# **BUNKER HILL COMMUNITY COLLEGE**



# 2011-2012 CATALOG









#### Welcome to Bunker Hill Community College.

There are so many different ways to learn, access knowledge or find information today – through your iPhone, your laptop, Facebook, Twitter and more. The new technology seems to offer every bit of information you could need. So why take the time and make the effort to enroll in Bunker Hill Community College?

The answer is complex because there are **so many reasons** for you to learn here with us. For instance, at BHCC you are surrounded by students from more than 95 countries. You hear more than 75 different languages every day. In fact, when some students arrive from the Community College T stop and enter our main lobby for the first time and see flags representing our students' home countries, they say it feels like the United Nations. That is an education in itself. Come here and you'll never see the world the same way again.

You will never think about the environment in the same way either, nor will you lack opportunities to volunteer to contribute to community causes both here in our local communities and abroad. Our initiatives to promote sustainability recently resulted in a national award, and

we've also been acknowledged by national and statewide organizations for everything from our community service programs, to our high-demand offerings in fields such as biotechnology and healthcare, to our long-term commitment to diversity.

Our classrooms feature the latest technology and you can also learn online right from home. Our courses prepare you for jobs in the fastest growing fields of today's economy. We offer numerous IT programs, with courses including computer gaming, iPhone app development and computer forensics. Graduates of our nursing and other healthcare programs such as sonography, respiratory therapy and computed tomography staff many of Greater Boston's hospitals and health clinics. Partnerships with business translate into apprenticeships and summer internships. New ideas can become new companies for students in our entrepreneurship program. We offer courses in video production, psychiatric rehabilitation, energy and the environment, financial management, advertising, early childhood education, microbiology, hazardous materials, engineering, and comparative governments, not to mention culinary arts courses that could lead you to a career as a master chef.

As important as the academic programs we offer is how we teach classes and how you will learn at BHCC. Many of our courses don't look or feel like those you took in high school or at other colleges in the past. For instance, in our "learning communities," students work in teams with other students, and the professor is more like a coach than a traditional teacher. The atmosphere is friendly and supportive and the course is focused on you, the student, as much as on what you are learning. In some learning communities you take two or three different courses that are linked together by a common theme, so you get a chance to see the connections between fields of study, and you can apply what you learn in one course to the assignments you receive in another.

All of that is inside of the classroom, but at our College, learning takes place outside of the classroom, too. Many of the professors you will encounter here are noted authors and practitioners whose wide-ranging expertise enriches the learning environment. Our Compelling Conversations speaker series has brought award-winning celebrities such as journalist Bob Woodward, women's rights activist Gloria Steinem and news analyst Juan Williams to the College to share their experiences and meet with students in class. Gallery exhibits provide opportunities for you to get to know working artists. Clubs and organizations as diverse as BHCC itself challenge you to pursue and expand your interests.

All of this is with one goal in mind. We want to involve you in your education. We want to help you finish what you start. We want you to meet your goals. We want you to walk across the stage at Commencement one day soon, pick up your degree or certificate, and transfer to a four-year institution or secure a job in your field of interest. As the new academic year gets under way, I personally welcome you to Bunker Hill Community College. Have a great year.

Mary L. Fifield Ph.D.

President



# BHCC Goals 2010 - 2013

# Create Pathways and Partnerships to Promote Student Success

BHCC will strengthen and coordinate public and private sector pathways and partnerships leading to college readiness; student internships; dual enrollment; mentoring; career opportunities; practica, civic engagement and learning communities.

# **Demonstrate Strength through Diversity**

BHCC will demonstrate the value of diversity by modeling successful college initiatives; collaborating with public and private sectors to expand diversity interests; strengthening college hiring, promotion and retention practices; and closing achievement gaps among all student populations.

# Develop and Cultivate College-wide Sustainability Initiatives

BHCC will raise institutional and individual awareness of and commitment to the responsible use of natural resources.

# **Expand Technology throughout the College**

BHCC will provide software, hardware, infrastructure, social networking, internet, multimedia, repository, and other extended technology resources required to maintain institutional excellence and increase student success.

# Foster Wellness, Growth and Lifelong Learning

BHCC will address the holistic needs of the college community by expanding student support interventions and strategies, and by increasing faculty and staff professional development.

# **Identify and Close Workforce Gaps**

BHCC will design and align curricula to meet current and future high-demand employer needs.

# Institute a Culture of Evidence and Accountability

BHCC will collect, analyze and use data for assessment of academic programs, non-academic departments, and college-wide decision making.



2011 - 2012 College Catalog



# **BHCC Board of Trustees**



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\* as of July 2011



# 2011 - 2012 Academic Calendar

2011 - 2012 College Catalog



# **Table of Contents**

Message from the President1BHCC Goals2BHCC Board of Trustees3Massachusetts Department of Higher Education3Academic Calendar4DHE and Massachusetts Community College Mission Statements7Mission of BHCC and Vision of BHCC7Statement on Inclusion, Institutional Values and Statement on Civility8College Profile9Chelsea Campus10Satellite Locations12
Admissions and Registration
Admissions and Registration
Transfer Programs
Partnerships with Secondary Schools
Cost of Attendance 20 Financial Aid 23
Scholarships and Awards 26
Production of the control of the con
Academic Information Academic Advising and Assessment
Graduation Information
Academic Resources and Support  Academic Resources and Support
Alternative Learning
Distance Education
Weekend College
Midnight Courses
Academic Policy and Procedure
Academic Policy and Procedure
Grading and Notation System

Satisfactory Academic Progress	
Academic and Student Services	
Academic and Student Services	
General Services	
Student Activities and Athletics	49
BHCC Learning Communities  Commonwealth Honors Program and Community Engagement	
	J1
Programs of Study	
Programs of Study	52
Directory of Associate Degree and Certificate Programs	54
Course Descriptions	
Course Descriptions	
	159
Course Descriptions  Community and College Resources Boston Welcome Back Center	211
Course Descriptions  Community and College Resources  Boston Welcome Back Center  Workforce Development Center  ACT Center	
Community and College Resources Boston Welcome Back Center	
Community and College Resources Boston Welcome Back Center	
Community and College Resources Boston Welcome Back Center	
Community and College Resources  Boston Welcome Back Center	
Community and College Resources Boston Welcome Back Center	

The College reserves the right to make changes at any time with respect to course offerings, degree and program requirements.

Addendums will be made to the online version of this catalog so that students may have access to the most current and up-to-date information.



www.bhcc.mass.edu

CHARLESTOWN CAMPUS	250 New Rutherford Ave., Boston, MA 02129 • Telephone: 617-228-2000
CHELSEA CAMPUS	175 Hawthorne Street, Bellingham Sq., Chelsea, MA 02150 • Telephone: 617-228-210
EAST BOSTON SATELLITE	East Boston Neighborhood Health Center, 155 Addison Street, East Boston, MA 02128 • Telephone: 617-568-6444
MALDEN SATELLITE	Malden High School, 77 Salem Street, Malden, MA 02148 • Telephone: 617-228-2403
SOMERVILLE SATELLITE	Mystic Activity Center, 530 Mystic Ave., Somerville, MA 02145 • Telephone: 617-228-210
SOUTH END SATELLITE	B.A./Villa Victoria, 405 Shawmut Avenue, Boston, MA 02118 • Telephone: 617-228-240

General Education Requirements fold-out section

CHARLESTOWN & SATELLITE TTY: 617-228-2051 • CHELSEA TTY: 617-228-3377







# **Bunker Hill Community College Institutional Mission**

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 System 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 post-secondary 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 is a public institution of higher education offering programs and courses of study including Arts and Sciences, nursing and allied health, domestic and international business, hospitality and culinary arts, early childhood education and human services, criminal justice and computer applications.

The College supports open access to post-secondary education by providing a range of educational opportunities that include distance learning, self-directed learning, and an Honors Program. The College offers an entry-level assessment program for new incoming students, a sound foundation in developmental studies, and for non-native English speaking students, a variety of levels of English as a Second Language (ESL) instruction.

The student body reflects the diversity of the urban community and encouraging this diversity is an essential part of the College mission. The College seeks to become a national model for successfully incorporating the strengths of many cultures, ethnic backgrounds, age groups, and learning styles into the curricular and extracurricular life of the institution.

Bunker Hill Community College seeks to enhance its position as a primary educational and economic asset for the Commonwealth through cooperative planning and program implementation involving neighboring institutions of higher education, the public schools, community organizations, and area businesses and industries.

# Vision of Bunker Hill Community College

Bunker Hill Community College is a comprehensive, multi-campus urban community college that serves diverse educational needs and is enriched by our global community.

We are dedicated to a dynamic educational environment that is accessible to all and to a college that is invested in the social and economic well-being of its communities.

We believe in student-centered learning that draws upon the rich diversity of our students' life experiences and that uses strategies and technologies to maximize opportunities for reaching educational goals. We respect and value what each student brings to the College and celebrate learning as an interactive and reciprocal process.

Approved by the Board of Trustees, September 2000.



#### 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 Institutional Values**

The Bunker Hill Community College Board of Trustees adopted five institutional values for the College. The values were arrived at following several meetings and discussions among the trustees including two open sessions with faculty and staff.

Inspiring Excellence

- Encourage all faculty, staff, and students to rise above self-imposed limits.
- · Create partnerships to excel.
- Commit that all members of the community reach their potential.

#### Integrity

- · Do what we say we do.
- · Keep our word.
- Act responsibly, accountably, and ethically.
- · Do the right thing no matter what.
- Take personal responsibility for your actions and the outcomes of your actions.

#### Learning

- · Commit to forward growth and positive change for everyone.
- Provide tools for lifelong learning for students, employees, and the community.
- Provide opportunities to grow beyond current boundaries, both personally and professionally.

#### Respect

- · Value differences.
- · Treat everyone fairly.
- Give everyone an equal opportunity to be a participant.

#### Service

- Put students first: we train you, we teach you, we prepare you.
- · Meet student needs as well as those of the job market.
- Work together to improve our community.

### **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.



# **College Profile**

Bunker Hill Community College is a multi-campus urban institution. The Charlestown Campus is situated on 42 acres in the historic Charlestown section of Boston, Massachusetts. The College has a campus in Chelsea, Massachusetts, in the historic Old Post Office Building in Bellingham Square.

The College operates four satellite campuses in the greater Boston area located at the Education and Training Institute of the East Boston Neighborhood Health Center in East Boston, at Malden High School, at the Mystic Activity Center in Somerville, and at Inquilinos Boricuas en Acción (I.B.A.)/Villa Victoria in Boston's South End.

Founded in 1973, BHCC enrolls approximately 13,000 students in day, afternoon, evening, late-evening, midnight, weekend, and web-based and distance-learning courses and programs each semester. The College is internationally recognized for the development of individualized and alternative methods of instruction. The College is a leader in the application of distance-learning technologies and computer-based methodologies that enhance and strengthen the learning environment.

BHCC is the largest community college in Massachusetts. The average age of students is 27. More than half of BHCC's students are women and 63 percent are persons of color. The majority work full or part time while attending college. Approximately 35 percent of BHCC's students reside in the city of Boston and 81 percent live within 10 miles of the College campuses.

Bunker Hill Community College incorporates multicultural and international perspectives in its courses, programs and institutional climate. With some 734 international students from more than 95 countries speaking 75 different languages, BHCC is one of the most diverse and cosmopolitan colleges in New England. The College has one of the state's largest course offerings in English as a Second Language. A representative list of the native languages spoken by students includes Russian, Vietnamese, Haitian Creole, Spanish, Portuguese, Chinese, Arabic and Italian.

The College offers associate degree programs as well as certificate programs in a wide variety of technical fields. These academic and technical programs respond to the workforce needs of the local and regional economy. BHCC's degree and certificate programs prepare students for job placement, career advancement and/or transfer to four-year colleges and universities.







# **Chelsea Campus**

The Chelsea Campus of Bunker Hill Community College is situated in an historically renovated facility at 175 Hawthorne Street in Bellingham Square. Providing higher education and job training opportunities to residents of Chelsea, Revere, Everett, East Boston, Malden and Winthrop, the campus is actively involved in the community through partnerships with local human service agencies, the City of Chelsea and the Chelsea Public Schools.

Several MBTA bus lines stop directly outside the front door of the campus, making it easily accessible by public transportation. The College also provides free shuttle service between the Charlestown and Chelsea campuses. Day students may park in metered spaces on streets adjacent to Bellingham Square. Beginning at 5:30 each weekday evening, students may take advantage of free parking at a city lot that is located at the corner of 5th and Chestnut Streets. For directions and more detailed information about public transportation, see Directions to BHCC Campuses at the back of this catalog or visit the Chelsea Campus page of the College website at www.bhcc.mass.edu/chelseadirections.

All Allied Health certificate programs, including medical assistant, patient care technician, medical coding, central processing, surgical technology, and emergency medical technician (EMT) are based in Chelsea. The Chelsea Campus has a focus on laboratory science in biology, offering sections of Human Biology and Anatomy & Physiology I and II. The selection of day and evening courses leading to College degree and certificate programs available at the Chelsea campus includes sections in accounting, business, computers, economics, English, English as a Second Language (ESL), history, mathematics, philosophy and psychology. Chelsea is also home to the College's Adult Basic Education (ABE) program and GED Spanish, funded by the Massachusetts Department of Elementary and Secondary Education.

# **Chelsea Campus Center for Student Access and Success**

The Chelsea Campus Center for Student Access and Success is the hub of all student services offered at the Chelsea Campus. Through this Center, students may register and pay for courses, complete course placement assessments (Accuplacer and LOEP), and access advising and academic support services. The Center offers tutoring in mathematics, English, and biology. Tutoring in other academic areas is also available by arrangement. The Center also offers student achievement workshops in career exploration, goal setting, time management, learning styles, note-taking strategies, study skills, and test-taking skills. For additional information, visit the Center in Room 202 or call 617-228-3356.





10 2011 - 2012 College Catalog



The Education Resource Institute (TERI), located in the Chelsea Campus Center for Student Access and Success, is a partner with the Chelsea Campus in the delivery of educational outreach programming for low-income and first generation students, promoting access to college and assistance with the federal financial aid process. For more information on services provided by TERI, call 617-228-3358 or 617-536-0200.

#### **Student Activities**

The rich cultural diversity of the student population is celebrated by a variety of activities that are held throughout the year. Students have the opportunity to participate in college committees, student clubs, the Student Government Association, and the Chelsea Campus Council, which is a forum for students, faculty and staff to contribute to the development and growth of the Chelsea Campus.

#### Library

The College Library maintains a partnership with the Chelsea Public Library to deliver campus library services. With a valid College ID, students may access all of the library's services and resources. Through the BHCC-Chelsea Library Partnership, the College has access to additional classroom space and BHCC provides and maintains computers that are located at the library for student use. The Chelsea Public Library is located in Bellingham Square, at 569 Broadway. For hours of operation, call 617-228-2101 or 617-466-4350.

# **Technology**

Chelsea Campus computer facilities include two computer classrooms, seven smart classrooms, and an Academic Computing Center that supports online tutoring. Chelsea Campus technology supports students enrolled in computer-intensive courses and provides supplemental resources to students enrolled in other courses. Assistive technology, including the Kurzweil Reading System that assists students who are vision-impaired or who have reading and related learning disabilities, is available through the Academic Computing Center. For more information call 617-228-3355.

#### **Child Care**

Through a contract with The Child Focus Center, on-site toddler and preschool childcare is available to children of students, faculty and staff. The Chelsea Child Focus Center is open Monday through Friday. Children from 15 months to 5 years old qualify for available part-time and full-time programs. The Child Focus Center is licensed by the Massachusetts Department of Early Education and Care and accredited by the National Association for the Education of Young Children (NAEYC). For more information about the Child Focus Center call 617-228-3374.

#### **Chelsea Campus Facilities**

The Campus Bookstore opens for select days during the first two weeks of each semester, offering textbooks for courses that are delivered at the Chelsea Campus. Days and times will be posted around the campus or ask at the front desk.

The Chelsea Campus Student Lounge is located on the first floor in the rear of the campus building. The student lounge offers vending, snack and beverage machines, access to copying services, television, and a comfortable setting with tables and chairs at which students may take a quick meal break between classes.

The Chelsea Campus Community Room, which comfortably accommodates up to 100 people, provides space for student activities and programs, faculty and staff development workshops, conferences and meetings. Guest speakers, artists and performers are featured in campus-sponsored special events that are held throughout the year in the Community Room. The Community Room may also be rented by outside groups and organizations. For rental fees and associated costs, please contact 617-228-3340.

The Health Skills Laboratory offers a simulated setting in which students enrolled in Allied Health programs learn necessary clinical skills.

Two Science Laboratories provide equipment and materials for students enrolled in lab courses delivered at the Chelsea Campus including biology, environmental science and nutrition.





# **Satellite Locations**



Bunker Hill Community College offers courses at satellite locations, each intended to serve the distinct needs and interests of the host community. The curricula available at the satellites allow students to begin work on associate degree or certificate programs. Courses may include foundation courses that fulfill general education requirements for degrees and certificates as well as courses in response to community interest, such as offerings in business, accounting and computer technology. For a complete listing of current course offerings and schedules each semester, see the current course schedule booklet, visit www.bhcc.mass.edu/satellites or call the Registrar's Office at 617-228-2403. Directions to all satellite locations are at the back of this catalog.

#### **East Boston Satellite**

The East Boston Satellite is located at the Education and Training Institute of the East Boston Neighborhood Health Center, 155 Addison Street, East Boston. Opened in the spring of 2007, the East Boston Satellite offers introductory courses in the evening during the fall, spring and summer semesters. This satellite offers a range of student services prior to each semester, including on-site registration and payment, placement testing, academic advising and information on federal financial aid. For more information call 617-568-6444 or email training@ebnhc.org.

#### 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 evening during the fall and spring semesters. Placement testing, advising and registration for these courses are conducted on the BHCC Charlestown Campus. Refer to the current course schedule for a list of courses. Malden High School is accessible from the Orange Line, Malden Center transit station.

#### Somerville Satellite

The Somerville Satellite is located at the Mystic Activity Center, 530 Mystic Avenue, Somerville. The Somerville Satellite offers evening classes, including introductory and foundation courses leading to completion of requirements for degrees and certificates, during the fall and spring semesters. For information regarding placement testing, advising, assistance with the college application and federal financial aid processes, and registration and payment, call the BHCC Chelsea Campus at 617-228-2101.

#### South End Satellite

Bunker Hill Community College has established a satellite located at 405 Shawmut Avenue in the South End of Boston in partnership with Inquilinos Boricuas En Acción (IBA). BHCC's South End Satellite 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 affordable-housing community. The South End Satellite Campus provides residents of the South End and Lower Roxbury with the opportunity to complete their GED, to take adult education (ESL, Basic English and Math) classes, and to enroll in college-level classes. Free child care services and training in life skills and job readiness are also available. Prior to the beginning of each semester, the Satellite offers a range of student services including academic support, case management, financial aid assistance, academic advising, and admissions and enrollment information. This Satellite recently expanded to a second location serving South End and Lower Roxbury residents ages 16 – 24 who need their GED, life skills, and job readiness training.

2011 - 2012 College Catalog



# **Admissions and Registration**

#### Admission

Bunker Hill Community College is committed to an open admission policy. This policy offers the opportunity to enroll to those who have earned a high school diploma, a GED or an associate degree or higher and who express a desire to pursue a college education. 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." Students who do not choose this option are referred to as "non-degree-seeking students." Students are expected to be able to perform college-level work and to conduct themselves in a manner appropriate for college students. In cases where tests or other indicators suggest the contrary, the College reserves the right to deny admission. 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.

#### **Ability to Benefit Policy Statement**

Students who supply the College with documentation of successful completion of their high school course requirements for the Commonwealth of Massachusetts, but who have not passed the MCAS test nor received a GED, may apply for admission to a BHCC degree-granting program (matriculation) through the Ability to Benefit policy. Students who did not complete high school either in the U. S. or abroad are also eligible to apply for admission to a BHCC degree-granting program (matriculation) through the Ability to Benefit policy. Students interested in taking advantage of this policy may do so by following this procedure:

Upon submitting an application for admission, applicants will be required to take an Ability to Benefit assessment test. Applicants achieving the minimum score as established by the U.S. Department of Education (for Accuplacer - Reading: 55; Sentence Skills: 60; Arithmetic: 34) will be admitted to BHCC and will be permitted to apply for financial aid. Students enrolled in an ESL or Bilingual program at the time of graduation may take the ESL CELSA test for Ability to Benefit. Students passing the CELSA are eligible to apply for financial aid and enroll in ESL classes.

# **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 prescribe 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.

#### **Homeschooling Policy**

Homeschooled students without a high school diploma 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. If a homeschooled student has not completed an approved homeschool program, then the student will not be eligible to enroll in a degree or certificate program until he/she has taken and passed an Ability to Benefit assessment test.

Homeschooled students who wish to apply for admission to a degree or certificate program must submit with their admissions application evidence that their homeschool program was approved by their school district's superintendent or school committee. Additionally, if the homeschooled student is under the age of compulsory attendance, which is 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 homeschooled if the student has completed his/her homeschool program before the age of 16.

The College reserves the right to limit or deny enrollment of any student under the age of 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.

# Non-Degree Students

To enroll in classes as a non-degree student, students should refer to the appropriate course schedule booklet available at the Admissions and Registration Desk, Room B203, Charlestown Campus, or online at www.bhcc.mass.edu, or call the Registrar's Office at 617-228-2403 for registration dates. All students who wish to register for a math or English course or a course with a math, English or reading prerequisite, may be required to take the computerized placement tests (CPTs) prior to registration, or bring appropriate transcripts. All students who wish to register for an ESL course may be required to take the ESL placement test prior to registration. The tests determine the levels at which students begin their studies.



