers/virtual assistants; customer service; and job application techniques. The class develops problem solving, critical thinking, organizational skills, and interpersonal skills while emphasizing work ethics, teamwork, and cultural diversity. To enhance these skills, students work individually and in teams to conduct library and Internet research and give presentations in class.
Personnel from area corporations may participate in class discussions. Pre/co-requisites: MS Word I (OIM 103), Document Generation I (OIM 101) and Applications/ Concepts (CIT110).

## 0 IM-121 <br> 1 Credit

OIM Practicum
This field experience takes place after students have completed the coursework required for the administrative support specialist certificate. Students work for 45 hours within a work environment related to their career goals, abilities, and skills. Students complete the OIM Career Exploration course prior to the practicum and participate in a weekly seminar during the field experience. Prerequisites: Students complete all coursework with a grade point average of 2.75 or higher. Students must meet with the Internship Coordinator during the semester prior to completing the practicum

## OIM-130 <br> 3 Credits

Business Correspondence/Editing
This course reviews English fundamentals and emphasizes proofreading and editing skills for Business documents. Students compose, edit, and produce business letters and memorandums that are commonly written by administrative assistants. This course utilizes current word processing software. Prerequisite: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses and Pre/co-requisite: Keyboarding: Document Generation I (OIM-101).
OIM-132
3 Credits
Administrative Business Communication I
(Formerly OIM 130) This course will develop the skills needed to create documents that are used within office and medical office environments. Writing assignments will include emails, memorandums, and letters. Projects utilizing Outlook for email and electronic calendar activities will be completed. Students create PowerPoint presentations based on research related to office procedures and/or office functions. Students will also learn to prepare agendas, implement and conduct business meetings, and develop skills in taking minutes at meetings. Individualized review of fundamental English skills will be based on pre-test results. Proofreading and editing skills both manually and digitally will be included. Prerequisite: Writing Skills II (ENG095) and MS Word I (OIM 103) or Document Generation I (OIM 101). Note: An exemption exam for OIM 132 is available through the Center for Self-Directed Learning for students with previous keyboarding experience by contacting the Prior Learning Coordinator.

## OIM-170

3 Credits

## Medical Office Procedures

This course includes Windows, word processing medical office procedures, and computerized medical management software. Students create documents commonly used in a medical office as well as job application materials, using templates, macros, and/or merged documents. Concepts covered include interpersonal communications, telecommunications, billing and collections, reimbursement procedures, records management, and mail classification and procedures. Hands-on experience using computerized medical management software provides practice in entering patient information, diagnostic cases, and financial transactions; processing insurance claims; scheduling patient appointments; and generating commonly used reports. Note: For Allied Health students or by permission of department chair. Prerequisite: Document Generation I (OIM-101), MS Word (OIM-103), or Medical Computer Application (OIM-102; formerly OIM-142), or any computer applications course or by permission of the department chair.

## OIM-190 <br> Medical Information Management

This course covers the medical environment, patient and staff scheduling, medical documents and computerized medical applications, professional activities and travel arrangements for medical staff, health insurance, and HIPPA standards, and ICD and CPT coding. Students use a computerized patient accounting software application to enter patient information, diagnostic and procedure codes, schedule and revise patient and staff appointments, process insurance claims, enter financial transactions, and generate financial reports. Students complete individual team projects that include Internet research as well as a written and oral presentations on an issue related to medical office administration. Pre/co-requisite: MS Word (OIM 103) or Document Generation I (OIM 101).

## OIM-200

3 Credits
Introduction to Physicians' Billing
This course presents the "revenue cycle" concept to students, which encompasses registration practices and the impact this process has on the billing function. The varied health care delivery systems and the history of the delivery of medical care are presented. The variety of prospective reimbursement systems on data collection, billing, and effective processes are defined and discussed. The principles of ICD and CPT coding the management of data, and the constantly changing regulations of CMS and other external regulators is reviewed. Technicalities of managing all aspects of claims submission and denial are examined. The course is offered only in the evening. Pre/co-requisite: Medical Terminology (NHP180).

## OIM-230 <br> 3 Credits <br> Administrative Business Communication

This course reinforces written (letters, memos, faxes, e-mail, reports, and resumes); verbal (listening, note-taking, telephone messages, voice mail, intercom discussions, and video conferencing); and nonverbal communications (transmission of attitude, facial expressions, hand gestures, and body language). To enhance these skills, students use Internet research to investigate topics related to the office administration field. It includes human relation skills, diversity, cultural sensitivity, and global awareness. This course is offered fall semester only. Pre/co-requisites: Records and Information Management (OIM 106), Document Generation II (OIM110), Administrative Technology and Procedures ( 0 IM 115), and Business Correspondence and Editing (OIM130).

## OIM-232 3 Credits

 Administrative Business Communication II(Formerly OIM230) The course covers human relations skills, non-verbal communication, diversity, cultural sensitivity, and global awareness. Meeting and event planning as well as telephone technique are included. Students research business-related topics, write formal reports and work in groups to develop PowerPoint presentations. Resumes, cover letters, and mock interviews are included to prepare students for internship placement. Students continue individualized review of English skills as needed. This course is offered fall only. A CO RI check may be required to participate in the Office and Information Management Internship. Prerequisite: A grade of C or better in Business Correspondence (OIM 130) or Administrative Business Correspondence I (OIM 132). Pre/corequisites: Records and Information Management (OIM 106), Document Generation (OIM110) MS Word II (OIM 112), or Dicument Generation I (OIM 101) and Technology and Procedures (OIM 115), or permission of department chairperson.

## O IM-299 <br> 3 Credits

## 0 ffice and Information Management

 InternshipThis field experience takes place during the spring semester of the second year and provides specific occupational preparation for office careers. Students work in an off-campus work environment related to their career goals, abilities, and skills. Students participate in seminars prior to internship and during the field experience. This course is offered spring semester only. Prerequisite: Administrative Business Communication II (OIM 232 - formerly OIM2330) and permission of the department chairperson or designee. Note: Administrative Business Communication II (OIM 232) is offered fall semester only and must be taken the fall semester prior to internship.

## Philosophy

## PHL-101

3 Credits

## Introduction to Philosophy

This course has three principal goals: to expand capacities for deep thinking; to develop skills for understanding and expressing complex ideas; and to consider some profound human questions. Students will encounter a selection of philosophical texts that address enduring philosophical questions. These texts will reflect the chronological, geographical, and social diversity of philosophical inquiry. Students will practice skills for reflective, critical, creative, and integrative thinking, and will demonstrate those skills in understanding and responding to texts, engaging in critical dialogue with peers, inquiring into philosophical questions, and developing and expressing their own philosophical perspectives. This course meets the General Education Requirement for Creative Work. Prerequisites: A grade of $C$ or higher in Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course.

## PHL-103

3 Credits

## Ethics

In this course, students will explore ideas about right and wrong. Students will engage with theories in moral philosophy, addressing concepts including rights, responsibilities, consequences, power, harm, equity, and liberation. Students will consider current issues in applied ethics, which will vary, but may include privacy, taxation, parenting, reparations, sexual consent, and/or mass incarceration. Students will practice skills including inclusive interpersonal communication and analysis of observable actions in relation to ethical principles. Students will reflect on and discuss their personal philosophy of right and wrong. The course meets the General Education requirement for Community and Cultural Contexts. Prerequisites: Grade of C or higher in Academic Reading III (ESL-098) and Academic Writing III (ESL-099) or Reading Skills I (RDG-090) and Writing Skills I (ENG-090); or C or higher in Integrated ELL Level I (ELL-101) or exemption by placement testing.

## PHL-290

3 Credits

## Special Topics in Philosophy

This course engages students in deeply exploring and contributing to selected topics in philosophy. Students will study works of philosophy; dialogue and exchange ideas with peers; connect
philosophical themes to lived experience and contemporary events; and produce seminar papers or other signature work developing and expressing their own philosophical ideas. Course topics vary; the topic will be announced at the time of registration. Prerequisites: ENG 111 and
at least 6 additional college-level credits. Students who have not completed the prerequisites may email [philosophy@bhcc.edu] to request permission to enroll in the course.

## Physics <br> PHY-191 4 Credits Introduction to Physics/ Lab

This course provides the background for the study of electronics and other technical areas. Topics include classical mechanics, the conservation laws, and electrostatics. This course is for Electric Power Utility Program students and Gas Utility Technology degree students only.
Class meets: 3hrs. lecture; 3hrs. Lab. Prerequisite: A grade of $C$ or better in Topics in
Algebra/Trigonometry (MAT193).

## PHY-201 <br> 4 Credits <br> General Physics I/Lab

This introductory course covers the principles of physics, using a problem-solving approach. Laws of motion, forces, work and energy, momentum and harmonic motion will be covered. For the biology student this course will provide him or her with an enhanced understanding of the physical aspects of living systems. Laboratory work will reinforce the understanding of physical concepts and promote the development of problem solving skills. This course satisfies the physics requirement of the AS Biological Science program. This course does not satisfy the physics requirement of the AA Chemical Science or
Physics/Engineering concentrations or the AS Engineering program. Class meets 3hrs. lecture; 3 hrs . lab. Prerequisite: Grade of C or better in Precalculus (MAT197).

## General Physics II/Lab

This continuation course of General Physics I/Lab (PHY201) covers the following topics: waves and sound, elasticity, fluids, heat, electricity, magnetism, electromagnetic radiation, light and optics and modern physics. As in General Physics I, this course will continue to relate principles of physics to living systems. Laboratory work will further develop the student's skills in data collecting and analysis. This course satisfies the physics requirement of the AS Biological Science program. This course does not satisfy the physics requirement of the AA Chemical Science or Physics/Engineering concentrations or the physics requirement of the AS Engineering program. Class meets 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in General Physics I/Lab (PHY201).

## PHY-251

4 Credits

## College Physics I/Lab

This course is an introduction to some of the fundamental principles and concepts of physics, using a problem-solving approach. The topics considered include the basic equations of motion, Newton's laws and their applications, work, energy, momentum, rotational kinematics and dynamics, conservation laws, laws of universal gravitation, and simple harmonic and oscillatory motion. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in Calculus I (MAT281).

## PHY-252

## College Physics II/Lab

In the first half of the course, this continuation of College Physics I (PHY251) covers the following topics: basic topics in electricity and magnetism, electromagnetic radiation, the nature of light, and optics. In the second half, the course covers an introduction to some basic ideas in modern physics. It also covers these additional topics: atomic structure, quantization, and nuclear
physics. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: College Physics I/Lab (PHY251). Pre/co-requisite: Grade of C or better in Calculus II (MAT282).

## Paralegal Studies

## PLG-101 <br> <br> introduction to Law

 <br> <br> introduction to Law}This course provides students with an understanding of the paralegal field. The course assists students to become familiar with all aspects of the legal system. The course emphasizes the role of the paralegal and the way that role complements that of the lawyer. The course explores the role of law in our society, the judicial system, contract law, tort law, equity, and criminal law. Prerequisites: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course.

PLG-102
3 Credits

## Legal Research \& Writing

This course covers an introduction to legal writing and proper use of legal terminology in developing and drafting a format for the legal memorandum, preparing briefs, and, in particular, formulating research skills. Prerequisite: Introduction to Law (PLG101).

## PLG-103

3 Credits
Litigation
Litigation is a core function of many law firms. Students will learn the rules and requirements necessary to provide effective litigation support in a law office. Topics include the organization and jurisdiction of federal and state courts, the preparation of pleadings, motions, interrogatories, judicial notice, preparation and admission of evidence, subpoenas, depositions and trial notebooks, interviewing clients, trial and appellate procedures, the rules of evidence, and the preparation of cases for hearing or trial. The roles of arbitration, mediation, and negotiation will also be covered. Prerequisites: Introduction to Law (PLG101)

## PLG-104 <br> 3 Credits <br> Legal Ethics

This course presents the major areas of lega ethics placing special and comprehensive emphasis on how the rules affect paralegals. It aids students in understanding how the legal profession is regulated generally and the impact that paralegals' conduct has on the lawyers who employ them. Through case studies, geared specifically toward paralegals, demonstrations of the rules are introduced and applied.
Prerequisite: Introduction to Law (PLG101).

## PLG-105

3 Credits

## Practical Legal Writing

This course is intended to be a continuation of Legal Research and Writing (PLG102). The course provides students the opportunity to improve their writing skills for all aspects of working in a legal environment, including legal correspondence, legal memorandums, case briefs, and a variety of court documents. The course covers the structure and jurisdiction of the Federal and Massachusetts Court Systems. Prerequisites: Introduction to Law (PLG101), Legal Research \& Writing (PLG102), and College English (ENG111).
PLG-201
3 Credits
Family Law
This course covers the laws concerning family relationship, marriage, cohabitation, adoption, divorce, child custody, support, alimony, and the effects of wills and probate. Prerequisite: Introduction to Law (PLG101).

## PLG-202 <br> Business O rganizations

3 Credits

Choosing the proper form of business organization can mean the difference between success and failure. Many attorneys are involved in advising their commercial clients regarding the appropriate form of business. This course covers the rules and requirements to establish sole proprietorships, partnerships, limited partnerships, limited liability companies, limited liability partnerships, business trusts, corporations and joint ventures. Practical considerations include the preparation and management of the documents necessary for the organization and maintenance of each business entity. Corporate materials are reviewed, as are corporate characteristics, formation procedures, financial structure, meetings, dividends, share ownership, amendments, dissolution, and M assachusetts incorporation procedures. Prerequisite: Introduction to Law (PLG101).

## PLG-203

3 Credits

## Real Estate Law

This course thoroughly investigates the theory and practice of real estate transactions from the perspectives of both the buyer and the seller. The topics include examination of titles, estates in land, restrictions, easements, covenants, options, deeds, mortgages, and foreclosure proceedings. Prerequisites: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course.

## PLG-204 <br> 3 Credits

## Wills, Estates and Trusts

This course covers the initial investigation and preparation of estates and trusts in detail. Topics include the causes and effects of trusts, wills and probate; litigation and procedural laws.
Prerequisites: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course.

## PLG-299

3 Credits

## Paralegal Internship

An internship in Paralegal Studies is a hands-on learning experience at law firms, public agency, corporations, or other law related organizations, under the direct supervision of a legal professional. It is intended to provide students the opportunity to gain practical experience in their field of study. Students perform 150 hours of internship service over the course of 10-15 weeks, during the spring, fall, or summer semesters. Students meet bi-weekly with their advisor to prepare papers, work on related projects, and share experiences with other students. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisites: Completion of all PLG required courses. Pre/co-requisite: a cumulative grade point average of at least 3.0 in the program and approval of the paralegal faculty internship coordinator.

## Pharmacy Technology

## PMT-103 1 Credit <br> Pharmacology for the Surgical Technologist I

This course provides the student with a basic foundation in pharmacology. This will help prepare the student to safely and appropriately prepare and manage operating room medications, solutions and specimens. This class is a lecture class and meets one hour per week for 15 weeks. Calculations involving fractions and decimals will be reviewed. Students will be
introduced to common medical terminology and weights and measures used routinely in the measurement and administration of medications. Use and understanding of the metric system will be emphasized. Prerequisite: admission into the Surgical Technology Program

## Pharmacology for the Surgical Technologist II

This course is the second in a two-course sequence designed to provide the student with a basic foundation in pharmacology. This course is oriented to providing the student with information regarding commonly used preoperative and post-operative medications. This class is a lecture class and meets one hour per week for 15 weeks. Drugs will be discussed by grouping them into general classes and with important differences among group members being highlighted. The dosage, routes of administration, generic and trade names, common adverse reactions and important drug interactions will be emphasized. Prerequisite: Pharmacology for the Surgical Technologist I (PMT103).

## PMT-111 <br> Pharmacy Practice for Pharmacy

4 Credits Technicians I
This course provides the student with a perspective on the role of the pharmacy technician, the genesis of the regulations governing the pharmaceutical industry, and the current status of federal and state laws which must be followed. Emphasis will be placed on handling controlled substances and related record keeping. The roles of the FDA in the drug approval process and post-marketing surveillance, and the DEA in the daily operation of the pharmacy will be discussed. Students will be introduced to common medical terminology and weights and measures routinely used in the practice of pharmacy. The metric system and conversions between the metric system and common household measures will be emphasized. Prerequisite: Acceptance to the Pharmacy Technician Certificate Program

## PMT-112 4 Credits

Pharmacy Practice for Pharmacy

## Technicians II

This course provides the student with the knowledge to be able to begin participation in prescription/order processing in a pharmacy. The course includes an introduction to drug formulation, pharmacy operations, third party billing and inventory control that are essential to working in a pharmacy. Calculations related to routine prescription processing and pharmacy management including calculation of dayssupply, refill adjustment and inventory control are emphasized. A general introduction to
biopharmaceutics and drug action will be provided. Prerequisite: Pharmacy Practice for Pharmacy Technicians I (PMT111).

## PMT-113 <br> 4 Credits

## Pharmacy Practice for Pharmacy <br> \section*{Technicians III}

This course provides the student with a basic introduction to the pharmacology of drugs in common use. The course will be taught by examining body systems, e.g. gastrointestinal, and will include discussion of the drugs commonly used in treating diseases affecting the system. Drugs will be discussed by grouping them into general classes and with important differences among group members being highlighted. The dosage, routes of administration, generic and trade names, common adverse reactions and important drug interactions will be emphasized. Calculation of
patient dosage and patient days supply will be used when appropriate. Prerequisite: Pharmacy Practice for Pharmacy Technicians II (PMT112).

## PMT-299

## Pharmacy Practicum/Seminar

This course combines group discussion in a seminar setting with an internship program based in a live pharmacy setting. The practicum and seminar are designed to give the student practical experience in the basic roles the technician fulfills in the pharmacy and to complete their preparation for transition to the workplace. The experience component encompasses the steps from customer service to prescription processing and prescription production. The shared learning experience in the weekly seminar will be used as a problemsolving group discussion and to prepare the student to apply and compete for work. Prerequisites: PMT-113 and Chair Approval.

## Practical Nursing

## PN P-111 <br> Practical Nursing I

The course provides the student with the fundamental concepts and skills upon which the role of the LPN is built. Concepts of Health care delivery throughout the age-related continuum of care are introduced such as patient-centered care, communication, leadership, and professionalism. Basic nursing interventions and the concepts of system-based and evidencebased practice are introduced and interwoven with the importance of safety, quality improvement and cultural diversity. Students acquire physical assessment skills and learn the basics of informatics and technology which are transferred to the clinical setting where teamwork and interdisciplinary collaboration are practiced and encouraged. Additional expenses may include supplies, equipment and uniforms. Course meets 6 hours of lecture/lab 1-2 days per week and 6 hours of clinical practice at the college or at selected health care facilities. Prerequisite: acceptance into the Practical Nursing Certificate Program, MAT097, ENG111, BIO 203, or BIO 204.

## PN P-112

## Practical Nursing II

This course builds on all the semester I courses and concepts with particular attention to individuals with more complex health care needs and with problems related to alteration in health status. Principles of Nutrition and Pharmacology are applied in relation to health and the disease process. Teaching is an integral component of each unit of study. Subjective and objective data are influenced by culture, age and previous experiences of the patient and is a building block for critical thinking. The nursing process is utilized as the critical thinking tool in assessing this data for the purpose of planning and implementing holistic individualized nursing care. Applications of the concepts of caring and therapeutic nursepatient relationships are stressed. During the clinical experience, the student will be accountable for providing competent, ethical and legal care in the role of the Practical Nurse. Additional expenses may include supplies, equipment and uniforms. Course meets 6 hours of lecture/lab 1-2 days per week and 19 hours of clinical practice per week a the college or at selected health care facilities. Prerequisite: Practical Nursing I (PNP 111), Drug Calculation (NUR 100) and Principles of Psychology (PSY 101).

## PN P-113

10 Credits
Practical Nursing III
The student synthesizes and integrates cultural sensitivity and health education to provide safe and effective care and advocate for patients throughout the lifespan. The student outlines and implements a plan of care related to the challenges of the pediatric/ $\mathrm{MCH} /$ geriatric patient, integrating the concepts of Erikson's developmental stages, and extends care to family and community. Knowledge of medications and nursing implications of administration are expectations in the clinical setting. Legal and ethical principles are taught and adhered to within the scope of practice of the LPN. The leadership role of the practical nurse is defined and practiced in the long-term care setting where patient outcomes are predictably defined. Additional expenses may include supplies, equipment and uniforms. Course meets 6 hours of lecture/lab 1-2 days per week and 18 hours of clinical practice per week at the college or at selected health care facilities. Prerequisite: Practical Nursing II (PNP 112).

## Portuguese

## PO R-101

3 Credits

## Elementary Portuguese I

This course covers an introduction to the sounds and structures of the Portuguese language. The video-based, self-paced course emphasizes both Portuguese and Brazilian culture.

## PO R-102 <br> 3 Credits

## Elementary Portuguese II

This continuation course of Elementary Portuguese I (PO R101) places greater emphasis on reading skills. The video-based, self-paced course stresses more complex Portuguese structures. The course meets General Education Humanities Requirement Area 6. Prerequisite: Elementary Portuguese I (PO R101) or one year of high school Portuguese.

## Political Science

## PSC-101

3 Credits

## Government/Politics in US

This course provides an overview of the foundations, processes, and institutions of the United States federal government. Topics covered include the Constitution, federalism, civil liberties, civil rights, public opinion, the media, political participation, campaigns, elections, public policy, and the organization and functions of the three branches. Special emphasis is placed on the various channels of citizen influence. Prerequisites: A grade of C or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG095) and Academic Writing III (ESL-099) or Writing Skills I (ENG-090); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses. This course meets the General Education requirement for Community \& Cultural Contexts.

## PSC-150 <br> 3 Credits <br> \section*{Introduction to Political Theory}

This course introduces students to political theory through analyzing works of political and moral philosophy. Students investigate the theoretical foundations of various governing systems and apply philosophical frameworks to contemporary topics. Theorists considered will include but not be limited to: Plato, Aristotle, Machiavelli,
Hobbes, Locke, Rousseau, and Marx. While the course provides a foundation for understanding canonical Anglo American and European traditions, it includes political theorists from

Africa, Asia, and Latin America, including postcolonial \& feminist theorists. Prerequisites: A grade of C or higher in Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course The course meets the General Education requirement for Community \& Cultural Contexts.

## PSC-210

3 Credits
State/Local Politics
This course acquaints students with the structures and functions of state and local governance in the United States with special emphasis on fiscal and social policy. It includes an analysis of political organization, state constitutions, and intergovernmental dynamics. This course meets the General Education requirement for Community and Cultural Contexts Prerequisites: A grade of $C$ or higher in Academic Reading III (ESL-098) or Reading Skills II (RDG-095) and Writing Skills II (ENG-095); or Integrated ELL Level III (ELL-103) or exemption by placing into higher level courses.

## PSC-211 <br> 3 Credits

Introduction to Comparative Politics
This course offers a cross-national analysis of the domestic politics and political institutions of various nation states, utilizing both qualitative and quantitative tools. Special emphasis is given to the impact of ideology, democratization, and economic development. Prerequisite: A grade of C or higher in College Writing I (ENG-111). This course meets the General Education requirement for Community \& Cultural Contexts.
PSC-220
3 Credits
Introduction to International Relations
This course introduces students to the major theoretical debates in International Relations and situates the field within the context of the discipline, Political Science. It focuses on significant ideas, processes and institutions which explain the interrelations between the various actors in the international system, looking specifically at nation states and supranational and international organizations. Special attention is given to research methodologies and to questions of ideology, conflict, trade, finance, human rights, identity based differences (ethnicity, gender, etc.), and the dynamics of globalization. Prerequisite: A grade of C or higher in College Writing I (ENG-111). The course meets the General Education requirement for
Community \& Cultural Contexts.

## Psychology

## PSY-101 <br> 3 Credits

Principles of Psychology
This introductory psychology course covers a survey of information and theory. Topics include the brain and behavior, research methods, learning, consciousness, motivation, emotion, human growth and development, personality, abnormal behavior, and psychotherapy, social cognition and understanding. The course meets Community and Cultural Context requirement. Prerequisite: Academic Reading III (ESL-098) or Integrated ELL Level III (ELL-103) or Reading Skills II (RDG-095) or exemption by placing into higher level course.

## PSY-105

3 Credits
Psychology of Social Relations
This course covers the complex interrelationship between the individual and society. Topics include attitude formation, prejudice, conflict, frustration, cooperation and competition, cultural and interpersonal difficulties involving identity formation, and alienation versus integration.

PSY-107
3 Credits

## Group Dynamics

Through class exercises and observation, this course explores the relationship between the theory and experience of effective groups. It examines comparisons of individual and group performance, group goals, problem solving, decision-making, conformity, norms, cohesiveness, and leadership. The course meets General Education requirement Community and Cultural Contexts".

## PSY-131 3 Credits <br> Psychology of Popular Culture

This course is designed to facilitate the development of critical thinking, reading, and writing skills through the psychological study of popular culture. Issues of social psychology, cross-cultural communication, identity development, creativity, violence, and psychological health will be analyzed in a variety of domains of popular culture. Psychological theory and analysis will be applied to youth culture, consumer culture, political campaigns, contemporary music and visual arts, tourism, stand-up comedy, advertising, and the internet. This course meets General Education "Individual and Society" Requirement Area 2.
PSY-141
3 Credits
Social Aspects of Aging
This course will provide a survey of major topics in the psychology of aging. Students will investigate the domains of memory, cognition and intelligence, the social and cultural environment, sensation and perception, language, emotion, spirituality, personality, health behavior, and the living environment. Students will look for common themes across domains, such as change and maintenance of identity with age. Students will learn research methods for studies of aging and will have an understanding of the aging brain.

PSY-201
3 Credits

## Learning and Memory

This course is an introduction to current views of behavioral change, learning, and remembering. The focus will be on concepts, theoretical issues,and applications of current research in the fields of behavioral and cognitive psychology. Prerequisite: Grade of C or better in Principles of Psychology (PSY101).


Psychology of Personal Adjustment
This course explores the development and expression of the personality through an examination of processes by which the selfconcept is formed. The course surveys the theories of behavioral scientists that have contributed to the study of adjustment. Scientific study of the effects of stress and stress management techniques are included in this curriculum. The course prepares students for advanced study in psychology and places emphasis on critical thinking skills, especially as applied to scientific research. Prerequisite: Grade of C or higher in Principles of Psychology (PSY101) or permission of instructor.

PSY-209 3 Credits
Child Psychology
This course examines the normal physical, cognitive and socio-emotional development of children from conception to age twelve. This course is to be used for meeting the requirements of the A.A. Psychology Concentration or for elective credit in other programs. However, this course may not be used to meet program requirements for degrees or certificates in the ECDev, EDU, or HSV programs Students may not receive credit for both PSY209
and ECE103 to meet requirements for degrees or certificates for college graduation. Prerequisite: Grade of C or better in Principles of Psychology (PSY101).

PSY-213
3 Credits

## Human Growth and Development

This course examines the theories of the
biological, social, and psychological development of human beings throughout the life span. This course may be taken either as a prerequisite course for the pre-nursing program, or as an elective by non-Psychology majors. The course does not satisfy the requirements of the A.A. Psychology Concentration program. Prerequisite: A grade of C or better in Principles of Psychology (PSY101).

## PSY-215 Counseling

This course explores theories and practices in counseling individuals and groups. It explores various theoretical approaches to counseling, and provides practical exercises in counseling. This course is restricted to those students enrolled in the Human Services, Education, Early Childhood Development, Psychology, or Sociology programs or by permission of the department chair of Education, Early Childhood
Development, and Human Services or the department chair of Behavioral Sciences. Prerequisite: A grade of C or higher in Principles of Psychology (PSY101).