#### Re-admission of Degree- and Certificate-seeking Students

Students who are readmitted after an absence of two or more consecutive semesters must follow the catalog and curriculum year requirements for their degree or certificate programs in effect at the beginning of the semester of their re-enrollment. Students applying for re-admission to nursing and allied health degree or certificate programs must meet with the appropriate academic dean, chairperson or program director prior to re-admission. Students who wish to be readmitted to the College may do so without submitting an application if they reapply within two semesters of the date of withdrawal.

However, students who meet either of the following conditions must submit a new application form and may need to submit another copy of their high school diploma or GED certificate for re-admission to the College:

- 1. A degree-seeking (matriculated) student who has been academically suspended from the College.
- A degree-seeking (matriculated) student who has graduated from a degree or certificate program.

#### **Fresh Start Policy**

Under the Fresh Start Policy, students may enroll without having 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.
- 2. The credits held by the student must be at least five years old. No credits shall have been earned or attempted at BHCC within the past five years.
- 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 credits subsequently taken at BHCC are counted in the GPA. Likewise, only the completion rate subsequent to the return 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 may be 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.

#### **Midyear Admission**

Bunker Hill Community College admits students to most programs at midyear on a space-available basis. Students can begin courses in the spring semester; however, some courses listed in the catalog may not be available to midyear entrants. The College cannot assure the availability of specific courses.

Many programs contain courses that have prerequisites. Because prerequisites are not waived for students admitted at midyear, the number of semesters necessary to complete degree requirements may increase.

#### **Curriculum Year/Program Requirements**

The term "curriculum year" refers to the academic year in which students are admitted to the College. Students must fulfill the program requirements listed in the College Catalog in effect for their curriculum year. When students are readmitted to the College after an absence of two or more consecutive semesters, they must fulfill the curriculum year/program requirements in effect at the beginning of the semester of re-admission. Students changing their program must fulfill the curriculum year program requirements in effect at the beginning of the semester following the date of the change.

#### **Immunization**

Massachusetts General Laws, Chapter 76, Section 15C, require that all full-time students (enrolled in 12 or more credits) and all students (full- and part-time) enrolled in health career programs present evidence of immunity to measles, mumps, rubella, diphtheria, tetanus and three doses of hepatitis B vaccine. Students in the health career programs also must present evidence of immunity to varicella and Mantoux testing for tuberculosis. For measles, mumps, rubella and hepatitis B, serologic proof of immunity is acceptable.

Students who fail to present the required information within 30 days of the date of registration are not allowed to register for subsequent semesters or receive final grades until the immunization form is received by the Admissions and Registration Desk, Room B203, Charlestown Campus. Immunization forms become part of the student's permanent file and cannot be copied, transferred or returned.

# Criminal Offender Record Information and Sex Offender Registry Information Checks

In order 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 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 Criminal History Systems Board, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access CORI records. The College shall refer to regulations issued by the Commonwealth's Executive Office of Health and Human Services, 101 Code of Massachusetts Regulations 15.00-15.16, as guidance when assessing student CORI records. 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. Accordingly, in order 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 Campus Police Department, located in Room E127 on the Charlestown Campus.

If you have any questions regarding access to this type of information, please feel free to contact the College's Chief of Police/Security, located in Room E127 on the Charlestown Campus

# **Transfer Applicants from Other Institutions**

Students who have attended another college may apply for transfer credit. After acceptance to the College, students must make sure that official transcripts from all colleges attended are sent directly to the Admissions Office. The College may award credit for courses completed successfully at other colleges if the courses are comparable to those offered at Bunker Hill Community College. Credits earned at colleges that follow a quarter-system are converted to semester-hour equivalents, resulting in an adjustment to the number of credits transferred.

The College awards transfer credit when a grade of C or better is earned from a regionally-accredited college or university and the courses are comparable to those offered at BHCC.

A grade of P may be accepted as general elective credit only if the student can demonstrate that the P grade is equivalent to a grade of C or higher. The College will accept a maximum of 45 transfer credits toward the Bunker Hill Community College associate degree and 75 percent of the total number of credits required for certificate programs. Once transfer credits are awarded, courses transferred become part of the student's permanent record.

#### **International Student Admissions Process**

International students who wish to attend Bunker Hill Community College on a student F-1 visa must have completed their secondary education and must demonstrate proficiency in English, if English is not their first language. International applicants from outside the United States must submit all required application materials to the International Center by July 15 for the September semester, November 30 for the January semester and April 21 for the summer term. International applicants currently within the United States must submit all required application materials by August 15 for the next September semester, January 2 for the next January semester and May 15 for the summer term.

A student whose first language is not English and who is applying from overseas must take the Test of English as a Foreign Language (TOEFL). Test scores more than two years old are not accepted. Information and application forms can be obtained by visiting the TOEFL website at www.toefl.org.

If applying to Bunker Hill Community College from within the United States, applicants who are unable to provide a TOEFL score must take the College Placement Test at the BHCC Assessment Center, Room B118, Charlestown Campus. Students can obtain more information by calling 617-228-2468.

The U.S. Department of Justice, Immigration and Naturalization Service, authorizes Bunker Hill Community College to provide I-20 forms, which are needed to apply for student F-1 visas, to international students who are admitted to the College. In addition to satisfying admission requirements, students must provide evidence of their financial ability to support their educational and living expenses while in the United States. Specifically, students must provide a completed affidavit of support and an official bank statement that shows evidence of sufficient funds to cover educational and living expenses for the first year (\$19,500).

F-1 visa students must register and complete at least 12 credits (full-time) for fall and spring semesters, except in the semester of graduation where the student may be eligible to enroll into less than 12 credits. However, during the semester, if F-1 visa students need to withdraw from any of their classes the student must get an authorization from an International Student Advisor BEFORE withdrawing from class. Further, F-1 visa students are eligible to enroll in only one online or distance education class per semester.

International applicants may obtain more detailed information concerning the admission process by contacting the International Center at 617-228-2460 or via email at international@bhcc.mass.edu. Financial aid is not available to international students. Lack of sufficient funds may result in an interruption in enrollment at the College that will jeopardize the student's eligibility to remain in the United States on a student visa.

Once admitted, international students receive orientation and other support services through the International Center. See page 46 for more information.



# **Transfer Programs**

#### MassTransfer

MassTransfer provides a broad population of students with straightforward and understandable options toward the completion of associate and baccalaureate degrees, clearing the way for student access and student success in Massachusetts' public higher education system.

MassTransfer has two main purposes:

- to provide community college students who complete designated associate
  degrees under MassTransfer with the benefits of the full transfer and
  applicability of credit, guaranteed admission, and a tuition discount (each
  benefit based on the student's final grade point average) to linked
  baccalaureate programs; and
- to provide any student in the Massachusetts public higher education system
  the intermediate goal of completing a portable transfer block ("MassTransfer
  Block") which satisfies general education/distribution/core requirements
  across institutions (with the receiving institution able to add no more than six
  additional credits/two courses).

The MassTransfer policy for community college students who complete designated associate degrees will apply to students who matriculate in or after fall 2009 at a Massachusetts community college. Community college students who matriculated prior to fall 2009 and who participate in the Commonwealth Transfer Compact and/or Joint Admissions Program will be required to complete their associate degrees by August 2013 and must matriculate at a Massachusetts state college or University of Massachusetts campus by fall 2014.

MassTransfer integrates and replaces the Commonwealth Transfer Compact, Joint Admissions, and the Tuition Advantage Program.

#### MassTransfer Block

MassTransfer provides students in Massachusetts public higher education the intermediate goal of completing a portable transfer block, MassTransfer Block, which satisfies general education/distribution/core requirements across institutions. Students may complete the MassTransfer Block of 34 credits without earning a degree and utilize the benefits of MassTransfer as long as they have a 2.0 or higher G.P.A.

#### MassTransfer Block:

English Composition/Writing 6 credits
Behavioral and Social Sciences 9 credits
Humanities and/or Fine Arts 9 credits

Natural or Physical Science 7 credits (1 credit must include a Lab)

Mathematics/Quantitative Reasoning 3 credits Total Credits 34 credits

Students with a 2.0 G.P.A. or greater will satisfy the general education requirements at the receiving institution, with the receiving institution able to add no more than 6

additional credits or 2 courses, if the student is admitted for transfer. Students enrolling in a baccalaureate program requiring a higher grade point average or specific courses for completion of the degree may be required to complete additional courses or G.P.A requirements. Completion of the MassTransfer Block does not guarantee admission to the college or university.

The MassTransfer policy for any student in the Massachusetts public higher education system who completes the MassTransfer Block will apply beginning fall 2010, regardless of initial date of enrollment. Transfer Counselors are available in the Admissions Office, Room B202, Charlestown Campus, or call 617-228-3398. For more detail see the MassTransfer chart on the following page.

More detailed information regarding MassTransfer and eligible programs at Bunker Hill Community College can be found at the official MassTransfer website www.mass.edu/masstransfer/.

#### **Early Childhood Education Transfer Compact**

The statewide Early Childhood Education Transfer Compact enables students to transfer associate degree credit from Early Childhood Education programs to the same programs at specific four-year state colleges and the University of Massachusetts. Students seeking Compact status should review the Compact carefully with a Transfer Counselor in the Admissions Office, Room B202, to make sure that the courses selected meet transfer requirements.

#### **Suffolk University Joint Admissions Program**

Bunker Hill Community College and Suffolk University participate in a Joint Admissions Agreement through which participating students are guaranteed admission to Suffolk University's College of Liberal Arts and Sciences or Sawyer Business School. In order to be eligible, students must graduate with a cumulative grade point average of 2.50 or higher from an approved Bunker Hill Community College academic program. Students receive specialized individual advising and support while studying at Bunker Hill Community College.

### Transfer and Articulation Information for Baccalaureate Programs

Bunker Hill Community College strives to ease the process by which our graduates transfer to four-year colleges and universities. As part of this goal, the College has worked with many four-year colleges and universities to develop formal and informal transfer agreements. The agreements are individually developed with the receiving institution and, as a consequence, are unique and are designed to provide information about the transferability of BHCC courses to the receiving institutions. Contact a Transfer Counselor in the Admissions Office, Room B202, or call 617-228-3398 for assistance in planning for transfer and in interpreting transfer agreements, as well as for a complete description of guarantees, requirements, benefits and limitations of the agreements. The charts on page 18 provide an overview of our current agreements.



# MassTransfer

Eligibility Guidelines	Additional Information
<ul> <li>A. Final Cumulative G.P. A. of 2.0 or Higher</li> <li>Waives the admissions application fee and essay</li> <li>Guarantees the full transfer of college-level credits, including "D" grades, applied to the degree requirements of the linked baccalaureate degree or school at the state college or University of Massachusetts</li> <li>Satisfies the general education requirements at the receiving institution with the receiving institution able to add no more than six additional credits / two courses in compliance with the New England Association of Schools and Colleges' Standards for Accreditation.</li> </ul>	<ul> <li>Students must complete an "Intent to Enroll" form at the Admissions and Registration Office.</li> <li>"Full transfer" ensures that a minimum of 60 credits must be transferred and applied to the linked baccalaureate program UNLESS:         <ul> <li>the student changes his or her major;</li> <li>the linked baccalaureate program requires a higher grade point average;</li> <li>specific courses for the major are required of native students.</li> </ul> </li> </ul>
<ul> <li>B. Final Cumulative G.P.A. of 2.5 or Higher</li> <li>Grants all of the benefits outlined in section A.</li> <li>Guarantees admission to the linked baccalaureate degree or school at a Massachusetts state college or University of Massachusetts campus.</li> </ul>	<ul> <li>Admission is guaranteed UNLESS:         <ul> <li>the linked baccalaureate program requires a higher grade point average;</li> <li>because of space or fiscal limitations the receiving institution does not admit all qualified applicants to a given major or program.</li> </ul> </li> <li>Students must be in good academic, fiscal and disciplinary standing with all previous institutions.</li> </ul>
C. Final Cumulative G.P.A. of 3.0 or Higher  • Grants all of the benefits outlined in both sections A and B.  • Guarantees a tuition waiver equal to 33% of the Massachusetts resident tuition rate at a state college or University campus for two years of undergraduate enrollment.	<ul> <li>Enrollment must be continuous at the state college or UMass campus;</li> <li>The student must earn a cumulative G.P.A. of 3.0 or higher for the first year of enrollment at the state college or UMass campus.</li> </ul>

2011 - 2012 College Catalog 17



# Articulation Agreements between Bunker Hill Community College and Other Academic Institutions

# **ASSOCIATE IN ARTS:**

#### A.A. Business

Emmanuel College - Business Administration; Suffolk University, Sawyer School of Management - Accounting, Computer Information Systems, Entrepreneurship, Finance, Interdisciplinary Business Studies, Management, Marketing; Westfield State University - Business Management/Management Concentration, Wentworth - Business Finance, International Business, Management, Entrepreneurship and Accounting

#### A.A. Education

Wheelock College - Early Childhood Education

#### A.A. General Concentration

Bridgewater State University - Liberal Arts/Elementary Education; Framingham State University - Liberal Arts; Suffolk University, College of Liberal Arts and Sciences

#### A.A. Mathematics

Merrimack College

#### A.A. Psychology

Suffolk University, College of Liberal Arts and Sciences - Psychology

### A.A. Sociology

Suffolk University, College of Liberal Arts and Sciences - Sociology

### **ASSOCIATE IN SCIENCE:**

### A.S. Biological Sciences

University of Massachusetts Amherst - Biology; University of Massachusetts Boston - Biology; University of Massachusetts Lowell - Biology; University of Massachusetts Dartmouth - Biology

### A.S. Business Administration: Accounting Option

Northeastern University; Salem State University; Suffolk University, Sawyer School of Management - Accounting

# A.S. Business Administration: Entrepreneurship Option

Suffolk University, Sawyer Business School - Entrepreneurship

# A.S. Business

Bentley

#### A.S. Business Administration: Finance Option

Suffolk University, Sawyer School of Management - Accounting, Computer Information Systems, Finance, Management, Marketing, Business Administration

#### A.S. Business Administration: International Business Option

Suffolk University, Sawyer School of Management - International Business

#### A.S. Business Administration: Management Option

Bentley; Northeastern University; Suffolk University, Sawyer School of Management - Accounting, Computer Information Systems, Finance, Management, Marketing, Business Administration

### A.S. Gaming/Computer Simulation

Becker College - Computer Game Development and Programming

# A.S. Computer Information Technology: Computer Science Transfer Option

Merrimack College; University of Massachusetts Boston - Computer Science

#### A.S. Criminal Justice

Salem State University; Springfield College; Suffolk University, College of Liberal Arts and Science - Sociology/Criminology and Law; University of Massachusetts Lowell

#### A.S. Early Childhood Development

Lesley University, Adult Learning Division - Human Development Major, Early Childhood Education Minor

## A.S. Early Childhood Education

Springfield College; Wheelock College

### A.S. Engineering

Merrimack College; University of Massachusetts Amherst - Engineering; University of Massachusetts Lowell - Civil and Mechanical Engineering

#### A.S. Human Services

Springfield College Boston Campus; Wheelock College - Early Childhood Education

## A.S. Nursing

Emmanuel College (online); Regis College; Salem State University; University of Massachusetts Boston (online); University of Massachusetts Lowell, School of Health and Environment



# **Partnerships with Secondary Schools**

### Kids to College

Kids to College is a partnership with Boston's King Middle School in conjunction with the Higher Education Information Center. Representatives from BHCC work with classes of sixth-grade students to prepare them in all facets of planning for and attending college. In addition to receiving classroom instruction, the students visit BHCC as part of their final class project. For more information, call the Admissions Office at 617-228-3398.

#### MCAS Preparation/Pathways to Success Program

The MCAS Preparation/Pathways to Success Program at BHCC provides MCAS preparation and college transitional assistance annually to over 150 Boston area students who have failed the MCAS. Instruction is tailored to individual needs for MCAS mathematics and English curricula. The program also familiarizes students interested in attending an institution of higher education with the college environment. The program operates three terms each academic year, each lasting 6-8 weeks, with approximately 60 students attending each term. The program has been funded by a grant from the DOE since 2002, and is administered through the Grant Management Office at BHCC. For more information, contact the MCAS Program Coordinator at 617-228-2289.

#### The Massachusetts Educational Opportunity Program (MEOP)

The Massachusetts Educational Opportunity Program (MEOP) is an intensive college preparation program held after school at the BHCC Charlestown Campus. MEOP offers a broad range of college prep, academic and life skills activities to highly motivated students from the Boston Public Schools who demonstrate economic need and/or who are the first in their family to enter college. Each academic year, 15 participants are recruited from grades 10-12 from Boston area high schools. Upon completion of their program, students do a presentation which is attended by BHCC staff. For more information, contact the MEOP Project Coordinator at 617-228-2063.

# The Secondary Postsecondary Career and Vocational Technical Education (CVTE) Linkage

The Secondary Postsecondary Career and Vocational Technical Education (CVTE) Linkage (formerly Tech Prep) is designed to encourage and aid students to enroll in and successfully complete a two year degree program, a certificate program, or a registered apprenticeship training program. The Metro Boston Consortium, which includes Bunker Hill and Roxbury Community Colleges and 17 area high schools, serves 1500-2000 students enrolled in career and technical programs. The Consortium provides activities and services including career planning, early college placement testing, articulation agreement credit, college and industry on-site visits, and hands-on workshops in career/vocational fields as well as workshops and conferences in science, technology, engineering and mathematics. For more information, contact the Consortium Coordinator at 617-228-2339.

# The Dual Enrollment Program

The Dual Enrollment Program at BHCC enables high school students from Boston area schools to earn high school and college credits simultaneously while gaining familiarity with the college

experience. The courses are taught on-site by BHCC faculty. The program coordinator provides students with advice on procedures for testing, enrollment and college expectations. The coordinator also provides academic and non-academic support for students throughout their time at the College. BHCC has provided institutional funding for the program since its inception in 2007. Additional funding is provided by a grant from the Commonwealth. For more information, contact the Dual Enrollment Coordinator, at 617-228-3319.

#### **Students Taking Action for Nursing Diversity (STAND)**

Students Taking Action for Nursing Diversity (STAND) provides high school students who have expressed an interest in the nursing field with an opportunity to pursue a nursing degree at Bunker Hill Community College. Upon completion of the STAND program, and BHCC's course prerequisites, participants are guaranteed acceptance into the College's nursing program. Participants are provided with the opportunity to take NUR095 as a dual enrollment course, experience hands-on lab activities, attend workshops, job shadow at local hospitals, go on field trips, obtain stipends and receive mentoring, advising and tutoring. The program, which was implemented in 2005, serves approximately 50 students each academic year. Funding for the program is provided by the Boston Public Health Commission and BHCC. For more information, contact the Stand Program Coordinator at 617-228-2313.

#### Massachusetts DECA, Distributive Education Clubs of America

Massachusetts DECA, Distributive Education Clubs of America, is a co-curricular career technical high school student organization that operates in over 50 comprehensive and technical high schools in Massachusetts. The organization serves about 3,500 high school students annually that are enrolled in marketing, management, accounting or entrepreneurship programs at the school they attend. Massachusetts DECA has been operating on a continuous basis at BHCC since September 1993, and has served approximately 37,000 student members since being hosted at BHCC. Massachusetts DECA is partially funded through a Carl D. Perkins grant from the MA Department of Education and is administered by the BHCC Grant Management Office. Additional funding comes from membership dues and conference registration fees. For more information, contact the State Advisor for Massachusetts DECA at 617-228-2024.

# The College Advising Corps (CAC)

The College Advising Corps (CAC) provides one-on-one college advising and college awareness programming for East Boston High School students through a partnership between the high school and Bunker Hill Community College that was initiated in 2007. The College Advising Corps is a national program that places recent college graduates in high schools to assist first generation students with the college application process. Through one-on-one advising, college visits, and financial aid awareness, the program addresses the many barriers first generation students face when applying to college. For more information, contact the CAC on-site advisor at 617-228-2476.



# **Cost of Attendance**



The Board of Higher Education sets tuition and the College sets fees. Both are subject to change.

#### **Application Fee** (nonrefundable)

FF ( 3	
Massachusetts Residents	\$10.00
Non-Residents	\$35.00
Tuition and Fees	
Massachusetts Residents (MA)	\$141.00/credit
Non-Massachusetts Residents and International Students per credit: \$230 tuition/\$112 course fees/\$5 technology fee	\$347.00/credit
The New England Regional Student Program	\$153.00/credit
(Available to students from RI, CT, NH, ME and VT who are the New England Board of Higher Education)	e pre-approved by

#### **Other Charges** (subject to change)

Special Cost Course Fee	\$35.00/credit
Health Insurance Fees:*	
Fall Semester	\$928.00
Spring Semester	\$618.00
* Massachusetts state law requires that all students	taking nine or more

\* Massachusetts state law requires that all students taking nine or more credits in fall semester or nine or more credits in spring semester have medical insurance. There are no exceptions.

Liability Insurance Fee	\$15.00
Parking Permit Fee	\$30.00
Photo ID Replacement Fee	
Returned Check Fee	\$30.00
Transcript Fee	\$2.00/transcript
Refund Check Replacement Fee	\$20.00

#### **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 due date that appears on the registration statement or at the time of registration. Students may access the waiver form online at http://commonwealthstudent.com. The College has set up dedicated computer stations in the Main Lobby of the Charlestown Campus for students without Internet access. MassHealth qualifies as comparable coverage; however, free care that is provided by hospitals and community health centers to low-income uninsured and underinsured people is not insurance and does not qualify. The state requires students who are insured through Commonwealth Care and students who are dependents on Masshealth to participate in the Student health insurance coverage; therefore, Commonwealth Care and MassHealth care cannot be used to waive coverage.

All students carrying nine or more credit hours in the fall or nine or more credit hours in the spring must comply. Classes offered in the Center for Self-Directed Learning or during mini sessions are considered part of the long semester for purposes of determining health insurance requirements. Students are not required to have health insurance coverage during the summer term. In addition, overseas health plans,



travel, and accident insurance plans are deemed not comparable or accessible; therefore, all international students must participate in the College health insurance program or obtain coverage from a U.S. based carrier that meets state requirements. Consult the Division of Health Care Finance & Policy at 1-800-609-7232 for more information.

#### **Special Cost Courses**

Students enrolled in health career program courses with prefixes AHE, CLS, CTC, DMS, EMT, MIG, MRC, NUR, RTH, SGT, SON, VSN, and students enrolled in CIT141 and CIT241 must pay an additional fee of \$35 per credit hour. Other health related courses may be added. Also a malpractice insurance fee of \$15 per academic year may apply for some health courses. For more information, students should go to the Student Payment Office, Room B219, Charlestown Campus, or call Student Payment at 617-228-2150.

#### **Residency Tuition**

Students registering for classes at Bunker Hill Community College, who are claiming entitlement to in-state tuition, must complete the Massachusetts Community College Instate Tuition Eligibility Form. An eligible person shall mean 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. The institution 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 the Registrar's Office at 617-228-2403.

#### **Payment**

At the time of registration, students receive a registration statement bill and a class schedule that indicates the amount charged and information about payment and insurance waiver deadlines. Follow-up and/or updated statements are sent to the address on file until the balance is paid in full. Students must pay all bills by the published due dates or at the time of registration. Failure to receive a bill does not relieve responsibility for timely payment. Students who register on or after the due date must pay at the time of registration and will not receive any statements or warning notices. The College accepts payment online at https://onlineservices.bhcc.mass.edu by personal check or from a savings account or with VISA, MasterCard, Discover or American Express, or in person at the Student Payment Office, Room B219.

The College processes checks through Telecheck electronic check acceptance services and the writer must present positive U.S. identification. Other requirements are available in the Student Payment Office, Room B219. When you provide a check

you are authorizing us to convert the check to an electronic payment item and submit it for payment as an ACH debit entry to your account.

A payment plan is available to eligible students for the fall and spring semesters, excluding the summer and mini sessions. You may sign up on the payment plan by logging on to http://onlineservices.bhcc.mass.edu. For specific information about the payment plan, contact the Student Payment Office at 617-228-2150.



2011 - 2012 College Catalog



#### **Outstanding Financial Obligations**

Students who have any outstanding financial obligations to the College are not permitted to register. If already registered, these students will not be permitted to attend classes, nor will they receive grade reports, attendance reports, or transcripts of grades, without the final approval of the Bursar. The Bursar is located in the Student Payment Office, Room B219, Charlestown Campus.

Bunker Hill Community College is responsible for making "diligent efforts" to collect amounts due the state. Diligent efforts shall include written billings, 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 other Commonwealth payments that are due to them or scheduled to be paid to them.

#### **Refund Policy**

Students dropping or withdrawing from classes must complete the appropriate form available at the Admissions and Registration Desk, Room B203, Charlestown Campus. 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 Registrar's Office, are followed. Application fees are nonrefundable. Lack of attendance or course abandonment does not constitute a drop or withdrawal. For specific refund deadlines please refer to the course schedule booklet for the semester or session. For more information, go to Admissions and Registration Desk.

# **Health Insurance Refund Policy**

Except for medical withdrawal due to covered injury or sickness, students withdrawing from the College during the first 31 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 31 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 31 days, may apply to the Student Payment Office for a refund of health insurance premiums. Registering for minisemester, web courses, Telecourses, and Center for Self-Directed Learning courses later in the fall or spring semester may restore the student's obligation to carry health insurance.

#### **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. In order to receive a tuition discount, students must present the waiver at the time of registration.

If students present the waiver after registration, the College will make no adjustment. 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 the Admissions and Registration Desk before making course selections.

#### **Veterans Center**

Bunker Hill Community College is committed to providing members of the various branches of the military, veterans, and their eligible dependents with a smooth transition to college and a successful educational experience. The Veterans Center was established to serve the increasing veteran population at BHCC. Veterans Center staff members provide specialized customer service for veteran students and serve as advocates by providing information about the College and veterans' benefits. This includes assisting with the enrollment process and providing support services throughout their enrollment at the College. The Center also serves as an academic resource and a place to meet other veterans.

Students who wish to apply for educational benefits must contact the VA Certifying Official at the Veterans Center. The VA Certifying Official acts as liaison between the College and the VA to provide information on College procedures and addresses eligibility and payment of VA benefits. Students receiving educational benefits are required to attend classes regularly and maintain satisfactory academic progress. Students must notify the College's veterans official upon registration for classes at BHCC and of any changes in their enrollment status.

The Veterans Center is located in the Main Lobby of Building B, Room B201, on the Charlestown Campus. Veterans are invited to stop by to learn more about resources available to them at the Center.



2011 - 2012 College Catalog



# **Financial Aid**

#### **Financial Aid**

The Financial Aid Office at Bunker Hill Community College assists students and their families with meeting the costs of a college education. Bunker Hill Community College 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, go to the financial aid section of the College's website at www.bhcc.mass.edu/fa.

### **General Eligibility Requirements**

In order 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 Room B213,

#### **Unofficial Withdrawals**

Charlestown Campus, or call 617-228-2275.

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 on the following page.









#### **Financial Aid Application Process**

Financial Aid applications must be completed for each new academic year. In order 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 www.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, Room B213, Charlestown Campus, or call 617-228-2275 if they have any questions about this process.

The Dreamkeepers<sup>SM</sup> Student Emergency Assistance Fund has been established at the College. The purpose of the fund is to provide monetary relief to students for emergencies that may significantly interfere with their ability to continue to attend college. The fund does not support tuition, fees and books. Applications are available online at https://bhcc.dreamkeepers.org/.

# **Federal Financial Aid Refund Policy**

The calculation of the return of Title IV Funds is determined by the date that the student withdraws, which is:

- The date the student began Bunker Hill Community College's withdrawal process, or;
- The date the student officially notified the institution of intent to withdraw, or;

- The midpoint of the enrollment period for a student who leaves without notifying the institution (an unofficial withdrawal), or;
- The student's last date of attendance at a documented academically related activity.

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 Financial Aid Office if you have any questions about the policy.



# **Priority Deadlines for Financial Aid**

Fall/Spring students .......April 15
Spring only students ......November 1

Summer financial aid funds are available on a first-come, first-served basis. Summer financial aid applications are available at the Financial Aid Office, Room B213 on the Charlestown Campus at the time of summer course registration.

#### **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.

#### **Satisfactory Academic Progress**

In order to continue at Bunker Hill Community College and/or receive financial aid, the Federal Government requires that students must make satisfactory progress toward a degree or certificate. Students are considered to be achieving satisfactory academic progress if they complete 66 percent or more of the total number of credits attempted and meet the following minimum cumulative grade point average:

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

# **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.

#### **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, log on to www.bhcc.mass.edu/fa.



# **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 the Financial Aid Office for a listing of available Work-Study positions.

#### 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.

# **Alternative Financing**

The College offers a tuition payment plan and private loan financing options to students and families who have needs that cannot be met with federal or state financial aid. Alternative Loan information is available on the website at www.bhcc.mass.edu/fa.

#### Individual Assistance

Students who require personalized service should contact the Financial Aid Office for individualized assistance.



# **Scholarships and Awards**



Students applying for the following scholarships/awards for the 2011-2012 academic year 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; attend BHCC during the fall 2011 semester; 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 unless otherwise noted in the scholarship eligibility requirements. Students may obtain scholarship applications on the Charlestown Campus in the Financial Aid Office, B213, Student Advising, B215, Student Activities Office, D106, or at the Chelsea Campus, Front Desk, Main Lobby.

# **Academic Excellence Award for Continuing Students**

Maximum of five (5) awards for Spring 2012 and a maximum of five (5) awards for Fall 2012.

**Eligibility Criteria:** Awarded to continuing BHCC students who have earned at least 15 credits at BHCC, achieved a cumulative GPA of 3.75 or higher, and will be enrolled full-time (12 or more credits) for the semester for which the award is granted.

Amount: In-state tuition and fees (up to 12 credits) for one semester.

Application Deadline: October 7, 2011 for the Spring 2012 semester;
March 2, 2012 for the Fall 2012 semester.

#### Frank J. Bellairs Memorial Scholarship

**Eligibility Criteria:** New Culinary Arts student who is enrolled in a minimum of two (2) courses for the Fall 2011 semester. Preference will be given to students who entered BHCC with a GED, or to non-traditional or adult learners.

**Amount:** \$250 for the Fall 2011 semester. Scholarship is renewable for the Spring 2012 semester if the student maintains eligibility requirements and a cumulative GPA of 2.00 or higher. Scholarship must be used to purchase the necessary supplies and uniforms required by a student in the program and cannot be used toward tuition and fees.

Application Deadline: October 7, 2011

#### Deputy Warden John A. Blaney Memorial Scholarship

Eligibility Criteria: Continuing BHCC second semester Criminal Justice student who has achieved a cumulative GPA of 3.50 or higher and intends to complete the A.S. degree in Criminal Justice.

Amount: \$1,500 for the Fall 2012 semester.

Application Deadline: March 2, 2012.

#### **Brandy R. Bonney Memorial Scholarship**

Eligibility Criteria: One graduating senior from Somerville High School nominated by the high school principal/headmaster (or designee) is eligible for this scholarship upon meeting the following criteria: 1) be accepted into a BHCC degree or certificate program; 2) agree to participate in the BHCC Mentor Program during the scholarship award period; 3) have earned a cumulative GPA of 3.00 or higher at the close of the high school academic year; 4) be an active member of the high school and community.

Amount: In-state tuition and fees (up to 12 credits) for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: A nomination form and letter will be sent to the principal during the first week of April. Nomination forms are due no later than May 11, 2012

# **Boston Sand & Gravel Company Scholarship**

Eligibility Criteria: Awarded to two (2) continuing BHCC students with a cumulative GPA of 3.00 or higher who exemplify the institutional values of the College, demonstrate dedication to their field of study, and intend to complete either an A.S. or A.A. degree at BHCC.

Amount: In-state tuition and fees (up to 12 credits) for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012.

### William F. Brazil Memorial Scholarship

Eligibility Criteria: Awarded to up to three (3) continuing BHCC students majoring in business, science or mathematics who have completed at least 30 credits at BHCC (including developmental credits and current Fall 2011 credits) and have achieved a cumulative GPA of 3.0 or higher.

Amount: In-state and fees for up to 12 credits for the Spring 2012 semester.

Application Deadline: October 7, 2011



#### **BHCC/Charlestown Housing Development Award**

**Eligibility Criteria:** New or continuing BHCC student who is a resident of the Boston Housing Authority in Charlestown, MA. Continuing students must have a cumulative GPA of 2.0 or higher.

Amount: \$500 for tuition and fees for the Fall 2012 semester. Award is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012.

#### **BHCC/Charlestown Resident Scholarship**

Eligibility Criteria: New or continuing BHCC student who is a resident of Charlestown, MA, who has demonstrated outstanding service to the Charlestown community and is an active member of the community. Continuing students must have a cumulative GPA of 2.0 or higher. Applicants must submit two (2) letters of recommendation from individuals familiar with the applicant's achievements.

**Amount:** In-state tuition and fees (up to 12 credits) for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012.

#### **BHCC/Chelsea Resident Scholarship**

Eligibility Criteria: Continuing BHCC student who is a resident of Chelsea, MA, who has completed at least 15 credits at BHCC, and has achieved a cumulative GPA of 2.00 or higher.

**Amount:** The scholarship is for in-state tuition and fees (up to 12 credits) for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012

#### **BHCC Foundation Grant**

Eligibility Criteria: Grant is awarded to one (1) new or continuing BHCC student, nominated by City Year. Recipients must have a minimum cumulative GPA of 2.00 or higher (or equivalent) and be enrolled in a degree or certificate program at BHCC. In April 2012 a letter and nomination form will be sent to the Executive Director of the organization from the President of BHCC requesting a nomination for the following academic year. Grant recipients may be eligible for re-nomination the following year while they continue their degree or certificate program requirements at BHCC if they meet grant criteria.

**Amount:** In-state tuition and fees (up to 12 credits) for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements. This grant is funded by the Bunker Hill Community College Foundation, Inc.

Nomination Deadline: May 11, 2012

# BHCC Commonwealth Honors Program Scholarships Continuing Commonwealth Honors Program Students

Eligibility Criteria: Continuing Commonwealth Honors Program student enrolled in the Commonwealth Honors Program within the current year. Student must demonstrate academic excellence and evidence of completion of Honors Program Contracts. Applicants, in a 500-word essay, must address the following topic: Select one of the Honors Contracts you have completed and discuss briefly how you would extend or further investigate the topic. Applications will be reviewed



by members of the BHCC Commonwealth Honors Program Committee, using the applicant's contributions to the Honors Program as part of their selection criteria.

#### **Graduating Commonwealth Honors Program Students**

Eligibility Criteria: Graduating Commonwealth Honors Program student who has completed the Commonwealth Honors Program and has been accepted by and plans to attend a four-year institution. Students must demonstrate academic excellence and evidence of completion of all Commonwealth Honors Program requirements (four Honors Contracts and the Honors Seminar). Applicants, in a 500-word essay, must address either of the following topics: 1) If you were to continue in an honors program in the next academic year at another institution, describe an honors exploration/project with which you would like to become involved; or 2) If you were to recruit a student for the Commonwealth Honors Program, explain how that student would benefit from the program and include how you have benefited from the Commonwealth Honors Program. Applications will be reviewed by members of the BHCC Commonwealth Honors Program Committee, using the applicant's contributions to the Honors Program as a criterion for their selection.

Amount per Scholarship: \$500.

Application Available: Contact the faculty directors of the Commonwealth Honors Program.

Application Deadline: April 13, 2012

#### **BHCC Memorial Scholarship**

**Eligibility Criteria:** Continuing BHCC student who is enrolled part-time (between 6 and 11 credits) for Spring 2012 and has completed at least 15 credits at BHCC with a cumulative GPA of 3.00 or higher and will be enrolled part-time (between 6 and 11 credits) for the Fall 2012 semester.

**Amount:** The scholarship is for in-state tuition and fees (up to 11 credits) for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012



#### BHCC/Student Government Association Leaders of Tomorrow Award

Eligibility Criteria: All applicants must be enrolled in 6 or more credits for the Spring 2012 semester; must have a cumulative G.P.A. of 2.30 or higher; have no outstanding IP's on transcript at time of the scholarship deadline; current SGA members are not eligible to apply.

**Amount:** \$500 scholarship will be awarded to two returning students and a \$1000 scholarship will be awarded to one June 2012 graduating student, who will be transferring to a four-year institution in the Fall 2012.

Application Deadline: March 2, 2012

#### Carlos E. Cano Memorial Scholarship

**Eligibility Criteria:** Awarded to a new or continuing student in the Culinary Arts Program. Continuing students must maintain a GPA of 2.00 or higher. Recipient must write a brief thank you note to donor.

Amount: \$200 towards books and supplies for Spring 2012 and is renewable for Fall 2012 if student maintains eligibility requirements.

Application Deadline: October 7, 2011

#### **English as a Second Language Award for Continuing Students**

Eligibility Criteria: Awarded to two (2) continuing BHCC students with a cumulative GPA of 3.0 or higher who are enrolled in an associate degree program and have completed at least 6 credits of ESL at BHCC. Must be enrolled for at least 6 credits in ESL for the Spring 2012 semester and will be enrolled for at least 6 credits for the Fall 2012 semester.

**Amount:** The scholarship is for in-state tuition and fees (up to 6 credits) for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012

# Anne Monahan Kelly Memorial Scholarship

Eligibility Criteria: Awarded to one student who is either a first year Nursing student or a BHCC student who is taking courses to qualify for admission to the BHCC Nursing Program. The student must have achieved a cumulative GPA of 3.0 or higher, must demonstrate dedication to the field of nursing and intend to compete an A.S. degree at BHCC. Preference will be given to students from Jamaica Plain and South Boston and to students who may be working at Labouré Center in South Boston or at Marion Manor Skilled Nursing & Rehabilitation Center in South Boston, although other qualified students should apply as well.

Amount: \$1,000 toward tuitition and fees for the Fall 2012 semester.

Application Deadline: March 2, 2011.

## Edward L. Kerr, Jr. Memorial Scholarship

Eligibility Criteria: Continuing BHCC student who has earned at least 15 credits at BHCC and has a cumulative GPA of 3.25 or higher.

**Amount:** \$250 for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012.

#### Thomas A. Kershaw Scholarship

**Eligibility Criteria:** Continuing BHCC student pursuing a course of study in Culinary Arts or the Hotel/Restaurant/Travel program with a cumulative GPA of 2.0 or higher.

Amount: Professional Chef's toolkit.

Application Deadline: March 2, 2012.

#### Stanley Z. Koplik Scholarship

**Eligibility Criteria:** Continuing BHCC student who has a cumulative GPA of 3.00 or higher and is currently enrolled in a minimum of 9 credits at BHCC. Applicant must be enrolled in an A.S. or A.A. degree program in accordance with MassTransfer guidelines approved by the Massachusetts State Colleges and the University of Massachusetts.

Amount: \$250 for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012

#### Marguerite I. Munster Memorial Scholarship

**Eligibility Criteria:** Matriculated fourth semester Nursing major who has demonstrated outstanding clinical competence and academic achievement in courses completed at BHCC.

Amount: \$500.

Application Available: Contact the Nurse Education Department Chair, Room G212, Charlestown

Campus

Application Deadline: December 2, 2011.

#### Maurice F. O'Shea Trustees' Academic Award

**Eligibility Criteria:** Continuing BHCC student who has demonstrated outstanding academic excellence while attending Bunker Hill Community College. Applicants must have completed a minimum of 30 credit hours at BHCC (includes all credits earned at BHCC and current Spring 2012 credits) and have earned a cumulative GPA of 3.50 or higher. Applicants, in an essay of no more than 300 words, must indicate how they have contributed to the institutional values of the BHCC community (see page 8) and must also outline their career goals. Applicants will need to submit three (3) letters of recommendation (two of which must be from BHCC faculty), which speak to the applicants' commitment to their courses of study and give examples of that commitment.

Amount: The award is for in-state tuition and fees for up to 12 credits for the Fall 2012 semester and is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

**Application Available:** Office of the Dean of Student Affairs, Room B308, and Student Activities, Room D106, Charlestown Campus.

Application Deadline: March 2, 2012

### President's High School Scholarship

Participating High Schools: Academy of Public Service, Boston Community Leadership Academy, Jeremiah E. Burke High School, Cambridge Rindge and Latin School, Charlestown High School, Chelsea High School, East Boston High School, English High School, Everett High School, Fenway High School, The Engineering School, Madison Park Technical Vocational High School of Mathematics & Science, Malden High School, Medford High School, Monument High School, Dorchester Academy, Odyssey High School, Parkway Academy of Technology & Health, Revere High School, Muriel F. Snowden International High School, Tech Boston Academy, Urban Science Academy, Winthrop High School.



Eligibility Criteria: One graduating senior from each of the high schools listed above, nominated by the high school principal/headmaster (or designee) is eligible for this scholarship upon meeting the following criteria: 1) be accepted into a BHCC degree or certificate program; 2) agree to participate in the BHCC Mentor Program during the scholarship award period; 3) have earned a cumulative GPA of 3.00 or higher at the close of the high school academic year; 4) be an active member of the high school and community.

**Amount:** In-state tuition and fees (up to 12 credits) for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

**Application Deadline:** A nomination form and letter will be sent to the principal of each high school during the first week of April. Nomination forms are due no later than May 25, 2012.

### President's Leadership Award

**Eligibility Criteria:** December 2011 BHCC graduate or June 2012 graduating BHCC student who has demonstrated outstanding leadership ability and has completed at least 30 credits at BHCC with a cumulative GPA of 3.50 or higher as of (and including) the Fall 2012 semester.

Amount: \$1,000.

**Application Available:** Office of the Dean of Student Affairs, Room B308, and Student Activities, Room D106, Charlestown Campus.

Application Deadline: May 7, 2012

#### Rukmini Rao Memorial Scholarship

**Eligibility Criteria:** Awarded to two (2) continuing students majoring in Science, Technology, Engineering or Math who have a cumulative GPA of 3.50 or higher who demonstrate dedication to their field of study and intend to complete an A.S. degree at BHCC.

Amount per Scholarship: \$750 towards tuition and fees for the Fall 2012 Semester.

Application Deadline: March 2, 2012.

### Refrigeration Service Engineers Society (RSES) Scholarship

Eligibility Criteria: Continuing BHCC student in an associate degree program with a concentration in mathematics, engineering or physics who has satisfactorily completed at least 30 credits and is entering the second year at BHCC with a cumulative GPA of 2.0 or higher.

Amount: \$250 for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012.

## Rosann Sperduto '88 Memorial Scholarship

Eligibility Criteria: A female December 2011 BHCC graduate, or a female graduating from BHCC in June 2012, who has demonstrated outstanding academic excellence and leadership ability. Applicants must be a member of Alpha Kappa Mu and/or have achieved a cumulative GPA of 3.50 or higher and plan to transfer to a four-year institution for the Fall 2012 semester. Applicants must also submit a short essay (500 words) along with two (2) letters of recommendation.

Amount: \$500 payable to the transfer four-year institution.

Application Deadline: April 6, 2012.

#### **Study Abroad Scholarship**

Twenty-four (24) scholarships will be awarded to support participation in selected study abroad programs in countries such as Mexico, Argentina, China, England, France, Portugal, Italy, Japan, Czech Republic, Tanzania, Spain, Ireland, Greece, Morocco, Costa Rica, and Belize.