## PSY-219

3 Credits

## Social Psychology

This course covers the complex interrelationship between the individual, small groups, and the greater society. Topics include attitude formation and change, social conflict, prejudice, frustration, and cooperation versus competition and aggression. Prerequisite: A grade of C or higher in Principles of Psychology (PSY101).

## PSY-223 <br> 3 Credits

## Personality

This course covers distinctive patterns of behavior, including the thoughts and emotions that characterize individuals' adaptation to life. It examines four major approaches to the study of personality: psychoanalytic, behavioral, trait dispositional, and humanistic. Students study varying degrees of emphasis on processes or forces impinging on individuals' interaction with their environment. Prerequisite: A grade of C or higher in Principles of Psychology (PSY101).

## PSY-224

3 Credits

## Adolescent \& Adult Development

In this course, students study adolescents and adults in the areas of physical, intellectual and social changes, and their emotional growth and development during life stages of adolescence and adulthood. Prerequisite: A grade of C or higher in Principles of Psychology (PSY101).

## PSY-227

## Abnormal Psychology

This advanced course for the serious student of psychology covers the history of mental illness and its treatment, modern classification, diagnosis, the theoretical causes of disorders, and treatments. The range of psychopathology extends from the disorder-free person to adjustment reactions, anxiety disorders, personality disorders, and borderline disorders, to psychosis and major disorders. Prerequisite: A grade of $C$ or higher in Principles of Psychology (PSY101) or permission of instructor.

PSY-233 3 Credits
Intro to Psychiatric Rehabilitation
This course provides an overview of the underlying core values, principles and methods
of psychosocial rehabilitation. Course topics include understanding the experience of mentally ill persons and their paths to recovery; a brief historical background on the emergence of psychosocial rehabilitation as an alternative to traditional models of diagnosis and treatment; the principles of psychosocial rehabilitation and their application to assessment and rehabilitation planning and intervention, practitioner competencies, different program settings; and the role of the family in psychosocial rehabilitation. Prerequisite: Introduction to Psychology (PSY101).

## PSY-235

3 Credits
Introduction to Behavioral Research
This course is an introduction to the ways of discovering, describing, and making warranted assertions about aspects of people and social life. The chief objectives are 1) to help students develop the skills and knowledge necessary to become intelligent critics of research in the behavioral and social sciences, and 2) to give them a rudimentary understanding of the design and evaluation of scientific research. Statistical material is treated in a conceptual manner. Prerequisite: Principles of Psychology (PSY101).

## Reading

## RDG-090 <br> 3 Credits

## Reading Skills I

This course develops basic reading skills necessary for success with college-level material. The course will focus on improving comprehension and vocabulary. In particular, students will improve their ability to recognize and articulate main ideas, supporting details, and patterns of organization. Students will also improve vocabulary skills using context clues and the dictionary. Note: Students must meet exitlevel requirements or pass a departmental reading final in order to earn a passing grade of C in this course.

## RDG-095 <br> 3 Credits

Reading Skills II
This course develops advanced reading skills necessary for success with college-level material. The course will focus on achieving college-level comprehension skills and vocabulary. In particular, students will recognize and articulate main ideas, supporting details, and patterns of organization. Students will develop critical reading and thinking skills and improve vocabulary. In addition, students will improve note-taking and test-taking skills. Note: Students must meet exitlevel requirements or pass a departmental reading final in order to earn a passing grade of C in this course. Prerequisite: Grade of C or better in Reading Skills I (RDG090) or placement by examination.

## Religious Studies

## REL-111 <br> 3 Credits <br> World Religions

This course helps students to inquire into, analyze, and contextualize practices and beliefs of religions in all regions of the world. Students analyze different religions in relation to one another, contemplate the diversity of practices and beliefs even within a single religious tradition, consider how various religions engage significant human questions, and encounter religion as a living, evolving process. Students locate religions and their development within social, geographical, and political contexts. Students develop information literacy and communication tools to inquire into and discuss
beliefs and practices with respect, curiosity, engagement, and intercultural competency. This course fulfills the General Education requirement "Community and Cultural Contexts." Prerequisites: Writing Skills II (ENG-095) and Reading Skills II (RDG-095); or Integrated ELL Level 3 (ELL-103) or exemption from requirements due to placement testing.

## Russian <br> RUS-101 <br> Elementary Russian I <br> This course will introduce students to the Russian language and culture. The course focuses on useful vocabulary and basic concepts of grammar essential for leading simple conversations in everyday situations. The course offers a unique insight into the life of Russian people. Students will master the Cyrillic alphabet and major pronunciation rules necessary for reading in Russian. No prior knowledge of Russian is required. <br> RUS-102 <br> 3 Credits <br> Elementary Russian II <br> Russian 102 is the second part of an elementary sequence and the contiuation of 101 with emphasis on speaking and reading skills. In this class the students will continue to learn about the history, and cultur of the country. This course satisfies General Education requirement <br> "Creative Work". Prerequisite: Russian 101 or permission of the Foreign Language Department.

## Science

## SCI-150 <br> 4 Credits <br> \section*{Forensic Science and Lab}

Forensic science is the application of the scientific method to criminal investigation. Topics include recognition, identification, and evaluation of physical evidence such as hairs, fibers, drugs, blood, glass, soil, fingerprints, and documents. Such topics as forensic serology, analysis of arson debris, forensic analysis of drugs, gunshot residues, papers and inks, paint chips and DNA fingerprints. The course is designed for students with minimal background in science.
Prerequisites: Foundations of Math (MAT-093), and Writing Skills II (ENG-095) and Reading Skills II (RDG-095) or Academic Reading III (ESL-098); or Integrated ELL Level III (ELL-103) or placement equivalency. Course meets: 3 hrs lecture; 3 hrs. lab.

## SCI-221 3 Credits Interpretation and Presentation of

 Scientific ResearchThis course will introduce students to the major aspects of formal scientific communication. Students will learn how to read scientific papers or posters, listen to conference presentations, search primary sources, write lab reports in the style of a scientific paper, and to present experimental results in both poster and oral presentation formats. Students will use assignments from previous science courses as the foundation for their own paper, poster and oral presentations. This course is recommended for all STEM majors and will provide students with the communication skills required for research internships. This course may be used as a career elective for all science and engineering programs. Course meets: 3 hour lecture. Prerequisites: Completion of at least two collegelevel science or engineering courses (BIO 195 or above, CHM 201 or above, PHY 201 or above, ENR 101 or above) or permission of instructor.

## Surgical Technology

## Surgical Technology I

This course is an introduction to the profession of surgical technology．The foundation and theory of the practice of Surgical Technology are presented to the student in conjunction with hands on experience in surgical technology， standard precautions，surgical equipment and instrumentation，and the care of the surgical patient．The introduction to the clinical setting is presented in the lab．The surgical conscience is defined and developed as well as standards of professionalism．Prerequisite：admission into the Surgical Technology Program．

## SG T－106

8 Credits

## Surgical Technology II

This course focuses on the introduction of surgical specialties．During clinical placement students participate in the corresponding surgical interventions as they apply to each specialty Prerequisites：Basic Anatomy／Physiology／Lab （BIO 107）or Human Biology／Lab（BIO 108）and Surgical Technology I（SGT105）．

## SGT－107 <br> 3 Credits

## Surgical Technology III

This course provides a direct focus on performance in the clinical setting．Students participate as independent members of the surgical team，demonstrating beginning－level competence of advanced skills and anticipation of surgical needs．Classroom discussions will include legal，ethical，moral issues，or incidents， emergencies，and understanding the surgical patient＇s reaction to stress and illness．
Prerequisite：Surgical Technology II（SGT106），
PMT（103），and Human Growth and Development （PSY213）．
SGT－109
2 Credits

## Central Processing I

This course covers an introduction to the profession of Central Processing．It introduces principles of microbiology，technical functions， and functional areas as applied to Central Processing．The course covers the process of infection and disease transmission．It also covers manual and mechanical decontamination and disinfection．Course meets： 2 hrs．lecture．

## SGT－109A

2 Credits

## Central Processing I Clinical

During clinical practice at local medical centers， students participate in corresponding central processing functions．A minimum of 90 hours of clinical is required．People working in central processing can apply for prior learning assessment credits．

## SG T－110 2 Credits <br> Central Processing II

This course introduces high－and low－temperature sterilization，sterile packaging and storage．The chemistry of Sterilization is presented．Quality control，risk management regulations and recommendations and recommended practices are introduced．Inventory management and principles of purchasing are also introduced． Course meets 2 hrs lecture．Prerequisites：A grade of $C$ or higher in Central Processing I （SGT109）and Foundations of Mathematics（MAT－ 093），and Reading Skills I（RDG－090）and Writing Skills I（ENG－090）；or Integrated ELL Level I（ELL－ 101）or placement．
SGT－110A 2 Credits
Central Processing II Clinical
During clinical experience，students participate in applications of theory to actual practice．A minimum of 90 hrs of clinical is required．

Prerequisites：Central Processing I（SGT109）and Central Processing Clinical（SGT111）with a grade of $C$ or better．

## SG T－111 <br> 2 Credits

## Central Processing Clinical

This course is clinically focused，with students focusing on clinical skills acquisition．Students develop both depth and breadth of experience during clinical rotation．Course meets the first night to discuss clinical placement． 6 hrs clinical． Prerequisite：Central Processing I（SGT109）with a grade of C or better．People working in Central
Processing can apply for Prior Learning
Assessment credits．

## SGT－115 <br> 2 Credits <br> Asepsis for Surgical Technology

This course covers the principles and practices of surgical asepsis that must be maintained in the operating room．This course will cover a brief introduction to microbiology with emphasis on infection control in the surgical setting．The course will cover sterilization，disinfection and antisepsis and the role of the surgical technologist as it applies to these principles． Prerequisites：Admission into the Surgical Technology Program．

## SGT－116 <br> 4 Credits

Surgical Seminar
This course provides students with an opportunity to advance their knowledge of surgical procedures through the use of case studies．The seminar will be an online course that focuses on discussion of surgical specialties， complications，new technologies and the role of the surgical technologist as they advance from student to employee．Prerequisites：Surgical Technology II（SGT106）and Human Growth and Development（PSY213）．

## Sociology

## SOC－101 3 Credits <br> Principles of Sociology

This course covers an introduction to the concepts and theories of society and social institutions．The course meets The course meets Community and Cultural Context requirement． Prerequisite：Academic Reading III（ESL－098）or Integrated ELL Level III（ELL－103）or Reading Skills II（RDG－095）or exemption by placing into higher level course．

## SO C－109 <br> Cultural Anthropology

3 Credits
This course demonstrates the way that the basic concepts and techniques developed by cultural anthropologists help us understand various cultures and intercultural relations．Through ethnographic readings and films，students learn about kinship，gender，ethnicity，religion，and social change in a variety of cultures．The course increases awareness of cultural dimensions of human experience and the diversity and flexibility of human cultures．The course meets General Education requirement＂Community and Cultural Contexts＂．Prerequisite：Academic Reading III （ESL－098）or Integrated ELL Level III（ELL－103）or Reading Skills II（RDG－095）or exemption by placing into higher level course．
SOC－110 3 Credits

## Physical Anthropology

Presented in four basic sections，this course covers an introduction to the field of physical anthropology，genetics，human evolution，and evolution of behavior．Module topics include the background of physical anthropology；man in the natural world；practical genetics；classification within the human species；homo sapiens；homo erectus；the Australopithecines；evolution review；
what was before man；evolution of behavior；and where do we go from here？This course is offered through the Center for Self－Directed Learning only．
SOC－203
3 Credits

## Social Problems

This course critically examines contemporary social problems by applying national and global sociological perspectives to the issues of poverty， racial and ethnic inequalities，sexuality，crime， and the environment．Students explore the systemic causes of social problems．How does a social problem become defined？What are the causes of various social problems？What can be done about them？Students may be expected to participate in service－learning projects in order to apply course materials to real world efforts to solve social problems．Prerequisites：Grade of C or better in Principles of Sociology（SOC101）．
SO C－204
3 Credits
Sociology of Organizations
This course will explore how social institutions are created and maintained．Their impact on individual and social lives will be analyzed． Concepts like bureaucracy，power，conflict， functionalism，and stratification will be discussed in detail．Some of the organizations to be focused upon include：education，government， economic organizations，health care，social services，sports，religion，the family，and communication／media．This course will empower students with concepts and skills that will help them to better understand how social structures work and interact with each other．An open systems approach will be used in this course． Prerequisites：Grade of C or better in Principles of Sociology（SO C101）and College Writing I （ENG111）．

## SOC－205

3 Credits

## Urban Sociology

This course covers the problems of social issues of contemporary urban life．It covers individuals＇ responses to cultural，racial，political，institutional， educational，economic，and other challenges of city life．Prerequisite：Principles of Sociology （SO C101）．
SOC－206 3 Credits
Juvenile Delinquency
This course analyzes the nature and types of juvenile behavior that violate the law．Students study issues such as socialization，deviant roles， social processes，the special attributes of youth， and historical attitudes toward childhood and adolescence．Topics include family juvenile court， correctional institutions，causes of delinquency， the female delinquent，and prevention and treatment of delinquency．
SO C－207
3 Credits
Criminology
This course examines various aspects of crime from the perspective of the sociologist．The course emphasizes social structure／social process theories of social disorganization and crime causation．O ther topics include the history of criminology，the nature and extent of crime，the measurement of crime，criminal typologies， public order crime，victims，and victimization． Prerequisite：Principles of Psychology（PSY101）or Principles of Sociology（SOC101）．
SOC－211

## The Family

This course examines psychological and sociological factors related to the dynamics of family life．The course covers the process of the growth and adjustment of each family member as the family structure changes．Students discuss the historical，contemporary，and future family． Prerequisite：one introductory Behavioral Science course．

## SOC-225

3 Credits
Sociology of Homosexuality
This survey course examines issues dealing with homosexuality from the perspective of the sociologist. The course emphasizes the essentialist/constructionist debate; facts and myths about homosexuality; the influence of prejudice and discrimination on the lives of gay men, lesbians and their families; and the homosexual culture/community/lifestyle. O ther topics include coming out issues, development of gay and lesbian identities, the needs of a gay family member, gay history, gay spirituality, the AIDS crisis, and the gay liberation movement and its impact on contemporary culture.

## SOC-227 <br> 3 Credits

## The Sociology of Race and Ethnicity

This course explores issues of race and ethnicity as they exist in contemporary American society. We will look at the definition of race and ethnicity, how these definitions have evolved over time, and what they mean today. The impact of hate groups on American life and culture will be explored through the concept of difference and the ideas of superiority and inferiority. Core topics to be discussed include racial prejudice and racism, ethnic identity and multiculturalism, and Eurocentrism. This course satisfies the General Education requirement for Community and Cultural Contexts (previous area 2: Individual and Society) for all programs. Prerequisite: Grade of $C$ or better in Principles of Sociology
(SO C101), Principles of Psychology (PSY101), or Cultural Anthropology (SOC109).

## SOC-229 <br> 3 Credits <br> Sociology of Film

This course deciphers the explicit and implicit message contained in films that has to do with the organization and structure of culture and society from the past to the present. The course covers the idea that, like all art forms, films are created in a social context and express a particular point of view through the characters, themes, motifs, and visual styles they embody.

## Sonography

## SO N-113

Cross Sectional Anatomy
This course focuses on detailed cross-sectional anatomy as it relates to sonographic imaging. This study of serial sectional anatomy helps sonographic students gain knowledge of the human body needed for the practical application of ultrasound. In class scanning will occur on a routine basis. Prerequisite: Admission to General Sonography Program. Co-requisite:
Anatomy/Physiology/Lab II (BIO 204).

## SO N-115

3 Credits

## Abdominal Ultrasound

This course familiarizes the student with interpretation of normal and abnormal sonographic findings of the abdominal cavity. Related scanning techniques and associated Color Flow and Doppler are described Sonographic/medical terminology, pathophysiology, clinical presentation and associated laboratory findings as they relate to abdominal sonography will be covered Prerequisite: Cross-Sectional Anatomy (SO N 113). Co-requisite: General Sonography Clinical I (SON121).

## SO N-117 <br> 4 Credits

Ultrasound Scanning and Pathology
This course consists of a lecture component and hands-on component. The student will have the opportunity to apply knowledge that they have
gained via lecture directly to hands-on scanning applications. Topics addressed include proper machine set up, annotation of the equipment with reference to anatomy, and basic images. Students will be exposed to the various scan planes and transducer orientations that are utilized in daily practice as a sonographer. In addition, exam protocols and pathology will be discussed. The student will have the opportunity o use the equipment in the classroom.
Prerequisite: Cross-Sectional Anatomy (SO N 113). Co-requisite: General Sonography Clinical I (SO N 121).

SO N-119
3 Credits

## Subspecialty Sonography and

## Neurosonography

This hybrid course will familiarize the student with interpretation of normal and abnormal
sonographic findings of subspecialty exams. This course will also have a hybrid and in-class component for an introduction to neurosonography. Related scanning techniques and associated Color Flow and Doppler are described. Sonographic/medical terminology, pathophysiology, clinical presentation and associated laboratory findings as they relate to subspecialty sonography and neurosonography will be covered. Prerequisite: Cross-Sectional Anatomy (SO N 113). Co-requisite: General Sonography Clinical I (SO N 121).

## SON-121

3 Credits

## General Sonography Clinical I

This course is the hands-on application of ultrasound in the hospital setting. Scanning skills are developed during this clinical. Students will be performing supervised ultrasounds and present daily cases to sonographers and/or physicians. Students will become acquainted with the responsibilities needed to work in the ultrasound setting. Clinical will take place 3 days a week. Prerequisite: Cross-Sectional Anatomy (SO N 113). Co-requisites: Abdominal Ultrasound (SO N 115), Ultrasound Scanning and Pathology (SO N 117), and Subspecialty
Sonography/N eurosonography (SO N 119).

## SO N-123

3 Credits

## General Sonography Clinical II

This hybrid course is a combination of classroom teaching and an online learning experience. This course continues with the presentation and physics of ultrasound. Special attention is given to the Doppler affect and its relevance in the field of general sonography. Sonographic artifacts, harmonics, contrast agents, bioeffects and safety are covered as well. Review from Ultrasound Instrumentation I is covered in the form of online weekly registry review tests. Prerequisite: Ultrasound Instrumentation (MIG 105). Corequisite: General Sonography Clinical III (SO N 223).

## SON-213 2 Credits Ultrasound Physics and Instrumentation for the General Sonographer

This hybrid course presents the physics of Ultrasound to the performance and instrumentation used in the general sonographic practice. A review of the basic laws and instruments are also discussed as they relate to the specific topics of the Doppler effect and sonographic artifacts Special emphasis is placed on bioeffects and safety in the performance of General Sonography. The advancements in sonographic applications and instrumentation such as harmonics and 3D are explored, as well as the use of contrast agents. Review from Ultrasound Physics I is covered in the form of online assignments and testing. Prerequisite: Ultrasound Physics/Instrumentation (M IG 105). Co-requisite: General Sonography Clinical III (SO N 223).

SON-215
2 Credits Advanced General Sonography I
This hybrid course is a combination of classroom teaching and online learning experience. Course topics include a review of abdominal and subspecialty sonography. Interesting sonographic cases will be presented for review. Articles from the J ournal of Ultrasound in Medicine and the J ournal of Diagnostic Medical Sonography will be reviewed and discussed. Registry practice exams will be taken online on a regular basis.
Prerequisite: Abdominal Ultrasound (SO N 115). Co-requisite: General Sonography Clinical III (SO N223).

## SO N-217

2 Credits
Advanced General Sonography II
This hybrid course is a combination of classroom teaching and online learning experience. Course topics include a review of obstetrical and gynecological sonography as well as physics and instrumentation. Interesting sonographic cases will be presented for review. Articles from the J ournal of Ultrasound in Medicine and the J ournal of Diagnostic Medical Sonography will be reviewed and discussed. Registry practice exams will be taken online on a regular basis. Prerequisite: Advanced General Sonography (SO N215). Co-requisite: General Sonography Clinical IV (SON225).

## SON-219 3 Credits

Obstetrical/G ynecological Sonography I
This course familiarizes the student with interpretation of normal sonographic findings of gynecological and first, second, and third trimester sonography. All measurement techniques including gestational dating will be discussed. Abnormal sonographic findings as they relate to gynecology and the first trimester will be covered. Related scanning techniques and associated Color Flow and Doppler are described. Sonographic/medical terminology, pathophysiology, clinical presentation and associated laboratory findings as they relate to gynecology and the first trimester will be covered. Prerequisite: General Sonography Clinical II (SO N 123). Co-requisite: General Sonography Clinical III (SON 223).

## SO N-221

## Obstetrical and Gynecological II

This course is a continuation of Obstetrical/Gynecology Sonography I. Abnormal sonographic findings as they relate to second and third trimesters will be covered. Fetal anomalies as well as maternal disease will be discussed. Related scanning techniques and associated Color Flow and Doppler will be described. Sonographic/medical terminology, pathophysiology, clinical presentation and associated laboratory findings as they relate to the second and third trimesters will be covered Prerequisite: O bstetrical/Gynecological Sonography I (SO N 219) Co-requisite: General Sonography Clinical IV (SO N 225 ).

## SO N-223 <br> 3 Credits <br> General Sonography Clinical III

This course is the hands-on application of ultrasound in the hospital setting. Scanning skills are developed during this clinical. Students will be performing supervised ultrasounds and present daily cases to sonographers and/or physicians. Students will become acquainted with the responsibilities needed to work in the ultrasound setting. Clinical will take place 3 days a week. Prerequisite: General Sonography Clinical II (SO N 123). Co-requisites: O bstetrical and Gynecological Sonography I (SO N219), Advanced General Sonography (SO N 215), and Diagnostic Instrumentation (SO N 213).

## SO N－225 <br> 3 Credits <br> General Sonography Clinical IV

This course is the hands－on application of ultrasound in the hospital setting．Scanning skills are developed during this clinical．Students will be performing supervised ultrasounds and present daily cases to sonographers and／or physicians．Students will become acquainted with the responsibilities needed to work in the ultrasound setting．Clinical will take place 3 days a week．Prerequisite：General Sonography Clinical III（SO N223）．Corequisites：Obstetrical and Gynecology Sonography II（SO N221）and Advanced General Sonography（SON217）．

SO N－227
3 Credits
General Sonography Clinical V
This course is the hands－on application of ultrasound in the hospital setting．Scanning skills are developed during this clinical．Students will be performing supervised ultrasounds and present daily cases to sonographers and／or physicians．Students will become acquainted with the responsibilities needed to work in the ultrasound setting．Clinical will take place 3 days a week．Prerequisite：General Sonography
Clinical IV（SO N225）．

## Sport Management

## SPM－101 <br> 3 Credits

Principles of Sport Management
This course examines the issues of management and organizational behavior within the context of the sports industry．Students will gain a comprehensive view of the procedures and operations of sports organizations and enterprises and will examine processes such as budgeting，marketing，event management，and labor relations that are necessary for the successful administration of these organizations． The Principles of Sport Management course is designed for individuals with interests in careers that combine management skills and knowledge of the sports industry．Pre／Co－requisite：
Introduction to Business（BUS101）．

## SPM－201 <br> 3 Credits <br> Psychology of Sport

This course is the study of the interaction between psychological variables and performance in sports and physical activity．This course is designed to help students both learn and then apply practical as well as theoretical information as it relates to the psychology of sport．The course includes topics such as optimal performance，correlation，motivation，co－action effect，self－actualization，psycho－behavioral techniques，self－efficacy，and the general health benefits of sport participation．This introductory course is ideal for students who wish to work with athletes in some capacity，pursue a career in sports management，or plan on working with individuals in the health and fitness industry． Prerequisite：Principles of Psychology（PSY101）．

## SPM－211 3 Credits

Sport Facility and Event Management
This course provides students with an understanding of the complexity involved in major sports events and facilities in relation to their social，cultural，and physical environment． Topics include the analysis of goals and resources，the development of revenue streams， design and planning，scheduling and operations， staff management，and the implementation of programming．Risk management and security issues reflective of today＇s environment will be discussed．Prerequisite：Principles of Sport Management（SPM 101）．

SPM－213 Sport Law and Ethics
This course is designed to introduce students to the legal，business，and policy issues and disputes that arise in the world of amateur and professional sports．Discussion of amateur sports includes the roles，rules and activities of the NCAA and questions involving amateurism，eligibility，sex discrimination and antitrust．Discussion of professional sports includes professional sports leagues，labor relations，contractual questions and representation．Issues important to both areas include violence in sports，drug testing， criminal，tort issues，and sponsorship endorsements．Prerequisite：Principles of Sport M anagement（SPM 101）．

## SPM－215

3 Credits

## Sport Marketing and Promotion

This course takes an in－depth look at fundamental marketing practices as applied to various sport venues and provides a detailed analysis of sport as a product，sport consumer markets，and sport product markets．Students will become familiar with marketing strategies applied to specific segments of the sport industry including amateur college，professional and recreational markets． Students will prepare and organize marketing， promotional，and public relations campaigns applied to the sport and leisure industry．Legal issues and other challenges facing the sport industry will also be examined．Prerequisite： Principles of Sport M anagement（SPM 101）．

## SPM－217

3 Credits
Seminar in Sport Management
Through case discussion，lecture，videos，guest speakers，and field research，this course provides the student with a series of concepts，framework， analytical techniques and management decision－ making skills to enable him／her to anticipate and critically examine and evaluate some of the problems，issues，and opportunities facing a sport business enterprise．This course should be taken in the student＇s final semester．Prerequisite： Principles of Sport Management（SPM 101）．

## SPM－299

3 Credits

## Sport Management Internship

This course enhances the academic experience for students．All internships take place at pre－ approved sites．Students engage in activities that improve knowledge of the practical world of work and help them gain professional experience．The internship experience applies resources gained from students＇study to improve the quality of their contributions to the employer．A faculty coordinator supervises and grades all courses． Students are responsible for following all guidelines in the BHCC Internship Handbook． Prerequisite：Department Chair approval．

## Spanish

SPN－101

## Elementary Spanish I

This course，for students with little or no previous knowledge of Spanish，covers an introduction to the sounds and structures of Spanish and the development of basic skills needed for understanding and speaking Spanish．The course is not intended for native speakers or for students who have studied this language within the last three years．

## SPN－102

## Elementary Spanish II

This continuation course of Elementary Spanish I （SPN 101）emphasizes conversational skills and simple readings．The course satisfies General Education requirement＂Creative Work＂． Prerequisite：Elementary Spanish I（SPN 101）or one year of high school Spanish．

SPN－110
Lat Id－Media Cul \＆Myths
This course will explore the agenda behind the manipulation of the Latinx experience in the media，how this contributes to the perpetuation of stereotypes，and how these myths affect the notions of self－identity．Examples of songs，T．V． shows，literary fiction，and other cultural manifestations will be incorporated into the course in order to examine the bias and flaws embedded in literature，the media， institutionalized discourses，and other sources of information．Through discussions，critical thinking exercises，writing，and research students will acquire a better understanding of the Latinx experience in the United States．This course is taught in English．

## SPN－201 <br> 3 Credits <br> Intermediate Spanish I

This course covers a review of basic language skills and emphasizes conversational and reading skills．Prerequisite：Elementary Spanish II SPN 102）or two years of high school Spanish or permission of instructor．

## SPN－202

## Intermediate Spanish II

This continuation course of Intermediate Spanish I（SPN 201），emphasizes self－expression through speaking，reading，and writing．Prerequisite： Intermediate Spanish I（SPN 201）or three years of high school Spanish or permission of instructor．

## SPN－280

3 Credits

## Spanish for Heritage Speakers

SPN 280 is a course especially tailored toward heritage or native speakers of Spanish with active or passive knowledge of the language．The main purpose of the course is to build upon the language knowledge that students bring to the classroom and advance their proficiency of Spanish for multiple contexts．Special attention is given to building vocabulary，acquiring and effectively using learning strategies，and strengthening composition skills in Spanish to be used in formal settings．Cultural projects and readings will reinforce learners understanding of the multiple issues related to the Hispanic cultures，including the USA．This course meets the General Education requirement for Creative Work．Prerequisite：being a heritage or native speaker of Spanish，that is having active or passive knowledge of the language OR specia permission by the instructor

## Theatre

## THE－107

3 Credits

## Acting I

This course covers a total approach to the actor＇s art and stresses the use of body and voice．It includes improvisation，theater games，and sensory exercises with eventual involvement in scene study and character development．This course meets General Education requirement for Creative Work．

THE－108
3 Credits
Acting II
This scene study class covers intensive work with imagery and improvisation to heighten actors＇ abilities to perform roles dynamically．The course focuses on students＇discovering their strengths as they learn to trust their impulses and create characters that are vulnerable and compelling． Each participant works on two scenes． Prerequisite：Acting I（THE107）．

## THE-109

## Play Production Workshop

This course covers practical training in acting, costuming, makeup, lighting, and stage management related to the production performed by each class. All students work as crewmembers and are encouraged to audition for roles in the play. Students may repeat this course three times, earning one credit for each repetition. Prerequisite: Acting I (THE-107)

## THR-107

3 Credits
Acting I
This course covers a total approach to the actor's art and stresses the use of body and voice. It includes improvisation, theater games, and sensory exercises with eventual involvement in scene study and character development. This course meets General Education requirement for Creative Work.