**Eligibility Criteria:** Students enrolled in a degree or certificate program who have completed at least 12 credits at BHCC with a cumulative GPA of 2.50 or higher.

Amount: \$1,000 - \$5,000 (80% of total program costs).

Application Available: International Center, Room E236, Charlestown Campus

Application Deadline: December 2, 2011.

#### Trustees' Service Award

Eligibility Criteria: Continuing BHCC student who has demonstrated academic achievement and outstanding community service while attending Bunker Hill Community College. Community service includes civic responsibility/civic engagement or volunteer service. Applicants must have completed at least 30 credits at BHCC (includes all credits earned at BHCC and current Spring 2012 credits) and earned a cumulative GPA of 2.50 or higher. Applicants, in an essay of no more than 300 words, must indicate specifically how they have contributed to the institutional values of the BHCC community (see page 8) and/or communities in which they are involved. Each applicant must submit three (3) letters of recommendation (two of which must be from BHCC faculty) that address the applicant's leadership qualities as they relate to community service.

Amount: The award is for in-state tuition and fees for up to 12 credits for the Fall 2012 semester and is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Available: Office of the Dean of Student Affairs, Room B308, and Student Activities, Room D106. Charlestown Campus.

Application Deadline: March 2, 2012.

# James R. Ware Stop & Shop Scholarship

**Eligibility Criteria:** Continuing Business Administration student who has earned at least 30 credits at BHCC with a cumulative GPA of 2.0 or higher.

Amount: \$250 for the Fall 2012 semester. Scholarship is renewable for the Spring 2013 semester if the student maintains eligibility requirements.

Application Deadline: March 2, 2012

### Rubin M. Weiner Memorial Scholarship

**Eligibility Criteria:** Awarded to two (2) students, one scholarship awarded to a second semester Nursing student, one to a first year student in Respiratory Therapy. Preference given to graduates of Malden High School though other qualified students should apply as well.

**Amount: \$500** 

Application Available: Contact the Nurse Education Department Chair, Room G212, Charlestown

Campus.

Application Deadline: December 2, 2011 for the Nursing scholarship and

March 2, 2012 for the Respiratory Therapy scholarship.



# **Academic Information**



### **Academic Advising Philosphy**

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

# **Academic Advising**

Academic advising is available for all BHCC students in a variety of forms that include individualized advising, group advising and online advising. Advising services are designed to assist students in achieving their academic, vocational and personal goals. These services include interpretation of assessment scores and selection of a program of study, course placement, registration related assistance and resource referral. Advisors also assist students with a variety of issues and concerns affecting their educational success.

Degree-seeking students will receive notification by mail of their assignment to a specific full-time faculty or professional staff member for advising or assignment to

the Advising/Counseling Center. Advisor assignments can also be found in the My Profile section of each student's Online Services WebAdvisor account at http://onlineservices.bhcc.mass.edu. Non-degree-seeking students are not assigned to an advisor for one-on-one advising. Non-degree-seeking students may utilize online advising services and are encouraged to apply to the College.

Students assigned to a full-time faculty or professional staff member for advising should contact their advisor to arrange an appointment. All full-time faculty and professional staff advisors have offices with posted office hours, voicemail and email. Students assigned to the Advising/Counseling Center may access assistance in Room B215 during posted walk-in hours. For more information, call 617-228-2230.

Advising is also available at the Chelsea Campus. Please call 617-228-2101 for more information. In addition, questions about advising can be sent to onlineadvising@bhcc.mass.edu.

#### WebAdvisor

All registered students have an Online Services account known as WebAdvisor. 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, pay for courses, create a payment plan and waive health insurance. Students who have already earned 12 or more credits at BHCC and have maintained a 2.0 or higher GPA can register for courses online through WebAdvisor. In addition, the Program Evaluation feature of WebAdvisor allows students to monitor their progress toward program requirement completion and make informed decisions about course selection.

To access your WebAdvisor online account for the first time, go to http://onlineservices.bhcc.mass.edu and select the Students menu. Select What's My User ID? and input your last name and either your Social Security Number (do not use dashed or spaces) or your BHCC Student ID, and submit this information. You will receive your WebAdvisor User ID. Now select Log In and input your User ID. You will also need to input an initial password, which is the last 6 digits of your Social Security Number if you have one or the last 6 digits of your BHCC Student ID. The system will then require you to change your password. Please note that your new password must contain between 6 and 9 characters, include both letters and numbers, and contain no special symbols.

If you have utilized your WebAdvisor account in the past, but have forgotten your password, you can automatically reset your password in the What's My Password? section. Students who encounter trouble accessing their online account can contact the Student Helpline at 617-228-3441. Questions related to the content of a WebAdvisor account and/or advising related questions should be directed to the student's assigned advisor.



### **Placement Testing and Assessment**

All degree and certificate seeking students and all those who intend to take math or English courses, or courses that have a mathematics, reading or English prerequisite, may be required to take the computerized placement tests (CPTs) before registering. Students who test below the tenth-grade reading level on the placement examination must enroll in an appropriate level reading course. Students may not register for English or mathematics courses at a higher level than indicated by their performance on the placement tests. Students can prepare for the CPTs by using review books and practice questions on various websites. Search for "Accuplacer practice" via any Internet search engine or go to www.bhcc.mass.edu/inside/103. The College reserves the right to determine placement into courses, including English as a Second Language and developmental courses, based on the placement test results. The Assessment Center may restrict retesting. The Assessment Center is located in Room B118, Charlestown Campus.

Assessment Testing is also available at the Chelsea Campus. Please call 617-228-2101 for details.

Students whose first language is not English and who have not earned a high school diploma or GED in the United States may be required to take the English placement test (LOEP). International students may be required to take the LOEP if they have not scored at least 500 on the TOEFL paper test or 173 on the computerized version or 60 on the Internet-based TOEFL. The LOEP places students into an appropriate level in noncredit Basic English as a Second Language (BESL) courses or Academic English as a Second Language (ESL) courses. For more information, go to Room B118, Charlestown Campus, or call 617-228-2468.

### **Study Abroad Opportunities**

The International Center assists BHCC students in integrating study abroad experiences into their academic programs. Short term study abroad programs are offered in 17 countries for periods from twelve days to eight weeks. The International Center provides scholarship opportunities to qualified students. For more information go to the International Center, Room E236, Charlestown Campus, or visit the study abroad website at www.bhcc.mass.edu/studyabroad.

#### **Graduation Information**

Depending upon the program of study, students who complete the requirements listed below are awarded the Associate in Science or Associate in Arts degree. During their final semester, students who expect to graduate must apply for graduation at the Admissions and Registration Office, B203. The Registrar publishes the specific application deadlines in October and February. To graduate, students must fulfill these requirements:

• 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.

**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.

**Certificate Credit Requirements.** 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).





# **Academic Resources and Support**



Bunker Hill Community College is committed to providing effective and dynamic instructional, academic and student support services through a variety of traditional and multidimensional resources. The College philosophy is that each student is a unique learner and that academic resources and support services should strive to meet the individual needs of all students.

### The Library and Learning Commons

The Library and Learning Commons delivers services crucial for student success, including information literacy instruction, quality resource selection and an academic learning atmosphere. The library web page at http://www.noblenet.org/bhcc serves as an information gateway and extends library services with links to an online catalog, a directory of high-quality research websites and to numerous full-text and citation subscription databases accessible from off campus. Offerings include online digital educational videos and online maps. The 100,000-volume print and electronic collection, which includes books, magazines, newspapers and journals, is augmented by resources available through the library's memberships in NOBLE, LYRASIS, Massachusetts Library System and OCLC. Consistent with the library's on-campus services, the needs of distance and nontraditional learners are also addressed with carefully selected online resources, which offer in-context instruction customized to the curriculum. Information literacy workshops as well as one-on-one instruction sessions are available throughout the calendar year. Social web tools are used in

many facets of the library and we continue to actively seek new and emerging technologies to meet the needs of our diverse and evolving student population. The BHCC photo identification card serves as your library card. During the fall and spring semesters, the Library and Learning Commons is open seven days a week with evening hours Monday through Friday. Visit the library web page for scheduled hours. During summer sessions and between semesters, please call the library's Lending Services Desk at 617-228-2213 for schedule updates.

#### **Charlestown Tutoring and Academic Support Center**

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 Bunker Hill Community College students. The TASC Centers offer tutorial assistance, small group workshops, and academic mentoring to students enrolled in credit-bearing courses. Students are offered a wide range of services to support their work on basic academic skills as well as on course-specific work in their programs. Students may register for weekly, individual, and group appointments. These services are offered in a student-centered atmosphere.

Major areas of concentration on the Charlestown Campus are English and writing, English as a second language (ESL), mathematics (from basic mathematics to advanced calculus), computers, science, business, behavioral science, human services and early childhood education. Other subject areas may be added on an as-needed basis. The TASC also offers eighteen student computer stations where students may type papers, do research or access the Internet. Students may utilize services during regularly scheduled hours at the TASC located in Room E174. During the fall and spring semesters, the TASC is open seven days a week, with evening hours Monday through Thursday. During the summer semester, the TASC is open Monday through Thursday including evenings. The TASC is closed during semester breaks. For more information, contact the TASC at 617-228-3467 or email tasc@bhcc.mass.edu.

### **Chelsea Campus Center for Student Access and Success**

The Chelsea Campus Center for Student Access and Success houses academic support, advising, and assessment services delivered on the Chelsea Campus. New and continuing students may receive advising and course placement testing. Students may drop in for group and individual tutoring or register for by-appointment tutoring sessions. The major areas for tutoring at the Chelsea Campus Center include English, mathematics, biology and Allied Health. The Chelsea Campus Center also offers assistance in the areas of study skills development, with workshops available for small groups and for entire classes at the request of instructors. The Chelsea Campus Center for Student Access and Success is located on the second floor in Room 202. During the fall and spring semesters, the Chelsea Campus Center is open Monday through



Friday with evening hours Monday through Thursday. For additional information regarding these services, contact the Chelsea Campus Center at 617-228-3356.

#### **Technology Support/Academic Computing**

The Computing Centers at both the Charlestown and Chelsea Campuses house more than 800 workstations. All workstations on the network provide access to the Internet. In addition, each Center is equipped with resources to support students with disabilities. All students may use the Centers' resources, when available, on a first-come, first-served basis. To learn about the policies and procedures for using the Centers, students may visit either location and speak with a staff member. Students are not allowed to bring food and/or drinks of any kind into computer classrooms or open laboratories.

**Charlestown Campus.** The Charlestown Computing Center is located on the first floor, D-Building. This complex consists of 11 specialized classrooms, an open laboratory for student instruction, and an open laboratory area for individual use on a first-come, first-served basis. The Visual Media Arts Center (VMAC), located on the first floor of the E-Building in rooms E159–E171, features Macintosh-based computer rooms. During the fall and spring semesters, the Charlestown Computing Center is open seven days a week, with evening hours Monday through Friday. During June, July and August, the Charlestown Computing Center is open on weekdays only, with evening hours on Monday through Thursday. During the fall and spring semesters the VMAC is open Monday through Saturday, with evening hours Monday through Thursday. Both Centers are closed during semester breaks, with the exception of spring break, when hours and access are limited. For schedule information, see the posted schedule or ask a staff member for help.

**Chelsea Campus.** The Chelsea Campus computer facilities consist of two specialized computer classrooms, a resource room and an open laboratory. These facilities support students' needs with applications consistent between the campuses. During the fall and spring semesters, the computer laboratory is open Monday through Saturday, with evening hours Monday through Friday. During June, July and August the computer laboratory is open Monday through Friday, with evening hours Monday through Thursday. During all semester breaks, access is limited. Hours of operation for these periods will be posted.

### The Student Success Program

The Student Success Program provides a comprehensive program of academic and student support services designed to help students achieve their educational goals at Bunker Hill Community College and to transfer to four-year colleges or universities. The program provides academic counseling, peer tutoring, a counseling/mentor program, cultural enrichment events and college transfer tours. It also provides workshops on a variety of topics focusing on learning strategies, life management skills, career planning skills and the college transfer process. To qualify for these services, students must apply and be selected to participate. They must demonstrate

an academic need and meet one or more of the following criteria: first generation college student, low-income student or student with a documented disability. The United States Department of Education, TRIO Student Support Services Grant funds the Student Success Program. For more information, contact the Student Success Program Office, Room B331, Charlestown Campus, or call 617-228-2303.

#### The College Connection

The College Connection is an academic and advising support service available to students enrolled in the daytime, evening, and weekend sections of RDG 090, RDG 095 and ENG 090 at the Charlestown campus. At the individual professor's request, each of these classes is assigned a dedicated Literacy Coach who visits the class on a regular basis, provides individualized reading tutoring outside of class time, follows up with absent students, connects students to appropriate College resources, and provides advising services. Participation in this program is optional for both faculty and students. 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.

#### Adult Basic Education and Transitions to College Programs

The Adult Basic Education and Transitions to College programs are grant funded programs that offer free classes for adults to develop English language proficiency, content skills to acquire the General Education diploma, and skills to successfully transition to college-level programs.

The Adult Basic Education (ABE) program at the Chelsea Campus provides educational and support services for adults who lack English language and literacy skills and/or do not have a high school diploma. This comprehensive program provides free educational services that include courses in four levels of Basic English for Speakers of Other Languages (ESOL), two levels of General Education Development (GED) preparation in Spanish, Spanish native literacy, ABE literacy, Pre-GED English, GED English and two levels of ESOL Family Literacy. The ABE courses are offered both day and evening either at the Chelsea Campus or at program partner sites in the community. The ABE program collaborates with the following partners in the Chelsea community: Centro Latino, Inc., Intergenerational Literacy Program/Chelsea Public Schools and LARE/American Training.

**The Transitions to College Program** offers courses for students who have received their high school diploma in their native country, have English language proficiency or a GED, and plan to attend college. The Transitions to College course is offered at the Charlestown Campus in the evening. In addition, the ABE and Transitions to College programs offer a variety of support services to assist students in achieving academic success including tutoring, career counseling, financial aid and job skills counseling. The Massachusetts Department of Elementary and Secondary Education funds the ABE and Transitions to College programs. For more information, call the ABE and Transitions to College Office at 617-228-2108.



# The Language Institute

The Bunker Hill Community College Language Institute is a unit of the College that coordinates the various student services and programs into an integrated intake and educational system to meet the needs of English as a Second Language (ESL) students.

The Language Institute is guided by an advisory group comprised of representatives from departments that provide programming and support services for ESL students. The intake process begins in the Assessment Center, Room B118, Charlestown Campus, where prospective students are assessed, advised and develop an academic plan based on their individual needs. Students are then oriented to the various support services that are available through the Multi-Media Multi-Purpose Language Lab, Tutoring and Academic Support Center, Center for Self-Directed Learning, International Center, Welcome Back Center, Career Services and Community Education. Special programming includes non-credit and credit ESL courses, Intensive Language programs, TOEFL preparation, NCLEX preparation for nurses who earned their credentials outside of the United States, and language enhancement courses for business professionals.

For more information, visit the Assessment Center, Room B118, Charlestown Campus, or call 617-228-2377.

# **Academic Skills Development**

# Math Multi-Media Computer Lab

The Math Multi-Media Computer Lab is a mathematics resource center that is available to all students enrolled in mathematics courses at BHCC. The primary goal of the lab is to assist students to become independent learners and in achieving academic success in mathematics. The Math Multi-Media Computer Lab, equipped with 48 workstations, provides a computer-based environment with access specialized math software such as Mathtype, TI interactive, Sketchpad, Derive, Maple and Mathmatica. In addition to mathematical software the following are also available:

- · One-on-one help using these recources
- One-on-one training in Web based tools like MyMathLab, Webassign and ALEKS.

The Math Multi Media Computer Lab is located in M102 and M103 and is open 7 days a week. Hours may vary from semester to semester, so please check the schedule posted on the door. For more information call the coordinators at 617-228-1012 or 617-228-3286.

#### Multi-Purpose Multi-Media Language Lab

The Multi-Purpose Multi-Media Language Lab at BHCC 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 currently has 8 language learning software programs, several support staff members, and 35 partitioned workstations. The objective of the Lab is to help all students improve their language skills. In addition to software and tutoring, the Lab offers the following support services:

- One-hour interactive grammar and writing workshops;
- · English 095 and 111 practice exit exams;
- ESL 079, 089, and 099 practice exit exams;
- · Individual tutoring sessions;
- ESL-IP course instruction and tutoring;
- · TOEFL practice and tutoring;
- Foreign language learning programs and textbook software;
- · Online website services.

The Lab is located within the Center for Self Directed Learning in Room E226. During the fall and spring semesters, the Lab is open seven days a week, with evening hours Monday through Thursday. During the summer semester, the Lab is open Monday through Thursday including evenings. For more information about the Lab, call 617-228-3440 or visit http://www.bhcc.mass.edu/languagelab.

### The Writing Place

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. The Writing Place tutors are students who have successfully completed their College English program and are taking a course that prepares them to provide effective feedback and assistance. Specific materials and computer resources are available in the Writing Place to supplement class instruction and develop composition skills. The Writing Place, located in E142, is open during the fall and spring semesters, Monday through Friday. Hours may vary from semester to semester, depending on tutor availability. Students are encouraged to visit the Writing Place in E142 to schedule weekly sessions with a tutor. Tutoring sessions can also be arranged by contacting the Writing Place at 617-228-3244.



# **Alternative Learning**

Bunker Hill Community College provides a variety of alternative learning options for students who are self-directed learners interested in programming that addresses individual learning styles or provides 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.

#### The Center for Self-Directed Learning

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, progress at their own pace 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. The instructional media materials include a wide range of DVDs, videotapes, CDs and innovative computer-assisted instruction. Regardless of the medium, 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. Course facilitators and tutors are available to assist students at all times during scheduled hours of operation. During the fall and spring semesters, the CSDL is open seven days a week, with evening hours Monday through Thursday. During the summer semester, the CSDL is open Monday through Thursday including evenings. For schedule information, see the posted schedule or ask a staff member for help. Refer to the current course schedule booklet or the College website at www.bhcc.mass.edu for a detailed listing of course offerings. The CSDL is located in Room E235, Charlestown Campus. For more information, contact the Center at 617-228-2225 or csdl@bhcc.mass.edu.

# **Prior Learning Assessment Program**

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. This program assists students with identifying and documenting prior learning they possess. The PLA advisor assists students in preparing portfolios and documenting credits. Specialists in each topic review completed portfolios. The credits may be used to fulfill degree or certificate requirements or may be used as electives. Students may apply a maximum of 45 PLA credits toward an associate degree at BHCC. For more information, visit the Prior Learning Assessment Office, Room E235, Charlestown Campus, or call 617-228-2350.

**Credit by Departmental Examination.** The PLA offers credit by departmental examination. Through these examinations, students can demonstrate current proficiency in selected courses listed in the Bunker Hill Community College catalog. For each examination passed, students earn college credit. Departmental examinations are graded on a pass/fail basis. For more information about the specific courses and examinations, visit the Prior Learning Assessment Office, Room E235, Charlestown Campus, or call 617-228-2350.

**College-Level Examination Program.** In addition to the departmental examinations through the PLA program, students may test in the areas of English, foreign languages, social science, history, business, mathematics and science through the College Level Examination Program (CLEP). The examinations cover the material mastered during the first year of a college general education program. Students may select one or more examinations from the series. In addition to general area examinations, such as social science, humanities and natural science, students also may select from more than 30 specific examinations. CLEP exams are administered in the ACT Center, Room E222, Charlestown Campus. For more information regarding the CLEP tests, visit the Prior Learning Assessment Office, Room E235, Charlestown Campus, or call 617-228-2350.

### **Contract Learning**

Contract Learning provides students with the opportunity to fulfill degree/certificate requirements or pursue special academic or career interests while learning the techniques and procedures necessary to negotiate, design, and carry out independent projects. Each learning contract is negotiated between the student and a member of the faculty, with approval of the Academic Dean. For more information see the Academic Dean for the subject area of the proposed contract.

### **Distance Education**

Bunker Hill Community College offers several alternatives to classroom instruction that allow students to do all or part of their course work at a distance. These alternative modes of instruction include online courses and hybrid courses that are part online and part in class. The College also offers an extensive program through the Weekend College.

# Web Courses through BHCConline

Bunker Hill Community College offers courses online as a convenient alternative to the traditional classroom. These web courses, designated as WB, are designed for self-directed, motivated learners. The courses are equivalent in content and academic rigor to traditional classroom courses, but offer students the flexibility and convenience of learning virtually anytime and anywhere.

#### Distance Education



Hybrid courses, designated as HB, are also available through BHCConline. These courses include both traditional classroom and online components. Students in hybrid courses generally meet onsite for 50 percent of the instructional time. The other 50 percent of instruction is conducted online.

To succeed in online or hybrid courses, students must have a computer with Internet access. A multi-media computer with at least a 600 MHz processor, 256 MB of RAM, or a comparable Macintosh is recommended. Broadband access is required for most courses. Mozilla Firefox 1.0x is the preferred browser for PC users and a recent version of Mac OS for Mac users. A recent version of Microsoft Office, or at a minimum MS Word, is required for preparing assignments.

It is expected that students possess basic computer skills such as navigating the World Wide Web, sending and receiving email with attachments, and word processing.

Students are expected to have solid reading and writing skills with the ability to follow directions. Successful students are highly motivated, independent learners with excellent time management skills. Distance learning students are required to maintain a consistent pace in submitting coursework and participating in online activities. It is expected that students enrolled in online and hybrid courses spend between 6-10 hours each week working on their course. Proctored exams may be required.

Students must begin their online coursework during the first week of the semester and are expected to complete their course in a semester's time. Students may access their online course(s) on the first day of classes. To access their course(s) students must create a username and password by following the directions at www.bhcc.mass.edu/mycourseaccess. Questions regarding access, technical requirements and related information may be emailed to onlinehelp@bhcc.mass.edu. Students may also call 617-228-2466 for more information.

#### Web Course Orientation

Students new to online courses should participate in one or more of the following orientation options to learn about using the technology, expectations for completing courses and guidelines to be a successful online student:

- Participate in one of the "live" virtual computer based orientations offered
  at the beginning of each semester. Refer to the BHCConline section of the
  current course schedule booklet or visit www.bhcc.mass.edu/bhcconline
  for more information about dates and times. To log on to the orientation go
  to www.bhcc.mass.edu/virtualorientation.
  - A microphone is required to speak, although questions can be asked through a chat feature.
- 2. Listen to a prerecorded orientation by logging on to Elluminate at www.bhcc.mass.edu/precordedorientation.
- 3. Complete the BHCConline Orientation at www.bhcc.mass.edu/bhcconline.

For information about orientations and general information about BHCConline, email onlinehelp@bhcc.mass.edu, call 617-228-2466, visit the BHCConline Office in Room E221 on the Charlestown Campus, or go to www.bhcc.mass.edu/bhcconline.

For access to online library resources, go to www.noblenet.org/bhcc. Certain databases, however, can be accessed only with a library ID number. For more information, contact a member of the library staff.

#### **Streaming Media Courses**

Streamed media courses, designated as SM, provide students with access to asynchronous media based courses available at www.bhcc.mass.edu/BHCCtv. Students can view course content from any computer with Internet access and QuickTime. Students complete coursework at home and mail assignments, papers and projects to the BHCConline Office. Proctored exams are required. Students may pick up the course syllabus and course orientation information at the BHCConline Office, Room E221. For more information, call 617-228-2466 or email onlinehelp@bhcc.mass.edu.

#### Virtual Classes through the Web

Virtual classes, designated as VC, are available for students who are interested in online synchronous courses that meet at specified times. Classes are offered on the Web using voice over internet protocol (VOIP) technology, through the BHCConline





VOIP provider Elluminate. Students are able to participate in class meetings at set times from any computer that is connected to the Internet. Students are able to listen to the instructor's "live" presentation and view documents and media that are used in the presentation. Syllabi, assignments and other student activities are available through the BHCConline learning platform BlackBoard. For information to access Elluminate, visit www.bhcc.mass.edu/BHCConline. For more information, call 617-228-2214 or email onlinehelp@bhcc.mass.edu.

### **Massachusetts Colleges Online**

BHCC is a member of Massachusetts Colleges Online (MCO), a consortium of the 24 community and state colleges. The institutions have formed this partnership to extend convenient and flexible online courses and programs to students throughout the state and beyond. Students are encouraged to explore the MCO website at www.mco.mass.edu to learn more about the more than 1,000 courses that are available through MCO. Although most courses transfer to other institutions, BHCC students should check with onlineadvising@bhcc.mass.edu for verification.

#### Weekend College

The Weekend College is for busy adults who want to earn college credits on the weekends in an accelerated approach. The Weekend College schedules classes in various formats that provide students with flexible options as well as give them an opportunity to complete their programs of study by attending classes only on the weekends. Course schedules include:

- Seven-week concentrated mini-semesters that meet on Saturdays and/or Sundays;
- · Hybrid courses that combine classroom instruction with online instruction;
- Web courses:
- Individualized, self-paced courses through the Center for Self-Directed Learning;
- Traditional sixteen-week courses available on Friday evenings, Saturdays, and Sundays.

#### **Weekend College Enrollment Process**

Students follow the same steps to enrollment as non-Weekend College students. For more information, go to www.bhcc.mass.edu and follow the directions for steps to enrollment. Interested students may also contact an online advisor at onlineadvising@bhcc.mass.edu or call 617-228-3396 for further information.

The College offers drop-in advising services on Saturdays during the fall and spring semesters, and also the summer sessions, in Room B215. For information, weekend students may call 617-228-2230 on Saturdays. All students should call the Admissions Office at 617-228-3398 on weekdays.

The College provides assessment testing, required for most students before they register, on weekdays, evenings and some Saturdays. The computerized placement tests (CPTs) assess the students' skill level in mathematics, English, and reading. The College uses test results to determine students' starting points for their programs. The College administers CPTs in the Assessment Center, Room B118, Charlestown Campus. Assessment testing is available on a drop-in basis. For testing times, call 617-228-2468. Students receive a testing exemption if they provide transcripts of completed courses in math and writing.

The Weekend College conducts registration during each of the Orientation Sessions. Students also may register for classes during any of the day and evening registration times. For more information, call 617-228-2345 or email onlineadvising@bhcc.mass.edu.

#### **Weekend College Academic Support Services**

The Library and Learning Commons, Center for Self-Directed Learning, Tutoring and Academic Support Center, Language Lab, Math Lab, BHCConline Office and Advising Center provide an array of services for all students during the weekends during the fall and spring semesters. For more information, visit the Advising Center on Saturdays in Room B215 or email onlineadvising@bhcc.mass.edu.

#### **Midnight Courses**

To meet the needs of second-shift workers, parents and others who cannot attend college during day-time or evening hours, BHCC offers midnight courses. These courses begin at 11:45 p.m. and end at 2:30 a.m. Most of the classes are in subjects such as English, psychology, mathematics and sociology that are requirements for certificates and degrees ranging from computer science and fine arts to healthcare and other areas.

Free parking is available in Lot 4. There is also free coffee for night-owls. For further information, visit: www.bhcc.mass.edu/midnight-courses.





# **Academic Policy and Procedure**

#### Code of Behavior

Bunker Hill Community College expects students to behave in a manner appropriate to a college environment. College policy prohibits specific behaviors on campus property as described here and in the *Student Handbook*. These actions include disruptive behavior; violence or the written threat of violence; the possession or use of controlled substances or alcohol on College property; possession or use of weapons, ammunition or fireworks on College property; gambling on College property; unauthorized mass action; hazing; removal or mutilation of library books; plagiarism; cheating; sexual, racial or ideological harassment and damage to College property.

If it is proven that a student in any course in which he or she is enrolled has knowingly cheated or plagiarized, this may result in a failing grade for an exam or assignment, withdrawal from the course or a failing grade in the course. The student would also be subject to disciplinary proceedings as outlined in the *Student Handbook* for violation of the Student Code of Conduct.

Complaints against students should be referred to the appropriate academic dean for inappropriate behavior in the classroom, or to the Dean of Student Affairs for inappropriate behavior on College property. If necessary, the Dean will convene a disciplinary hearing committee. The members of the hearing committee make a recommendation to the Vice President regarding the disposition of the case. The Vice President's decision is final and binding.

Complaints by students against other members of the College community may be resolved through the Student Grievance Procedure. Refer to the Bunker Hill Community College *Student Handbook* for more information.

#### 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, Room D106H.

#### **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 Student Affairs. The Dean 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 attend no class meetings during the first four weeks of the semester will be withdrawn from the course and 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.

#### **Absence Due to Religious Beliefs**

1985 Regular Session STUDENTS ABSENCE DUE TO RELIGIOUS BELIEFS Chapter 375 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



#### **Auditing a Course**

Students desiring to audit a course must obtain permission from the Registrar or the Assistant Registrar. 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.

#### **Change of Grades**

Students must direct 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 complaints no later than 30 calendar days following the last day of the instructional period for which the grade was granted. Refer to the Bunker Hill Community College *Student 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 accountable for their behavior and demeanor during all clinical experiences and must conduct themselves in a manner that is in keeping with the professional conduct expected in their fields.

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 the Associate Dean of Nurse Education, Medical Imaging and Respiratory Therapy. Students participating in clinical experiences should refer to the Criminal Offender Record Information (CORI) and the Sex Offender Registry Information (SORI) requirements listed on pages 14-15 of this catalog.

#### **Course Load**

Students who carry 12 or more credit hours in a fall or spring semester or six credit hours in a summer or mini session are full-time students. Students must enroll in a minimum of 15 credit hours per semester 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 nine credits during a summer or mini session must obtain written permission from an academic dean.

#### **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. In order 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**

Degree seeking students completing a minimum of 12 credit hours in courses graded A, B or C 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, W, WA, NA 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 Deans' 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.

#### **Dropping or Adding a Course**

Students may adjust their schedules either during the registration period or during the schedule adjustment period. After the schedule adjustment period, students may add only those courses offered through the Center for Self-Directed Learning courses. Refer to the College's course schedule booklet for published deadlines.

#### **Final Examination Schedule**

Final examinations take place during the last week of the semester. Final examination makeup time is scheduled for the last day of final exam week. Students who are scheduled for two final examinations at the same time or who have more than two exams scheduled in one day may request that they be allowed to take one of those exams during the final examination makeup time. Students who miss final examinations must notify the academic dean of their program area immediately, stating the reason. The individual faculty member makes the decision regarding makeup of final exams.





#### **Grading and Notation System (effective January, 1990)**

	QUALITY DINTS PER
NOTATIONS DEFINITIONS OF GRADES AND NOTATIONS CREE	DIT HOUR
<b>A</b> Equivalent to a numerical grade of 94 - 100	4.00
<b>A-</b> Equivalent to a numerical grade of 90 - 93	3.70
<b>B+</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
<b>D</b> Equivalent to a numerical grade of 60 - 69	1.00
<b>F</b> Equivalent to a numerical grade of 0 - 59	none
P Indicates satisfactory completion of coursework where no letter grade is award of credits for a course by special examination. It is equivalent to a gor higher and carries no quality points. Credit hours will be given equivalent number of credit hours normally assigned to the course	rade of C ent to the
IP Required work in the course is in progress. The method and time for composition of work must be agreed upon in writing by student and instructor; not earned until the course is completed. IPs not completed by the enfollowing semester are automatically changed to a grade of F unless an IP is agreed upon in writing by student and instructor and submitted Registrar's Office	credit is d of the extension d to the
AU Audit; no credit earned	none
NA Students who register for a specific course and who have not attend meetings during the first four weeks of the semester will be withdrawn course and receive the grade designation NA (non-attendance) which we on the transcript and be counted toward credits attempted but not conthe grade point average. The NA grade designation is not used do summer semester	from the ill appear inputed in uring the
W Official withdrawal from a course; no credit earned	none
WA Administrative withdrawal from a course; no credit earned	none
The total quality points for a course is computed by multiplying the grade	e quality

The total quality points for a course is computed by multiplying the grade quality point by the number of credits for the course; for example, an A in College Writing (3 credits) produces 12.0 quality points.

**Computation of Grade Point Average:** 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 P, IP, AU, 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.

Example for determining a Cumulative Grade Point Average:

COURSE	CREDITS ATTEMPTED	GRADE		QUALITY POINTS	QUALITY POINTS EARNED
ENG112	3	A-	=	(3.70)	11.10
MAT196	3	C+	=	(2.30)	6.90
BIO102	4	В	=	(3.00)	12.00
SPN201	3	F	=	(0.00)	0.00
TOTAL	13				30.00

Cumulative Grade Point Average (CGPA): 30÷13 = 2.31

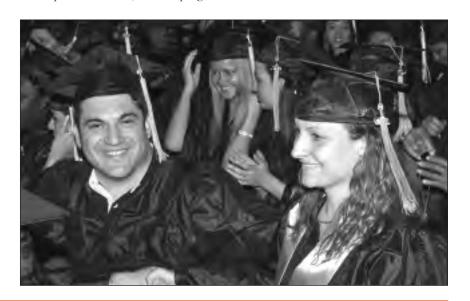
Graduation Grade Point Average is calculated in the same manner but excludes developmental course work (i.e. courses numbered below 100).

#### **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.





# **Satisfactory Academic Progress**



#### **Progress Reports**

At the seventh week of the semester, course instructors issue warning grades to all students doing minimal or failing work. Students who receive such warnings should discuss their academic progress with the appropriate instructor and their advisor.

### **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 the Admissions and Registration Desk. 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 changing their program must fulfill the curriculum year program requirements in effect at the beginning of the semester following the date of the change.

### Repeating a Course

Students may repeat only courses in which they earn a grade of D, F, W, WA, N or NA. The grade earned in the final attempt automatically becomes the official grade for purposes of calculating grade point average and for determining eligibility for

graduation. The grades for each attempt, however, are recorded on the student's transcript. Certain courses in the health programs must be repeated until the student earns a grade of A or B. When this exception applies, the College notifies the student.

#### **Academic Standing**

The College considers students to be in good academic standing if they successfully complete 66 percent or more of the total number of credits attempted with a cumulative grade point average of 2.00 or higher. Courses with a grade of F, W, WA, N, NA and IP are not considered to be completed successfully.

#### **Satisfactory Academic Progress**

In order to continue at Bunker Hill Community College and/or receive financial aid, students must make satisfactory progress toward a degree or certificate. The College considers students to be achieving satisfactory academic progress if they complete 66 percent or more of the total number of credits attempted and meet the following minimum cumulative grade point average:

CREDITS ATTEMPTED	CUMULATIVE GRADE POINT AVERAGE
Below 12	no minimum
12-30	
Above 30	

#### **Academic Probation**

The College places those students on academic probation who fail to meet the criterion of satisfactory academic progress. Students placed on academic probation may enroll in no more than 10 credits each semester while on academic probation. Students who fail to attain both the required cumulative GPA and the percentage of total credits attempted remain on academic probation even though they attain the appropriate semester GPA and complete 66 percent of credits attempted in the probationary semester. Students who remain on academic probation status for three consecutive semesters are placed on academic suspension.

The College mandates academic support for students on academic probation. Students must meet with a counselor or a designated academic advisor to discuss the factors interfering with academic progress, to determine appropriate course selections for the next semester and to develop an individual plan for academic success.





#### **Academic Suspension**

The College will suspend students from attending the College if one or more of the following circumstances occurs during any probationary semester:

- Failure to achieve a semester grade point average of 1.79.
   (Student has attempted between 12 and 30 credits to-date at BHCC) or
- Failure to achieve a semester grade point average of 2.00.
   (Student has attempted more than 30 credits to-date at BHCC) or
- Failure to complete more than 66% of the total number of credits attempted in this semester. (Please note that grades of F, W, WA, N, NA and IP, count as credits attempted).

The College will also suspend students from attending the College who have remained on academic probation for two consecutive semesters (see Academic Probation).

Suspended students must remain on suspension for a minimum of one semester unless the suspension is successfully appealed (see Appeals Process). Following a minimum leave of one semester, the College may consider suspended students for suspension re-admission. To be considered for re-admission, students must provide a typed letter with evidence of increased potential for academic success along with any other supporting documentation. Students must complete an application for re-admission secured through the Admissions and Registration Desk.

Re-admission is contingent upon a review of the application by the Associate Dean of Academic Affairs or an appropriate designee. Students are placed on academic probation for the semester in which they are readmitted and are limited to taking a maximum of 10 credits (see Academic Probation).

#### **Appeals Process**

Students placed on academic probation or suspension from the College for unsatisfactory academic progress have the right to appeal. For students on academic probation, the College grants appeals based on computational error. For students who are suspended, the College grants appeals through an Academic Appeals Committee. The decision of this committee is final. 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 page 25 for information on the Financial Aid appeals process.

#### Withdrawal from a Course

Students may withdraw from a course only during the semester in which they are registered for the course and only by the deadline specified for each semester. The College does not process course withdrawals after the withdrawal deadline date specified for each semester. The College issues no refunds for students who withdraw from a course.

To withdraw from a course, students must complete and submit the appropriate course withdrawal forms, which are available at the Admissions and Registration Desk. After students officially withdraw, their transcripts show grades of W. 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 classes does not constitute withdrawal from the course and results in a grade of F or NA for the course (see Satisfactory Academic Progress).

### Withdrawal from the College

Students may withdraw from the College only during the semester in which they are registered. Withdrawals are not processed retroactively, that is, after the semester in which the student was enrolled. Students who withdraw from the College are not entitled to a refund. To withdraw from the College, students must complete a withdrawal form available at the Admissions and Registration Desk, complete all the withdrawal steps and submit the completed form to the Admissions and Registration Desk. Students who withdraw from the College receive W grades on their transcripts for all courses for the semester withdrawn. 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 may do so without submitting an application if they reapply within two consecutive semesters of the date of withdrawal.



# **Institutional Policy Statements**

#### **Affirmative Action and Equal Opportunity Policy**

Bunker Hill Community College is an Affirmative Action/Equal Opportunity Employer. We are committed to a diverse, multicultural, multi-ethnic work environment. Women, people of color, persons with disabilities and others are strongly encouraged to apply.

Bunker Hill Community College does not discriminate on the basis of race, color, religion, national origin, age, gender, sexual orientation or disability status in its educational programs or in admission to, access to, treatment in or employment in its programs or activities as required by Title VI, Civil Rights Act of 1964; Title IX, Education Amendments of 1972; and Section 504, Rehabilitation Act of 1973 and regulations promulgated there under; 34 CFR Part 100 (Title VI), Part 106 (Title IX) and Part 104 (Section 504). Direct all inquiries concerning application of these regulations to the Director of Diversity and Inclusion, the College's Affirmative Action Officer and Title IX and Section 504 Coordinator, 250 New Rutherford Avenue, Room E236F, Boston, MA 02129 or by calling 617-228-3311.

When a student or employee believes s/he has been discriminated against based on race, color, national origin, age, gender, sexual orientation or disability status, the College's Affirmative Action Plan provides an informal complaint process and a formal grievance process which may be accessed by any member of the College community. For more information, or for a copy of the plan, contact the Affirmative Action Officer at 617-228-3311.

#### **Educational Records**

**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.



### Institutional Policy Statements



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. In order to facilitate this, a student must request in writing that a privacy code be placed on his/her directory information through the Admissions and Registration Office or the Registrar's Office. 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. Nonconsensual release of directory information may be submitted to the Department of Defense in accordance with the Solomon Amendment.

#### Sexual Harassment

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 conduct and expressive behavior 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 grievance process is a mechanism for redress. All grievants must contact the College's Affirmative Action Officer before proceeding under the Affirmative Action Policy's Grievance Procedure. Reasonable efforts are made to maintain confidentiality during the grievance process.

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 *Student Handbook*.

# Student Right-to-Know Graduation Rate and Campus Security Information

As mandated by the Public Law 101-542, the Student Right-to-Know and Campus Security Act, as amended by Public Law 102-26, the Higher Education Technical Amendments of 1991, the public may obtain Bunker Hill Community College student graduation rate information.

As mandated by the Crime Statistics Law, 20 U.S.C. 1092F, the College reports for the previous calendar year and for two prior years, if available, statistics concerning on-campus occurrences of crimes of murder, sexual offenses, robbery, aggravated assault, burglary and motor vehicle theft. In addition, the law requires that the College report the number of on-campus arrests for liquor violations, drug abuse violations and the possession of weapons.

Graduation Rates and Campus Security 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 at http://nces.ed.gov/collegenavigator/

In compliance with the law, security information is also available through the Public Safety Office, Room E127, Charlestown Campus and via the College website at www.bhcc.mass.edu.

45



### **Academic and Student Services**



#### **Admissions and Registration Office**

The Admissions and Registration Desk provides a variety of services to students. Prospective students may obtain information regarding applying to a degree program, specialized programs, information sessions and tours, and course schedules through the Admissions and Registration Desk or via the College website at www.bhcc.mass.edu. The Admissions and Registration Desk also provides registration services for all new and currently enrolled students, degree- or non-degree-seeking and those taking noncredit courses. Registration services include course scheduling, course and College withdrawal and schedule adjustment. The Admissions and Registration Desk processes transcript and verification requests, changes of programs and changes to personal information.

#### Online Services

The College offers all students secure, easy online access to academic and financial records, and to course availability information. Using a password, students access this information directly at http://onlineservices.bhcc.mass.edu. The College provides information online for students regarding semester grades, unofficial transcript, placement test summary, account summary, financial aid status, course schedules and course availability.

**Registration.** Students with a GPA of at least 2.00 and a minimum of 12 completed credits may register online; all students may pay online, providing their student payment account and immunization records (if applicable) are in good standing.

**Payment.** Students can access their financial account summaries online at http://onlineservices.bhcc.mass.edu. The account shows both current semester payments received and balances due. Students also are able to make online payments using VISA, MasterCard, Discover and American Express, or from a checking or savings account. Students also are able to make payments by phone by calling 1-866-519-0785.

**Financial Aid.** 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 documentation

**Obtaining a Password.** The College creates students' initial passwords using either the last six digits of their Social Security number or the last six digits of their Student ID. To access online services, go to http://onlineservices.bhcc.mass.edu and select the *Student* menu. Select *What's My User Id?* and input your last name and either your Social Security Number or your BHCC Student ID, and submit this information. You will receive your User ID. Now select Log In and input your User ID. You will also need to input an initial password, which is the last 6 digits of your Social Security Number if you have one or the last 6 digits of your BHCC Student ID. The system will then require you to change your password. Please note that your password must contain between 6 and 9 characters, include both letters and numbers, and contain no special symbols.

If you have created a password in the past but have forgotten it, you can automatically reset your password by selecting *What's My Password?* For information regarding obtaining a password or accessing online services, call the Student Helpline at 617-228-3441.

### **Advising/Counseling Center**

The Advising/Counseling Center provides a variety of services to assist students in achieving their academic, vocational and personal goals. These services include interpretation of assessment scores and assistance with selection of a program of study, course placement, course selection and registration. The Center staff also assist students with a variety of issues and concerns affecting their educational success. The College encourages students with academic and/or personal concerns to meet with an academic counselor. Walk-in advising is available throughout the year at a variety of times in Room B215. Call 617-228-2230 for information on the Advising/Counseling

### Transfer Counseling • The International Center



Center walk-in hours at the Charlestown Campus. Advising is also available on the Chelsea Campus. Call 617-228-2230 for information on advising at the Chelsea Campus.