## THR-108

3 Credits
Acting II
This scene study class covers intensive work with imagery and improvisation to heighten actors' abilities to perform roles dynamically. The course focuses on students' discovering their strengths as they learn to trust their impulses and create characters that are vulnerable and compelling.
Each participant works on two scenes.
Prerequisite: Acting I (THE107)
THR-109
Play Production Workshop
This course covers practical training in acting, costuming, makeup, lighting, and stage management related to the production performed by each class. All students work as crewmembers and are encouraged to audition for roles in the play. Students may repeat this course three times, earning one credit for each repetition. Prerequisite: Acting I (THE-107)

## THR-111 <br> Improvisation

This course explores improvisation both as an art and also as the basis for developing roles for stage and on-camera work. Students develop spontaneity, narrative skills, the ability to work off a partner, and to make strong choices on stage. Students work with the repertoire of comedy improvisation groups, with more dramatic and naturalistic improvisation groups, and with more dramatic and naturalistic improvisation situations. This course meets the General Education requirement for Creative Work. Prerequisites: Integrated ELL Level 1 (ELL101) or Reading Skills I (RDG090) and Writing Skills I (ENG090); or exemption by placement testing

## THR-113

3 Credits
Voice and Movement
This course frees the body and voice from habitual tensions and patterns and opens and expands the possibilities for vocal and physical expressiveness. Voice training focuses on the cultivation of a flexible and expressive voice and the development of interpretive skills. Movement focuses on body awareness, control, and flexibility for the stage.

## THR-115 <br> Playwriting

3 Credits

This course introduces students to various approaches to writing for the stage. Components of playwriting, which include narrative, structure, plot, character, dialogue, and setting, as well as the concept of "theatre", will be explored. Through reading and discussion of short works by a selection of playwrights, students will garner a sense of the development of playwriting while also being exposed to various playwriting genres During the semester, students will create short
works for the stage. Weekly writing exercises will be shared and discussed in class. This course meets the General Education requirement for Creative Work. Co-requisite: College Writing (ENG-111)

## Test

| TST-101 | 3 Credits |
| :--- | :--- |
| Test Registration |  |

This course is used to test various functions of the registrar's office including grading, waitlist, registration, withdrawal, schedule adjustment, and enrollment verifications. December 192011 4:53 PM Deborah A. Boyer

## Test Registration II

This course is used to test various functions of the registrar's office including grading, waitlist, registration, withdrawal, schedule adjustment, and enrollment verifications. December 192011 4:53 PM Deborah A. Boyer

## Visual Media Arts

## VMA-100 3 Credits <br> \section*{VMA Freshman Seminar}

This interdisciplinary course builds a connection to the aesthetic, historical and intellectual aspects of an artist community and creative work while helping students navigate through some of the logistical hurdles of the first year experience. Students participate in a variety of group activities, discussions and presentations with faculty and visiting artists. Field trips include local galleries/studios and museums. A journal/sketchbook is required. The course is required for all Visual and Media Arts majors. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-102 <br> 3 Credits

Visual Design: Composition and Color
This course introduces the student to elements and principals of design that are fundamental to all fields of visual art. Within the context of 2dimensional problem solving, students will develop a working vocabulary of visual elements including line, form, space, and color, in order to explore the expression of principles of composition such as balance, rhythm, emphasis, and proportion. Students will experience working with a variety of mediums and begin to develop skills in both visual thinking and craftsmanship. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-103

3 Credits
This course introduces the student to the fundamental elements and principles of design within the context of 3-dimensional form and time, both essential to the understanding of 2D and sequential art and design. Working with a variety of materials students will explore the fundamentals of scale, volume, space and light in 3 dimensions. Through exploring sequence and visual narrative, students will be introduced to the fundamentals of viewer experience in time. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-104

3 Credits

## Drawing from Observation

This introductory studio course examines the basic vocabulary, principles, and skills of drawing Using a wide range of media, students work primarily from observation to master techniques of objective drawing. While concentrating on formal visual elements such as line, shape, value, texture and limited color, students work with principles of figure/ground, scale, positive and negative space, proportion, perspective, volume, light, composition and pictorial unity. Through drawing, discussion, critique, and research, students will explore mark making as an expressive endeavor. This course meets the General Education requirement for Creative Work. Prerequisite: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); or exemption by placing into higher level courses.

## VMA-105 <br> Digital Imaging With Photoshop

3 Credits

The Adobe Photoshop workspace reflects the technical basis of the digital image. Understanding the structure of this important application enables the student to systematically build confidence and skill in its use, and also apply its principles in related applications. This course surveys the breadth and depth of the Photoshop workspace and toolset through lecture presentations and lab exercises. An overview of the digital imaging workflow will be presented, with emphasis on image processing Students must have basic computer literacy. Prerequisite: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103) and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-106

Digital Imaging for Artists and Designers
In this course students will learn the Adobe Photoshop and conceptual skills necessary to create digital illustrations, collage and mixed media work comprised of photography, scanned images, found materials and student artwork. Students will learn the technical aspects of digital imaging such as scanning, image resolution, color reproduction, nondestructive editing, and image retouching and manipulation. These will be applied to projects where students explore principles of color and composition, meaning, expression, representation, sequence and narrative.

VMA-110
Audio for Media
In this introductory lab, students will gain basic knowledge and skills for producing audio for broadcast and visual media. Through hands-on projects, students will learn how to record, edit, and mix sound, using standard audio equipment and digital audio editing software. Topics will include the science of sound, audio for video, audio and the internet, and the technical aesthetic aspects of audio craft. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Leve III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

VMA-111 3 Credits Introduction to Mass Media

Mass media helps shape the power dynamics in society and politics. This introductory course is the study of social, cultural, economic, ethical and political issues from personal, local, historical and global perspectives of media. Students will explore various kinds of media and their uses such as news, advertising, public relations, entertainment, social media and video games. Through discussions and projects, students will engage with multiple views, experiences, and beliefs in order to become critical consumers and
producers media in our multicultural world. The course meets General Education Requirement for Community and Cultural Contexts. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher evel courses.

## VMA-112

3 Credits

## Art History: Prehistoric to Medieval

This course is a broad, multicultural survey of art and architecture from the Prehistoric to the Medieval periods. Through formal analysis students will learn to use visual language to express aspects of design such as style, composition, perspective and materials. Students will explore how global, social, political, and cultural events influence, and are influenced by, artists and the production of art. By engaging with works of art through discussion, writing, museum visits, and making projects, students will explore the process of human creative endeavor, and will construct a narrative about artistic expression as it relates to society and their own experience. This course meets the General Education requirement for Creative Work. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of M athematics (MAT-093) or exemption by placing into higher level courses.
VMA-113
3 Credits
Art History: Renaissance-Contemporary
This course is a broad multicultural survey of art and architecture from the Early Renaissance through contemporary times. Through formal analysis students will learn to use visual language to express aspects of design such as style, composition, perspective and materials. Students will explore how global, social, political, and cultural events influence, and are influenced by, artists and the production of art. By engaging with works of art through discussion, writing, museum visits, and making projects, students will explore the process of human creative endeavor, and will construct a narrative about artistic expression as it relates to society and their own experience. This course meets the General Education requirement for Creative Work. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-114

3 Credits
History of Graphic Design
This course critically investigates and explores graphic design and visual communication history, major movements and pivotal artists and designers. This course requires participation of students in lecture and presentation, writing and studio projects, which will build critical thinking and visual skills. The course provides a necessary historical basis for students in the Visual Design Option in the Visual \& Media Arts Program. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of M athematics (MAT-093) or exemption by placing into higher level courses.

## VMA-115

3 Credits
The Moving Image
This course critically investigates and explores the history and technical development of the moving image, including major and influential works, artists, technical advances, and movements in film, television, and digital presentations. This course builds critical thinking and visual skills. The course provides a necessary historical basis for students in the Integrated Media Design Option in the Visual \& Media Arts Department. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of M athematics (MAT-093) or exemption by placing into higher level courses.

VMA-118
Elements of Time
This course is a time-based foundation studio course that focuses on critical thinking skills in the form of time and experience. The conceptual and experimental approach of this course enables students to develop the basic vocabulary, concepts, tools and principles used by artist and designers who create time-based multimedia projects. Students will critically evaluate and utilize time as narrative and an essential element through projects in audio, video, installation and live performance. These assignments will culminate in a self-directed project that promotes inquiry and can shape the viewers' perceptions of artifacts, light, movement, time and space. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics MAT-093) or exemption by placing into higher level courses.

## VMA-122 <br> 3 Credits

## Painting for General Education

This introductory studio course examines the basic vocabulary, skills and principles of painting from observation. The course emphasizes drawing, composition, color, value, and paint quality. Through working with various tools and materials, discussion, critique, and research, students will explore how the combined elements of visual design can produce the illusion of volume, space, light and movement in order to depict observed and imagined subject matter, and be used to express ideas and emotion.This course meets the General Education requirement for Creative Work. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-123

Water Color I
An introduction to the medium of watercolor paint, this course demonstrates and explores basic techniques such as wet-on-dry, wet-on-wet, and washes. Students draw from observation and learn to manipulate value, tone, and color. Class time includes one-on-one instruction and group critiques. This course meets the General Education requirement for Creative Work. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and
Foundations of M athematics (MAT-093) or exemption by placing into higher level courses.

## VMA-124

Printmaking I
This course is an introduction to a variety of printmaking processes including woodcut, monoprint, engraving, and dry point. Students will experiment with tools, materials and techniques in a studio environment. Through drawing, research, discussion, and critique, students will develop their own visual ideas and use printmaking as means of expression. This course meets the General Education requirement for Creative Work. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103) and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-125

## Introduction to Adobe Suite

This is an introductory course in Adobe Illustrator, Photoshop, and InDesign, the industry-standard applications for graphic design. Through in-class and independent projects, students will learn the basic functionality of Illustrator for digital illustrations. Photoshop for editing images, and InDesign for layout and design. Students will be introduced to the basic tools and vocabulary needed to continue building skills independently. Please note: This course cannot be used for credit in the VMA Visual Design Option.

VMA-129
Visual Design with HTML \& CSS
Visual Design students will learn typography, layout and design in the context of interactive media, using HTML and CSS as visual design tools. Through a variety of onscreen projects, students will build on typesetting and layout skills and practice the principals of interactive design. Projects will focus on web typography, fluid design, functional style, navigation, and kinetic typography on screen. Prerequisite: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.
VMA-130
3 Credits

## Social Media Strategy

In this course, students will explore techniques and strategies of social media marketing and public relations that can be used to promote a company, and individual or a product. Through case studies and exercises students will learn how to identify business objectives and how a marketing campaign is created. Students will learn to reach an audience through an integrated marketing approach that uses social media, online video, podcasts, mobile apps, blogs, news releases, viral marketing, marketing, print and other current tools and channels. Career pathways will be identified and explored. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

3 Credits
Typography I, Form, Style, \& Hierarchy
Typography is the art and technique of arranging letterforms for practical and expressive communication. This rigorous course introduces students to the anatomy and classification of type, and to the basic principals of type classification, legibility, information hierarchy and grid systems. By completing a variety of projects, students will build skills in typesetting and layout, expressive typography, conceptual thinking and Adobe InDesign and Adobe Illustrator. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses. Students must earn a grade of $C$ or higher to advance to Typography II.

## VMA-133 3 Credits Typography II: Layout, Typesetting, and

 SystemsIn this course students will continue to build on typographic foundation principles, strengthening their skills through projects of moderate complexity. Projects involve information design and design of long-form content for print and digital books, magazines and other publication formats. Students will learn to develop consistent type and navigation systems, and explore the relationship between type and image. There will be an emphasis on working through the design process from sketch, revision, and final presentation. Software used:
Adobe Illustrator, InDesign, and some Adobe Photoshop. Prerequisite: A C or higher in
Typography I: Form, Style and Hierarchy (VMA132).

## VMA-135

3 Credits

## Digital Illustration

In this course students will learn digital drawing skills to create projects in Adobe Illustrator and other software that communicate concepts and information. There will be an emphasis on developing visual research, sketching and rendering practices in order to create illustrations, data graphics and logotypes using vector drawing techniques. Prerequisites: Writing Skills II (ENG095) or Integrated ELL Level III (ELL-103) and Foundations of Mathematics (MAT-093).

VMA-140
3 Credits Media in Motion

In this studio/critique class, students will learn to combined typography, image, audio and short animated sequences using software and traditional methods. Skills and principles learned in this course may be applied to title sequences for film, motion graphics, Info graphics, web banners, interactive sequences and time-based art. There will be an emphasis on the process of design problem-solving incorporating thematic development, storytelling, message, interactivity and editing. Perquisite: Grade of C or better in Typography - VMA-132.

## VMA-141

3 Credits
Elements of Video Production
This course gives students an overview of the theoretical, aesthetic, and practical elements of digital video pre-production, production, and post-production. Through a series of creative exercises, lectures, and classroom critiques, students will gain an understanding of the fundamental skills required in planning, scripting, directing, shooting, lighting, and editing digita video productions for a variety of purposes and audiences. The course provides a special emphasis on understanding and using visual storytelling techniques to relate information and emotion. Recommended prerequisite: Digital Imaging with Photoshop (VMA105). Prerequisites Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).

## VMA-151 3 Credits

Introduction to Audio Technology
This course will provide the student with the basic knowledge and skills required for audio production. Through lectures and hands-on lab work, students will learn the technical and aesthetic aspects of microphones, tape decks, and mixing consoles. Both digital and analog production media will be covered, with greater emphasis on the digital realm. In addition to technical abilities, students will also examine the nature of the acoustic environment, and will be introduced to digital audio editing software. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-161 <br> 3 Credits

Introduction to Digital Photography
In this rigorous course students investigate basic technical issues of photographic work-flow and formal practices of seeing photographically. Through shooting assignments and lab exercises, students use an array of technical, aesthetic and compositional principles to create work that documents and interprets the world around them. Examples of current and historic photography will be examined. Students must have a digital camera or phone camera. This course meets the General Education requirement for Creative Work. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-205 <br> Inventive Drawing

Through various methods of visual thinking and ideation, students will learn to develop ideas and concepts, and will experiment with a variety of digital, traditional, or organic tools, drawing methods and mediums. During the course students will develop individual creative insight, learn to generate ideas through brainstorming and creative thinking, skills that are useful in effective design, animation, illustration, drawing, painting, story-telling and many other forms of visual communication. Prerequisite VMA104

VMA-207

## Figure Drawing

Students draw from the model as a means of understanding form, shape, and line, gaining experience with a variety of drawing media. Figure Drawing emphasizes shorter poses as training in immediate response to gesture and form. This course serves as a requirement and preparation for intermediate level and conceptbased studio courses such as Ideas in Art: Fine Arts Studio, Observational Drawing, and MultiLevel Studio classes. Prerequisite: Drawing I(VMA104).

VMA-221
3 Credits

## Multimedia Paint \& Theory

This course introduces students to the fundamentals of painting with heavy body paints and mediums. Working from observation students will gain the basic skills necessary to control the value, color, texture and composition of the paintings they create. They will develop visual problem-solving skills and critical vocabulary through group critiques and individual meetings. This course will leave them with a basic understanding of how to build a personalized, sustainable painting practice. Prerequisite: Drawing from Observation (VMA104).

VMA-223
3 Credits

## Water Color II

Focusing on developing one's personal sense of aesthetics and style, this course explores various techniques used in watercolor. The course places emphasis on creating cohesive, well-composed paintings, while it develops an understanding of the elusive properties of spontaneity and transparency as they relate to the medium of watercolor paint. Prerequisite: Watercolor I (VMA123) or permission of instructor.

## VMA-224

3 Credits

## Printmaking II

A continuation of Printmaking I (VMA124), this course further develops the techniques of dry point, engraving, woodcut, and monotype while focusing on thematic development and content. The course explores the more complex methods of color printing. It encourages experimentation in a self-motivated workshop environment. Class time includes one-on-one instruction and group critiques. Prerequisite: Printmaking I (VMA124) or permission of instructor.

## VMA-225

3 Credits

## Painting Concepts

This studio course provides intermediate instruction to students that possess the basic painting skill set framed by VMA221. Through observational painting, students will continue to increase their facility with heavy body paints while learning advanced techniques and employing digital media as a painting medium. This course also serves as an introduction to portraiture and figure painting while providing a framework for students to begin experimenting with persona aesthetics (style). They will exercise their visual problem- solving skills and increase their critical vocabulary through group critiques and individual meetings. This course will help them begin building their own sustainable painting practice.

## VMA-227

3 Credits

## Studio Portfolio

What topic should my artwork discuss? How should this project manifest? Why am I making this? These questions comprise the three basic considerations that inform an artwork's concept; the Subject ("the what" or the topic), Form ("the how" or the format) and the Content (" the why" or the artist's intention). Ideas in Art students will explore how to successfully apply these essential conceptual considerations to a creative practice.

Students will examine their own motives while investigating broader topics introduced through readings, writings and workshops. Studio art projects encourage the evolution of personal style as students gain exposure to an array of contemporary and historical conceptual frameworks. Students will exercise conceptual and visual problem solving skills through group critiques and individual meetings. This course will help students begin building a visually and conceptually enriched art practice. Prerequisite: Figure Drawing (VMA207) or Multimedia Paint and Theory (VMA221).

VMA-232

## Visual Design Lab I

In this rigorous studio lab course, students will strengthen foundations of visual language, typography, image, and materials by working on pragmatic and expressive design problems. Students explore design process, methods of research, concept development, sketching, critique and revision in order to produce and present effective visual design solutions. Students learn to analyze and discuss their work, and the work of others, through frequent class critiques Pre/Co-requisite: Grade of C or better in Typography II: Layout, Typsetting, and Systems (VMA-133).

## VMA-233 <br> \section*{Visual Design Lab II}

This course is a continuation of Visual Design I where visual design methods and principles are applied to projects of increased complexity. Class discussions will include exploration and overview of aspects of print and digital production methods as they pertain to the visual designer. Prerequisite: Grade of C or better in Visual Design Lab I (VMA232).

## VMA-241

3 Credits

## Advanced Video Production

This course focuses on development of the skills and concepts necessary for digital video production. Students learn the advanced use of the HDV digital camcorder microphones, the field audio mixer and lighting techniques. The course uses images and materials acquired in the course in its co-requisite class, Video Post Production (VMA242), in order to complete a final project counting for both courses. Topics covered include fiction and non-fiction production techniques, including research, script development and interviewing. Discussion of theoretical issues in applied media aesthetics will be an integral and essential part of the class. Prerequisite: Elements of Video Production (VMA141) or permission of instructor. Corequisite: Video Post Production (VMA242)

## VMA-242

## Video Post-Production

This course delivers an intensive workshop in digital nonlinear post-production software, theory and techniques. Students work in-depth with Final Cut Pro and will also explore other aspects of the Final Cut Studio package, including Live Type, Soundworks Pro, and Motion. The course also provides a solid foundation in the theory and aesthetics of film and video editing by examining the history and development of the editing process. The course uses images and materials acquired in its co-requisite course, Advanced Video Production (VMA241) in order to complete a Final Project counting for both courses.
Prerequisite: Elements of Video Production (VMA141) or permission of instructor. Corequisite: Advanced Video Production (VMA241).

## VMA-243

3 Credits

## Projects in Video Production

The approach and content of this course focuses on producing a work of professional quality for
use as a portfolio presentation of student achievement. Drawing on skills they have acquired in previous production courses, students will write, shoot, and edit a high-quality video program, including audio sweetening, digital composite effects, and graphics, modeling their activities on a real-world production atmosphere. Actual production activities depend on project production schedule and needs. Prerequisites: Advanced Video Production (VMA241) and Video Post Production (VMA242) or permission of instructor.

VMA-244
3 Credits

## Media Project Planning

This course is an intensive survey of all aspects of pre-production planning for video and multimedia productions. Special emphasis is given to the process of writing for the media, including idea development, preparation of proposals, treatments, storyboards and scripts that clearly define message, intent and audience. A variety of storytelling methods and approaches to the creative process will be explored, including the dramatic, educational, corporate and documentary formats. In addition, the fundamentals of production management will be presented, including script breakdown, production scheduling, resource planning, and budgeting. Students will be expected to utilize skills gained in this class in subsequent media production classes. Prerequisite: Elements of Video Production (VMA141).

## VMA-252 <br> 3 Credits

## Audio Studio Production

This course will cover basic techniques for multitrack studio recording. Topics will include: microphone techniques and placement, tracking and overdubbing, mixing and digital editing, and use of outboard equipment. Use of ProTools software in a recording environment is emphasized. Prerequisite: Introduction to Audio Technology (VMA151).

## VMA-261 3 Credits <br> Digital Photography Techniques

This course examines professional practices in digital photography. Emphasis is on the continuity of the digital workflow and the production of fine prints. Technical issues of acquisition, image processing, out-put, and archiving will be addressed. Work derives from topical shooting assignments and student defined projects. Students must have a digital camera with manual exposure control, and preferably one with RAW capture capability. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of M athematics (MAT-093) or exemption by placing into higher level courses

VMA-262
3 Credits
Video Techniques Lab
In this digital filmmaking course, students will learn the technical elements of visual storytelling through demonstration and hands-on practice Students will build a vocabulary of camera, lens, lighting and some editing skills through working on a variety of projects. Working in groups, students will experience various roles with a film
crew. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and
Foundations of M athematics (MAT-093) or exemption by placing into higher level courses.

## VMA-263

Video Concepts Lab
In this combination lab and critique class, digita filmmakers will focus on the pre and post production elements of visual storytelling. Through calls discussion and a variety of projects, students will explore aspects of structure, narrative, and style and build skills in conceptualization, scripting, story boarding and editing techniques. Post-production topics include digital editing software and current methods for output and distribution. Screenings, reading sand discussions of film and video work will challenge students to advance their personal vision and storytelling abilities. Prerequisites: Writing Skills II (ENG-095) or Integrated ELL Level III (ELL-103); and Foundations of Mathematics (MAT-093) or exemption by placing into higher level courses.

## VMA-271

3 Credits

## Design for the World Wide Web

This course addresses the unique design issues involved in creating web pages. Students learn to develop graphics and media, to integrate content and media elements, and to create visually attractive communicative, and effective pages for electronic delivery. The course gives special attention to software applications used in the creation of web page design and graphics. Prerequisite: Digital Imaging with Photoshop (VMA105).
VMA-273
3 Credits
Motion Graphics \& Compositing
This course will familiarize students with the aesthetic and technical requirements of using digital methods to combine video, photo graphics, text and other visual and audio elements. Through lecture, demonstration and hands-on projects, students will learn behaviorbased animation, transfer modes, particle dynamics and simulation design, stylized title animation, chroma key techniques, DVD motion menu design, 3D features, key framing, audio and integration with various editing software. Prerequisite: Digital Imaging with Photoshop(VMA105) or permission of instructor Recommended: Advanced Video Production (VMA241) and Video Post Production (VMA242).

## VMA-274 DVD Authoring

This course provides students the technical and aesthetic skills needed to design and author professional DVDs. Through lectures and handson exercises, students will learn the stages of the DVD authoring process, including initial planning and storyboarding, menus and buttons, design and navigation, and burning and replication. Prerequisites: Digital Imaging with Photoshop (VMA105) and Elements of Video Production (VMA141). Recommended prerequisite: Advanced Video Production (VMA241) and Video Post-Production (VMA242)

VMA-275

## Interactive Design I

In this studio intensive course, students will build on the foundations of visual design, typography and image with the principles of interactivity and user experience, in order to create responsive designs that work on both handheld and desktop devices. Prerequisites: $G$ rade of $C$ or better in VMA 132 Typography I.

## VMA-276 Interactive Design II

3 Credits
This is a practical class teaching interactive visual design from conception to completion. Students start by coming up with an idea for and examining the needs of their design projects, then define the target audience and behavior, page layouts, project planning/site maps, and techniques to smooth their workflow. Students will choose their digital applications(s) (e.g., website, Apple iPhone) for their projects. The final visual designs are ready to be delivered for development and implementation. Prerequisites: Interactive Design I (VMA275), or the permission of the instructor.
VMA-290
3 Credits
Visual Design Portfolio
In this course Visual Design majors will refine, expand on, and assemble existing portfolio content for transfer to 4-year design programs, internships, and entry-level employment. The portfolio content is evidence of the student's abilities in design, concept development, and technical skills. Students will produce a resume and self-marketing materials. They will learn presentation techniques and participate in portfolio review. Prerequisite: Grade of C or better in Visual Design I (VMA232). Pre/Corequisite: Visual Design Lab II (VMA233).