#### **Transfer Counseling**

The College encourages students to meet with the transfer counselor to discuss the selection of a major and a transfer college, as well as to seek assistance with procedures to facilitate the transfer process. For transfer information, visit the Admissions and Registration Desk, Room B203, Charlestown Campus, or call 617-228-3398.

#### The International Center

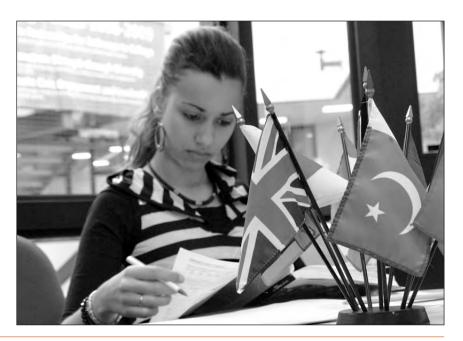
The International Center provides programs, services and activities designed to advance the internationalization of the College community. Staff at the Center provides comprehensive programs and individual assistance to international students from more than 90 countries who are welcomed to the College every year. The Center, with assistance from the Student Government Association, provides opportunities for students, faculty and staff to participate in international study and travel experiences in a variety of locations such as Costa Rica, the Czech Republic, France, Italy, India, Spain, China, Senegal and the United Kingdom. The Center hosts many international visitors and the Center staff members develop customized training programs for educators and students from around the world. With federal funding, the Center provides support to faculty to develop new international courses and to update their courses to include an international perspective, so that graduates are prepared to practice their professions within a global and multicultural environment. The International Center is located in Room E236, Charlestown Campus, and can be

International students who wish to attend Bunker Hill Community College apply through the International Center, where they can obtain the necessary documentation to apply for student visas to study in the United States. International Student Advisors in the International Center assist students to maintain legal immigration status, obtain student visas, apply for a change of their tourist visas to student visas, transfer to other colleges, obtain work permission, obtain practical training and arrange travel or temporary absence certification from the United States. The International Student Advisors also serve as counselors to discuss 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.

reached by calling 617-228-2460, by email at international@bhcc.mass.edu or by

visiting the website at www.bhcc.mass.edu/internationalcenter.





46 2011 - 2012 College Catalog



#### The Community Center for Entrepreneurship

The Community Center for Entrepreneurship (CCE) at BHCC is a resource center that promotes the understanding and growth of entrepreneurial opportunities and supports students, alumni and the surrounding community. CCE is funded by grants from the John E. and Jeanne T. Hughes Charitable Foundation, the Carl D. Perkins Career and Technical Education Act, and The Boston Area Advanced Technological Education Connections (BATEC).

The CCE is a great resource for you to:

- Take advantage of the CCE's free workshops and seminars, mentoring for aspiring entrepreneurs, and networking opportunities with local small businesses:
- Find resources on entrepreneurship, both on campus and online;
- Learn about the CCE's participation in national entrepreneurial activities, such as Global Entrepreneurship Week;
- Share your entrepreneurial experience by serving as a mentor or guest speaker.

In addition, BHCC offers a Degree Option and Certificate in Entrepreneurship. For further information about the CCE and academic programs call 617-228-3224, email cce@bhcc.mass.edu, or visit www.bhcc.mass.edu/entrepreneurship.

#### **Career Center**

The Career Center provides a wide range of career services to all currently enrolled students and alumni and provides a valuable link in the partnership between the College and the business community. Working closely with the academic programs, career counselors assist students in the process of career development, occupational research and job search. The Center houses a library of career information, current job listings, internships, and career/job search resources, including DISCOVER, a computer-based career and educational planning program and several resume writing software programs. The Career Center is located in Room M101 on the Charlestown Campus and can be reached at 617-228-2245, or visit www.bhcc.mass.edu/careercenter.

Career and Life Planning. The Career Center provides an opportunity for students to identify their interests, skills and values by offering workshops and assessments, including the Self-Directed Search and the Myers-Briggs Type Indicator, all designed to help students choose a major or make career decisions. These tools will help students set personal and educational goals as they start and continue their college education. Career counselors are available to meet with students individually to guide them through the process of career exploration.

**Job Search Activities.** Workshops designed to assist students in all aspects of finding and keeping employment are offered, including resume writing, interviewing skills, how to look for a job, tips for second language job seekers, and more. Jobs

are posted weekly from Boston-area employers and students and alumni can receive coaching and support while they conduct their job search. Employers are invited to recruit on campus throughout the year and a Job Club for graduating students is also offered.

**Job Fairs.** Job Fairs are held in the fall and spring semesters and provide employers with an opportunity to actively recruit on campus. Students are able to explore employment and career opportunities in several industries through personal contact with employers. Job Fairs are widely advertised on the campus. Workshops are offered through the Career Center to prepare students to be successful at the Job Fair.

**Internship Programs.** The College supports the opportunity for students to gain hands-on experience in a field of study through two types of internships: Academic Program Internships are 3-credit courses available in several disciplines that count toward a degree or certificate. Career Development Internships are non-credit field placements matched to career learning goals. Current postings, workshops, and advising are offered to help students identify opportunities, apply, and empower success on the internship. For more information contact the Internship Coordinator, Room B211D, Charlestown Campus, or visit www.bhcc.mass.edu/internships4students.

#### Office for Students with Disabilities

The College provides support services for students with documented disabilities. These services include classroom accommodations, testing modifications and the use of assistive technology. In addition, the Office offers academic advising, supportive counseling and study and support groups. These services promote equal access and student success, while maintaining student confidentiality and consideration in accordance with the Americans with Disabilities Act and the Rehabilitation Act of 1973. Students with appropriate documentation who wish to request accommodations should register with the Office for Students with Disabilities, Room D106, Charlestown Campus, or call 617-228-3415 or 617-228-2234, or TTY 617-228-2051.

*Note:* Students are responsible for initiating the request for accommodations, which are only permissible through the Office for Students with Disabilities.

#### **Health Services**

Bunker Hill Community College offers health services to promote health education and wellness in an atmosphere that is welcoming, culturally sensitive and growth producing. The Health Services Office promotes wellness through health education awareness programs and individual health counseling.

The Health Services Coordinator provides emergency first aid and treatment of minor injuries and common illnesses and is available to discuss the individual health concerns of students, faculty and staff. The Coordinator acts as a resource for information regarding immunizations, student health insurance, referral to local



### **General Services**

healthcare providers and health screening. For more information, visit the Health Services Office, Room E154, Charlestown Campus or call 617-228-2274.

Bunker Hill Community College is a smoke-free environment. Smoking is not allowed in any building on any campus.

**Bookstore.** The bookstore is located on the fourth floor, E-Building, Charlestown Campus, and operates all year round as a service to the students, faculty and staff. The bookstore stocks textbooks and related materials for all college courses. In addition, the store sells school supplies, reference materials, backpacks, clothing, gifts, and more. During the beginning of each semester, the bookstore brings course materials to the Chelsea campus for courses offered at that location. BHCC students can now order their textbooks online at www.whywaitforbooks.com to have them shipped or for easy pick up with no waiting in line. Textbook rentals are available. For store hours and inquiries, visit the bookstore's website at www.bhcc.bncollege.com or contact the bookstore at 617-241-5161.

**Food Services.** Fame Food Service operates a full-service cafeteria on the fourth floor, E-Building, Charlestown Campus. During the fall and spring semesters, the cafeteria is open Monday through Thursday, 8:00 a.m.-2:30 p.m., and Friday, 8:00 a.m.-2:00 p.m. The Fame Café, located in the main lobby of the Charlestown Campus, is open weekdays year round. During the fall and spring semester, the café extends its hours to include evenings and weekends: Monday through Thursday, 6:30 a.m.-9:00 p.m., Friday, 7:00 a.m.-2:00 p.m., Saturday, 8:00 a.m.-3:00 p.m., and Sunday, 9:00 a.m.-2:00 p.m.

**Child Care.** The Child Focus Centers, located on both the Charlestown and Chelsea Campuses, are preschools licensed by the Massachusetts Department of Early Education and Care. Both Centers are accredited by the National Association for the Education of Young Children (NAEYC). The Centers are open to children ages 15 months to 5 years of students, faculty and staff of Bunker Hill Community College. The Centers are open daily Monday through Friday on both campuses, and also Tuesday and Thursday evenings on the Charlestown Campus. For more information, call 617-241-5464.

**Student Lounges.** Lounges are located throughout the College and provide areas for quiet reading, conversation and table games.

**Parking.** Parking at the Charlestown and Chelsea College campuses is restricted to permit holders. On the Charlestown Campus, student parking is available in the large Parking Lots numbered 1 and 2. The perimeter roadway and Lots 3, 4, 5 and 6 are reserved for faculty and staff parking. Charlestown Campus Lot 4, adjacent to B-Building, provides designated one-hour visitor parking spaces as well as spaces for persons with disabilities. The Chelsea Campus provides parking in designated spaces for faculty and staff only. There is no student parking on the Chelsea Campus. The

Student Handbook contains complete information regarding parking regulations. The College is not responsible for any damage to and/or theft of any vehicles.

**Public Transportation and Directions.** All College campuses and satellites are accessible by public transportation. Directions to each College location and an MBTA map are at the back of this catalog.

**Security.** The Public Safety Department is dedicated to protecting the students, faculty, staff, visitors and property of Bunker Hill Community College. Campus Police officers are 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.

#### **Evening and Weekend Services**

In order to address evening students' needs, the College offers support services Monday through Thursday evenings until 7:00 pm.. Admissions and Registration, Financial Aid, Student Payment, Advising and Assessment are open Monday through Thursday until 7 p.m. Some offices are also open on weekends. Please see specific offices for current schedules.

An academic dean is available on the Charlestown Campus Monday through Friday evenings until 7 p.m. during the fall and spring semesters. Students may consult the academic deans to seek information regarding their programs of study, specific courses or for other academic issues. On weekends during the fall and spring semesters, the Director of BHCConline and Weekend College or his representative is available to address academic issues. BHCConline, Academic Computing Center, Audio-Visual Center, Center for Self-Directed Learning, Library and Learning Commons, Language Lab, Math Lab and the Tutoring and Academic Support Center are open evenings and weekends on the Charlestown Campus during the fall and spring semesters, and Monday through Thursday evenings during summer sessions.

The College schedules evening workshops such as Test-Taking Strategies, Choosing Your Major, Stress Reduction and a College Transfer Evening each semester. In addition, the College offers evening cultural activities for students, including a poetry series and musical entertainment.

**The Admissions and Registration Office** in the Main Lobby of both campuses is open evenings, and also on weekends on the Charlestown campus during the fall and spring semesters. Services available include assistance with admissions, program information, and assistance with transcript requests, change of program forms, degree audits, advising and registration.



**The Student Payment Office** is open Monday through Thursday evenings to assist students with account information and the purchase of parking permits. The Student Payment Office is open on weekends only for scheduled Saturday registrations.

**The Bookstore** has extended evening hours during the beginning of each semester and is open on Saturdays during the fall and spring semesters. BHCC students can now order their textbooks online at www.whywaitforbooks.com to have them shipped or for easy pick up with no waiting in line. For store hours and inquiries, visit the bookstore's website at www.bhcc.bncollege.com or contact the bookstore at 617-241-5161.

**The Café**, located in the Main Lobby of the Charlestown Campus, is open Monday through Thursday evenings and on weekends during fall and spring semesters.

**Child Care.** The Child Focus Center on the Charlestown campus is open Tuesday and Thursday evenings year round.

#### **Student Activities and Athletics**

Bunker Hill Community College offers a variety of co-curricular 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 students that provides the opportunity for students to develop leadership skills. Student Government Association members work in collaboration with the College administration to enhance the quality of student life on campus. Their meetings are open and all students are encouraged to take part in the decision-making process. The College requires any student holding or seeking an elected or appointed position in the SGA to continue to make satisfactory academic progress. The SGA develops a proposed annual budget with the Coordinator of Student Activities. The Associate Vice President of Student Services and Dean of Student Affairs reviews the budget proposal. The College President approves the final SGA budget, which is funded with income derived from student fees.

The Student Government Association formally approves student clubs and organizations. Clubs and organizations provide the opportunity for students to meet other students, have fun, learn, and develop organizational skills. A roster of clubs and organizations are listed to the right.

**Athletics.** BHCC's Athletic Department has developed a program of varsity, intramural and recreational offerings 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 programs with similar institutions. The Athletic Department

sponsors varsity level sports in Men's and Women's Basketball, Men's and Women's Soccer, Men's Baseball, Women's Softball (Fast Pitch!) and Co-ed Golf. College League Memberships include NJCAA (National Junior College Athletic Association) Division III and the MCCAC (Massachusetts Community College Athletic Conference) Division III. Intramural College Activities include 3 on 3 Basketball, Tennis, Table Tennis, Chess and Checkers.

The Athletic Department is located Room G117 in the Health and Wellness Center on the Charlestown Campus. For more information, visit www.bhcc.mass.edu/athletics.

**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*. To obtain a copy, contact the Student Activities Office, Room D106H, Charlestown Campus. Direct all inquiries related to College regulations, student conduct and the student grievance procedure to the Office of the Associate Vice President of Student Services and Dean of Student Affairs .

### **Student Clubs and Organizations**

A Cappella Club

African-American Cultural Society

African Students Club

Alpha Kappa Mu Honor Society

Arab Students Association

Art Club

Asian Students Association Behavioral Sciences Club

Brazilian Cultural Club

Business Club

Business Law Club

Cape Verdean Club

Criminal Justice Society

Dance Club

Entrepreneur Club
Evening Students Association

Foreign Language Club

Gay, Lesbian, Bisexual and Transgender Student Union

Gospel Choir Haitian Club

Hillel Club Hospitality Club International Media Club

Islamic Students Association

Latinos Club Math Club

Meditation and Wellness Club

Multicultural Club

Music Club Nursing Club

OTAKU and Gamer Alliance

Parents Association

Real Life Christian Fellowship

Science Association S.H.O.C.W.A.V.E.S.

(Students Helping Our Communities with Active Volunteer Experiences and Service)

Stage and Screen Club

Student Government Association

Student Success Club Sustainability Club

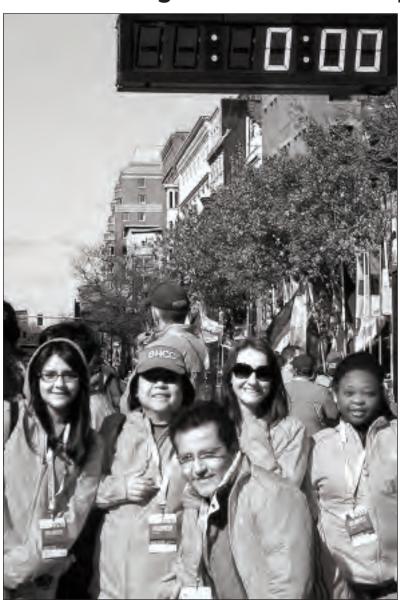
Veterans of all Nations Club

WBCC Radio Station

Writer's Block



# **BHCC Learning Communities: An Opportunity to Engage**



BHCC Learning Communities provide students with the opportunity to learn in a supportive and engaging environment. Students who participate in BHCC Learning Communities benefit from interdisciplinary learning experiences, teacher-to-student mentoring, peer mentoring, and integrated support services.

BHCC Learning Communities promote active and engaged learning through such practices as collaborative and problem-based learning, peer teaching and study groups, and service learning. Learning Community structures enable stronger relationships among students, faculty, and staff as well as encourage students to take responsibility for their learning. Students enrolled in Learning Communities are more likely to stay in college, do well in all their courses, and achieve their academic goals.

#### **Learning Community Seminar for First Year Students**

The Learning Community Seminar for First Year Students (LCS101) is a three-credit course designed to help incoming students make a successful transition to college. The Seminar provides a student-centered, active learning environment that maximizes academic and personal growth. Students develop competencies in six areas: reflection and career exploration; goal setting and problem solving; critical thinking and information literacy; communication skills; diversity and team work; and community engagement. The Learning Community Seminar is open to first-year students and required for first-time-to-college students who are enrolled full-time (12 or more credits) and pursuing AA or AS degrees. Faculty design Seminar topics based on student programs of study and interests. Students may choose a section based on their major or a topic of interest.

### **Learning Community Clusters**

Learning Community Clusters enable students to take two or more courses together, and learn and study with the same group of students. In Learning Community Clusters, faculty members have planned their courses together around common themes. Sometimes the work in the Learning Community is related to the student's major. Clusters offer smaller class sizes and hands-on activities such as field study and team projects that make learning fun.

#### **Common Interest Communities**

Common Interest Learning Communities bring together students with common interests, academic goals, or career aspirations for structured learning activities outside of the classroom. Students in Common Interest Communities may share a common major, or they may have something else in common, such as new parenthood or a desire to transfer to a four-year college or university.

For more information about BHCC Learning Communities, contact the Assistant Director at 617-228-2173.



# **BHCC Commonwealth Honors Program: An Invitation to Excellence**

The Commonwealth Honors Program (CHP) offers students in the state's public colleges and universities an intellectually stimulating educational foundation for becoming independent thinkers and lifelong learners. Completing your degree within the Commonwealth Honors Program designates you as a Commonwealth Honors Program Scholar, and guarantees your transfer to the Commonwealth College at UMass Amherst or an Honors Program at any state college or university where you have been accepted. Students in the CHP can also participate in Mass Transfer for transfer to four-year public colleges and universities. Participation in this program will also enhance applications to private four-year institutions.

#### **Honors Coursework**

Completion of the CHP requires three honors course experiences: Honors courses, honors components and completion of the Honors Seminar. An Honors component is an additional part of a regular course in which a CHP student works with an Honors advisor and course professor to design an enriching and academically rigorous experience that earns Honors credit. Examples might be special research in a chemistry or psychology course, an art portfolio or an analysis of an author's works. Completion of an Honors component in a course will earn an Honors designation on your transcript for the course.

The Honors Seminar is an interdisciplinary three-credit course that allows students to develop their research skills by exploring the theme chosen for the semester from different perspectives. Recent Honors Seminar topics have included: Concepts of Time; The Oceans; Pandemics–Epidemics; Waging War–Waging Peace in the Nuclear Age and Sustenance and Sustainability: Food and Drink. The Honors Seminar satisfies the Menu 6 distribution requirement.

### **Admissions and Program Requirements**

Some students enter the CHP immediately from high school. Others are returning BHCC students. To enter the program you must satisfy one of the following requirements:

- Current BHCC student with a minimum 3.3 cumulative GPA and at least 12 earned credits;
- High school graduate with B+ average;
- Transfer student from another college with at least 12 earned credits and a 3.5 GPA; or
- · Transfer student satisfactorily completing work in another CHP.

To graduate as a Commonwealth Honors Scholar, you must satisfy all of the following requirements:

- Meet all requirements for your associate's degree program;
- Earn a minimum 3.5 cumulative GPA at Bunker Hill Community College;
- Complete at least three courses which include an Honors Component or complete two Honors Components and Honors English 112 or complete one Honors Component, Honors English 112, and Honors Literature 517;
- Complete the Honors Seminar (HON200) an interdisciplinary Honors course. In the Honors Seminar you will develop an Honors research project and present the results of your research at the Honors Program presentation programs.

#### **Scholarships**

The College offers two scholarships of \$500 to CHP students. One is awarded to a continuing BHCC Honors Program student, the other to a student who has completed the Honors Program at BHCC and is transferring to a four-year institution to continue his/her education.

#### **Scholarships**

The College offers two scholarships of \$500 to CHP students. One is awarded to a continuing BHCC Honors Program student, the other to a student who has completed the Honors Program at BHCC and is transferring to a four-year institution to continue his/her education.

# Office of Community Engagement

The Office of Community Engagement is the home to all Service Learning initiatives, student volunteer experiences, and community partnership developments. The Office of Community Engagement seeks to help students develop tangible skills through community service, service learning, civic engagement, and student activism. Whether the involvement is civic-centered or service-centered, the Office of Community Engagement will help students see the connection between involvement in their communities and their own professional and personal development. During the academic year, the office hosts a variety of programs, such as a Get Involved! Volunteer and Internship Fairs, Service Months, Alternative Spring Break, and workshops focused on leadership and civic engagement.

The Office of Community Engagement guides students in finding community organizations to volunteer with and helps students recognize how service connects with their professional development. The office staff can assist students in petitioning professors to use service learning, which allows students to combine service and research in the community that relates to the content of their class. Through these efforts, the Office of Community Engagement helps students realize their passions and interests by encouraging them to become more civically involved in their community. For more information, visit the office in Room B211A or call 617-228-3485, or you may email the office staff at engagement@bhcc.mass.edu.



# **Programs of Study**

Bunker Hill Community College offers numerous programs of study that lead to Associate in Arts (A.A.) degrees, Associate in Science (A.S.) degrees and certificates. All programs of study include courses from three required areas: general education requirements, career and/or liberal arts electives and program requirements. These required areas are explained on the following pages.

**Associate in Arts (A.A.) degree concentrations** prepare students to transfer to four-year colleges and universities. Extreme care was taken in fashioning these transfer-focused degrees. Nonetheless, the College advises students to comply with the following recommendations:

- In order to make the wisest choice of Bunker Hill Community College courses, consult the institution to which you wish to transfer.
- In order to facilitate transfer to the four-year institution, work with the BHCC transfer counselor and your academic advisor in planning your BHCC curriculum.

Information about Transfer Programs is available on pages 16-18 of this catalog. Students should also meet with a transfer counselor to discuss transfer options.