VMA-299G
3 Credits

## Visual Design Internship

This course provides students with practical experience in a professional setting and preparation for a successful career in the visual design field. Designation of the internship site will be based on student academic and career goals. The internship includes in-class learning and weekly meetings with the instructor and/or the representative of the designated business or agency. Prerequisite: Grade of $C$ or better in Visual Design Lab I (VMA232) and permission from the department

## VMA-299M <br> 3 Credits

Media Communication Internship
This internship course is dedicated to field experience in a professional job situation and is recommended as a final semester course. Students arrange for placement at an internship site with the departmental supervisor in the semester previous to the actual internship. Site experience requires 120-150 hours, as well as a personal project related to the internship. Prerequisite: Advanced Video Production (VMA241) or permission of department chair

## Biotechnology, Biological Sciences

Dr. Jim Barber
Consultant
Industrial Biotechnology
Dr. Erik Hett
Head of Experimental and Chemical Biology Merk, Exploratory science center

Dr. Jim Biagioni
Consultant
Dr. Phillip Snyder
Internship Director
Vertex
Sunny Schwartz
Executive Director
MA Biotechnology Education Foundation
Dr. Barry Goldman
VP, Head of Discovery
Indigo AG, Inc
Dr. Chelsea Worley
Engineer I, Technical Development Biogen

Dr. Alexia Pollack
Department Chair, Biology
University of Massachusetts Boston
Dr.Elizabeth Zulick
Professor, Faculty Lead, Life Sciences Northeastern University

Dr. John Snyder
Professor, Chemistry
Boston University
Dr. Fadie Coleman
Director
BU Met College Biomedical Laboratory and
Clinical Sciences Program
Dr. Claire Moore
Professor, IRACDA grant
Tufts University

## Criminal Justice

## Angel Barbosa

Sergeant
Cambridge Police Department
David Batchelor
Captain
Chelsea Police Department

## April English

Chief of Organization Development and Diversity
Office of the Massachusetts Attorney General

## Christopher Harris

Associate Professor
Undergraduate Program Coordinator
Transfer Advisory
School of Criminology and Justice Studies University of Massachusetts Lowell

## Linda O'Brien

Deputy Chief of Police
Tufts University

## Robert Rose

Trooper
Massachusetts State Police
Rachelle Steinberg
Assistant Deputy Superintendent
Suffolk County Sheriff's Department
Natashia Tidwell
Counsel
Collora LLP
Michelle Williams
Chief Probation Officer
Massachusetts Trial Court-Charlestown Hospitality

## Martin Breslin

Director of Culinary Operations
Harvard University Dining Services
Stephanie Fischer
Director of Human Resources
The Liberty Hotel
Christina Mirasolo
Senior Meeting Planner
Liberty Mutual Insurance
Cynthia Moriarty
Conference Manager
Seaport Hotel \& World Trade Center, Boston
Charles Murphy
Director of Sales
U.S. Food Service Co

## Dean Riddle

Vice President of Human Resources
Colwen Management, Inc.
Pamela Ross- Kung-
President
Safe Food Management
Susanna Tolini
Research Chef
Kayem Foods, Inc

## Medical Imaging Cardiovascular Ultrasound and Diagnostic Medical Ultrasound

Dr. Carol Benson DMS
Medical Director
Brigham and Women's Hospital
Beth Cameron, R.D.M.S., A.B.
Applications Specialist
General Electric Medical Systems
Robert Cataldo, R.C.S.
Chief of Echocardiography Lab
Boston Medical Center
Sandra Creaser, R.T. (R) (N) (M) (ARRT)
Community Partner
City of Charlestown, MA
Diane DeRoche, R.D.C.S.
Echo Lab Supervisor
Nashoba Valley Regional Medical Center
Charlene Doherty, R.D.M.S.
Staff Sonographer, Ultrasound Department North Shore Medical Center

## Sandra Doherty

Public Member

## James Fantony

Cardiac Sonographer
Newton-Wellesley Hospital
Chun He, R.D.M.S., R.V.T.
Clinical Ultrasound Consultant
Dr. Sherif Labib
Echo Lab Director
Lahey Clinical Medical Center
Medical Laboratory Technician Advisory
Committee
Dalton Clarke, M.T., A.S.C.P., C.
Laboratory Director
Cambridge Health Alliance

## Hind Kurbaj

Operations Director, Pathology
Beth Israel Deaconess Medical Center

## Emelie Villapa

Department of Pathology and Laboratory Medicine Microbiology Department
Boston Medical Center
Debra St. George,
M.S., B.S., M.T., A.S.C.P.

Program Director
Clinical Laboratory Science Program
Bristol Community College

## Shauna Mazzola

Clinical Education Coordinator
Tufts Medical Center
Ellen Goonan, M.S., M.T., ASCP
Director of Operations, Clinical Laboratories
Technical Director of Regulatory Compliance
Brigham and Women's Hospital
Jennifer Nicoloro PhD, MLS(ASCP)CM
Medical Laboratory Sciences Program
Director, Department of Clinical Laboratory
and
Nutritional Services
University of Massachusetts Lowell
Laura Listro, M.I.S., ASCP
Massachusetts General Hospital

## James Happel

Director, Laboratory Services
Brigham and Women's Faulkner Hospital
Kelli Purchase, B.S., M.T. (ASCP)
Core Lab Supervisor
Carney Hospital
Lisa Zenkin Steward
St. Elizabeth's Medical Center
Medical Radiography
Patricia A. Doyle, M.B.A., C.R.A.
Director, Diagnostic Imaging
Lahey Clinic
Doris Gentley, R.T. (R.)
Senior Director of Radiology and Imaging
Cambridge Health Alliance
Victoria Glassman, R.T. (R.)
Senior Program Manager, Radiology
Education
Brigham and Women's Hospital

Elizabeth Grady, R.T. (R.)
Diagnostic Manager
Beth Israel Deaconess Hospital
Barry Hall, R.T. (R.)
Medical Imaging Professional
William A. Lorenzen, M.S.
Manager, Research Laboratory Support Radiation Safety Officer
Children's Hospital of Boston
Brian J. McIntosh, B.S., R.T.(R), C.R.A.
Director of Radiology
Brigham and Women's Faulkner Hospital
Deborah Ricciardelli, RTR
Unit Operations Manager
Massachusetts General Hospital
Nursing Program
Beverly Amero
Nurse Manager, Perioperative Services
Mount Auburn Hospital
Hallie Greenberg
Director of Nursing Education
Brigham and Women's Hospital

## Diane Hanley

Director of Practice and Quality
Children's Hospital
Janet Hosta
Director of Professional Development
Youville Hospital
Kathy Lucas
Director of Nursing Education
Cambridge Hospital

## Maria Tricarico

Director of Nurses Lemuel Shattuck Hospital

## Paralegal Studies

Susan Atlas
Professor and Department Chair
Bunker Hill Community College
Kevin Brownile
Senior Director, Business Apps/ Tech
Hologic, Inc.
Christopher R. Buckley, Esq.
Attorney at Law
Law Office of C.R. Buckley
Sally J. Calhoun, Esq.
Attorney at Law
Law Office of Sally J. Calhoun
Christine Collins
Senior Trial Attorney and Intern Coordinator U.S. Department of Labor, Office of the Solicitor

Leah Gallagher
Senior Vice President
The Belfort Group
Justice Kumahia
Assistant Dean of Academic Affairs
Bunker Hill Community College
Hon. John E. McDonald, Jr.
First Justice
East Boston Division
Boston Municipal Court

## Rebecca MacDowell Lecaroz

Partner
Brown Rudnick

## Keith McNally

Paralegal
Law Office of Susan A. Atlas
Ilene Mitchell
Case Manager and Staff Attorney
Administrative Office of the Probate and Family Court

## Lee Ann Murphy

Paralegal
Boston Scientific Corporation

## Anthony B. Sandoe

Retired Professor
Suffolk University Law School
Teresa Shipley
Paralegal Specialist
U.S. Department of Labor, Office of the Solicitor

Hon. Jennifer M.R. Ulwick
Associate Justice
Norfolk Probate and Family Court

## Paramedic Studies

Allan I. Alpert
Director, Department of Emergency
Management
City of Chelsea
Kevin T. Crane, NRP
Boston EMS (Retired)
Thomas C. Grassia, Esq.
Attorney at Law
Gayle M. McGinty, RN, MSN
Nurse Educator
Massachusetts College of Pharmacy \& Health Sciences

Lynn A. Mahoney,
NRP Education Coordinator
Fallon Ambulance Company
Erin L. McCann, M.D.
Emergency Room Physician
Norwood Hospital
Chief Timothy F. Morrissey, NRP
Sherborn Fire Department
Dr. Charles N. Pozner, M.D.
Director of Pre-Hospital Care
Brigham \& Women's Hospital
Ronald Quaranto, COO
Pharmacy Technician
Cataldo Ambulance Company
Jonathan DaSilva
CVS Health
Evan Taylor
Tufts Medical Center
Jean Beach
Beth Israel Deaconess Medical Center
Yuliya Malinkovich
Margolis Pharmacy
Franklin Small
Cambridge Health Alliance

## Surgical Technology

Peter C. DiStefano, CST
Certified Surgical Tech
Jayne MacPherson, CST, Ph.D., FAST
Faculty
Bunker Hill Community College
Senem Hicks, RN, MSN
ST Employer
Neelakantan Sunder, MD
Physician
Kristen Urbanek
Certified Surgical Tech
David Drago
Public Member
Sergio Jarmamillo
Public Member
Ultrasound
Dr. Carol Benson DMS
Medical Director
Brigham and Women's Hospital
Robert Cataldo, RDCS
Chief of Echocardiography Lab
Boston Medical Center
Sandra Creaser, R.T. (R) (N) (M) (ARRT)
Community Partner
City of Charlestown, MA
Diane DeRoche, RDCS
Echo Lab Supervisor
Nashoba Valley Regional Medical Center
Charlene Doherty, RDMS
Staff Sonographer, Ultrasound Department
North Shore Medical Center

## Sandra Doherty

Public Member
James Fantony
Cardiac Sonographer
Newton-Wellesley Hospital
Chun He, R.D.M.S., R.V.T.
Clinical Ultrasound Consultant
Dr. Sherif Labib
Echo Lab Director
Lahey Clinical Medical Center

## Executive Division

Pam Y. Eddinger
President
Executive Division
B.A. Barnard College, Columbia University; M.A., Ph.D. Columbia University

## Molly B. Ambrose

Associate Vice President
Human Resources and Labor Relations
A.B. Le Moyne College;
M.S. Case Western Reserve University; M.B.A. Syracuse University

## James F. Canniff

Provost and Vice President
Academic and Student Affairs
B.A. Catholic University of America;
M.U.S. Howard University;

Ed.D. University of Massachusetts Amherst

## Nahomi Carlisle

Associate Vice President and Chief Equity and Compliance Officer
Executive Division
B.A. Bentley University
J.D. New England School of Law

## Marilyn K. Kuhar

Executive Director
Development and BHCC Foundation
B.A. Georgetown University

## Karen M. Norton

Executive Director
Integrated Marketing and Communications
B.S.B.A. UMass Lowell
M.S Eastern Nazarene College

## John K. Pitcher

Vice President
Administration and Finance
B.S. Indiana University;
M.B.A. Georgian Court University

## Division of Academic and Student Affairs

## James F. Canniff

Provost and Vice President
Academic and Student Affairs
B.A. Catholic University of America;
M.U.S. Howard University;

Ed.D. University of Massachusetts Amherst
Maryanne Atkinson
Dean
Health Sciences
A.S. North Shore Community College;
B.S., M.Ed. University of Massachusetts Boston

## Lori A. Catallozzi

Dean
Humanities and Learning Communities
A.B. Smith College;
M.F.A. University of Pittsburgh

## Nuri Q. Chandler-Smith

Dean
Academic Support and College Pathway
Programs
B.S. Northeastern University;

Ed.M. Harvard University
Alicia A. D'Oyley
Interim Dean
Enrollment Management and LifeMap
B.A., M.S., Ph.D. Regis College

Julie B. Elkins
Dean
Student Services
B.S. Central Missouri State University;
M.A. Indiana University of Pennsylvania;

Ed.D. University of Massachusetts Boston
Austin A. Gilliland
Dean
Professional Studies
B.S., M.A. University of Texas at Austin

Carlnita P. Greene
Dean
Behavioral, Social Sciences and Global Learning
B.A. University of Virginia
M.A. S.U.N.Y. at Brockport

Ph.D. University of Texas
Kristen P. McKenna
Dean
Workforce and Economic Development
B.A. Rhode Island College
M.A. Bridgewater State University
M.Ed. Eastern Nazarene College

## Alice Murillo

Associate Provost
Chelsea Campus
B.S. Catholic University of Puerto Rico
M.A.T. University of Florida

Ph.D. Florida State University
Laura C. Rubin
Dean
Science, Engineering and Mathematics
B.S. Lafayette College

Ph.D. University of Texas at Austin

## Franklyn E. Taylor

Associate Provost
Academic and Student Affairs
B.A. University of Sierra Leone, Freetown
M.P.A. University of Florida
M.S. University of Wisconsin

Ed.D. Northern Arizona University
R. Arlene Vallie

Interim Dean, Research and Assessment
Academic Affairs
A.A. Bunker Hill Community College
B.A. Howard University
M.S.W. Boston College

Kevin E. Wery
Senior Director
College Events and Cultural Planning B.A. University of Wisconsin, Madison M.A. Tufts University

## Division of Administration

## John K. Pitcher

Vice President
Administration and Finance
B.S. Indiana University;
M.B.A. Georgian Court University

## Robert A. Barrows

Director and Chief of Police
Public Safety
A.S. North Shore Community College;
B.S., M.S. Salem State University

Gary A. Bigelow
Executive Director
Facilities Planning, Construction, and Energy
Management
B.A. University of Massachusetts Amherst

Jeffrey L. Ginsberg
Associate Vice President
Administration and Finance
B.A. Colorado State University;
M.P.A. Suffolk University

## Melissa B. Holster

Executive Director
Student Financial Services
B.A. Lafayette College;

Ed.M. Boston University

## Steven T. Ogawa

Chief Information Officer
Information Services
A.A. Fresno Community College;
B.S. University of California;
M.B.A. Northeastern University

Steven A. Roller
Executive Director
Grants Department
B.A., M.A. University of Chicago

## FACULTY, PROFESSIONAL STAFF AND ADMINISTRATORS

Mirna V. Abarca
Academic Coordinator
Biology and Chemistry Department
B.S. University of El Salvador

Joshua E. Abel
Professor and Chairperson
Criminal Justice and Public Safety Department
B.A. Nyack College
M.S. Westfield State University
J.D. Valparaiso University School of Law

## Khaled Abukhidejeh

Professor
Mathematics Department
B.S. Rochester Institute of Technology
M.S. Tufts University

Milagros M. Aherrera
Director of Compensation and Benefits Human Resources
Certificate in Hotel Management, Ecole de Roches
B.S. St. Scholastica's College, Philippines
M.S. UMass Boston

Naoko Akai-Dennis
Assistant Professor
English Department
B.A., M.A. Kobe Kaisei Stella Maris,

Hyogo, Japan
M.Ed., Ph.D. Columbia University

## Donna Akerley-Procopio

Professor
Computer Information Technology Department
B.A. Boston University
M.Ed. Salem State University

Henry J. Allen, Jr.
Associate Professor
History and Social Sciences Department
A.A. Bunker Hill Community College
B.A. Boston University
M.A. UMass Amherst

Rebecca A. Alleyne-Holtzclaw
Professor
Allied Health Certificate Programs
B.S. Boston State College
M.S. Boston University
C.A.G.S Boston College
D.N.P. Regis College

Christian Almeida
Business Analyst/Programmer
Student Financial Services
B.S. UMass Dartmouth

Molly B. Ambrose
Associate Vice President
Human Resources and Labor Relations
A.B. Le Moyne College
M.S. Case Western Reserve University
M.B.A. Syracuse University

Denise E. Amerena
Coordinator
Health Services
A.S. Laboure Junior College
B.S. Salem State University

## Faeizeh M. Amini

Director
Center for Self-Directed Learning
B.S. Suffolk University

Nancy J. Angoff
Associate Director
Grants Department
B.A. Barnard College, Columbia University
J.D. Northeastern University

Mizuho Arai
Professor
Behavioral Science Department
A.A. Wayo Women's Junior College
B.A. Regis College
M.S.M.A. Ph.D. Boston University

Guy L. Armand
Director
Community-Based Initiatives
B.S. Northeastern University

Asther Asmelash
Associate Professor
English Department
B.A. Texas State University
M.A. Texas Women's University

## Maryanne Atkinson

Dean
Health Sciences
A.S. North Shore Community College
B.S.N. M.Ed. UMass Boston

Karen E. Atkinson
Professor
Biology and Chemistry Department
B.A. Wellesley College

Ph.D. Northeastern University
Susan A. Atlas
Professor and Chairperson
Paralegal and Legal Studies Department
B.A., L.L. M. Boston University
J.D. Suffolk University

Lamine A. Ba
Professor
Biology and Chemistry Department B.S., M.S., Ph.D. Ohio State University

## Cory H. Banton

Academic Coordinator
Community-Based Initiatives
B.A. Antioch College
M.A. School for International Training

## Robert A. Barrows

Executive Director and Chief of Police Public Safety
A.S. North Shore Community College
B.S. M.S. Salem State University

Mary Beth W. Barton
Professor
Hospitality Department
A.S., B.S. Johnson \& Wales University

## Aurora B. Bautista

Professor
Behavioral Science Department
B.A., Ph.D. University of Philippines
M.A. New School of Social Research

## Samira Belaoun

Success Coach/Career Advisor (Academic
Counselor)
Advising and LifeMap
B.S., M.S. University of Paris

## Scott S. Benjamin

Professor
Biology and Chemistry Department
B.S. S.U.N.Y. at Oswego
M.S. University of New Hampshire

Ph.D. Boston University

## Leigh Bennett

Assistant Professor
English Department
B.A. Wellesley College
M.A. Boston University
M.F.A. Bennington College

Shana D. Berger
Associate Professor
English Department
B.A. Colby College
M.A. Cornell University

## Stacey Betts

Project Manager
Grants Department
A.A. Albertus Magnus College
B.A. Smith College

Sherry P. Bhalla
Learning Specialist
Center for Self-Directed Learning D.M.D. Baba Farid University of Health Sciences, India

## Akram H. Bhuiya

Professor
Engineering and Physical Sciences Department
M.Sc. University of Dhaka
M.S. Tufts University
E.E. (Post-Masters) Northeastern University

Ph.D. Atlantic International University

## Gary A. Bigelow

Executive Director
Facilities Planning, Construction, and Energy
Management
B.A. UMass Amherst

Donna M. Bishop
Associate Professor
Nurse Education Department
B.S.N. Atlantic Union College
M.S.N. Salem State University

Sara E. Blackwood
Coordinator of Instructional Technology
(Simulation Lab Specialist-Chelsea)
Health Sciences
B.A. UMass Boston
M.A. Lesley University

Amy E. Boudreau-George
Interim Assistant Director
Institutional Research and Assessment
B.A., M.A. UMass Boston

Michael G. Boyle
Professor
Computer Media Technology Department
B.F.A. James Madison University
M.F.A. Mass College of Art and Design

## Lauren Brennan

Manager, College Events
College Events and Cultural Planning
A.S. Bunker Hill Community College

Patricia A. Bresnahan
ESOL Instructor (Special Programs
Coordinator)
Workforce and Economic Development
B.S., M.S., Ph.D. University of Connecticut

## Brandy M. Brooks

Assistant Director, Adult Education Pathways
Workforce and Economic Development
B.S. Cornell University
M.A. Tufts University
M.S. Northeastern University

Ph.D. UMass Lowell
Kristen M. Brouker-Botelho
Manager of Advancement Operations Institutional Advancement B.A. College of Our Lady of the Elms Graduate Certificate, UMass Boston

## Stephanie A. Bryszkowski

Director
Career Development and Internships
B.S. Fitchburg State University
M.Ed. Salem State University

## Dennis F. Burke

Associate Professor
Biology and Chemistry Department
A.S. Excelsior College
B.S., Ph.D. Palmer College

## Karissa A. Burnham

Assistant Professor
Nurse Education Department
A.S. Holyoke Community College
B.S. UMass Boston
M.S.N. Framingham State University

## Eric Cabral

Coordinator of Internship Programs (Academic Coordinator)
Career Development and Internships B.S. Johnson \& Wales University M.Ed. Providence College

## Kristen Calllahan

Associate Professor
Business Administration Department
B.S. Umass Boston
M.S. Boston College

## Meghan Callaghan

Interim Associate Director
Academic Innovation and Instructional Design B.A. Whitworth University
M.A. UMass Boston

## Andrew Camerato

Coordinator, Instructional Technology Nurse Education Department
B.A. Framingham State University

## James F. Canniff

Provost and Vice President
Academic and Student Affairs
B.A. Catholic University of America
M.U.S. Howard University

Ed.D. UMass Amherst
Crispina Capitulo-Ampane
Associate Professor
Nurse Education Department
B.S.N. University of Iloilo, Philippines
M.S.N. UMass Boston

## Nicholas J. Cardellicchio

Professor and Chairperson
Emergency Medical Studies Department
B.A. Columbia College
J.D. New England School of Law

## Nahomi Carlisle

Associate Vice President and Chief Equity
and Compliance Officer
Executive Division
B.A. Bentley University
J.D. New England School of Law

Misael J. Carrasquillo
Special Programs Coordinator
Veterans Center
A.A. Bunker Hill Community College
B.S, M.B.A./M.S. Northeastern University

## Anne B. Carter

## Professor

Visual and Media Arts Department
B.F.A. Mass College of Art and Design
M.Ed. UMass Boston

Laura N. Carty Barrett
Professor
English Department
B.A. Trinity College
M.A. Simmons College

Roberto J. Carvajal
Senior Special Programs Coordinator
Community-Based Initiatives
A.A. Bunker Hill Community College
B.A. Solemn State University
M.Ed. Boston University

Lori A. Catallozzi
Dean
Humanities and Learning Communities
A.B. Smith College
M.F.A. University of Pittsburgh

Ph.D. UMass Boston
Andy Caul
Success Coach/Career Advisor (Academic Counselor)
Advising and LifeMap
B.A. Andrew University
M.A. Episcopal Divinity School, Cambridge

Ed.M. Harvard University

## Naomie F. Cazeau

Early College \& High School Partnerships
Coordinator (Senior Special Programs
Coordinator)
High School and Community Partnerships and Pathways
B.A. UMass Dartmouth
M.S. Northeastern University

Cheryl D. Cephas
Executive Director
Human Resources
B.S. Wilmington University
M.A. University of Phoenix

## Corinto R. Cevallos

Business Analyst/Programmer Enrollment Management and LifeMap B.S. Northeastern University

Jack P. Chan
Senior Special Programs Coordinator Workforce and Economic Development B.S. Syracuse University

## Nuri G. Chandler-Smith

Dean
Academic Support and College Pathway
Programs
B.S. Northeastern University

Ed.M. Harvard University

## Yong Chen

Professor
Visual and Media Arts Department
A.S. Bunker Hill Community College
B.S. Foshan University, China
B.F.A. Mass College of Art
M.F.A. University of Hartford

Yanming J. Chen
SQL Programmer
Administrative Systems
B.S. Zhejiang University
M.S. UMass Boston
M.S. Boston University

## Betty C. Cheng

Associate Professor
Nurse Education Department
B.S.N., M.S.N. UMass Boston

## Phanny Chhoeun

Professor
Nurse Education Department
B.S.N. UMass Lowell
M.S.N. Rivier University

John A. Chirichiello
Director
Facilities Management

## Hung Q. Chu

Academic Counselor
Student Financial Services
B.S. UMass Amherst

## Margaret Cifuni

Associate Professor
Nurse Education Department
B.S. Boston College
M.S. Salem State University

## Eugenia Ciocan

Professor
Engineering and Physical Sciences Department
B.S., Ph.D. "Al.I.Cuza" University, lasi, Romania
M.S. Bucharest University
M.S. Case Western Reserve University

Tony C. Clark
Professor
English Department
B.A. Morehouse College
M.A. New York University
M.S. City University of New York at

City College
Daniel T. Clement
System Administrator
Administrative Systems
B.S. Merrimack College

Amy L. Clinard
Assistant Professor
Behavioral Science Department
B.A. College of the Holy Cross
M.A. Sacred Heart University

## Anthony F. Cobuccio

Manager
Central Services

## Jennifer Cocio-Thompson

Senior Director
Nurse Education Department
B.S.N. Northeastern University
M.S.N., M.A. Boston College

## Kali R. Cofield

Executive Assistant to the Vice President
Administration and Finance
B.S.B.A. Eastern Nazarene College
M.B.A. University of Phoenix

## Allison Cohn

Educational Case Manager
(Academic Coordinator)
Boston Welcome Back Center
B.A. Clark University
M.P.H. Tulane University

Jennifer A. Cohn
Professor and Chairperson
English Department
B.A. Stonehill College
M.A. Simmons College

Katharine V. Colello
Coordinator, Learn and Earn (Academic
Coordinator)
Career Development and Internships
B.S. Lehigh University
M.A.T. Towson University

Melissa Colon
Assistant Professor
Behavioral Science Department
B.A. Boston College
M.P.P., Ph.D. Tufts University

Michael L. Combs
Professor
Mathematics Department
B.S. Rensselaer Polytechnic Institute
M.S. Stony Brook University

## Cecile M. Corona

Professor
English Department
B.A. Syracuse University
M.A. New York University

Michael P. Costello
Senior Special Programs Coordinator Student Central
A.A. Bunker Hill Community College
B.A. Lesley University

Bryan D. Craven
Assistant Professor and Chairperson
Computer Media Technology Department
A.A. North Shore Community College
B.S.B.A Salem State University

William J. Cribby
Assistant Dean
Student Affairs
B.A. University of New Hampshire
M.Ed. Bridgewater State University

William R. Cronin
Professor and Chairperson
Computer Information Technology Department
B.S. Case Western Reserve University
M.S. Northeastern University
M.S. UMass Lowell

## Zoe Cruz

Human Resources Associate
Human Resources
B.S. City University of New York Brooklyn College

Stacey L. Curran Conway
College Connection Coordinator
Academic Support and College Pathway
Programs
B.A. Massachusetts College of Liberal Arts

Michael T. Curry
Assistant Professor
Mathematics Department
B.S., M.S. , Ph.D. SUNY of Stony Brook
M.A.T. Northeastern University
M.A. Simmons College

Franci S. Da Luz
Interim Associate Director
Admissions and Recruitment
B.A. UMass Boston
M.Ed. Boston University

Ryan M. D'Arcy
Success Coach/Career Advisor (Academic Counselor)
Advising and LifeMap
B.S. Frostburg State University
M.Ed., Bridgewater State University

## Samer F. Darwish

Professor
Mathematics Department
B.S. S.U.N.Y. of Technology
M.S. Salem State University

Keisa Davis-Rezendes
Associate Director
Student Financial Services
B.A. Charter Oak State College

Kathryn M. De Vitto
Senior Special Programs Coordinator
Online Learning and Instructional Innovation
B.A., M.Ed. UMass Boston

John T. Deehan
Business Analyst
Enrollment Management and LifeMap
B.S. Stonehill College

Hariklia M. Delta
Professor
Computer Science Department
B.S. Aristotelio University of Thessaloniki,

Greece
M.S., C.A.G.S. Northeastern University

## Michael R. D'Entremont

Professor
English Language Learning Department
B.A. Northeastern University
M.A. University of Mississippi

Ed.M. Boston University
Tracy L. Deveau
Executive Assistant to the Provost and Vice President
Academic and Student Affairs
A.S. Northern Essex Community College
B.S. Boston University
M.S. Northeastern University

Alba Diaz
Campus ID Special Programs Coordinator Student Central
A.A. Northern Essex Community College
B.A. Worcester State University

## Sartreina M. Dottin

Senior Academic Counselor
Student Affairs
B.A. UMass Amherst
M.S.W. Boston University School of Social Work

Ph.D. Capella University
Alicia A. D'Oyley
Interim Dean
Enrollment Management and LifeMap
B.A., M.S., Ph.D. Regis College

Michael G. Dubson
Professor
English Department
A.A. Parkland College
B.A., M.A. UMass Boston

Elizabeth Dunphy
Professor
Biology and Chemistry Department
B.A. Wellesley College

Ph.D. University of Washington
Pam Y. Eddinger
President
Executive Division
B.A. Barnard College, Columbia University
M.A., Ph.D. Columbia University

Kenneth I. Elkind
Assistive Technology Educator (Disabilities
Counselor)
Disability Support Services
B.S. Lewis and Clark College
M.S. University of Oregon

Julie B. Elkins
Dean
Student Affairs
B.S. Central Missouri State University
M.A. Indiana University of Pennsylvania

Ed.D. UMass Boston
Jeff C. Ellenbird
Professor
English Language Learning Department B.A. University of California, Santa Cruz
M.A. San Francisco State University