**Associate in Science (A.S.) degree programs** prepare students with the knowledge and skills necessary to enter the workforce at the conclusion of the degree. In addition to preparing students for employment, many Associate in Science degree programs transfer to four-year colleges and universities.

To assure smooth transfer to four-year programs, A.S. transfer students should follow the recommendations for the Associate in Arts (A.A.) degree above.

**Certificate programs** provide students with skill training and job upgrade opportunities.

See pages 54-55 for a directory of all academic programs, organized by degree. Refer to the page number listed for your program of interest.

#### **General Education Requirements**

Bunker Hill Community College is committed to the belief that all graduates should possess the skills and breadth of knowledge necessary to live full and productive lives. The General Education portion of associate degree programs assists students in acquiring knowledge and skills that enhance their major areas of concentration. Students who receive A.A. or A.S. degrees must take a total of 22 credits of General Education.



Those credits must include:

- 1. ENG111 and ENG112 (six credits) to fulfill General Education Requirement 1 and
- Sixteen additional credits to fulfill General Education Requirements 2, 3, 4, 5 and 6.

Students may fulfill their General Education requirement by completing one course from each of the six General Education menu areas listed on the fold-out section at the back of this catalog. Instructors teaching General Education menu courses will outline in each course syllabus the General Education outcomes and requirements specific to their courses.

Students should consult their individual program grids in the following pages for General Education course requirements specific to their major.

Some General Education requirements are met by concentration courses. Such instances are noted in the program grids.



#### **General Education Outcomes for All Programs**

- Students are able to interpret, analyze, synthesize, and evaluate information from multiple sources in a logical and coherent manner.
- Students are able to approach writing as a process and to write coherent, well
  developed, effectively proofread essays, research papers, arguments, and
  critical analyses while using sources responsibly.
- Students are able to explain the sociological and psychological concepts and theories that describe the nature of human societies and can relate these concepts and theories to their own life situations. [Menu 2]
- Students are able to apply their understanding of diverse world perspectives and past historical events in order to critically evaluate potential resolutions to conflicts in our multicultural world. [Menu 3]
- Students are able to apply computational methods, generate problem-solving strategies, and construct mathematical models necessary in a technologically sophisticated society. [Menu 4]
- Students are able to use scientific methods of inquiry to investigate the ideas, laws, and theories used to explain the physical universe, its life forms and its natural phenomena. [Menu 5]
- Students are able to explore the dimensions of the human intellect and imagination and develop an informed appreciation of the diverse modes of creative expression. [Menu 6]

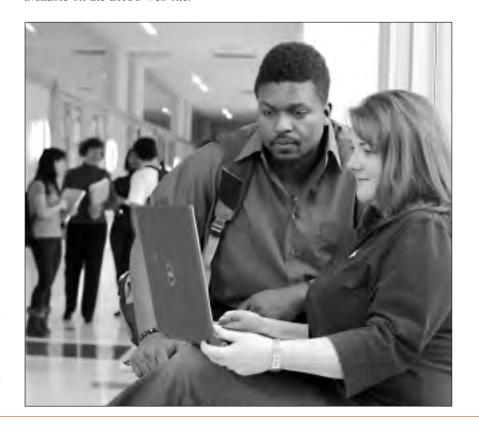
Refer to the fold-out section at the back of this catalog for General Education Requirements.

### **Student Learning Outcomes Assessment Program**

The Student Learning Outcomes Assessment Program (SLOAP) is Bunker Hill Community College's comprehensive plan to ensure relevant curriculum and quality teaching and learning in all of its academic and career programs. SLOAP was designed and implemented by the full-time faculty during the 2003-2004 academic year and it is designed to be a continuous and ongoing assessment of what students should know and be able to do as a result of enrolling in any College program or course.

A major emphasis of SLOAP is cross-curricular writing. Writing facilitates deep and efficient understanding of course content and develops the advanced critical thinking skills necessary for effective problem solving. Writing across the disciplines also helps students learn to communicate effectively, using the conventions appropriate to each discipline. This combination of improved critical thinking and communication skills supports personal and professional success.

In the pages that follow, each program has stated its mission in the program overview and has outlined the learning outcomes acquired upon completion of the program. Students should review this material along with the program curriculum in order to determine their individual expectations for a course of study. More information regarding the Student Learning Outcomes Assessment Program is available on the BHCC Web site.





# **Associate Degree and Certificate Programs**

Academic programs offered by BHCC begin on the following page. They are organized alphabetically by academic subject. Below is a listing of all academic programs organized alphabetically by degree. Refer to the page number listed below for the program of interest. **Refer to the fold-out section at the back of this publication for General Education Requirements.** 

BHCC Commonwealth Honors Program
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#### **ASSOCIATE IN ARTS DEGREES\***

7331	OCIAIL III AKIS DEGKEES	
GRID#	PROGRAM	PAGE
1	Business Concentration	
92	Chemical Science Concentration	152
13	Communication Concentration	68
14	Computer Information Systems Concentration	69
15	Computer Science Concentration	70
39	Education Concentration	94
43	English Concentration	99
95	Fine Arts Concentration	155
44	Foreign Language Concentration	100
45	General Concentration	101
65	History and Government Concentration	124
82	Mathematics Concentration	
83	Music Concentration	142
88	Physics/Engineering Concentration	148
89	Psychology Concentration	
93	Sociology Concentration	153
94	Theatre Concentration	154
98	*World Studies Emphasis Certification	158
	Students enrolling in any A.A. degree program can earn World Studies Emphasis certification simultaneously	

#### **ASSOCIATE IN SCIENCE DEGREES**

GRID #	PROGRAM	PAGE
	Biological Sciences Program:	
90	Biology Transfer Option	150
91	Biotechnology Option	151
	Business Administration Program:	
2	Accounting Option	57
3	Craft Entrepreneurship Option	
4	Entrepreneurship Option	
5	Finance Option	60
6	International Business Option	
7	Management Option	62
8	Technical Business Option	63
	Computer Technology Program:	
16	Computer Technology Program Core Curriculum	71
17	Computer Support Specialist Option	
18	Database Programming and Administration Option	
19	Network Technology and Administration Option	74
20	Computer Science Transfer Option	75
21	Digital and Computer Forensics and Investigations Option	76
22	Information Technology Transfer Option	77
	Computer Media Technology Program:	
31	Gaming/Computer Simulation Option	86
32	Web Development Option	
76	Criminal Justice Program	135
34	Culinary Arts Program	89
37	Early Childhood Development Program	92
40	Electric Power Utility Program	96
	Engineering Program:	
41	Biomedical Engineering Option	97
42	Engineering Transfer Option	
77	Fire Protection and Safety Program	136





	Hotel/Restaurant/Travel Program:		25	Database Support Specialist	8
66	Hotel/Restaurant Management Option		26	Excel Applications Support Specialist	8
67	Management of Assisted Living and Institutional Facilities Option	126	27	Computer Forensics	8
68	Meeting and Event Planning Option	127	28	Network Technology and Administration	
71	Human Services Program	130	29	Object Oriented Computer Programming and Design	8
	Medical Imaging Program:		30	Cisco Systems CCNA	
46	Cardiac Sonography Option	103		Computer Media Technology:	
47	General Sonography Option	104	33	Web Development	9
48	Medical Radiography Option	105	55		
49	Medical Radiography Part-time Evening Option	106	00	Legal Studies and Public Safety:	10
55	Medical Laboratory Science Program	112	80	Law Enforcement	
	Nursing Program:		81	Paralegal	14
56	Nursing Program: Day/Evening Option	114		Culinary Arts:	
57	Nursing Program: Hybrid/Weekend Option		35	Culinary Arts	
	Office and Information Management Program:		36	Pastry Arts	
84	Administrative Information Management Option	144	38	Early Childhood Development	
85	Medical Information Management Option		79	Fire Protection and Safety	13
78	Paralegal Studies Program			Hotel/Restaurant:	
58	Respiratory Therapy Program		69	Hotel/Restaurant Management	12
	Visual and Media Arts Program:		70	Meeting and Event Planning	12
96	Graphic Design Option	156		Human Services:	
97	Media Communication Option		72	Community Health Worker	13
	·		73	Professional Human Services Work	
CER	RTIFICATE PROGRAMS		74	Psychiatric Rehabilitation	
GRID #	PROGRAM	PAGE	75	Substance Abuse Services	
	Allied Health:			Medical Imaging:	
59	Medical Assistant	118	50	Computed Tomography	10
60	Medical Interpreting	119	51	Imaging Informatics	
61	Patient Care Technician		52	Magnetic Resonance (MR)	
62	Phlebotomy Technician	121	53	•	
	Business Administration:		54	Mammography	
9	Accounting Information	64	54	Vascular Sonography	I I
10	Craft Entrepreneurship			Office and Information Management:	
11	Entrepreneurship		86	Information Management Specialist	
12	International Business	67	87	Medical Information Management Assistant	14
	Computer Technology:			Surgical Technology:	
23	Computer Technology Certificate Program Core Curriculum		63	Central Processing	
24	Computer Support Specialist	79	64	Surgical Technology	12



## **1** Associate in Arts Degree: Business Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	Area 2 satisfied by program			
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Introduction to Business	BUS101 satisfies LCS requirement		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	
Principles of Psychology or Organizational Behavior/Design	PSY101 or MAN112		3	ESL098 or RDG095 or placement
Principles of Management	MAN111		3	BUS101; ESL098 and ESL099 or ENG090 and RDG095 or placement
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement
Macroeconomics	EC0201		3	MAT094 and RDG095 or placement
Principles of Accounting II	ACC102		3	ACC101
Microeconomics	EC0202		3	MAT094 and RDG095 or placement
Calculus for Management Science	MAT231		4	MAT192
Behavioral Science Elective			3	
Lab Science Elective			4	
Literature Electives (2)			6	pre/coreq ENG111
Statistics I	MAT181		3	MAT094
TOTAL CREDITS			63	

The Business Administration Department offers eight academic programs, placing graduates in a competitive position when seeking employment or transferring to four-year academic institutions. Students qualify for entry-level positions within their areas of concentration.

#### **CONCENTRATION OVERVIEW**

This concentration prepares students to transfer to four-year colleges or universities and major in business administration. A bachelor's degree enhances the competitive status of students for entry into business-related fields, and prepares students for advanced degrees. The college has transfer articulation agreements with many four-year academic institutions in the area. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer. The department also encourages students to consult with their advisors concerning transfer requirements.

#### **CAREER OUTLOOK**

Students' potential careers vary depending upon the chosen major and include accounting, mid-level management, banking, finance, and insurance. Students must complete a bachelor's degree as a minimum requirement for entry into these fields. Students may need to pursue graduate work, as well.

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

- Describe the interaction of history, culture, literature, economics, and science as studied within a broad liberal arts curriculum.
- Demonstrate competence in reading and writing/ literacy skills and in the organization of critical thinking and problem solving behaviors.
- Examine management theory and practice and explain basic business methodology and application.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



### Associate in Science Degree: Business Administration Program

This program prepares students for employment and for transfer to four-year colleges and universities. The college has transfer articulation agreements with many of the four-year colleges and universities in the area. The college encourages students to meet with their advisors for additional information. This program makes a concentrated effort to demonstrate how the subject matter relates to the cultures of our diversified student population. The program places emphasis on student participation

and creates an interactive forum in which to learn. The Business Administration Department offers eight academic programs, placing graduates in a competitive position when seeking employment or transferring to four-year academic institutions. Students qualify for entry-level positions within their areas of concentration.

## Accounting Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Accounting I	ACC101		3	
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and RDG095 or placement
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Accounting II	ACC102		3	ACC101
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Organizational Behavior/Design	MAN112 satisfies Area 2		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement
Accounting Information Systems	ACC105	Spring	3	ACC101; ENG095 or placement and ESL098 or RDG095 or placement
Intermediate Accounting I	ACC201	Fall	3	ACC102
World View	From Area 3		3	
Federal Income Tax I	ACC203	Fall	3	ACC102
Cost Accounting I	ACC207	Fall	3	ACC102
Science and Technology	From Area 5		4	
Intermediate Accounting II	ACC202	Spring	3	ACC201
Humanities	From Area 6		3	
Volunteer Income Tax Assistance	ACC205	Spring	3	ACC203
Managerial Accounting I	ACC216	Spring	3	ACC207
TOTAL CREDITS			61	

#### **OPTION OVERVIEW**

This option trains students in use of the accounting software used in industry by introducing computerized applications early in the sequence of courses. Students interface with the public through the Volunteer Income Tax Assistance (VITA) component of this option as they help interested members of the community prepare their tax returns.

#### **CAREER OUTLOOK**

This option qualifies graduates to enter the accounting profession in entry-level positions.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Understand all variables that are relevant to preparing individual tax returns at both the state and federal levels.
- Prepare a set of financial statements for a service, merchandising, or manufacturing business that is structured as either a proprietorship, partnership, or corporation.
- Analyze a set of financial statements to determine the strengths or weaknesses of the business.
- Understand the importance of cash flow within a business and account for its use and source in evaluating the effectiveness of managerial decisions.



## Craft Entrepreneurship Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Organizational Behavior	MAN112		3	
Macroeconomics or Microeconomics	ECO201 or ECO202 satisfies Area 3		3	MAT094 and RDG095 or placement
Quantitative Thought	From Area 4*		3-4	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Applications/Concepts	CIT110		3	ESL098 or RD6095 or placement
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and RDG095 or placements
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement
Principles of Accounting I	ACC101		3	
Accounting Information Systems	ACC105		3	ACC101; ENG095 or placement and ESL098 or RDG095 or placement
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Introduction to Entrepreneurship	MAN107		3	
Small Business Management	MAN207		3	ACC102 or ACC105; MAN111; MAN105 or instructor permission
Entrepreneurship and Innovation or Project Management or Operations Management or eCommerce Marketing	MAN204 or MAN215 or MAN212 or MAN217		3	MAN107 or instructor permission MAT094; CIT110; MAN111 MAN111; MAT173 or MAT181 or MAT183; CIT110 or CIT133 MAN105
North Bennet Street School		2 or 3 year program	18	chair approval
TOTAL CREDITS			67	

<sup>\*</sup>Recommended courses: MAT181 or MAT183

The Business Administration Department offers eight academic programs, placing graduates in a competitive position when seeking employment or transferring to four-year academic institutions. Students qualify for entry-level positions within their areas of concentration.

#### **OPTION OVERVIEW**

This option allows students and graduates of North Bennet Street School's 2 and 3-year programs to learn entrepreneurial skills and build on their own capabilities while earning a college degree. Students will be able to transfer credit for courses to four-year colleges with entrepreneurial programs. Students learn business skills that could be combined with their specialized skills to create opportunities for self-employment or for career advancement and career mobility.

Students who wish to apply to admission to the Craft Entrepreneurship Degree Option must contact the Dean of Professional Studies in Room 309, Charlestown Campus, telephone 617-228-2026.

#### **CAREER OUTLOOK**

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

# UPON COMPLETION OF THIS OPTION, 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.
- Be able to identify and analyze the marketing strategies of an organization that can be used to advance its mission.
- Integrate a variety of disciples concurrently to achieve business success.



# Entrepreneurship Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES	
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement	
College Writing II	ENG112		3	ENG111	
Organizational Behavior	MAN112 satisfies Area 2		3		
Macroeconomics or Microeconomics	ECO201 or ECO202 satisfies Area 3		3	MAT094 and RDG095 or placement	
Contemporary Math II or Statistics I or Statistics I with Lab or Calculus for Management Science	MAT173 or MAT181 or MAT183 or MAT231 satisifies Area 4		3-4	MAT094 or placement  MAT192 or placement	
Science and Technology	From Area 5		4		
Humanities 5.	From Area 6		3		
Applications/Concepts	CIT110		3	ESL098 or RD6095 or placement	
Computer Elective	see note		3	·	
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and RDG095 or placements	
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement	
Principles of Accounting I	ACC101		3		
Principles of Accounting II or Accounting Information Systems	ACC102 or ACC105		3	ACC101 ACC101; ENG095 or placement and ESL098 or RDG095 or placement	
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement	
Introduction to Entrepreneurship	MAN107		3		
Entrepreneurship and Innovation	MAN204		3	MAN107 or instructor permission	
Small Business Management	MAN207		3	ACC102 or ACC105; MAN111; MAN105 or instructor permission	
eCommerce Marketing or Merchandising	MAN217 or BUS224		3	MAN105 MAT094 or placement; ESL098 and ESL099 or RDG095 and ENG090 or placement	
Project Management or Operations Management or Principles of Retailing	MAN215 or MAN212 or BUS103		3	MAT094; CIT110; MAN111 MAN111; MAT173 or MAT181 or MAT183; MAT094 and CIT110; pre/coreq MAN105	
Business Internship or Management Seminar	MAN299 or MAN201		3	chair approval MAN105 and MAN111; should take in final semester	
Elective (Full-time students take LCS)	see note		3		
TOTAL CREDITS			64 - 65		

Recommended electives: CIT128, 133, 162, 233, 234

The Business Administration Department offers eight academic programs, placing graduates in a competitive position when seeking employment or transferring to four-year academic institutions. Students qualify for entry-level positions within their areas of concentration.

#### **OPTION OVERVIEW**

This option allows individuals to learn entrepreneurial skills and build on their own capabilities while earning a college degree. Students will be able to transfer credit for courses to four-year colleges with entrepreneurial programs. Students learn business skills that could be combined with their specialized skills to create opportunities for self-employment or for career advancement and career mobility.

#### **CAREER OUTLOOK**

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

# UPON COMPLETION OF THIS OPTION, 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.



# **5** Finance Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Business	BUS101 satisfies LCS requirement	Must be taken first semester	3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Quantitative Thought	From Area 4		3	MAT094 or placement
Principles of Management	MAN111		3	BUS101; ESL098 and ESL099 or ENG090 and RDG095 or placement
Real Estate or Wills, Estates, and Trusts	PLG203 or PLG204	Spring	3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Principles of Accounting II	ACC102		3	ACC101
Professional Communication	BUS207		3	ENG111
Macroeconomics	ECO201 satisfies Area 3		3	MAT094 and RDG095 or placement
Science and Technology	From Area 5		4	
Investments	ACC111	Fall	3	ACC102
Personal Finance	ACC112	Spring	3	
Organizational Behavior/Design	MAN112 satisfies Area 2	Fall	3	
Microeconomics	EC0202		3	MAT094 and RDG095 or placement
Financial Management	ACC210	Spring	3	ACC102
Humanities	From Area 6		3	
Money and Banking	ACC211	Spring	3	ECO201 and ECO202
Mutual Funds Industry	MAN213	Spring	3	ACC102 and ACC111
TOTAL CREDITS			61	

The Business Administration Department offers eight academic programs, placing graduates in a competitive position when seeking employment or transferring to four-year academic institutions. Students qualify for entry-level positions within their areas of concentration.

#### **OPTION OVERVIEW**

This option prepares students with general workforce skills and specialized educational training for entry-level positions in financial services, investment banking, financial planning, budgeting, and/or administration.

#### **CAREER OUTLOOK**

This option qualifies graduates for a variety of positions in banking, insurance, finance, brokerage, and mutual fund operations.

# UPON COMPLETION OF THIS OPTION, 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.



# International Business Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Accounting I	ACC101		3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Macroeconomics	ECO201 satisfies Area 3		3	MAT094 and RDG095 or placement
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement
Principles of Management	MAN111		3	ESL098 or placement and ESL099 or ENG090 and RDG095 or placement
College Writing II	ENG112		3	ENG111
Quantitative Thought	From Area 4		3	MAT094 or placement
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Microeconomics	EC0202		3	MAT094 or placement and ESL098 or RDG095 or placement
Principles of Accounting II	ACC102		3	ACC101
Science and Technology	From Area 5		4	
International Business	BUS106	Fall	3	EC0201 or EC0202
International Marketing	MAN106	Spring	3	MAN105
Liberal Arts Elective			3	
Cultural Anthropology	SOC109 satisfies Area 2		3	ESL098 or RDG095 or placement
Humanities	From Area 6		3	
Money and Banking	ACC211	Spring	3	EC0201 and EC0202
Exporting/Importing or	BUS108 or	Spring	3	BUS106
International Logistics	BUS112			500100
Career Elective	see note		3	
TOTAL CREDITS			61	

Note: Select the career elective from ACC, BUS, or MAN courses.

The Business Administration Department offers eight academic programs, placing graduates in a competitive position when seeking employment or transferring to four-year academic institutions. Students qualify for entry-level positions within their areas of concentration.

#### **OPTION OVERVIEW**

This option introduces students to the principles and concepts of international business operations. Students examine the significance of a global marketplace impacted by the diverse cultural, political, and legal environments that interface in a dynamic manner. The college has transfer articulation agreements with many of the four-year colleges and universities in the area, allowing students to transfer from this option. Students should speak with the department chairperson for specific transfer information.

#### **CAREER OUTLOOK**

This option qualifies graduates to seek employment with businesses conducting international operations that correspond to the required career electives.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Understand the many variables that impact a business conducting transactions in an international arena.
- Gain an appreciation of what is required of a business to compete and survive in the global marketplace.
- Examine marketing strategies that are available to businesses attempting to promote their products beyond the domestic boundaries of the United States.



### Management Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Business	BUS101 satisfies LCS requirement	Must be taken first semester	3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Management	MAN111		3	BUS101; ESL098 and ESL099 or ENG090 and RDG095 or placement
Principles of Accounting II	ACC102		3	ACC101
College Writing II	ENG112		3	ENG111
Quantitative Thought	From Area 4		3	MAT094 or placement
Organizational Behavior/Design	MAN112 satisfies Area 2	Fall	3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Macroeconomics	ECO201 satisfies Area 3		3	MAT094 and RDG095 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Financial Management	ACC210	Spring	3	ACC102
Management Seminar	MAN201	Spring	3	MAN105 and MAN111; should take in final semester
Professional Communication	BUS207		3	ENG111
Computer Elective			3	
Career Elective	see note		3	
Career Elective	see note		3	
TOTAL CREDITS			61	

Note: Select the career elective from ACC, BUS, or MAN courses.