Evans Erilus
Interim Director, HOPE Initiative
Academic Support and College Pathway
Programs
B.S., M.S. Northeastern University

Lamia Essofi
Special Programs Coordinator
Workforce and Economic Development
A.A. University of Paris
A.A. Bunker Hill Community College
B.A. Tufts University

## Raiza Felicitas

Senior Academic Counselor
Student Affairs
B.S., M.S. University of Wisconsin

## Sercan Fenerci

Director, Student Services \& Assistant

Director of Athletics \& Wellness
Athletics and Wellness
B.B.A. Angelo State University M.S. Southern New Hampshire University

## Jefferson T. Fernandes

Associate Professor
Computer Information Technology Department B.S. Northeastern University

## Julio S. Flores

Professor and Chairperson
Visual and Media Arts Department
B.F.A. Laguna College of Art and Design
M.F.A. New York Academy of Art

## Anthony D. Fontes

Professor and Chairperson
Business Administration Department
B.S. Eastern Nazarene College
M.S. Lesley College

Kim M. Frashure
Professor and Chairperson Environmental Science Department
B.A. University of Michigan
M.S. University of Vermont

Ph.D. UMass Boston
Deborah P. Fuller
Professor
English Department
B.A. Boston University
M.A University of Michigan

## Michelle Gagnon

Professor/Program Director, Cardiac
Sonography
Medical Imaging Program
B.S., M.S. UMass Lowell

Alicia Gallego-Zarzosa
Associate Professor
Global Languages Department
B.A., M.A. University of Madrid

Ph.D. Complutense University of Madrid

## Diane C. Galvez

Assistant Professor
Nurse Education Department
B.S.N. Nova Southern University
M.S.N. Saint Joseph's College of Music

Carlos S. Garcia
Academic Counselor
Student Financial Services
A.S. Bunker Hill Community College

## J. Roberto Garcia

Professor
English Department
B.A. Rhode Island College

Ph.D. University of Rhode Island
Katie T. Getty
Coordinator of Online Student Support Services
Online Learning and Instructional Innovation
A.A. Bunker Hill Community College
B.A. Wellesley College
J.D. The New England School of Law

## Elhoussine Ghardi

Learning Specialist
Center for Self-Directed Learning
B.S., M.S. UMass Lowell

Austin A. Gilliland
Dean
Professional Studies
B.S., M.A. University of Texas at Austin

## Perla Gilman

Associate Professor and Chairperson
Medical Laboratory Technician Program
B.S. University of Vermont
M.S. UMass Lowell

## Matthew Gingras

Employer Partnerships Coordinator (Special
Programs Coordinator)
Career Development and Internships
A.A. Northern Essex Community College
B.A. UMass Boston

Jeffrey L. Ginsberg
Associate Vice President
Administration and Finance
B.A. Colorado State University
M.P.A. Suffolk University

## George Glaze

Director
Student Central
B.S., M.A. La Salle University

Jillian M. Glaze
Senior Director
Student Financial Services
B.A. St. Lawrence University
M.Ed. Boston University

Maria R. Gomes
Admissions Coordinator
International Center
B.A. Pernambuco State Federal University
M.B.A., M.Ed. Salem State University

## Elva Green

Assistant Bursar
Student Payment Office
B.A. UMass Boston

## Carlnita P. Greene

Dean
Behavioral, Social Sciences and Global Learning
B.A. University of Virginia
M.A. S.U.N.Y. at Brockport

Ph.D. University of Texas
Louis Gregoire
Math Computer Lab Coordinator
(Coordinator of Learning Resources)
Mathematics Department
B.S. Salem State University, M.Ed. Cambridge College

## G. William Griffin

Professor
Biology and Chemistry Department
B.S. UMass Lowell

Ph.D. Tufts University
Nicole E. Guilmette
Professor
Biology and Chemistry Department
B.S. Boston College
M.S., Ph.D. Boston University

## George C. Hallsmith

Executive Assistant to the President
President's Office
B.S. San Francisco State University
M.Ed. Vermont College of The Union Institute and University

Todd J. Hannig
TOEFL \& Language Lab Tutor (Staff Assistant)
Academic Support and College Pathway
Programs
B.A. Brigham Young University
M.A. Columbia University

## Christina Hannon

Success Coach/Career Advisor (Academic
Counselor)
Advising and LifeMap
B.A. University of Connecticut
M.Ed. Salem State University

Molly J. Hansen
Coordinator, Food Pantry (Senior Special
Programs Coordinator)
Student Affairs
B.A. University of Arizona
M.Ed. UMass Amherst
E. Alicia A. Harris

Assistant Professor
Hospitality Department
A.A. Culinary Institute of America
B.A. Syracuse University

Michael D. Harris
Associate Professor
Computer Information Technology Department
B.S. UMass Lowell
M.B.A. UMass Boston

Emily K. Healy
Assistant Professor
Behavioral Science Department
A.A. William Rainey College
B.S., M.S. Illinois State University

## Joshua Heerter

Senior Staff Assistant
Academic Support and College Pathway
Programs
B.A. UMass Amherst
M.A. UMass Boston

Janelle A. Heideman
Instructional Designer
Online Learning and Instructional Innovation
B.A. Michigan State University
M.Ed. Wayne State University

## Tyler Hilbert

Manager of Enrollment Technology and Data
Analytics
Enrollment Management and LifeMap
B.S. Springfield College
M.Ed. University of South Carolina

Melissa B. Holster
Executive Director
Student Financial Services
B.A. Lafayette College

Ed.M. Boston University
William L. Hoover
Professor
Biology and Chemistry Department
B.S. Youngstown State University
M.D. Spartan Health Sciences University

## Perry Hull

Success Coach/Career Advisor (Academic
Counselor)
Advising and LifeMap
B.A. S.U.N.Y. at Geneseo
M.A. Brown University

Ana llic
Associate Professor/Program Director, General Sonography
Medical Imaging Program
A.S. Bunker Hill Community College
A.S. Cottey College
B.S. Smith College

## Zaida V. Ismatul

Interim Assistant Director for Dual Enrollment
\& Early College Program Chelsea High
School
Academic Support and College Pathway Programs
B.A. UMass Boston; M.Ed. Florida Atlantic University

## M. Loreto Jackson

Director
Athletics and Wellness
B.Ed. University of Ulster, Jordantown,

Northern Ireland
M.S. University of Delaware

Ph.D. University of Miami
Frances H. Jarvis
Staff Assistant
President's Office
B.A. UMass Boston

## John I. Jean

Professor
Mathematics Department
M.A., Ph.D., Ed.D. Columbia University

## Hilaire Jean-Gilles

Professor
Business Administration Department
A.S. Bunker Hill Community College
B.S. UMass Boston
M.S. Boston University

## Handine Jean-Marie

Assistant Dean
Professional Studies
B.A. Emmanuel College
M.Ed. Salem State University

Nada Jecmenica
Academic Counselor
Advising and LifeMap
B.A., M.Ed. Cambridge College

Biljiana D. John
Professor
Computer Information Technology Department
B.A. University of Skopje, Macedonia
M.A. Boston State College

Lateia Johnson
Rapid Re-Employment Workforce Training Initiative Coordinator (Temporary)
Workforce and Economic Development
A.A. Bunker Hill Community College
B.S., M.B.A. Northeastern University

## Sasha Johnson

Academic Counselor
International Center
B.A., Salve Regina University
M.A., Lesley University

Letia L. Jones
Special Programs Coordinator, Teaching and Learning Initiative
Academic Innovation and Instructional Design
B.A., M.S., M.Ed. Eastern Nazarene College

Assistant (Senior Staff Assistant)
High School and Community Partnerships and Pathways
A.A. Miami Dade College
B.A., M.S. Florida International University

Belinda L. Kadambi
Professor
Biology and Chemistry Department
B.S., M.S. University of Bombay, India

Ph.D. University of Cincinnati
Proshot Kalami
Professor
English Department
B.A., M.A. Tehran Azad University

Ph.D.. University of California
Joli A. Kane
Assistant Professor
Mathematics Department
B.Ed. San Diego State University
M.S. University of Texas, Arlington

## Sunny Kang

Professor and Chairperson
Mathematics Department
B.S. University of California
M.A. California State University

Paul M. Kasili
Professor
Biology and Chemistry Department
B.A. Coe College

Ph.D. University of Tennessee
Swati M. Kelkar
Professor
Mathematics Department
B.S. Meera Girls College
B.A. Gandharva Mahavidyalaya
B.Ed. Lal-Bahadur Shastri Teachers' Training College
M.S. Mohanlal Sukhadia University, Udaipur, India
M.A. Northern State University, Aberdeen South Dakota

## Brian Kelleher-Calnan

Success Coach/Career Advisor (Transfer Counselor)
Advising, LifeMap and Assessment
B.A. Bridgewater State University
M.A. Boston College

George Kelley
Professor
Hospitality Department
A.S. Bunker Hill Community College
B.A. UMass Boston
M.L.A. Boston University

## Jacqueline Kerstner

Professor
English Language Learning Department
B.A. University of Delaware
M.Ed. Boston University

Certificate in Liberal Arts, University of Copenhagen

## Tammie A. Key

Manager of Adjunct Faculty Services
Academic Affairs
B.A. Eastern Nazarene College
M.Ed. Cambridge College

## Elzbieta Kijowska

Director
International Center
M.Ed. Teachers College, Rzeszow, Poland
M.B.A. European Business School, Reutlingers, Germany

## Craig V. Koebelin

Web Developer
Communications and Digital Content
B.A. Boston University
M.S. Union College

Kenneth M. Kozikowski
Director
Technology Support Services
B.S. Assumption College

Marilyn K. Kuhar
Executive Director
Development and BHCC Foundation
B.A. Georgetown University

## Justice Kumahia

Assistant Dean
Behavioral, Social Sciences and Global Learning
A.S. Bunker Hill Community College
B.S. Babson College
M.A. UMass Boston

## Francine S. Kupferman

Director
Admissions and Recruitment
B.S. Wentworth Institute of Technology
M.Ed. Suffolk University

Edith Kwok
Budget Director
Administration and Finance
B.S. Bentley University
M.B.A. UMass Boston

Julie K. Lambert
Learning Specialist
Center for Self-Directed Learning
B.A. S.U.N.Y. at Binghamton
M.Ed. Lesley University

Oscar R. Lanza-Galindo
Associate Dean
Library and Learning Commons
B.A. Massachusetts College of Liberal Arts
M.A. SIT Graduate Institute
M.A. University of Arizona

Marc A. Lapierre
Assistant Professor
Criminal Justice and Public Safety Department
B.A. UMass Lowell
M.S. Fitchburg Sate College

Kristine E. Larkin
Academic Coordinator
Single Stop Program
B.S., M.S. University of Phoenix

Deborah A. Latina
Assistant Professor and Chairperson
Allied Health Certificate Programs
B.S. Northeastern University

JoDe M. Lavine
Assistant Dean
Science, Engineering and Mathematics
B.S. Texas Tech University
M.S., Ph.D. The University of Memphis

Sophonie Joseph-Laurore
Dual Enrollment and Early College Program

Daze S. Lee
Professor
Business Administration Department
B.B.A. Korea University
M.B.A. Providence College
J.D. UMass Dartmouth

Maria D. Leite
Director, Information Technology Project Management
Information Services
B.A. UMass Boston

## Sze Chun Leung

Assistant Comptroller
Business Office
B.A., M.S. Boston College

Beverly M. Lewis
Senior Director (Bursar)
Student Payment Office
B.A. Northeastern University
M.B.M. Cambridge College

Vanessa C. Lewis
Digital Content Specialist (one year temporary position)
Communications and Digital Content
B.A. Curry College
M.F.A. Pine Manor College

## Cherry Lim

AAPI Success Coach (Academic Counselor)
Advising and LifeMap
B.A. Tufts University
M.A. Boston College

Vivian Lin
AAPI Success Coach (Academic Counselor)
Advising and LifeMap
B.A. Ithaca College
M.S. University of Rhode Island

## Katherine Lopez

Success Coach/Career Advisor (Academic Counselor)
Advising and LifeMap
B.A. College of Holy Cross
M.Ed. Merrimack College

Franck D. Mabikas
Associate Professor
Mathematics Department
M.S. Salem State University

## Jayne MacPherson

Professor and Chairperson
Surgical Technology Certificate Program
B.S. Purdue University

Certificate in Surgical Technology, Lesley
University
M.S. Framingham State University

CAGS, Ph.D. Simmons College
Carmen C. Magana
Language Lab Coordinator (Coordinator of Learning Resources)
Academic Support and College Pathway
Programs
B.A. Boston University

## Lauren Maguire

Professor
Hospitality Department
B.S. Northeastern University
M.Ed. UMass Lowell

## Grace Mah

Associate Dean
Online Learning and Instructional Innovation
A.S. Savannah Technical College
B.S. Virginia Tech
M.S. Capella University

Jamie L. Mahoney
Professor
Computer Information Technology Department
B.A. Villanova University
M.B.A. University of Maryland

Ujunwa Makhene
Interim Associate Director
Academic Innovation and Instructional Design
A.S. Bunker Hill Community College
B.A. Tufts University
M.E.M. John Hopkins University

Kathryn L. Mapstone
Professor
History and Social Sciences Department B.S. Springfield College
M.A., Ph.D. Boston College

Carl D. Marcelin
Assistant Director for Talent Management
Human Resources
B.S. University of Florida

Susan G. Martin
Interim Registrar
Academic Records
B.S. Houghton College
M.S. Alfred University

## Sondra T. Mason

Professor
Criminal Justice and Public Safety Department
B.S. Northeastern University
M.A. Widener University

## Katie Mattia

Assistant Professor
Nurse Education Department
B.S.N. University of Toledo
M.S. N. Oakland University

## Emmanuela Maurice

Professor
English Department
B.S. UMass Amherst
M.F.A. Lesley University

## Carlos L. Maynard

Professor
Behavioral Science Department
A.A. Roxbury Community College
B.A, M.A. UMass Boston

## Andrew McCarthy

Librarian (Coordinator of Library Services)
Library and Learning Commons
B.A. Tufts University
M.L.I.S. McGill University

Luana L. McCuish
Professor
English Department
B.S., M.A. Salem State University

Kristen P. McKenna
Dean
Workforce and Economic Development
B.A. Rhode Island College
M.A. Bridgewater State University
M.Ed. Eastern Nazarene College

## Andrew E. McLaughlin

Librarian (Coordinator of Library Services)
Library and Learning Commons
B.A. Kalamazoo College
M.L.I.S. Simmons College

Jaqueline R. McMillion-Williams
Director
Advising and LifeMap
A.A. Bunker Hill Community College
B.A. UMass Boston
M.S.W. Simmons College

Yanitza Medina Vargas
Web/Live Chat Advisor (Academic Counselor)
Advising and LifeMap
B.A., M.Ed. Suffolk University

## Arthur E. Metherall

Application Developer
Administrative Systems
B.S. UMass Lowell

Elizabeth C. Miller
Professor and Chairperson
Computer Science Department
A.B. Mount Holyoke College
M.S. Boston College

Donna M. Misrati
Professor and Chairperson
Medical Imaging Program
B.S. Boston University
M.B.A. UMass Boston

## Paul E. Moda

Director, Student Leadership and
Engagement
Student Activities
B.S. Elmira College
M.A. Emerson College

Dawn M. Monahan
Professor
Nurse Education Department
B.S.N. Emmanuel College
M.S.N. Salem State University

## Brian S. Moore

Success Coach/Career Advisor (Academic
Counselor)
Advising and LifeMap
B.S., M.A. Suffolk University

## Nicole M. Moro

Director
Communications and Digital Content
B.S., M.S. Boston University

## Gregory P. Mullin

Professor
Behavioral Science Department
B.A., M.A., Ph.D. University of Connecticut

Alice Murillo
Associate Provost
Chelsea Campus
B.S. Catholic University of Puerto Rico
M.A.T. University of Florida

Ph.D. Florida State University

## Karen M. Murray

Professor
Nurse Education Department
B.S.N. Northeastern University
M.S. UMass Lowell

Denise M. Mytko
Career Development Navigator/Coordinator Workforce and Economic Development
A.A. Oakton Community College
B.S., M.A. Northwestern University

Champa S. Nagage
Comptroller
Business Office
M.B.A. University of Sri Jayawardenepura, Sri Lanka
FCMA, Chartered Management Accountant, UK

## Lindsay A. Naggie

Professor
English Language Learning Department
B.A. Grand Valley State University
M.Ed. Boston University

Ishita Nandi
Professor
History and Social Sciences Department
B.A., M.A. Jadavpur University Kolkata, India
M.A., Ph.D. University of California

## Tua Nefer

Professor
English Department
B.A. Oberlin College
M.F.A. Columbia University

Whitney B. Nelson
Professor
English Department
B.S. Utah Valley University
M.A. UMass Boston

Mei L. Ngan
Special Programs Coordinator
Workforce and Economic Development
B.B.A. UMass Dartmouth

Jennifer M. Nguyen
Special Programs Coordinator
Student Central
M.Ed. UMass Lowell

Francis K. Nkansah
Professor
Mathematics Department
B.S. Kwame Nkrumah University
M.S. University of Nevada

## Jonathan Noel

Pathway Coach (Academic Counselor)
Advising and LifeMap
B.S. Northeastern University
M.S. Cambridge College

Anna-Lisa H. Norman
Evening Supervisor (Special Programs Coordinator)
Tutoring and Academic Support Center B.A. Worcester State University

Karen M. Norton
Executive Director
Integrated Marketing and Communications B.S.B.A. UMass Lowell
M.S. Eastern Nazarene College

## Wissal Nouchrif

Professor
Business Administration Department
A.A. Bunker Hill Community College
A.A. Hassan Second University, Casablanca,

Morocco
B.A., M.B.A. UMass Amherst

Ed.D. Northeastern University
Tendai W. Nyakurimwa
Professor
Business Administration Department
A.S. Bunker Hill Community College
B.S. Suffolk University
M.B.A. Bentley College

Kathleen M. O'Brien
Director
Payroll Department
B.S. Northeastern University

## Tim Ogawa

Chief Information Officer
Information Services
A.A. Fresno Community College
B.S. University of California
M.B.A. Northeastern University
M.S. Harvard Extension School

## Stephen O'Leary

Academic Coordinator
Allied Health Certificate Programs
B.A. Westfield State University
M.A.T. Northeastern University

## Kathleen B. O'Neill

Director
Single Stop Program
A.A. Suffolk County Community College
B.A. Stony Brook University
M.S.C.W. Post University

Ed.D. Boston University

## Maritza Onodje

Director of Student Success Initiative (Title V grant)
Chelsea Campus
A.A. Valencia College
B.A. University of Florida
M.P.A. University of Central Florida

## Maria M. Ortiz

Special Programs Coordinator-(9th-12th
grade outreach specialist)-TRIO Talent Search
Program
TRIO Talent Search Program
B.S. Bentley University

Leslie A. Ouellette
Associate Director
Integrated Marketing and Communications
B.S.B.A. Merrimack College

## Yesim Ozek Kaloti

ESOL Instructor (Special Programs Coordinator)
Workforce and Economic Development
B.A. Dicle University, Turkey

Ph.D. Exeter University, England
Vanesa C. Pacheco
Adult Education Instructor (DESE Grant) Special Programs Coordinator
Workforce and Economic Development
B.A. Wheelock College
M.F.A. University of Maine

## Douglas A. Pastel

Professor
Visual and Media Arts Department
B.A. Harvard University, M.A. S.U.N.Y. at Buffalo

## Dipal Patel

Assistant Professor/Laboratory Instructor
Nurse Education Department
M.S. UMass Boston

## Jeremy Patti

Admissions Pathway Counselor
Admissions and Recruitment
B.S.B.A. Western New England University
M.Ed., Springfield College

Vivian P. Paudyal Chhetry
Professor
Mathematics Department
B.S. Manipur University, India
M.S. Tribhuvan University, Nepal
M.S. Indian Institute of Technology, India
M.Ed. Lesley University

## Ashley H. Pau

Professor
English Department
B.A. University of Alabama
M.F.A. Florida State University

## Lynn Pellecchia

Professor and Clinical Coordinator
Medical Imaging Program
A.S. Bunker Hill Community College
B.S. University of New Hampshire
M.Ed. UMass Boston

William P. Pendergast
Senior Special Programs Coordinator
Tutoring and Academic Support Center
B.S. Emerson College
M.F.A Lesley University

Herman Perez-Sostre
Special Programs Coordinator-(9th-12th grade outreach specialist)
TRIO Talent Search Program
A.S. from Instituto Technologico de Puerto Rico
B.S. Gonzaga University

## Meir J. Perry

Prior Learning Coordinator
Center for Self-Directed Learning
B.S. S.U.N.Y. of Oswego
M.A. M.S. Southern New Hampshire University

Erin M. Peterson
Professor, Medical Radiography (eve)
Medical Imaging Program
A.S. Bunker Hill Community College
B.S. Curry College

## Patricia Pierce

Assistant Professor
Nurse Education Department
B.S.N., M.S.N. Boston College

## Barbara Pierre

Success Coach/Career Advisor (Academic
Counselor)
Advising and LifeMap
B.A. Framingham State University
M.Ed. Salem State University

Rikka K. Pietilainen-Caffrey
Professor
Performing Arts Department
B.F.A. City College of New York
M.M., D.M.A. University of Colorado

## John K. Pitcher

Vice President
Administration and Finance
B.S. Indiana University
M.B.A. Georgian Court University

## Monica C. Poole

Professor and Chairperson History and Social Sciences Department
A.A. Edison Community College
B.A. Florida Gulf Coast University
M.A. Harvard University

## Mark J. Popeney

Professor and Chairperson Performing Arts Department B.A. University of California, Berkley
M.A., Ph.D. University of California, Los Angeles

## Jenne M. Powers

Interim Assistant Dean
Humanities and Learning Communities
B.A. College of William and Mary
M.A. , Ph.D. University of North Carolina at Chapel Hill

## Gary J. Presto

Senior Human Resources Associate
Human Resources
B.A. Boston College
C.G.S. UMass Boston

Cheryl L. Price
Director, TRIO
Student Success Program
B.S., M.A.,Ph.D. Eastern Michigan University

## Steve W. Prudent

Director
High School and Community Partnerships and Pathways
B.A. Valdosta State University
M.Ed. Northeastern University
M.S. Boston College

## Max Prudent

Learning Specialist (Mathematics and Business)
Center for Self-Directed Learning
B.A. UMass Boston
M.B.A. Florida Institute of Technology
M.Ed. Concordia University
M.Div. Liberty University

Maria N. Puente
Professor
Behavioral Science Department
B.A., M.A., Ph.D. Ateneo de Manila University

Mukti N. Raut
Director of Purchasing
Business Office
B.S. Tribhuwan University, Nepal
M.B.A. Kathmandu University School of

Management

## Krista Reichert

Professor
Environmental Science Department
B.S. Skidmore College
M.S. University of New Hampshire

## Candita Rentas

Special Programs Coordinator
Academic Records
A.S. Northern Essex Community College
B.S. Southern New Hampshire University

## Laurence G. Robertie

Professor
Business Administration Department
B.S. Salem State University
M.B.A. Suffolk University
M.S. Boston University

Andre A. Robinson
Professor
History and Social Sciences Department
B.A. University of Delaware
M.A. Duke University

Diane M. Rocheteau
Professor
English Language Learning Department
B.A. Boston University
M.A. UMass Boston

Maria Marcela Rodriguez
Professor
English Language Learning Department
B.A. University of Colorado
M.A. Simmons College

Michelle M. Rojas Surin
Director
Workforce and Economic Development
B.S. Lesley University
M.S. Simmons College

Steve A. Roller
Executive Director
Grants Department
B.A., M.A. University of Chicago

Marilyn A. Roth
Assistant Dean
Institutional Research and Assessment
B.A. University of Waterloo, Ontario
M.A. University of Victoria, British Columbia

## Allison G. Rowell

Special Programs Coordinator
Academic Records
B.A. UMass Boston

Laura C. Rubin
Dean
Science, Engineering and Mathematics
B.S. Lafayette College

Ph.D. University of Texas at Austin

## Margaret O. Rubino

Coordinator, Transfer and Articulation
Advising, LifeMap and Assessment
A.A., A.S. Bunker Hill Community College
B.S. Framingham State University
M.Ed. Cambridge College; R.T.

Jorge A. Rubio
Assistant Professor
Performing Arts Department
B.A. San Francisco State University
M.F.A. Harvard University

Alison L. Ruch
Associate Professor
English Department
B.A. University of Wisconsin
M.F.A. Oregon State University

Christopher A. Rule
Success Coach/Career Advisor (Academic Counselor)
Advising and LifeMap
B.A. Hobart and William Smith College
M.S. Southern New Hampshire University

## Abouhamed Saberi

Assistant Professor
Engineering and Physical Sciences Department
B.S. The Isfahan University of Technology,

Esfahan Iran
M.S. Tehran Polytechnic, Tehran, Iran

Ph.D. University of Maine
Nima Sadki-Carvajal
Early College Program Manager
High School and Community Partnerships and Pathways
A.A. Bunker Hill Community College
B.S. UMass Boston

## Vikram Sagar

Learning Specialist
Center for Self-Directed Learning
B.S. Boston College
M.S. Boston University

Zainab Salejwala
AAPI Success Coach (Academic Counselor)
Advising and LifeMap
B.A., M.S. UMass Boston

Jennifer S. Sanchez
Professor
Mathematics Department
A.S. John Tyler Community College
B.S., M.S. Virginia Commonwealth University

Irene A. Sancinito
Professor
Mathematics Department
B.A., M.A.T. Bridgewater State College

Lee M. Santos Silva
Director, Center for Equity and Cultural
Wealth
Behavioral, Social Sciences and Global Learning
B.A. Hampton University
M.A. Duke University

Isaias C. Sarmiento
Associate Professor
Mathematics Department
B.A. University of California
M.A. California State University

LaTasha K. Sarpy
Professor and Chairperson
Behavioral Science Department
B.A., M.A. UMass Boston
M.A. Wheelock College

Ph.D Northeastern University
Sara I. Satham
Senior Academic Counselor
Student Affairs
B.A, M.A. Ball State University

Donna J. Savino
Assistant Dean
Heath Sciences
B.S. UMass Boston
M.S. Boston University

Pamela B. Schmidt
Professor and Coordinator
Human Services Program
B.A. UMass Boston; M.Ed. Antioch University

Deborah Schwartz
Associate Professor
English Department
B.A. George Washington University
M.F.A. Goddard College

Andrea F. Schwartz
Disabilities Coordinator
Disability Support Services B.S., M.S. Salem State College, L.M.H.C.

Thomas M. Scully
Associate Professor
Nurse Education Department
M.S.N. UMass Boston

Heather Shapazian
Academic Counselor
International Center
B.A. Framingham State College
M.A. San Diego State University

Matthew C. Shedden
Deputy Chief of Police and Director of Operations
Public Safety
B.S. Salem State College
M.B.A. Endicott College

Jennifer T. Sherman
Associate Professor
Business Administration Department
B.S. Northeastern University
M.S. Suffolk University

Jane Shou
Academic Counselor
Student Financial Services
B.A., M.S. New York University

Alan H. Shute
Professor
English Language Learning Department B.S. University of Oregon
M.A. Monterey Institute of International Studies

## Erik R. Siggelkoe

Associate Professor and Chairperson
Engineering and Physical Sciences Department
B.S., M.S. UMass Dartmouth

Rebecca D. Siggelkoe
Coordinator of Enrollment (Academic Coordinator)
Advising, LifeMap and Assessment
A.A. Bunker Hill Community College
B.A., M.S. UMass Boston

## Agnes Simon

Senior Director, Project Support Services Grants Department
B.S. Esterhazy Karoly Teachers Training College, Eger, Hungary

## Vengerflutta Smith

Assistant Dean
Student Affairs
B.S. Highland Park Community College M.A. Michigan State University

## Asbeidy Solano

Pathway Coach (Academic Counselor)
Advising and LifeMap
B.S., M.A. University of California

## Torna O. Soro

Professor
History and Social Sciences Department
B.A. University of Bouake (Bouake-Cote

## D'Ivoire)

M.A. University of Cocody (Abidjan-Ivory

Coast/Cote D'lvoire)
M.A., Ph.D. University of Southern California M.S. UMass Boston

## Jennifer Spears

Manager
Technology Support Services
Barbara A. Spracklin
Professor
Nurse Education Department
B.S.N. Emmanuel College
M.S.N. University of Phoenix

## Laura E. Stauble

Assistant Professor
Early Childhood Education Department
B.A. UMass Amherst
M.S. Portland State University

Jac-Lynn Stark
Professor
English Department
B.A. Albertus Magnus College
M.A. Louisiana State University
M.Ed. Harvard Graduate School of Education

## Ranesha A. Steele

Special Programs Coordinator
Health Sciences
A.A. Mass Bay Community College
B.A. UMass Boston

## Robert L. Steeper

Professor and Chairperson
Biology and Chemistry Department
B.S. Western Michigan University
M.S. University of Michigan

Kenneth C. Steinman
Math Computer Lab Coordinator
(Coordinator of Learning Resources)
Mathematics Department
B.A. Queens College
M.A. Long Island University

Jane D. Stimpson
Instruction and Research Librarian
(Coordinator of Library Services)
Library and Learning Commons
B.A. Williams College
M.S.I.S. The University of Texas at Austin

## Dreaming Suny

Database Administrator
Administrative Systems
M.D. Taipei Medical College

## Enzo S. Surin

Professor
English Department
B.A. Framingham State University
M.F.A. Lesley University

## Danielle Tabela

Director of Testing Services \& Assessment Advising, LifeMap and Assessment
B.A. St. John's College
M.A. UMass Boston

## Franklyn E. Taylor

Associate Provost-Charlestown
Academic and Student Affairs
B.A. University of Sierra Leone, Freetown
M.P.A. University of Florida
M.S. University of Wisconsin

Ed.D. Northern Arizona University
Joye A. Thaller
Academic Coordinator (STEM Coordinator)
Science, Engineering and Mathematics
B.S., M.S. Cornell University
M.S. Tufts University

Dana A. Thomas
Associate Professor
Surgical Technology Certificate Program
A.S. Bay State College

Lisa H. Toto
Business Analyst
Administration and Finance
B.S. Suffolk University
M.Ed. American International College

## Rebecca Tumposky

Transfer Advisor/Career Advisor (Sr. Special
Programs Coordinator)
Advising, LifeMap and Assessment
B.A. Oberlin College
M.A. Tufts University

Denise Turner
Manager of Cultural Planning
College Events and Cultural Planning
B.A. Boston College

Jennifer Valdez
Professor and Chairperson
English Language Learning Department
B.A. Fordham University
M.A. Boston College
M.A. SIT Graduate Institute

## R. Arlene Vallie

Interim Dean of Research and Assessment
Academic Affairs
A.A. Bunker Hill Community College
B.A. Howard University
M.S.W. Boston College

Maggie A. Van Camp
Associate Professor and Chairperson
Early Childhood Education Department
A.A. Bunker Hill Community College
B.F.A., M.A. Massachusetts College of Art and

Design
Ph.D. Lesley University
Olga M. Van Dyke
Professor
Nurse Education Department
A.S. Bunker Hill Community College
B.S., M.S. UMass Boston

Aleksandar Vasovic
Senior Director
Administrative Systems
A.A. Central Texas College
B.A. Tarleton State University

Daniel Velasquez
Recruitment Counselor
Admissions and Recruitment
A.S. Bunker Hill Community College; B.A.

UMass Boston

Evisa Velo
Staff Assistant
Institutional Effectiveness
A.S. Bunker Hill Community College

Juan A. Venegas
Associate Registrar
Academic Records
B.A. California State University
M.A. SIT Graduate Institute

Kristen J. Wenger
Professor and Chairperson
Nurse Education Department
B.S.N. Salve Regina University
M.S.N. Sacred Heart University

Kevin E. Wery
Senior Director
College Events and Cultural Planning
B.A. University of Wisconsin, Madison
M.A. Tufts University

Deborah J. Westaway
Professor
Nurse Education Department
B.S.N, M.S.N. UMass Boston

Ninette J. White-Marzouki
TRIO Success Coach (Academic Counselor)
Student Success Program
A.S. Bunker Hill Community College
B.S. UMass Boston
M.Ed. Northeastern University

## SUPPORT STAFF

Gabriel A. Abreu
EDP Systems Analyst II
Technology Support Services
B.S. University of Connecticut

Monica Anand
Administrative Assistant II
Public Safety
Luisa A. Arias
Telephone Operator II
Admissions and Recruitment
Jessica R. Bastardi
Clerk VI
Student Central
A.A. Bunker Hill Community College

Denis P. Bastien
Maintenance Equipment Operator I
Facilities Management
Khadija Bhulasar
Clerk VI
Admissions and Recruitment
A.A. North Shore Community College

## Rosa A. Birden

Clerk V
Admissions and Recruitment
Laura A. Boucher
EDP Systems Analyst IV
Technology Support Services
A.S. Bunker Hill Community College

Bernard G. Boudreau
Painter II
Facilities Management

Robert L. Whitman
Professor
English Department
B.A. Bowdoin College
M.Ed. Harvard Graduate School of Education

Ph.D. University of Arizona
Harris Williams
Assistant Professor
Computer Science Department
B.A., M.B.A. Boston College

Kathryn L. Williams
Senior Staff Assistant
Disability Support Services
A.S. Bunker Hill Community College
B.S. UMass Boston

## Anita Wolf

Graphic Designer (Coordinator of College
Graphics)
Marketing and Creative Services
B.S. University of Cincinnati

## Karen Woo

Graphic Designer (Coordinator of College Graphics)
Marketing and Creative Services
B.F.A. Massachusetts College of Art and Design

## Heloisa H. Branley

Clerk V
Athletics and Wellness
Jovana Bullock
Accountant I
Student Payment Office
James F. Burns
Help Desk Coordinator
Technology Support Services
A.A. Bay State Junior College

## Danille E. Calvo

Administrative Assistant II
Chelsea Campus
Luis Campos
Maintainer I
Facilities Management

## Tia N. Cannon

Administrative Assistant II
Health Sciences
Leonard Cardarelli
Head of Building Maintenance
Facilities Management
Suzanne M. Carozza
Administrative Assistant II
International Center
B.S. Framingham State College

Adrian F. Castro-Cardoso
Accountant III
Payroll Department
B.S. Universidad de La Salle, Bogota, Columbia

Jill A. Yadav
Admissions Pathway Counselor
Admissions and Recruitment
B.A. Lynchburg College; M.Ed. Cambridge

College

## Brooke Yarborough

Director
Marketing and Creative Services
B.S. Northeastern University

## Colleen P. Yee

Assistant Director
Advising and LifeMap
B.A. Framingham State University
M.Ed. Suffolk University

Guixia Yin
Professor
English Department
B.A. Beijing Foreign Studies University

Ed.M. Boston University

## Richard L. Yost

Professor, Chairperson and Program Director Pharmacy Technician Program
B.S., Pharm.D., Philadelphia College of

Pharmacy
Miguel A. Zepeda Torres
Associate Professor and Chairperson
Global Languages Department
A.S. Colegio Nacional de Education

Professional Tecnica, Mexico; B.A. Ph.D.
University of California; M.A. California State University

## David G. Chandler

Administrative Assistant II
Advising and LifeMap
B.S. Ithica College

Sharon L. Chaney
Buyer II
Business Office
B.S. Bentley University

## Jeanette Chavarin

Administrative Assistant II
Student Activities
Linda Cheng
Clerk VI
Academic Records
A.S. Bunker Hill Community College; B.A.

UMass Boston

## Vincent Choufa

EDP Systems Analyst I
Technology Support Services
Ismail M. Chowdhury
Accountant IV
Payroll Department
M.S. University of Chittagong, Bangladesh

## Kenny Chung

EDP Systems Analyst II
Audio Visual Department

## Patrick Clark

Campus Police Officer I
Public Safety
A.A. Bristol Community College

Marc-Anthony Cousins
EDP Systems Analyst II
Technology Support Services
B.S. Syracuse University

Omar E. Cruz
Maintenance Working Foreman
Facilities Management
Anthony G. Cuddahy
Campus Police Officer I
Public Safety
Richard J. Cuevas
Maintainer II
Facilities Management
Camilla D. Davis
Administrative Assistant II
Academic Affairs
Joseph A. DeCristoforo
Head of Grounds Service Section
Facilities Management
Francesca A. DeCristoforo
Administrative Assistant II
Science, Engineering and Mathematics
A.A. Bunker Hill Community College

Christopher L. Desautel
Campus Police Officer III
Public Safety
A.A. Dean College; B.S. Suffolk University

Mei-Hua Driscoll
EDP Systems Analyst III
Online Learning and Instructional Innovation
B.S. Konan Women's University

Ann-Marie Duarte
Clerk VI
Student Central
Jamar T. Dumas
Campus Police Officer I
Public Safety
Erica S. Estridge
Clerk VI
Student Central
Ruth A. Fierro
Campus Police Officer I
Public Safety
Eyob D. Firew
Accountant V
Student Payment Office
M.S. Suffolk University
M.S. Addis Ababa University

## Katelyn E. Folberth

Clerk VI
Student Central
B.A. Mount St. Mary's University

Marilou Y. Fornari
Accountant V
Student Payment Office
B.S. Ateneo de Davao University, Philippines

Paul Freeman
Storekeeper IV
Central Services
Sandra L. Gaeta
Administrative Assistant II
Human Resources

Rebecca Gallant
Communication Dispatcher II
Public Safety
B.S. Baldwin College

John Giacalone
EDP Systems Analyst II
Audio Visual Department
Matthew Gomes
EDP Systems Analyst I
Academic Innovation and Instructional Design
Endy Gomes Vergara
Painter I
Facilities Management
Ruth J. Goodwin
Graphic Arts Technician II
Marketing and Creative Services
A.A., DTP Certificate, Bunker Hill Community

College
Cecilia M. Granados
Administrative Assistant II
Chelsea Campus
Marie Griffin
EDP Systems Analyst IV
Technology Support Services
Glen F. Grondin
EDP System Analyst II
Technology Support Services
A.S., B.S. ITT Technical Institute

## Lisandro Guzman

Communication Dispatcher II
Public Safety
Thanh Q. Ha
EDP Systems Analyst II
Audio Visual Department
Carlos G. Hernandez
Maintenance Equipment Operator I
Facilities Management

## Shamila Imani

Accountant III
Student Payment Office
B.A. The University of Business and

Management, Tehran
M.B.A. Endicott College

Courtney A. Ingersol
Clerk VI
Student Central

## Elsa Ipus

Administrative Assistant II
Testing Services and Assessment
A.S. Bunker Hill Community College
B.A. Corporacion Universitaria Taller Cinco,

Bogota, Columbia
Nicole S. Jennings
Administrative Assistant II
Behavioral, Social Sciences and Global Learning

## Debbie A. Jimenez

Clerk IV
Workforce and Economic Development
B.S. UMass Boston

Jean-Dany Joachim
Administrative Assistant II
Single Stop Program
A.S. Bunker Hill Community College
B.A. UMass Boston

Linda R. Johnson
Administrative Assistant II
Admissions and Recruitment
Pamela A. Johnson
Administrative Assistant II
Human Resources
Nikisha Joshi
Accountant II
Grants Department
A.S. Quincy College
B.S. Cambridge College

## Heng Kaing

Clerk VI
Academic Records
A.S. Bunker Hill Community College

John K. Keohan
Storekeeper IV
Central Services
Peter W. King
EDP Systems Analyst IV
Network Operations
Karl W. Kiser
EDP Systems Analyst III
Network Operations
A.S. Bunker Hill Community College
A.S. Newbury College
B.S. UMass Boston

Kattlyne P. Lajoie
Clerk VI
Student Central
A.A. Roxbury Community College

Minhtu H. Le
EDP Systems Analyst II
Technology Support Services
A.S. Bunker Hill Community College

Anna G. Lesnik
Accountant V
Student Payment Office
B.S. Belarus State University, Minsk, Belarus

Huixin Liang
EDP Systems Analyst IV
Technology Support Services
A.S. Bunker Hill Community College

Jose R. Lopez
Maintenance Equipment Operator I
Facilities Management
Quyen Luong
Accountant V
Grants Department
A.A. Bunker Hill Community College
B.S. Suffolk University

Richard V. Martins
Campus Police Officer II
Public Safety
A.S. Bunker Hill Community College

## Adam Maykis

Clerk VI
Student Central
B.A. UMass Boston

Michael J. McDonald
EDP Systems Analyst II
Technology Support Services

## Suzanne L. McGinn

Clerk VI
Advising, LifeMap and Assessment B.A. UMass Boston

Brian J. McGonagle
Carpenter I
Facilities Management

## Kathryn M. McLaughlin

Accountant III
Payroll Department
B.S. North Adams State College
M.B.A. Salem State College

Kevin M. Meehan
Administrative Assistant II Enrollment Management \& LifeMap

## Carol A. Melle

Administrative Assistant II
Student Activities
Cecilia D. Miller
Accountant II
Student Payment Office
B.S. Northeastern University

Sabrina B Minor
Technical Assistant II Center for Self-Directed Learning A.A. Bunker Hill Community College
B.A. UMass Lowell

## Sofya Mitelman

EDP Systems Analyst IV
Administrative Systems
A.S. Bunker Hill Community College

Priscilla M. Montagna
Administrative Assistant II
Professional Studies
A.S. Bunker Hill Community College
B.S. Madison University
M.A. UMass Lowell

Certificate, Forensic Criminology

## Kimberly Moore

Administrative Assistant I
Learning Communities
A.S. Roxbury Community College
B.A. UMass Amherst

James G. Morello
Reproduction Services Supervisor
Central Services

## Therese Morris

Administrative Assistant II
Humanities and Learning Communities
A.S. Bunker Hill Community College

Glenn R. Moyer
Accountant III
Business Office
B.A. Hesser College

Tahmina Munmun
Administrative Assistant I
Disability Support Services
A.S. Bunker Hill Community College
B.A. Lesley University

## Tony Q. Ngo

Clerk VI
Chelsea Campus
A.A. Bunker Hill Community College

## Tenzin Ngodup

Accountant III
Business Office
A.A. Bunker Hill Community College
B.S, Calcutta University
M.S. Madras University
M.A. Brandeis University

Thu Nguyen
Laboratory Technician II
Biology and Chemistry Department
ThuyTram Nguyen
Technical Assistant III
Center for Self-Directed Learning
B.S. UMass Boston

Phuong Thao T. Nguyen
Administrative Assistant II
Student Financial Services
A.S. Bunker Hill Community College

Chi Ha Nguyen
Administrative Assistant II
Student Affairs
Kieu T. Nguyen
EDP Systems Analyst IV
Technology Support Services
A.S. Bunker Hill Community College
B.S. UMass Boston

Caroline O'Brien
Administrative Assistant II
Facilities Management
Julia L. Ocasio
Administrative Assistant I
Student Financial Services
Elena M. O'Leary
Personnel Analyst I
Human Resources
Miguel A. Ortiz
Campus Police Officer I
Public Safety
Carlos E. Ortiz
Accountant II
Business Office
B.S. Newbury College

Elmutaz Osman
EDP Systems Analyst IV
Network Operations
A.A. Bunker Hill Community College
B.S. Phoenix University

Pathmavigi Pathmanathan
Accountant IV
Business Office
B.S. University of Colombo, Sri Lanka

Oscar E. Pena
Laboratory Technician II
Biology and Chemistry Department
B.S. Wentworth Institute of Technology

Loc Q. Pham
EDP Systems Analyst II
Technology Support Services
B.S. Wentworth Institute of Technology

Ngoc H. Pham
EDP Systems Analyst I
Academic Innovation and Instructional Design

Robert S. Pieri
EDP Systems Analyst II
Technology Support Services
A.S. Bunker Hill Community College

## Jose Portillo

Maintainer II
Facilities Management

## Therese A. Pullum

EDP Systems Analyst IV
Online Learning and Instructional Innovation
A.S. Bunker Hill Community College
B.S. UMass Lowell

Andrew G. Rezendes
Campus Police Officer I
Public Safety
B.A. Curry College

Helena I Rezendes
Campus Police Officer I
Public Safety
B.A. UMass Boston

## Brisna Rodas

Clerk V (Adjunct Faculty Liaison)
Academic Affairs
A.A. Bunker Hill Community College

Yahaira Rodriguez
Administrative Assistant II
Academic Support and College Pathway
Programs
Yoel E. Rodriguez
EDP Systems Analyst II
Technology Support Services
A.A. Bunker Hill Community College

Michael P. Rogers
Utility Plant Operator
Facilities Management

## Scott J. Rosenbaum

Campus Police Officer II
Public Safety
Luke J. Rossi
Clerk VI
Student Central
B.S. Suffolk University

## Debra D. Rowe

Accountant IV
Business Office
A.A. Bunker Hill Community College
B.S. Lesley University

Stephen C. Roy
Administrative Assistant II
Student Financial Services
A.S. Bunker Hill Community College

Lorraine C. Sacco
Clerk V
Central Services
Certificate in Paralegal, Bunker Hill Community
College

## Raymond Samms

Campus Police Officer II
Public Safety
Jasmin Sarita
Clerk VI
Student Central

## Jonathan Seaton

HVAC Mechanic I
Facilities Management

Robert D. Sendras
Clerk VI
Student Central
A.S. Gibbs College
B.S. Northeastern University

## Sonia Sharma

Administrative Assistant II
Workforce and Economic Development

## Jyllian N. Sharpe

Clerk V
Admissions and Recruitment
A.S. Bunker Hill Community College
B.S. Lesley University

Edwin E. Silva
EDP Systems Analyst II
Technology Support Services
A.S. Bunker Hill Community College

Elaina L. Singleton
Accountant III
Payroll Department
Frederick J. Smith
Clerk VI
Student Central
B.A. UMass Boston

William J. Sunderland
Maintenance Equipment Operator I
Facilities Management
Ronald V. Sutherland
EDP Systems Analyst IV
Network Operations

## Keesha B. Taylor

Coordinator of Student Assessment
Testing Services and Assessment
A.A. LaGuardia Community College
B.A. The City University of New York, Hunter

College, M.S. The City University of New York,
Baruch College, Ed.D. Northeastern University

Tin Q. Than
Laboratory Technician I
Science and Engineering Department
B.S. UMass Boston

Jennifer Ticas
Administrative Assistant II
Academic and Student Affairs
Flor J. Vega
EDP Systems Analyst I
Admissions and Recruitment
A.S. Gibbs College

Candida Ventura
Clerk VI
Academic Records
A.A. Bunker Hill Community College

Frank J. Watts
EDP Systems Analyst II
Integrated Marketing and Communications

## ADJUNCT FACULTY

## Mark S. Adams

Medical Imaging
B.S., Northeastern University

Babatunde A. Adedeji
Business
M.S., Suffolk University

Hope S. Ahodokpo
Mathematics
M.S., Roosevelt University

Sean M. Allan
Communication/English
M.A., Ph.D., University of California

## Husna Altug

Behavioral Science
M.Ed., Counseling Psychology, Cambridge College
Kasha J. Ambroise
Legal Studies \& Paralegal Services
J.D., Suffolk University

Jonathan T. Amon
Performing Arts
M.M., New England Conservatory of Boston

Anil Anand
Mathematics
M.S., Kansas State University

Binslas Anilus
Mathematics
M.S., Salem State University

## Andrew J. Armata

Business
B.S., Accounting, Bentley University

Stephanie J. Aronoff
English
M.A., Loyola Marymount University

Eveliz Arroyo-Barrows
Business
M.B.A., Fitchburg State University

Ursula J. August
Visual \& Media Arts
M.Ed., Harvard University
M.S., Massachusetts Institute of Technology

John T. R. Bacon
Behavioral Science
M.Ed., Cambridge College

Th.M., Holy Cross School of Theology
M.T.S., Holy Cross School of Theology

Temitayo A. Banjo
Computer Media Technology/Visual \& Media Arts
M.Ed., Educational Technology, American College of Education
Meighan E. Bannon
English
M.Ed., University of Massachusetts, Amherst

## Deborah Barrett

English Language Learning/English
M.Ed., University of Massachusetts, Lowell

Marilyn J. Barrett
Behavioral Science
M.Ed., Cambridge College

William H. Barry
Criminal Justice
M.S., Southern New Hampshire University

Piotr S. Bartkiewicz
Visual \& Media Arts
B.A., Pratt Institute

Alfred J. Barzykowski
Business
M.B.A., Suffolk University

Albert B. Beardsley
Criminal Justice
B.S., New York Institute of Technology

Mustapha Benaoui
Mathematics
Ed.D., Education, Northeastern University

## Russell F. Bent

English
M.A., Rivier College

Christine J. Benway
Business
J.D., Suffolk University

## Martin T. Berryman

Biology \& Chemistry
B.S., University of Massachusetts, Boston

Jessica Bethoney
English/Honors Program
M.Ed., Tufts University
M.A., Brandeis University

## Alka Bhaskar

Behavioral Science/Human Services
M.A., University of Meerut, India
M.A., Lesley College

James M. Biagioni
Business
M.B.A., Babson College

Marija J. Bingulac
History \& Social Sciences
M.S., University of Massachusetts, Boston

Vincent J. Bisson
English/Visual \& Media Arts
M.A., University of Oregon

## Mariusz Bojarczuk

English Language Learning
M.Ed., University of Massachusetts, Boston
M.A, Lodz University, Poland

Jessica A. Bombardier
English
M.A., American University

Michael A. Bonanno
History \& Social Sciences
M.A., Boston University

Toni F. Borge
English/Humanities
M.Ed., University of Massachusetts, Amherst

## Daniel G. Boudreau

English/Humanities
A.B.D., Ph.D., Bowling Green University

## Richard W. Boulware

Business/Criminal Justice
J.D., Suffolk Law School

Melissa S. Branco
Nursing Program
B.S.N., Rivier University

John B. Brennan
Nursing Program
M.S.N., Salem State

Becky K. Briggs
Business
E.D., Northern Illinois University

Noah J. Britton
Behavioral Science
M.A., Hunter College - City University of New York
Selig V. Broitman
English
M.Ed., Lesley University

Sandra E. Broughton
Business/Computer Information Technology M.H.A., Simmons College

## Alexis A. Buckley

English/History \& Social Sciences
M.S., Texas State University

Christopher R. Buckley
Legal Studies \& Paralegal
J.D., University of Massachusetts, Lowell

Kimberly M. Burke
Allied Health
M. Ed., Curry College

Julia A. Burnham
Nursing Program
M.S.N., Boston University

Bridgette Burns
Nursing Program
B.S.N., Worcester State College,

Annette R. Busch
Biology \& Chemistry
Ph.D., University of Hamburg, Germany
Lynne A. Byall Benson
English
Ph.D., Cornell University
Brian Byrnes
Behavioral Science
M.P.A., Suffolk University

Leo Carey
Computer Information Technology
M.P.A., University of Massachusetts, Boston

Robert T. Carlson
Mathematics
M.A., University of Michigan

Joan M. Casaletto
Medical Imaging
B.S., University of Massachusetts, Boston

Matthew T. Casey
Business/Criminal Justice
M.B.A., University of Massachusetts, Boston

Shirley Cassarà
Behavioral Science
Ed.D., University of Massachusetts, Amherst
Rachel C. Castleberry
Early Childhood Education
Master, Lesley University
Giuseppa Cefalu
Biology \& Chemistry
M.S., Northeastern University

Roger E. Celis
Global Languages
Ph.D., University of Washington
Arthur M. Centanni
Behavioral Science/Business/Criminal Justice
M.C.J., Boston University

Peter Chambang
Behavioral Science
M.S.W., Boston College

Elizabeth A. Charlton
English
M.F.A., Emerson College

Olga Charlton
English Language Learning
M.A., Minsk State University, Belarus

Wilson X. Chen
Mathematics
M.Ed., Lesley University

Vincent R. Chiachio
Business/Computer Information Technology M.B.A., Suffolk University

Richard H. Chiasson
English/Global Languages
M.A., University of Massachusetts, Boston

Clifton Chow
History \& Social Sciences
Ph.D., Brandeis University
Richard Chowenhill
Performing Arts
Ph.D., Brandeis University
Thomas J. Chuda
Behceavioral Science/Criminal Justi
M.S., Kansas State University
M.S., Northeastern University

Martha E. Cipullo
Early Childhood Education
M.S., Wheelock College

Michael P. Clifford
English
M.Ed., Lesley University

Sandra E. Clyne
Behavioral Science
Psy.D., Massachusetts School of Professional Psychology

Robert J. Cohen
English
M.A., The State University of New York, Stony Brook

Patricia H. Colella
English
M.A., Northeastern University
C.A.G.S., Boston University

Michael P. Collins
Business/Mathematics
M.S., Suffolk University, MA

Richard J. Colvario
Computer Science
M.Ed., Northeastern University

Raul S. Consunji
Business
M.B.A., Columbia University

Jacqueline M. Coogan
Behavioral Science
M.Ed., Suffolk University

Charles W. Cook
English
J.D., New England School of Law

Ellis D. Cooper
Mathematics
Ph.D., Dalhousie University, Canada
Mary K. Cragg
English
M.A., Arizona State University
M.A., Southern Arkansas University

Suzanne Crisci
English Language Learning/English
M.A., Brandeis University

Annette M. Crowley
Biology \& Chemistry
M.S., Brown University

Cynthia M. Cummings
English Language Learning/Humanities/
History \& Social Sciences
M.A.L.S., Hollins College

Donna S. Cummings
Business
B.S., Suffolk University

Edmund Cuoco
English
M.S., Lesley College

Kristina L. Currier
Visual \& Media Arts
M.Ed., Lesley University

Juliette D. Cusick
English Language Learning
M.A., University of Massachusetts, Boston

## Thelma Dakubu

Mathematics
Ph.D., University of Surrey, England
Kevin V. Daley
Business/Legal Studies \& Paralegal
Ph.D., University of Surrey, England

## Brenda D'Alotto

English/Visual \& Media Arts
M.A., M.Ed., University of Massachusetts, Boston

Leonard J. D'Alotto
Mathematics
M.S., Northeastern University
M.E., University of Virginia

Timothy H. Dalton
English
M.A.T., Boston College

Charles E. Daniel
English
M.P.A., University of South Carolina

Rosana Darang
Nursing Program/Surgical Technology
Certificate Program
M.D., St. Louis University, Philippines

Masako D'Auria
Global Languages
M.A., University of Oregon

Bernadette Davidson
Early Childhood Education
M.A., Lesley University

Dennis J. Deeb II
Behavioral Science/English/History \& Social Sciences
M.S., Suffolk University
M.Ed., University of Massachusetts, Lowell
M.A., Salem State College

Courtney L. DeGeorge
English
M.A., Simmons College

Stefani P. Desrosiers
Hospitality
B.A., Johnson \& Wales University

James I. Deveney, Jr.
English
M.A., University of Massachusetts, Boston

Sharon A. Deyeso
English
M.Ed., Suffolk University

Laura J. Dhembi
Business
M.B.A., Suffolk University

Mark A. Diamond
Visual \& Media Arts
M.Ed., University of Massachusetts, Boston

Victor A. Díaz
Behavioral Science
M.S.W., Smith College

Pasquale DiBenedetto
English
M.Ed., Boston College

Indralakshmi Din-Dayal
Global Languages
Ed.D., Harvard University
Richard W. Doherty
Engineering \& Physical Sciences/Mathematics M.S., Boston College

## Susan T. Dole

Behavioral Science
Ed.D., University of Massachusetts, Boston
Maria R. Doucette
Business/Computer Information Technology M.S., Suffolk University

David N. Dow
Behavioral Science/Business/Humanties/
History \& Social Sciences
M.Ed., Cambridge College

Daniel M. Downs
Business/Computer Information Technology M.Ed., Endicott College

Robert B. Doyle
Emergency Medical Services
B.S., Northeastern University

Paul A. Dube
Visual \& Media Arts
Certificate, New England School of
Photography
Gary L. Duehr
English/Visual \& Media Arts
M.F.A., University of lowa

Bonnie L. Dunn
Business
M.S.A., New England College

## Seychelle C. Dunn-Corbin

Performing Arts
M.A., Morgan State University, MD
G.P.D., Bard College

Robert J. Durant
Mathematics
M.B.A., Northeastern University

Kristen M. Ehrler
Mathematics
M.Ed., University of Massachusetts, Boston

Jennifer M. Elwell O'Donnell
Biology \& Chemistry
M.Ed., Boston College

## Fahri Ercem

Behavioral Science
M.A., Northeastern University
M.A., Cumhuriyet University, Turkey

Michelle J. Ervin
English Language Learning
M.Ed., Boston University

Meridyth Espindola
Visual \& Media Arts
M.F.A., University of Massachusetts, Dartmouth

Mario L. Espinosa
English Language Learning
M.M., Cambridge College

Stella Fateh
Mathematics
M.Ed., Boston College
M.Ed., Spicer Memorial College, India

Dennis Febles
Criminal Justice
J.D., New England School of Law

Stuart H. Feinberg
English
M.Ed., Cambridge College

Eileen R. Feldman
English Language Learning
M.Ed., Northwestern University

Cassandra Fenlon
Nursing Program
B.S.N., Rivier University

Livia C. Fernandes
Computer Information Technology B.S., Middlesex Community College

## Domenic A. Feroce

Business
M.B.A., Southern New Hampshire University

Linda T. Ferragamo
English Language Learning
M.A., St. Michael's College

Kevin R. Finnigan
English
M.A., University of New Hampshire

Ron E. Fionte
History \& Social Sciences
M.B.A., Suffolk University

John N. Fiske, Jr.
English
M.Ed., Lesley University

George A. Florentine, Jr.
Business
B.S., Boston College

Erica N. Flores
Visual \& Media Arts
M.F.A., New York Academy of Art

Brittany W. Flynn
Nursing Program
B.S.N., Salve Regina University

Jennifer M. Flynn
English Language Learning
M.S.N., University of Massachusetts, Worcester

Timothy J. Fontaine
Business
M.B.A., Suffolk University

Peter M. Forbes
English
M.A., Boston University

Ellen M. Ford
Mathematics
M.A.T., University of South Florida

Richard A. Fox
Biology \& Chemistry/Criminal Justice
M.A., Wayne State University

Buteau Francois
Coputer Information Technology
M.S., Boston College

Leia B. Friedman
Behavioral Science
M.S., Rivier University

Scot R. Frink
Nursing Program
B.S.N., Regis College

David G. Froust
Behavioral Science
M.L.A., Southern Connecticut State University

Jie L. Frye
Mathematics
M.S., University of Florida

John A. Furia
History \& Social Sciences
M.P.A., University of Rhode Island

Kerri S. Gagnon
Nursing Program
B.S.N., Northeastern University

Maria E. Galante
Visual \& Media Arts
M.Ed., Salem State University

Advanced Certificate, Rochester Institute of Technology

Meaghann E. Galdos
Biology \& Chemistry
M.A.T., Emory University

Gretchyn Gallagher
English Language Learning
M.Ed., University of Massachusetts, Lowell

Amanda V. Gannaway
Visual \& Media Arts
Ph.D., Columbia University
Zevahn D. Garfall
English
M.A., San Diego State University

## Stephen J. Gerome

Business/Computer Information Technology Ed.S., Nova Southeastern University

## Urbi Ghosh

Biology \& Chemistry
Ph.D., Colorado State University
Ph.D., Albany Medical College
Margaret J. Giberson
English
M.A., Boston College

Theresa L. Gomes
Criminal Justice
J.D., Massachusetts School of Law

Cynthia Y. Gonnella
Biology \& Chemistry
B.S., University of Massachusetts

Nikolas B. Gonzales
English Language Learning/History \& Social Sciences
M.S.Ed., City University of New York
M.A., California State University

Thomas J. Goodfellow
Hospitality
M.B.A., Boston University

Cora T. Gordon
Business/Mathematics/History \& Social
Sciences
Ph.D., University of Pittsburgh

## Eric H. Gorenstein

Mathematics
M.S., San Diego University

Robert A. Goris
Nursing Program
B.S.N., Rivier University

Paul L. Grabianowski
English
M.Ed., University of Tulsa

Matilde Graciano
Early Childhood Education
M.Ed., Cambridge College

Daryl E. Graves
Behavioral Science
Ph.D., Concordia College \& University
Rita M. Greco
Biology \& Chemistry
M.A., The City University of New York

Russell A. Green
English
M.F.A., Emerson College

## Jennifer B. Grehan

English Language Learning/English
M.Ed., Cambridge College

Tamblyn E. Griffiths
Visual \& Media Arts
M.F.A., University of Washington

David C. Grinstein
Mathematics
M.S., Tufts University

Gregory A. Grosvenor
English
M.F.A., Old Dominion University

Nina Ha
English
Ph.D., University of Massachusetts, Amherst
Othmane Habbouli
Mathematics
M.S., University of Massachusetts, Lowell

John P. Haley
Computer Science
M.A.T., Salem State College

Adele A. Hamblett
Mathematics
M.Ed., Northeastern University

Jamal A. Hammou
History \& Social Sciences
M.B.A., Bentley University

Lori S. Harrington
Early Childhood Education
M.A., Cambridge College

Christopher G. Hart
Business
M.S., University of Phoenix

Riad Y. Hassan
Global Languages
B.S., Northeastern University

Sanjoy K. Hazra
Business/Computer Information Technology B.S., Suffolk University

Marion M. Hernandez
English
M.A., Boston University

Thomas M. Hickey
Emergency Medical Services
E.M.T., The Commonweath of Massachusetts

Office of Emergency Medical Services
Douglas S. Holder
English
M.A., Harvard University

Samuel E. Hong
Behavioral Science
Ph.D., Northeastern University
Joseph M. Hughes
English Language Learning/English
M.F.A., Boston University

Harriet E. Hutchinson
Global Languages
Ph.D., Boston College
Catherine R. Ingersoll
Mathematics
M.S., Salem State University

## Ayesha Islam

Biology \& Chemistry
Ph.D., King's College London, United
Kingdome

## Anita Jain

Behavioral Sciences
M.S., Punjab University, India

Marika Jamacochian
Medical Imaging
Ph.D., Yerevan State University, Armenia
Seth C. Jameson
English
Ph.D., University of California, Los Angeles
Frank S. Jamgochian
Business
M.S., Bentley University

Andrew A. Jeglinski
Humanties/History \& Social Sciences
M.A., Salve Regina University

Christine M. Johnsen
Humanities/Nursing Program
M.S.N., Northeastern University
M.P.H., Columbia University

Lateia M. Johnson
Allied Health
M.B.A., Northeastern University

Lloyd Sheldon Johnson
Behavioral Science/Human Services/
Humanities
M.Ed., Antioch University

Ed.D., University of Massachusetts, Boston
Carolyn J. Jordan
Business/Computer Information Technology M.Ed., Lesley University

William A. Josephson
Mathematics
Ph.D., Polytechnic Institute of NYU
Afif A. Kadri
Computer Information Technology
M.S., Boston University

Anatoli Kaploun
Mathematics
Ph.D., Moscow State University, Russia
Sami A. Karachi
Business/Computer Information Technology
M.A., Boston College

Joanne Karanja
Nursing Program
B.S.N., Salem State

Caroline B. Kautsire
English
M.F.A., Emerson College
M.A., Brown University

Philip J. Kazanjian
Computer Information Technology
M.S., University of Maryland

Peter T. Kelliher
Biology \& Chemistry
M.S., University of Central England in

Birmingham, United Kingdom
Elizabeth Kellogg
Behavioral Science/Humanities
Ph.D., Saybrook University

## Cheryl R. Kelly

Behavioral Science
Ed.D., Vanderbilt University
Julia P. Kennedy
English
M.A., University of Massachusetts, Boston

Pamela A. Kenny
Nursing Program
B.S.N., St. Anselm College

Rawan A. Khabbaz
Mathematics
M.Ed., Lesley University

Sholeh Khazé
Mathematics
M.S., Fort Hays State University

Ruth E. Khowais
English
Psy.D., Massachusetts School of Professional Psychology

Shun Y. Kiang
English
Ph.D., Northeastern University
Ruth Kiefson-Roberts
English
M.A., Boston State College

James K. Kilpatrick
Behavioral Science
M.S., Lesley College

Jerald D. King
Biology \& Chemistry
B.S., Ohio State University

Kristen Kirby
Biology \& Chemistry
M.Ed., Auburn University

John A. Kordalewski
English
Ed.D., Harvard University
Omanand Koul
Biology \& Chemistry
Ph.D., Banaras Hindu University, India
Margaret F. Kuker
Early Childhood Education
M.Ed., Lesley University

Debra R. Kumar
Biology \& Chemistry
M.Ed., Salem State University

Brian A. Kyes
Criminal Justice
J.D., Suffolk University

Carole D. LaBonté
English
M.Ed., Suffolk University

Edward J. Ladny
Mathematics
M.S.Eng., University of Massachusetts, Lowell M.S., Salem State College

Sebastian Lagambina
Biology \& Chemistry
M.Ed., Cambridge College

Claire P. Laidlaw
Business/Computer Information Technology M.S., Boston State College

Mary M. LaMarra
Allied Health
M.Ed., Cambridge College

James A. Lambert
Visual \& Media Arts
MFA, Massachusetts College of Art
Kurt W. Lancaster
Behavioral Science/English
Ph.D., New York University
Bruce D. Lapierre
Biology \& Chemistry
M.S., University of Lowell

Timothy M. Lavin
Business
M.Ed., University of Massachusetts, Boston

Darin Leahy
Mathematics
M.S., University of Massachusetts, Lowell

Melody A. Lee
English
M.Ed., Boston University

Maureen E. Lee-Locke
Hospitality
M.Ed., Cambridge College

Robert G. Lehmann
Performing Arts/Visual \& Media Arts M.B.A., University of Massachusetts, Lowell

Jonathan C. Leung
Humanties \& Social Sciences
M.Ed., Bridgewater State University

Joseph L. Leva
Mathematics
M.S., Carnegie Mellon University

Marie A. Levey-Pabst
English
M.A., Critical \& Creative Thinking, University of Massachusetts @ Boston, MA

Kenneth J. Likis
English
M.Ed., Lesley College

Marie Lindahl
English
J.D., New England School of Law

Judy B. Lindamood
Early Childhood Education
Ed.D., Columbia University
Mandy C. Lobraico
Humanties \& Social Sciences
MA, University of Sydney, Australia
George LoCascio
Biology \& Chemistry
Master, University of Massachusetts, Amherst
Nicolas J. Lux
Environmental Science
Ed.D., Boston University
Andrea A. Lyons-Marcotte
Business
M.B.A., Suffolk University

Christina A. Madek
Business
J.D., Suffolk University

Kathleen H. Maher
Business
M.B.A., Plymouth State University

Paul F. Mahoney, Jr.
Criminal Justice
A.S., Wentworth Institute

Jackson A. Mann
Performing Arts
M.F.A., Vermont College of Fine Arts
M.M., Berklee College of Music, Valencia,

Spain
Rosalind R. Mann
Early Childhood Education
M.S., University of Massachusetts, Boston

Hassan A. Mansaray
English Language Learning
Ed.D., Boston University
Doranggie Manso Alvarez
Allied Health/Surgical Technology Certificate Program
A.A., Bunker Hill Community College

Joanne E. Manville
Mathematics
Ed.D., Boston University
Angelina M. Marinova
Mathematics
M.S., Sofia University, Bulgaria

Paul J. Marques
Computer Science
M.Ed., University of Massachusetts, Boston

Jennifer M. Martin
Nursing Program
B.N.S., University of Massachusetts, Dartmouth

Dean F. Marzullo
Business
M.S., Northeastern University

Carl P. Mason
English
M.F.A., Vermont College

Sheiba I. Mas-Oud
Mathematics
M.S., Biostatistics, New York Medical College
M.S., Mathematics Education, Lehman College

Tahmina A. Matubbar
Behavioral Science/Humanities/History \&
Social Sciences
M.A., University of Massachusetts, Boston

James W. McCann
Business/Computer Information Technology
M.B.A., University of Southern New Hampshire

Dianne E. McDermott Cerasuolo
Visual \& Media Arts
M.S.W., Boston University

Hiroko McDonald
Global Languages
M.A., Ochanomizu University, Japan

Katherine M. Mclsaac
English
M.A., Northeastern University

Timothy M. McLaughlin
Performing Arts/English
M.A., Eastern Michigan University

## Joshua E. McLellan

Business/Computer Information Technology M.P.H., Massachusetts College of Pharmacy \& Health Science
R. Michael McSweeney

History \& Social Sciences
M.A., Carnegie-Mellon University

## Mary-Kelly Meader

History \& Social Sciences
M.A., Boston College
D. Scott Mehlenbacher

Mathematics
Ed.M., Education Leadership, Boston University, MA

## Kenneth Melillo

Mathematics
M.B.A., Suffolk University

Frank S. Militello
Human Services
M.A., California School of Professional

Psychology;
C.A.G.S., Northeastern University

Kerin F. Miller
English
Ph.D., English, Georgia State University, GA

## Jeffrey S. Minear

English Language Learning
M.Ed., Cambridge College

## Mark D. Minton

Environmental Science/Humanities M.A., University of Rhode Island

## MeLissa M. Mips

Visual \& Media Arts
M.A., Emerson College

Elizabeth A. Mirasolo
English
M.Ed., University of Massachusetts, Boston

## Karen Mitchell

Biology \& Chemistry
Ph.D., University of Manchester, United Kingdom

James W. Montford
Visual \& Media Arts
M.F.A., Maryland Institute College of Art

Daryl D. Morazzini
English
M.F.A., Vermont College of Fine Arts

## Franca Morelli

Biology \& Chemistry
M.D., University of Perugia, Italy

Carmelito T. Moreno
Computer Science
Master, University of Massachusetts, Boston
Peter J. Morgan
Computer Science
M.S., Boston University

Julia Morgunova
English Language Learning
M.A.T., Simmons College

Jolvan T. Morris
Environmental Science Ph.D., Florida A\&M University
Post-Doctoral Research, Savannah State University

## Suman Mukherjee

Biology \& Chemistry
Ph.D., New Mexico State University

## Sheila Muller

Business
M.B.A., Bentley University

Jenifer V. Murphy
English
M.A., Northeastern University

Michael F. Murphy
English Language Learning
M.Ed., University of Pennsylvania

Michelle M. Murphy
Biology \& Chemistry
B.S., Fitchburg State College

## Karen A. Myers

Businss/Computer Information Technology M.S., Suffolk University

## Yoo S. Na

Performing Arts
Doctor of Musical Arts, University of Illinois, Urbana-Champaign

## Meghan Naim

Business
Bachelor, Robert Morris University
Lee S. Napoli
Hospitality
Diploma, Greensburg Salem High School

## Rossie P. Nedkova

Mathematics
D.H.E. (M.S.), Sofia University, Bulgaria

Mary B. Nelson
Business
M.B.A., M.I.S., Babson College

Polyanna S. Neumann
Nursing Program
B.S.N., University of Massachusetts, Boston

Brian C. Newquist
Mathematics
M.S., University of Nebraska

Hoa M. Nguyen
English Language Learning
M.A., University of Massachusetts, Boston,

Antoaneta V. Nikolova
Mathematics
M.S., Technical University, Sofia, Bulgaria

Clare Niven-Blowers
Behavioral Science
M.Ed., Cambridge College

Lin A. Nulman
English
Ph.D., University of New Hampshire
Kalimah A. Nur
Business
M.B.A., Boston University

Maureen E. O'Connell
Behavioral Science
M.P.A., Suffolk University

Karla A. Odenwald
English
Ph.D., City University of New York

Kurt W. Odenwald
English
M.F.A., Brooklyn College
M.A., University of Virginia

Jennifer L. O'Hare
Business
M.B.A., Anna Maria College

Ashlee L. H. Okan
English
M.F.A., Lesley University

Thomas E. Olivieri
English
M.A., University of Massachusetts, Boston

Sarah K. Olken
Biology \& Chemistry
Ph.D., Boston University, MA
Denise G. O'Malley
Humanities/Visual \& Media Arts
M.A., Boston College

Lawrence A. Overlan
Business
M.B.A., University of Notre Dame

Richard J. Owens
English
Ph.D., State University of New York, Buffalo
Luigi Palazzo
English Language Learning/Global
Languages
M.A., Boston College

Monique Palix-Robasson
Global Languages
M.A., University of Paris, Jussieu, France

David E. Parkison
English
M.F.A., Boston University
M.A., University of Rochester

Frank G. Pascal
English
M.A., Emerson College

Kenneth S. Paulsen
History \& Social Sciences
Ph.D., University of Maine
Jeffrey Pearlman
History \& Social Sciences
M.A., Salem State College

Lori E. Pennel
Business/Mathematics
M.B.A., Suffolk University

Donna M. Perezella
English Language Learning/English
M.A., Simmons College

Diane C. Perito
Biology \& Chemistry
Ph.D., Tufts University
Claudine P. Perrault
English
Ph.D., Salve Regina University
George D. Pfromm II
Visual \& Media Arts
B.A., Art Institute of Pittsburgh

Howard A. Phillips
Visual \& Media Arts
B.F.A., University of Montana

John J. Piantedosi
Behavioral Science/Humanities
M.Ed., Boston State College, MA
M.A., St. John's Seminary, MA

## Stacey Pichardo

Criminal Justice
J.D., Suffolk University

Patricia A. Plummer-Wilson
Early Childhood Education
M.Ed., Salem State College

Gerald A. Porter
Business/History \& Social Sciences
M.B.A., Babson College

Hubert Pousseu-Kouatcho
Mathematics
M.S., University of Massachusetts, Lowell

Paula C. Pozniak
Biology \& Chemistry
M.S., Massachusetts General Hospital Institute of Health Professions (Academic Unit of MA General Hospital)
Laura S. Prichard
Performing Arts
Ph.D./A.B.D., University of Illinois, Urbana

## Catherine L. Puopolo

Business
M.Ed., Suffolk University

Diane J. Puopolo
Business/Computer Information Technology M.S., Lesley College

Michael T. Puopolo
Business/Computer Information Technology M.B.A., Babson College

Matthew J. Purdy
English
Ph.D., Texas Technical University
DeAnna M. Putnam
Humanities/History \& Social Sciences M.Div., Gordon-Conwell Theological Seminary

Raul F. Quintanilla
Mathematics
M.S., Salem State College

Marielle Racicot
Global Languages
M.Ed., University of Massachusetts, Boston

Natalia E. Radziejewska
English Language Learning
M.A., George Washington University

Yenamandra V. Rao
Mathematics
Ph.D., Osmania University, Telangagna, India
Elizabeth L. Ratay
Performing Arts
M.M., Arizona State Univeristy

Ashleigh D. Reade
Performing Arts
M.F.A., Harvard University

Mina Reddy
English
Ed.D., University of Massachusetts, Boston

Harry M. Regis
Mathematics
M.A., Applied Linguistics, University of

Massachusetts, Boston
Vanessa A. Reiss-Vaughn
Early Childhood Education
M.Ed., Bridgewater State College

Arland J. Richmond
Computer Science
Ph.D., Boston College
Dennis A. Ricupero
Biology \& Chemistry
Ph.D., Boston University
Liudmila D. Rikun
Mathematics
M.S., University of Oil \& Chemistry, Baku, Azerbaijan

Justin R. Rodriguez
History \& Social Sciences
M.A., University of Massachusetts, Boston

Eric J. Roebuck
Engineering \& Physical Sciences
Ph.D., Tufts University
Claire E. Roll
Visual \& Media Arts
M.F.A., Boston University

Nancy N. Rosen
Behavioral Science
M.A., Cleveland State University

Aaron D. Rosenberg
Business
J.D., University of Connecticut

Louis J. Rossi, Jr.
Business
M.B.A., Suffolk University

Mark Rotondo
Mathematics
M.S., University of Massachusetts, Boston

## Leon R. Rozmarin

History \& Social Sciences
Ph.D., Boston University
Clayton T. Ryan III
Behavioral Science
Ed.M., Framingham State College
Rita J. Rzezuski
Early Childhood Education/Human Services
M.S., Wheelock College

Emilia M. Sabatowska
Behavioral Science
M.S., University of Massachusetts, Boston
C.A.G.S., University of Massachusetts, Boston

## Neelam Sahni

Biology \& Chemistry
D.P.M., New York College of Podiatric Medicine

Lucius A. Salisbury III
English
M.A., Boston University

Paige K. Sammartino
English
M.A., Simmons College

Erik Saperstein
Engineering \& Physical Sciences
M.S., University of Alabama, Birmingham

Victoria D. Savage
English
M.A., Newcastle University, United Kingdom

Mary A. Sceppa
Mathematics
M.S., Salem State College
C.A.G.S., Havard Extension School
C.A.G.S., University of Massachusetts, Lowell

Marc N. Schepens
Visual \& Media Arts
M.F.A., Boston University

Christopher F. Schiavone
History \& Social Sciences
Ph.D., Georgetown University
Michelle A. Schweitzer
English Language Learning
M.A., Boston University

Larissa A. Schyrokyj
Behavioral Science/English/Humanities
Ed.D., Northeastern University
Stefan A. Scott
Behavioral Science
B.A., Colgate University

Kimberly Seefeld
Mathematics
M.S., University of New Hampshire

Dennis S. Shafer
Performing Arts
Bachelor, The Boston Conservatory
Chandrika Shah
LCMS/History \& Social Science
M.A., Bombay University, India
M.A., San Francisco State University

Jennifer A. Shambaugh Lewis
Performing Arts
M.A., Emerson College

Usha K. Sharma
Biology \& Chemistry
Ph.D., University of Tokyo, Japan
Brian P. Sharp
Engineering \& Physical Sciences
B.A., University of Rhode Island

Mark A. Sheehan
Business/Mathematics/History \& Social Sciences
MI.M., Thunderbird School of Global

Management
Jonathan P. Sheetz
Biology \& Chemistry
M.D., Pacific Basin University Medical School, Federated States of Micronesia

Michael T. Silva
English
M.F.A., Columbia University
M.S., Boston University

Michael C. Silverman
English Language Learning
Ph.D., University of Southern California
Michael J. Skorker
Global Languages
M.A., Middlebury College

Stephen E. Slaner
Behavioral Science
Ed.D., Harvard Graduate School of Edu.

Robert J. Slattery
Biology \& Chemistry M.Ed., Boston State College

Walter E. Smelt III
English M.T.S., Harvard University

Michael A. Smith
Criminal Justice
M.P.A., Anna Maria College

## Odilia Smith

Global Languages
M.A., Salem State College
M.S., Antonio Narino University, Colombia

Lance M. Solimini
Business
J.D., Suffolk University
M.B.A., Endicott College

Jibril G. Solomon
Behavioral Science/ Biology \& Chemistry/
Humanities
Ph.D., Lesley University

## Andrzej M. Soltysiak

Medical Imaging
A.S., Bunker Hill Community College

## Xue Song

Global Languages
M.A., Brandeis University
M.Ed., Minzu University, Beijing, China

Philip M. Sooknanan
Mathematics
M.A., The City College Of New York

William L. Soper
Biology \& Chemistry/Humanities
M.A., The City College Of New York

Donna M. Sorbello Foley
Performing Arts
M.A., Boston University, MA

## Candice H. Spencer

Mathematics
M.Ed., C.A.G.S., Cambridge College

Kathleen W. Spicer
Hospitality/Humanities
M.Ed., Boston College

Robert W. St. Laurence
Performing Arts
M.F.A., American Repertory Theater

Jason E. St. Pierre
History \& Social Sciences
M.A., St. Louis University

## Thomas Stanga

Behavioral Science M.Ed., Cambridge College
C. Sandra Starr

Behavioral Science
M.S., Boston University

## Beverley A. Steitz

Business/Computer Information Technology M.Ed., Boston College

Christopher J. Stephens
English
M.A., Salem State College
M.F.A., University of New Orleans

Chavel St-Fort
Mathematics
M.S., University of Massachusetts, Lowell

Kimberly A. Stieglitz
Biology \& Chemistry
Ph.D., Boston University
Shelley F. Stoll
English Language Learning
M.A., University of Massachusetts, Boston

Julia E. Story
English Language Learning/English
M.F.A., Indiana University

Yvette M. Straughter
Mathematics
M.Ed., Boston State College

Cathy A. Strong
Nursing Program
B.S.N., Emmanuel College

Jessica L. Sullivan
Biology \& Chemistry
M.A.T., Boston University

Paul J. Sullivan
Business/Legal Studies \& Paralegal
J.D., New England School of Law

Linda L. Sutliff
English
M.A., Bowling Green State University

Marla E. Sweeney
Visual \& Media Arts
M.F.A., State University of New York, New Paltz

Richard J. Sweeney
Business
M.B.A., Anna Maria College

Catherine I. Swible-Keane
Biology \& Chemistry
M.S., Boston College

Vilma M. Tafawa
English
M.Ed., University of Papua New Guinea, Papua New Guinea

Weusi A. Tafawa
Business
M.B.A., Suffolk University

William C. Tam
Business
M.B.A., Chaminade University of Honolulu

Christina A. Taormina
English
M.A., University of Massachusetts, Boston

Joseph F. Tarello
Biology \& Chemistry
M.S., Union College

Thomas J. Tassinari
Behavioral Science
M.Ed., Suffolk University

Wayne B. Taylor
Behavioral Science
M.S., Boston College

Hayley Thompson-King
Performing Arts
M.M., New England Conservatory of Music

Alexandra M. Thorn
Environmental Science
Ph.D., Tufts University
Robert L. Thorp
Performing Arts
D.M.A., Boston University

William H. Tierney
English
M.F.A., Emerson College

Paola Y. Tineo
English Language Learning
M.A., Simmons College

Amy Tortorella
Biology \& Chemistry
D.C., National University of Health Services

Charles H. Trevillion
Behavioral Science/Business
J.D., New England School of Law

Ann Twomey
Nursing Program
B.S.N., Emmanuel College

Robin T. Tyler
Behavioral Science/English/History \& Social
Sciences
M.Sc., M.A., University of London, England

Gloria Vachino
Biology \& Chemistry
M.S., Tufts University

Christine M. Vasapoli
Behavioral Science M.A., Boston University

Nichole K. Vatcher
Behavioral Science
M.S., Suffolk University

Donald A. Veitch
English
M.Ed., Boston State College

## Ricardo Velez

Engineering \& Physical Sciences
M.S., University of Massachusetts, Boston

Paula K. Velluto
Business/Computer Information Technology/
Computer Science
B.S., Babson College

Dina Veygman
Computer Science
M.S., Boston University

Yvonne M. Vissing
Behavioral Science
Ph.D., Western Michigan University
Anne M. Vlack
Mathematics
M.Ed., Fitchburg State College

Gerald J. Waggett
English/Honors Program/Humanities
M.A., University of Massachusetts, Boston

Richard J. Wakefield
History \& Social Sciences
M.A., University of Connecticut

Elaine C. Walker
Behavioral Science
M.A., Lesley University

Abigail Wamboldt
Visual \& Media Arts
M.F.A., University of New Hampshire

Christopher R. Watson
Mathematics
M.S., Tufts University

Phil Weinberger
Business
M.B.A., Framingham State College

Christopher J. Weinmann
English
Ph.D., Pennsylvania State University
Ray P. Welliver
Business
M.B.A., Anna Maria College

Kathleen M. White
English
M.A., Northeastern University

Katie M. Wild
Visual \& Media Arts
M.F.A., University of Massachusetts, Dartmouth

Helen M. Williams
Business
M.A., Lenoir-Rhyne University

Neal J. Williams
Business
M.S., Bentley University

Richard E. Willson, Jr.
Mathematics
M.S., Northeastern University
M.S., Rensselaer Polytechnic Institute

Helen J. Wiseman
English
M.Ed., Lesley University

Chad E. Worley
Mathematics
M.S., Tufts University

Gennadiy M. Yablonovskiy
Mathematics
M.S., Kiev Pedagogical University, Ukraine

Mark J. Yanowitz
Environmental Science
B.S., University of Maryland,

Zhifang Yin
Mathematics
M.S., University of Vermont

Jenna F. L. Young
English
M.A., Boston College

Henry L. Zacchini
English
M.F.A., Brandeis University

Nazha A. Zahiri
Medical Imaging
B.A., Oregon Institute of Technology

James Y. Zaks
Engineer \& Physical Sciences
M.S., Rensselaer Polytechnic Institute, Troy

## Dawn L. Zapata

Business/Computer Information Technology
M.A., Harvard University

Tonka I. Zelenkova
Mathematics
M.A., Plovdiv University, Bulgaria

## A.A. - Associate in Arts

An undergraduate degree of at least 60 credits awarded upon successful completion of a program of study in liberal arts and sciences that prepares students to transfer to a baccalaureate institution.

## A.S. - Associate in Science

An undergraduate degree of at least 60 credits awarded upon successful completion of a program of study in an applied subject area, such as computer technologies or health that prepares students to enter the work force.

## Academic advisor

College staff member responsible for providing guidance in course and/or program-related issues.

## Academic calendar

A calendar of important dates associated with the college, such as semester start and end dates, holidays and deadlines.

## Academic course load

The number of credit hours in which a student is enrolled during the semester.

## Academic term (semester)

Fall, spring and summer weeks when classes are in session. The fall and spring semesters are approximately 16 weeks long. The summer semester usually has three sessions varying in length from five to twelve weeks. An online winter session that is approximately three weeks long is also offered.

## Academic year

Fall, spring, and summer semesters, generally from early September to mid-August.

## Accreditation

Certification by an independent educational board that colleges or university's practices and policies meet or exceed official standards.

## Academic Innovation \&

## Distance Education (AIDE)

The AIDE office supports teaching, learning and online programs and resources. AIDE partners with faculty, staff, and students to support Moodle, the College's Learning Management System where instructors post course materials, and other digital learning tools including virtual meeting platform WebEx, ePortfolio, Panopto, and more.

## Ace Mentor program

The ACE Mentor program provides students enrolled in Learning Community courses assistance in making a successful transition to college by focusing on academic achievement, engagement, and cultural competency.

## Add a course

To enroll in additional courses after registration is complete, accomplished through Admissions and Enrollment Services

## Administration

College staff members responsible for management and supervision.

## Advising

The professional use of knowledge and tools to assist and support students with navigating college.

Alumni
Graduates, in the plural.
Articulation agreement
A formal agreement between Bunker Hill Community College and a four-year college or university which eases students' transfer to that institution.

## Asynchronous course

Courses that do not meet at a specific date and time each week. Students develop their own schedule and follow the course syllabus that outlines all assignments due dates.

## Audit

To take a course under an agreement which does not result in a final grade of $A, B, C$, etc... Generally involves regular attendance and participation, but limits graded activities, such as exams; requires full payment of tuition.

## Board of trustees

An appointed board that oversees and is responsible for the policies and fiscal affairs of a college.

## Bridge session

An eight week semester that runs during the summer for a few three-credit courses and all four-credit courses.

## Bursar

College official responsible for the billing and collecting of tuition and fees.

## Career planning

The planning process in which students in collaboration with staff design a plan for employment that matches their interests and professional goals.

## Career program

A specialized degree designed to equip a student with the skills and educational background needed for employment in a specific field, such as business administration, criminal justice, etc...

## Certificate program

An academic program of study in a specific field intended for occupational training, upgrading, or retraining, generally 30 credits or less in duration. A certificate is awarded upon successful completion of the program.

## Commencement

Graduation ceremony.
Community education and
lifelong learning programs
Courses offered by this department within the Division of Workforce and Economic Development are non-credit and taken by students for career and educational advancement and/ or for personal enrichment. The department also offers approved continuing education units (CEUs) for professional advancement or to maintain licensure.

## Co-requisite

A course requirement that is taken concurrently with another course.

## Course cluster

Two or more courses grouped together around a common academic theme. Instructors teaching in a cluster situation work as a team to ensure cluster objectives are met.

## Course delivery

The modality used to impart course content.

## Credit course

An academic course numbered 100 or above in the college catalog which may be applied toward completion of a degree or certificate. (See also Developmental Course).

## Credit hour

A standard measure of the amount of instructional time required to successfully complete a course. For example, ENG111, College Writing I , is a 3 credit hour course, which means that it meets for 3 hours each week for one semester.
CSDL (Center for Self-Directed Learning)
An academic center at which students can register for a wide range of courses. Students can learn at their own pace through a variety of instructional media/materials.

## Curriculum

A set of courses focused in a particular field, e.g. accounting, criminal justice, early childhood.

## Dean

A member of the administrative staff responsible for supervision and management of a particular division of the college.

## Degree program

At Bunker Hill Community College, an Associate in Arts or Associate in Science program of study requiring 60 credits or more for completion.

## Developmental course

A basic skill development course numbered below 100 in the college catalog which carries college credit but does not count toward the requirements for graduation.

## Division

The Academic Departments and Services at the College are organized into nine divisions that are supervised and managed by a Dean. Examples of Divisions at BHCC are: Division of Academic Support and College Pathway Programs; Division of Health Sciences; Division of Science, Engineering and Mathematics Programs; Division of Student Affairs; etc.

## Drop a course

To cancel registration in a course. It may be accomplished only during the schedule adjustment period as specified on the academic calendar and is processed through Admissions and Enrollment Services.

## Education plan

A student's map or guide that delineates the courses they need to take to earn their degree or certificate and when those courses will be taken and in what format.

## Education planning

The planning process in which students in collaboration with staff create an educational pathway that facilitates their persistence and success.

## Elective

A course in a program of study which may be selected from a variety of courses in the designated discipline and is numbered above 100.

## ePortfolio

This is a vehicle for students to track their academic journeys through college by sharing their accomplishments and reflecting on their learning in ways that are both personally and publicly meaningful.

## Faculty

An employee of the College who delivers academic instruction.

Fees
Charges by the College for specific services to students.

## Financial aid

Funding from various sources provided to students to assist in defraying expenses of college (See Financial Aid section of this catalog).

## Financial planning

A set of resources and tools designed to help students make sound financial decisions that are in line with their personalized plan.

## Free Application for Federal Student Aid

 (FAFSA)A required standardized application that includes detailed financial data and is used to determine eligibility for all financial aid programs.
Full-time (student)
Student registered for 12 or more credits in the fall or spring semester or six (6) credits in the summer.

GED
General Educational Development (high school equivalency diploma).

## General Education

A common core of courses required of all students that provides for the acquisition of core skills and knowledge necessary in a literate citizenry.

## Good academic standing

A student is considered making satisfactory process and in good academic standing if G.P.A. is 2.0 or higher and has completed 66 percent of his/her credits attempted.

## G.P.A. (Cumulative G.P.A.)

Grade Point Average, used to compute student academic standing.

## Guest student

A student admitted and enrolled at another college or university planning to take a course(s) at BHCC

## HiSET

High School Equivalency Test.

## Hybrid course

Courses that combine traditional classroom instruction with online learning to deliver academic content that is the same as received in a pure classroom setting.

## Internship

A program designed to give a student real work place experience in their intended career before graduation.

## Integrated support services

Identifies and directs students to people, resources, and services that meet their unique needs to promote success and individual growth.

## IP grade (in progress)

A grade conferred by a faculty member giving a student a period of time after the end of the semester to complete all of the required coursework to earn a passing grade.

## Learn and Earn program

Paid internships at companies located in the greater Boston area.

## Learning Community Cluster

Enrolls the same group of students in two or more courses centered on common academic themes enabling students to learn and study together.

## Learning Community Seminar

A course designed to assist first time students make a successful transition to college.

## Learning Contract

An independent learning agreement between a student and a faculty member under the auspices of a Dean that allows a student to enroll in and complete a course that is not offered in any other format in a semester.

## LifeMap

An education, career and transfer planning program and process that is dedicated to promoting student success in their education, career and personal goals. Components of LifeMap include career planning, academic planning, support network and transfer planning.

## Major/program of study

The degree or certificate program a student is officially enrolled in.

## Matriculation

Formal application to and acceptance in a degree or certificate program.

## Mid-semester warning grade

Official notice to a student by faculty that at the half-way point of the semester a student is in danger of not passing a course(s) with a grade of $C$ or better.

## Mid-term

The point midway through an academic term.

## Moodle

Online platform where online courses are hosted.

NA grade (never attended)
An administrative withdrawal designation conferred by faculty to students enrolled in a course(s) and who do not attend one class during the first two weeks of the semester.

## Non-credit course

A course that is non-credit bearing and cannot
be used to satisfy an academic requirement for any degree or certificate program.

Onecard
Student ID which also serves as the means of student financial aid refunds.

## Online degree program

Degree programs that allow students the ability to fulfill all of the requirements by completing online courses.

## Open admission

A students' automatic acceptance into a nonselective degree or certificate program with a High School diploma or GED.

## Orientation

The formal process of welcoming new students to the college and providing them with information on the resources, services, and departments they may access to assist them to be academically successful.

## Part-time (student)

Student enrolled for 11 credits or fewer in the fall or spring semester.

PLA - prior learning assessment A program through which students may earn credit for college-level learning acquired through non-collegiate experiences such as employment, military training, community service, and volunteer activities.

## Placement test

A test which determines a student's level of learning in a subject, typically English or Mathematics, before they begin a college program.
Planned courses
The formal process of determining the order and semester courses have to be taken in to earn a degree or certificate.

## Prerequisite

Skill or course required for entry into a course or program of study.

## Probation

Formal notice that a student is not in good academic standing and imposes limits on the number of credits a student may register for in a semester.
Re-admission
The process by which students who return to the College to re-enroll in a degree or certificate program after an absence of at least one semester.

## Satellite campus

Location besides a college's main campus where classes are held and courses are facilitated.
Satisfactory academic progress (S.A.P.) Minimum grade point average and course completion rate that must be earned by a student to be considered in good academic standing.

Schedule adjustment (add/drop) A short period of time after a semester begins that allows students to change their course enrollment and/or course schedules.

## Selective program admission

Some programs are competitive and have specific requirements that must be met before a student may submit an application for admission. These programs are competitive and acceptance is not guaranteed.

## Self-directed learning

An approach to learning that requires students to take the lead in determining how they will learn subject matter and work to autonomously to acquire that knowledge.

## Selfservice

Online portal where students may register for classes, pay tuition and fees, access their financial aid information and more.

## Staff

An employee of the College who does not teach or facilitate academic instruction.

## Student Central

BHCC's one-stop center for student services, including financial aid, student payment and academic records.

## Success coach

A Success Coach is an advisor assigned to a Learning Communities course to assist students. Success coaches collaborate with faculty and ACE mentors to engage students in academic content and to work with students to identify pathways that encompass academic, career, and personal goals.

## Support Network

The staff who collaborate with students and provides services needed to help students achieve their academic, career and personal goals.

## Suspension

Students on probation who after taking a reduced course load, continue to not meet the grade and completion rate threshold to be in good academic standing. These students may be required to take a semester off.

## Synchronous course

Courses that meet at a specific date and time each week at the same on-campus or virtual location.

## To be announced (TBA)

An instructor and/or a room has yet to be assigned for a course.

## Transfer guidelines

Informal documents suggesting courses to be taken at Bunker Hill Community College for most effective transfer to a four-year college or university.

## Transfer planning

The planning process in which students in collaboration with staff design a plan for transfer to a four-year college or university in alignment with education and career goals.

## Transfer program

A degree program designed for students who plan to continue their academic careers beyond the associate degree level through transfer to a four-year college or university.

## Transcript

Permanent record of students' academic grades; available through Admissions and Enrollment Services.

## Tuition

Charges by the College to a student for registration in credit courses.

## Web course

A course that is completely online and provides the same academic content that is delivered in a traditional classroom course.

## Withdrawal from college

The formal process of notifying the College of the decision to discontinue attending all classes.

## Withdrawal from a course

The formal process of notifying the college of the decision to discontinue attending a Course.
About the Bunker Hill Community College Catalog ..... 2
Absence Due to Religious Beliefs. ..... 24
Academic Calendar ..... 12
Academic Discourse ..... 45
Academic Improvement ..... 28
Academic Innovation \& Distance Education (AIDE) ..... 36
Academic Policies and Information ..... 24
Academic Probation ..... 28
Academic Records ..... 21
Academic Resources ..... 39
Academic Services. ..... 32
Academic Suspension ..... 28
Academic Warning ..... 28
Accounting Information
Certificate Program ..... 115
Accounting Option ..... 116
Accreditation Statements ..... 9
Adjunct Faculty ..... 315
Administrative Divisions ..... 302
Administrative Support Specialist ..... 118
Admissions ..... 14
Adult Education and Transitions to College Programs ..... 39
Advising: Academic, Career and Transfer. ..... 32
Advising and LifeMap ..... 32
Affirmative Action and Equal Opportunity Guidelines. ..... 9
Alternative Learning ..... 36
Android Mobile App Certificate Program ..... 220
Annual Security Report Notice of Availability ..... 11
Appeals Process for Academic Progress ..... 17
Appeals Process for Financial Reasons ..... 17
Appeals Process for Grades. ..... 26
Appeals Process for
Probation and Suspension ..... 29
Application ..... 31
Assessment Center. ..... 35
Associate Credential Certificate Program*. ..... 178
Associate Degree \& Certificate Programs, Listed Alphabetically ..... 46
Associate Degree \& Certificate Programs, Listed by Degree ..... 47
Associate Degree \& Certificate Programs, Listed by Department ..... 48
Athletics and Wellness ..... 40
Attendance ..... 24
Auditing a Course ..... 24
Baking and Pastry Arts Option ..... 182
Bathroom and Locker Room Use .....  11
Behavior Policies, Discipline and Grievance Procedures.. ..... 25
BHCC Learning Communities ..... 36
BHCCselfservice ..... 32
BHCC Statement on Civility .....  8
BHCC Student Central ..... 16
Biological Sciences: Biotechnology Option ..... 208
Biological Sciences: Medical Professions Option ..... 211
Biology Transfer Option ..... 214
Biomedical Engineering Option. ..... 216
Bookstore ..... 21
Boston Chinatown Neighborhood Center Instructional Site in North Quincy ..... 22, 23
Boston Welcome Back Center for Internationally Educated Nurses. ..... 36
Bunker Hill Community College Board of Trustees. .....  5
Bunker Hill Community College Goals .....  4
Business Transfer Option ..... 119
Campuses and Instructional Sites ..... 21
Cardiac Sonography Option ..... 75
Career Advising ..... 32
Career Development. ..... 35
Catalog Year ..... 24
Center for Equity and Cultural Wealth (CECW). .....  7
Center for Self-Directed Learning (CSDL). ..... 37
Central Processing Certificate Program. ..... 94
Certificates ..... 31
Change of Grades. ..... 25
Changing Biographical Data. ..... 11
Charlestown Campus ..... 21, 23
Chelsea Campus ..... 21, 23
Chemistry Concentration ..... 217
Cisco Systems CCNA (Fast-Track) Certificate Program ..... 137
Clinical Experience Responsibilities. ..... 25
College Assessment .....  7
College Catalog Statement ..... 2
College Connection ..... 39
College Placement: ..... 35
Communication Concentration ..... 97
Community \& Cultural Contexts ..... 45
Computation of GPA ..... 30
Computed Tomography Certificate Program ..... 78
Computer Information Systems Concentration ..... 138
Computer Science Concentration. ..... 221
Computer Science Transfer Option. ..... 224
Computer Support Specialist Certificate Program ..... 140
Computer Support Specialist Option ..... 141
Cost of Attendance ..... 18
Counseling, Prevention and Wellness ..... 40
Course Load ..... 25
Course Prerequisites ..... 26
Creative Work ..... 45
Credit Hour Policy ..... 26
Criminal Justice Career Option ..... 166
Criminal Justice Transfer Option ..... 168
Criminal Offender Record Information (CORI) and Sex Offender Registry Information (SORI) Checks ..... 14
Culinary Arts Certificate Program ..... 184
Culinary Arts Option ..... 185
Cybersecurity Option ..... 143
Data Analytics Certificate Program ..... 145
Data Analytics Option ..... 146
Data Management (Fast-Track) Certificate Program ..... 148
Dean of Students ..... 40
Dean's and Merit Lists ..... 26
Deferment Policy ..... 14
Deferred Action for Childhood Arrivals (DACA) Process. ..... 15
Degree and Certificate Programs ..... 43, 44
Degree and Certificate-seeking Students ..... 26
Directions to BHCC Locations ..... 23
Directory Information ..... 29
Disability Support Services ..... 40
DISH Food Pantry ..... 41
Distance Education ..... 36
Dropping or Adding a Course ..... 26
Dual Enrollment and Early College Program ..... 38
Early Childhood Development with Child DevelopmentAssociate Credential Certificate Program*178
Early Childhoon Development Certificate Program ..... 173
Early Childhood Development Program. ..... 175
East Boston Instructional Site ..... 23
Educational Opportunities ..... 36
Educational Records ..... 29
Education Concentration ..... 180
Elective Courses ..... 49
Electrical Engineering Transfer Option ..... 229
Electric Power Utility Technology Program ..... 150
Energy and Sustainability Management Certificate Program ..... 231
Engineering Transfer Option ..... 232
English Concentration ..... 100
English: Creative Writing Option ..... 102
Entrepreneurship Certificate Program. ..... 121
Entrepreneurship Option ..... 122
Environmental Science ..... 234
Equity and Inclusion .....  7
Everett High School Instructional Site. ..... 23
Excel Applications Support Specialist Certificate Program151
Faculty, Professional Staff and Administrators ..... 303
Federal Financial Aid Refund Policy ..... 17
Final Examination Schedule. ..... 21
Finance Option ..... 124
Financial Aid and Scholarships ..... 16
Financial Aid Application Process: FAFSA ..... 17
Financial Aid General Eligibility Requirements ..... 16
Financial Aid Office ..... 16
Financial Aid Policies ..... 17
Fire Protection and Safety Certificate Program ..... 170
Fire Protection and Safety Program ..... 171
First Year Learning Community Requirement ..... 44
Food Services ..... 21
Freedom House Instructional Site in Dorchester ..... 23
Fresh Start Policy ..... 27
Gaming/Computer Artist Track Simulation Option ..... 159
Gaming/Computer Programming Track Simulation Option. ..... 161
General Education Elective ..... 45
General Education Program ..... 44
General Education Requirements ..... 43
General Sonography Option ..... 79
Global Language Concentration ..... 105
Grading and Notation System ..... 30
Graduation and Alumni
Engagement ..... 31
Graduation Information ..... 31
Graduation with Honors ..... 31
Grants ..... 18
Guest Students (Non-Matriculating or Non-Degree Students) ..... 15
Guidelines Concerning Sexual Violence ..... 10
Halting Oppressive Pathways through Education (HOPE) ... .....  8
Handshake ..... 35
Hazing .....  11
H-Building - Charlestown Campus ..... 23
Health Information Certificate Program ..... 152
Health Services ..... 41
High School Articulation Agreements and Curricular Alignment ..... 38
History Concentration ..... 55
Homeschooling Policy ..... 15
Hotel and Restaurant Management Certificate Program ..... 187
Hotel and Restaurant Management Option ..... 188
Human Services Program ..... 60
Immunization. ..... 15
Independent Learning Contracts ..... 37
Information Technology Transfer Option. ..... 155
Institutional Learning Outcomes (ILOs). ..... 7
Institutional Policy Statements ..... 9
Institutional Values ..... 7
Integrated Media Design Option ..... 200
International Admissions ..... 14
International Center ..... 41
Internships ..... 35
Internships and Career Development ..... 35
Laboratories ..... 22
Language Lab ..... 39
Liberal Arts ..... 108
Library \& Learning Commons ..... 39
Lifemap ..... 32
Magnetic Resonance (MR) Certificate Program ..... 82
Malden Satellite ..... 22,23
Mammography Certificate Program ..... 83
Management of Assisted Living and Institutional Facilities ..... 190
Management Option ..... 126
MA Residency Tuition ..... 19
Massachusetts Board of Higher Education. ..... 5
Massachusetts Distributive Education Clubs of America (DECA) ..... 38
MassTransfer ..... 34
Mathematics Concentration ..... 239
MathSpace ..... 39
Medical Assistant Certificate ..... 131
Medical Assistant Certificate Program ..... 64
Medical Information Management Option. ..... 128
Medical Interpreting Certificate Program ..... 66
Medical Laboratory Assistant Certificate Program ..... 84
Medical Laboratory Technician Program. ..... 241
Medical Radiography Full-time Option. ..... 86
Medical Radiography Part-time Option ..... 88
Meeting and Event Planning Certificate Program. ..... 192
Meeting and Event Planning Option ..... 193
Message from the President ..... 1
Microsoft Applicaitons Support Specialist Certificate Program ..... 133
Midterm Warning Grades ..... 30
Mission of Bunker Hill Community College ..... 6
Mission of the Massachusetts Community Colleges ..... 6
Mission of the Massachusetts of Public Higher Education ... 6 Moble App Starter CertificateApple. ..... 227
Music Concentration ..... 110
Network Technology and Administration Option ..... 157
Object Oriented Computer Programming and Design Certificate Program. ..... 228
Office of Community Engagement ..... 37
Open Educational Resources (OER). ..... 19
Outstanding Financial Obligations ..... 19
Pao Arts Center in Chinatown Instructional Site ..... 23
Paralegal Studies Certificate Program ..... 196
Paralegal Studies Program. ..... 198
Paramedic ..... 68
Paramedic Certificate Program ..... 69
Paramedic Studies Program ..... 71
Parking and Security ..... 23
Partnerships with Secondary Schools ..... 38
Pastry Arts Certificate Program ..... 195
Patient Care Technician Certificate Program ..... 67
Payments ..... 19
PC Hardware Support Specialist Certificate Program ..... 158
Pharmacy Technician Certificate Program ..... 93
Physics Concentration ..... 237
Placement Testing and Assessment. ..... 35
Political Science Concentration ..... 57
Priority Deadlines for Financial Aid ..... 17
Prior Learning Assessment (PLA) ..... 37
Professional Human Services Work Certificate Program ..... 62
Program Advisory Committees ..... 300
Program Changes ..... 30
Psychology Concentration ..... 50
Quantitative Problem Solving ..... 45
Reactivation Policy ..... 24
Readmission Policy ..... 24
Refund Policy ..... 20
Registered Nursing Program: Day/Alternative Options ..... 91
Repeat Course Policy ..... 30
Research Writing ..... 45
Satellites and Instructional Sites ..... 22
Satisfactory Academic Progress for Financial Aid ..... 17
Satisfactory Academic Progress Policy ..... 28
Scholarships and Awards ..... 18
Scientific Reasoning. ..... 45
Second and Subsequent Degrees ..... 31
Sexual Harassment Guidelines ..... 10
Single Stop ..... 41
Sociology Concentration ..... 53
South End Satellite ..... 22, 23
Sport Management Certificate Program ..... 134
Sport Management Option ..... 135
Statement on Inclusion. .....  8
Student Access and Success Center (SASC) ..... 22
Student Activities, Clubs and Organizations ..... 41
Student Affairs and Student Programs ..... 40
Student Central: Financial Aid, Student Payment and Academic Records ..... 16
Student Comprehensive Health Insurance Plan ..... 20
Student Handbook ..... 42
Student Learning Outcomes Assessment Program (SLOAP) ..... 7
Student Right-to-Know Graduation Rate ..... 30
Student Services and Support ..... 22
Student Success Program (TRiO) ..... 38
Studio Arts Option ..... 203
Study Abroad ..... 42
Summer Transition Program ..... 38
Support Staff ..... 312
Surgical Technology Certificate Program ..... 95
System and Institutional Mission,
Vision and Values Statements ..... 6
System-Wide Student Policies ..... 11
Table of Contents ..... 3
Test of Essential Academic Skills (TEAS ..... 32
Theatre Concentration ..... 113
The Bunker Hill Community College Alumni Association ..... 31
The Bunker Hill Community College Foundation, Inc ..... 31
The Commonwealth Honors Program at BHCC ..... 36
The Family Educational Rights and Privacy Act (FERPA) ..... 29
The Mary L. Fifield Art Gallery ..... 8
The Mary L. Fifield Endowed Student Emergency Assistance Fund ..... 42
The Writing Place ..... 40
Transfer and Articulation Information for Baccalaureate Programs ..... 34
Transfer Appeal Process ..... 33
Transfer In ..... 33
Transfer Out ..... 33
Transfer Services ..... 33
Tuition \& Fees ..... 18
Tuition Waivers ..... 19
Tutoring and Academic Support Center (TASC) ..... 40
Undocumented Students ..... 8
Unofficial Withdrawals ..... 17
Valor Act Credit Evaluation Policy ..... 16
Veterans Center ..... 42
Virtual LGBTOIA+ Center at BHCC ..... 42
Vision of Bunker Hill Community College ..... 7
Visual Design Option ..... 205
Web Development Certificate ..... 163
Web Development Option ..... 164
Withdrawal from a Course ..... 27
Withdrawal from the Semester or the College ..... 27
Withdrawal/Graduation ..... 17
Workforce and Community Education ..... 38
Work Study Program ..... 18
World Studies Emphasis Certification ..... 44


## Bunker Hill

 Community Collegeimagine the possibilities

## Charlestown Campus

250 New Rutherford Avenue
Boston, MA 02129
617-228-2000
TTY 617-242-2365
bhcc.edu

Chelsea Campus
70 Everett Avenue
Chelsea, MA 02150
617-228-2101
TTY 617-884-3293

## Connect with Us!

@bhccboston


Satellites: Malden • South End | Instructional Sites: Chinatown • East Boston • Everett • Dorchester • Quincy | online


[^0]:    * Costs are estimated and subject to change. Please refer to Admissions and Enrollment Services for exact cost.

    Note: A college physics course, with a grade of C or better, is required for accepted General Sonography or Cardiac Sonography students. For accepted Sonography students, MIG111, Imaging Technology I (web-based), will be offered in the summer prior to the start of the program.

[^1]:    Semester 4 Advising Note

    - Apply for graduation

    Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time. $\leqslant$ This course has pre/co-requisites.
    Advising note or suggestion regarding this course. This course satisfies General Education requirement.