The Business Administration Department offers eight academic programs, placing graduates in a competitive position when seeking employment or transferring to four-year academic institutions. Students qualify for entry-level positions within their areas of concentration.

The Management Seminar in this program is a Capstone course. It should be take in the student's final semester, and is offered only in the spring semester.

#### **OPTION OVERVIEW**

This option prepares students with a solid foundation of managerial principles and concepts that are standard practice in business. The upper-level management courses focus on the case study approach, allowing students to analyze and solve realistic management problems. The college has transfer articulation agreements with many of the four-year colleges and universities in the area, allowing students to transfer in this option. Students should speak with the department chairperson for specific transfer information.

#### **CAREER OUTLOOK**

This option qualifies graduates to enter the workforce as productive entry-level managers.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Apply the concepts needed to direct, plan, organize, and control the operations of a business.
- Demonstrate the necessary leadership skills to mobilize and motivate employees to accomplish business goals.
- Employ effective decision-making techniques in the workplace.
- Utilize human relations techniques when working with individuals or groups to help meet business objectives and resolve conflicts.



# Technical Business Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Organizational Behavior/Design	MAN112 satisfies Area 2		3	
Macroeconomics or Microeconomics	ECO201 or ECO202 satisfies Area 3		3	MAT094 and RDG095 or placement
Contemporary Math II or Statistics I or Statistics I with Lab or Calculus for Management Science	MAT173 or MAT181 or MAT183 or MAT231 satisfies Area 4		3-4	MAT094 or placement  MAT192 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and RDG095 or placement
Small Business Management	MAN207		3	ACC102 or ACC105; MAN111; MAN105 or instructor approval
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement
Principles of Accounting I	ACC101		3	
Principles of Accounting II or Accounting Information Systems	ACC102 or ACC105		3	ACC101 ENG095 or placement and ESL098 or RDG095 or placement
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Approved Apprenticeship			21	chair approval
TOTAL CREDITS			64 - 65	

The Business Administration Department offers eight academic programs, placing graduates in a competitive position when seeking employment or transferring to four-year academic institutions. Students qualify for entry-level positions within their areas of concentration.

This program is offered under an agreement with the New England Laborers Union. Students will transfer college credit for courses successfully completed during a New England Laborers Union Training Apprenticeship. College credits must be approved by the American Council on Education (ACE) and it is the responsibility of the student to obtain ACE approval.

#### **OPTION OVERVIEW**

This option allows individuals in the vocational field to build on their apprenticeship training to earn a college degree. Students can earn transfer credit for courses that are approved by the American Council on Education. Students learn business skills that could be combined with their specialized skills to create opportunities for self-employment or for career advancement and career mobility.

#### CAREER OUTLOOK

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

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- 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 the strengths or weaknesses of the business.
- Understand the basic principles of business law, contracts and agency.
- Demonstrate proficiency in spreadsheet and software applications.
- 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.



# Accounting Information Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Accounting I	ACC101		3	
Principles of Accounting II	ACC102		3	ACC101
Accounting Information Systems	ACC105	Spring	3	ACC101; ENG095 or placement and ESL098 or RDG095 or placement
Intermediate Accounting I	ACC201	Fall	3	ACC102
Applications/Concepts or Introduction to MS Office	CIT110 or CIT133		3	ESL098 or RDG095 or placement
Decision Support Using MS Excel	CIT234		3	CIT110, CIT113 or CIT120 or chair approval
Statistics	MAT181 or 183		3-4	MAT094 or placement
Concentration Electives			6	
CONCENTRATION ELECTIVES (CHOOSE 2)				
Intermediate Accounting II	ACC202	Spring	3	ACC201
Cost Accounting	ACC207	Fall	3	ACC102
Federal Income Tax I	ACC203	Fall	3	ACC102
Financial Management	ACC210	Spring	3	ACC102
Database Design with MS Access	CIT128		3	CIT110, CIT113, or CIT120 or chair approval
TOTAL CREDITS			27-28	

Due to the prerequisite requirements, it is not possible to complete this certificate program in one year. The program is intended to be followed on a part time basis over two years.

#### PROGRAM OVERVIEW

This program prepares students for entry-level training positions in firms where accounting departments may be specialized or all-inclusive (examples: accounts payable, accounts receivable, or inventory control). In addition, the program certifies those who are currently performing bookkeeper functions at their present employment. The certification enhances students' opportunities for growth. The program prepares graduates with skills directly transferable to the workplace through a combination of technical accounting training and financial accounting. The certificate program prepares students who feel that a degree program is not an appropriate choice.

#### **CAREER OUTLOOK**

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

# UPON COMPLETION OF THIS PROGRAM, 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.



## Craft Entrepreneurship Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and RDG095 or placement
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement
Principles of Accounting I	ACC101		3	
Accounting Information Systems	ACC105		3	ACC101; ENG095 or placement and ESL098 or RDG095 or placement
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Introduction to Entrepreneurship	MAN107		3	
Small Business Management	MAN207		3	ACC102 or ACC105; MAN111; MAN105 or instructor permission
Entrepreneurship and Innovation or Project Management or eCommerce Marketing or Operations Management for Business	MAN204 or MAN215 or MAN217 or MAN212		3	MAN107 or instructor approval MAT094; CIT110: MAN111 MAN105 MAN111; MAT173 or MAT181 or MAT183; and CIT110 or CIT133
TOTAL CREDITS			27	

#### PROGRAM OVERVIEW

This program prepares students to understand the business issues, technical skills and other knowledge underlying success in entrepreneurial endeavors. All of the courses are part of the Entrepreneurship Option of the A.S. in Business Administration Degree and thus could be used to fulfill requirements of that program. The certificate could also be completed to supplement knowledge acquired in craft disciplines by those that wish to start their own businesses.

#### **CAREER OUTLOOK**

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

# UPON COMPLETION OF THIS PROGRAM, 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 the 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 full potential from limited resources and improving productivity and effectiveness.
- Integrate a variety of disciples concurrently to achieve business success.



# Entrepreneurship Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and RDG095 or placement
Principles of Marketing	MAN105		3	ENG090 or placement and ESL098 or RDG095 or placement
Principles of Accounting I	ACC101		3	
Accounting Information Systems	ACC105		3	ACC101; ENG095 or placement and ESL098 or RDG095 or placement
Introduction to Entrepreneurship	MAN107		3	
Entrepreneurship and Innovation	MAN204		3	MAN107 or instructor approval
Small Business Management or Project Management	MAN207 or MAN215		3	ACC102 or ACC105; MAN111; MAN105 or instructor approval MAT094; CIT110, MAN111
eCommerce Marketing or Organizational Behavior or Business Law I	MAN217 or MAN112 or BUS201		3	MAN105 ENG095 or placement and ESL098 or RDG095 or placement
TOTAL CREDITS			27	

#### **PROGRAM OVERVIEW**

This program prepares students to understand the business issues, technical skills and other knowledge underlying success in entrepreneurial endeavors. All of the courses are part of the Entrepreneurship Option of the A.S. in Business Administration Degree and thus could be used to fulfill requirements of that program. The certificate could also be completed to supplement knowledge of those majoring in other disciplines such as information technology, hospitality, or culinary arts who may wish to start their own business.

#### **CAREER OUTLOOK**

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

# UPON COMPLETION OF THIS PROGRAM, 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.



### 12 International Business Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
International Business	BUS106	Fall	3	EC0201 or EC0202
Cultural Anthropology	SOC109		3	ESL098 or RDG095 or placement
Foreign Language 1			3	
Foreign Language 2			3	
International Marketing	MAN106	Spring	3	MAN105
Concentration Electives			12	
CONCENTRATION ELECTIVES (Choose 4)				
Export/Import Process	BUS108	Spring	3	BUS106
Money and Banking	ACC211	Spring	3	EC0201 and EC0202
International Logistics	BUS112		3	BUS106
International Business Issues	BUS114		3	BUS106
Career Elective	see note		3	
Business Internship	MAN299		3	chair approval
TOTAL CREDITS			27	

Note: Select the career elective from ACC, BUS, or MAN courses.

Due to the prerequisite requirements, it is not possible to complete this certificate program in one year. The program is intended to be followed on a part time basis over two years. At least one of the Economics courses ECO201 or ECO202 is required to begin this program.

#### PROGRAM OVERVIEW

This program prepares students already employed in a business environment with an international dimension to their existing areas of expertise. All students must take BUS106, International Business, and MAN106, International Marketing, but may choose any four courses from the pool of electives. Students have the unique opportunity to custom design their curriculum in order to accomplish their educational objectives. Students must take courses in English, mathematics, and reading as prerequisites to this program.

#### **CAREER OUTLOOK**

Graduates of this program qualify for entry-level positions in various fields in international business or for continuation in an associate degree program.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- Understand the export/import process.
- Understand the technology specific to international business.
- Understand the concepts of international business financing.
- Understand freight forwarding.



## **Associate in Arts Degree: Communication Concentration**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Journalism I	ENG241		3	ENG095 or placement
Mathematics Elective			3	MAT094 or placement
Lab Science Elective			4	
Behavioral Science Elective			3	
Social Science Elective			3	
Elective (Full-time students take LCS)	see note		3	
Elective	see note		3	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Concentration Electives			12	
CONCENTRATION ELECTIVES (CHOOSE 4)				
Principles of Advertising	BUS225		3	MAN105
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Film as Art	FLM101		3	
Oral Communication	ENG171		3	
Intro to Desktop Publishing	VMA131		3	ENG095 and MAT092 or placement
Introduction to Mass Media	VMA111		3	ENG095 and MAT092 or placement
Journalism II	ENG242		3	ENG095 or placement
TOTAL CREDITS			62	

Note: The department recommends a two-semester foreign language sequence.

#### **CONCENTRATION OVERVIEW**

The English Department offers programs which qualify graduates to transfer to four-year institutions that prepare them for careers in teaching, journalism, public relations, and media communications. 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, advertising, public relations, and journalism.

The communications concentration prepares students to transfer to four-year colleges or universities in journalism or media communications. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### **CAREER OUTLOOK**

Graduates of this concentration qualify to transfer to four-year colleges or universities that prepare students for professional careers in journalism, public relations, and media communications.

A bachelor's degree is the minimum requirement for entry into these fields. Graduate work may be necessary, as well.

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

- Communicate effectively in a variety of formats and situations.
- Write for a variety of purposes, adapting to varying audiences.
- Write pieces for specific markets, such as news stories and traditional academic papers.
- Use a computer to compose and edit papers and conduct Internet research.
- · Demonstrate proficiency in critical thinking.
- Understand the dynamics of communication in a global context.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



## **Associate in Arts Degree: Computer Information Systems Concentration**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	Area 3 satisfied by program			
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Applications/Concepts	CIT110 (Full-time students take CIT113)		3	ESL098 or RDG095 or placement
Principles of Accounting I	ACC101		3	
Intermediate Visual Basic	CIT218		3	CIT216 or instructor or chair approval
Visual Basic	CIT216		3	CIT110, CIT113, or CIT120 or chair approval
Principles of Accounting II	ACC102		3	ACC101
Microeconomics	EC0202		3	MAT094 and RDG095 or placements
Macroeconomics	EC0201		3	MAT094 and RDG095 or placements
Behavioral Science Elective			3	
Lab Science Elective			4	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Computer Elective	see note		3	
Computer Elective	see note		3	
Mathematics Elective			3-4	MAT094 or placement
Mathematics Elective			3-4	MAT094 or placement
TOTAL CREDITS			62-64	

Note: Recommended computer electives: CIT118, 120, 128, 162, 216, 242, 268, 272, 284.

#### **CONCENTRATION OVERVIEW**

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entry-level careers as database professionals through the Associate in Science (A.S.) and Certificate Database Programming and Administration Programs. CIT also prepares students to transfer to four-year college Information Technology (IT) Programs through two Associate in Arts (A.A.) Programs: A.A. Computer Information Systems Transfer and A.A. Computer Science Transfer. The department's goals are in concert with the college's goals (www.bhcc.mass.edu). Using input from its Industry Advisory Committee and internship course, the department is continually updating and fine tuning its programs of study. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### CAREER OUTLOOK

Graduates of this concentration can transfer to bachelor's programs at four-year colleges.

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

- Analyze the system needs of an organization.
- Make feasible recommendations for computer solutions that meet those needs.

This program also is available through the Weekend College Program.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158



### **15** Associate in Arts Degree: Computer Science Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	Area 5 satisfied by program			
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Intro to Computer Science and Object Oriented Programming	CIT120 satisfies LCS requirement - see note		4	ENG095 and MAT094 and RDG095 or placement
Introduction to Java	CIT239		4	ENG095 and MAT194 or placement; CIT120 or chair approval
Advanced Java	CIT285		3	CIT239 and MAT197
Data Structures	CIT242		3	CIT239 and MAT197
Linear Algebra or C++ Programming	MAT291 or CIT237		4	MAT281 MAT194 or placement and CIT120 or chair approval
Precalculus	MAT197		4	MAT194 or placement
Calculus I	MAT281		4	MAT196 or MAT197
Calculus II	MAT282		4	MAT281
College Physics I/Lab	PHY251		4	MAT281
College Physics II/Lab	PHY252		4	PHY251; pre/coreq MAT282
Behavioral Science Elective			3	
Social Science Elective			3	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
TOTAL CREDITS			65	

Note: The Department recommends that a college-level math course be taken before or concurrently with CIT120.

#### **CONCENTRATION OVERVIEW**

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entry-level careers as database professionals through the Associate in Science (A.S.) and Certificate Database Programming and Administration Programs. CIT also prepares students to transfer to four-year college Information Technology (IT) Programs through the Computer Information Systems Transfer Program and the A.S. Computer Science Transfer Option. The department's goals are in concert with the college's goals (www.bhcc.mass.edu). Using input from its Industry Advisory Committee and internship course, the department is continually updating and fine tuning its programs of study. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### **CAREER OUTLOOK**

Graduates of this concentration can transfer to bachelor's programs at four-year colleges.

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

- Design, implement, and maintain a software solution for a realistic problem by correctly employing and applying the principles of object oriented programming.
- Write Java code.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



# **Associate in Science Degree: Computer Technology Program**

The Computer Information Technology Department (CIT) has a clear, well-articulated, three-pronged mission, which includes supporting the IT components of the college's General Education offerings (across divisions, departments, and campuses, as well as through interdepartmental collaboration), preparing an IT workforce through certificate and associate degree offerings, and providing IT students with seamless transfer opportunities to related Baccalaureate Degree programs.

The Computer Technology Program Core Curriculum affords students the opportunity to explore the many career tracks in Information Technology before selecting a career in Computer Support, Data Base or Networking. The department's goals are in concert with the college's goals. Using input from its Industry Advisory Committees and internship course, the department is continually updating and fine tuning its programs of study.

### 16 Computer Technology Program Core Curriculum

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Principles of Accounting I	ACC101		3	
Oral Communications	ENG171		3	
Application/Concepts	CIT110 (Full-time students take CIT113)		3	ESL098 or RDG095 or placement
Introduction to Networking	CIT162		3	CIT110 or CIT113
Visual Basic	CIT216 - see note		3	CIT110, CIT113, or CIT120 or chair approval
Windows Operating Systems	CIT268		3	CIT110, CIT113, or chair approval
PC Hardware	CIT182 - see note		3	
PC Keyboarding Techniques	OIM100		1	
SUB-TOTAL CORE CREDITS			44	

Note: CIT216 is not required for the Network Technology and Administration Option.

CIT182 is not required for the Database Programming and Administration Option.



### **17** Computer Support Specialist Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
CORE CURRICULUM			44	
Principles of Internet and Information Security	CIT118		3	CIT110, CIT113, or CIT120 or chair approval
Introduction to MS Office	CIT133		3	
Advanced MS Office	CIT233		3	CIT110, CIT113, or CIT133 or chair approval
Collaboration, Communication and Integration in MS Office Applications	CIT250		3	CIT110, CIT113, or chair approval
Help Desk Techniques	CIT230		3	CIT110, CIT113, or CIT120 and one additional CIT course; ENG095 and RDG095 or placements
Internship	CIT299C		3	chair approval
TOTAL CREDITS			62	

#### **OPTION OVERVIEW**

This option is designed for full-time or part-time students who wish to prepare for the positions of Help Desk Technician, Technical Support Specialist and Customer Service Representative. This occupational group provides technical assistance, support, and advice to customers and users. The degree prepares graduates by developing in them skills ranging from the technical and computer-related to the "people" skills of verbal and written communications, telephone skills, tact, good manners, and logical problem diagnosis and solution.

The degree incorporates preparation for ICT Industry Certification Examinations. A range of general education courses in the program also enrich professional skills.

#### **CAREER OUTLOOK**

Graduates of this option may qualify for entry-level support positions in hardware support, trouble-shooting, help desk, Microsoft applications and other Internet support positions.

- Take the Comp TIA A+ Certification Examination.
- Understand help desk, Internet support, hardware and other entry level IT support professions.



### Database Programming and Administration Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
CORE CURRICULUM			41	
Principles of Internet and Information Security	CIT118		3	CIT110, CIT113, or CIT120 or chair approval
Database Design with MS Access	CIT128		3	CIT110, CIT113, or CIT120 or chair approval
Intermediate Visual Basic	CIT218		3	CIT216 or instructor or chair approval
Information Security and Assurance	CIT219		3	CIT118 or chair approval
SQL Programming	CIT236		3	CIT110, CIT113, or CIT120 or chair approval
Database Programming	CIT240		3	CIT236 or chair approval
Database Administration	CIT245		3	CIT236 or chair approval
TOTAL CREDITS			62	

#### **OPTION OVERVIEW**

The Computer Information Technology Department (CIT) has a clear, well-articulated, three-pronged mission, which includes supporting the IT components of the college's General Education offerings (across divisions, departments, and campuses, as well as through interdepartmental collaboration), preparing an IT workforce through certificate and associate degree offerings, and providing IT students with seamless transfer opportunities to related Baccalaureate Degree programs.

The Computer Technology Program Core Curriculum affords students the opportunity to explore the many career tracks in Information Technology before selecting a career in Computer Support, Data Base or Networking. The department's goals are in concert with the college's goals. Using input from its Industry Advisory Committees and internship course, the department is continually updating and fine tuning its programs of study.

The Database Programming and Administration option prepares students to gather data to determine user requirements and to design and program reports and forms so those users can create queries and interpret results. It also prepares students to determine necessary system changes, to create security procedures, and to implement backup and recovery processes.

#### **CAREER OUTLOOK**

Graduates of this option may qualify for entry-level database programming and support positions in a wide range of organizations.

## UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

 Qualify with the skill set necessary to take the first level of Oracle database certification.



## Network Technology and Administration Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
CORE CURRICULUM			41	
Routers and Routing Basics	CIT167		3	CIT162
Wireless Technology	CIT262		3	CIT162
Networking Security	CIT264		3	CIT162
LAN Switching and Wireless	CIT267		3	CIT167
WAN Technologies	CIT274		3	CIT267
MS Windows Server Admin/Lab	CIT282		4	CIT162; pre/coreq CIT268
Linux Administration/Lab	CIT270		4	CIT162
TOTAL CREDITS			64	

#### **OPTION OVERVIEW**

This option prepares students to maintain network hardware and software so that people within the organization receive timely and accurate information. Using cable, fiber optics, or wireless communications, the option prepares students to configure, manage and maintain a company's computer networking infrastructure. The option emphasizes networking technology for local area networks (LANs), and for connecting to larger networks (WANs) and to the Internet.

#### **CAREER OUTLOOK**

Graduates of this option may qualify as network administrators, responsible for day to day network operations as well as for entry-level networking positions, that may include hardware support and troubleshooting, software installation, and maintenance of a network.

- Have knowledge of the latest versions of Network Operating Systems (NOS) including UNIX, Linux and Microsoft Windows.
- Set up and configure a network.
- Set up user accounts and profiles to protect the network's integrity and security.
- Qualify to take the Microsoft Certified Professional (MCP) Examination, the Comp TIA Network+ and Comp TIA A+ Certification examinations, the Cisco Certified Network Administrator (CCNA) examination and the Certified Wireless Network Administrator (CWNA) examination.



### **20** Computer Science Transfer Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	Area 5 satisfied by program			
Humanities	From Area 6		3	
Intro to Computer Science and Object Oriented Programming	CIT120 satisfies LCS requirement		4	ENG095 and MAT094 and RDG095 or placements
Introduction to Java	CIT239		4	ENG095 and MAT194 or placement; CIT120 or chair approval
Advanced Java	CIT285		3	CIT239 and MAT197
Data Structures	CIT242		3	CIT239 and MAT197
C++ Programming	CIT237		4	MAT192 or placement and CIT120 or chair approval
College Algebra	MAT194; waived for students placing higher		3	MAT094 or placement
Precalculus	MAT197		4	MAT194 or placement
Calculus	MAT281		4	MAT196 or MAT197
Calculus II	MAT282		4	MAT281
College Physics I/Lab	PHY251		4	MAT281
College Physics II/Lab	PHY252		4	PHY251; pre/coreq MAT282
Elective	see note		3-4	
Elective	see note		3-4	
Elective	see note		3	
TOTAL CREDITS			61-66	

Note: Recommended electives: CIT284; MAT283, 285, 291; or any lab science.

Students choosing two 4-credit electives will need one less elective.

#### **OPTION OVERVIEW**

The Computer Information Technology Department (CIT) has a clear, well-articulated, three-pronged mission, which includes supporting the IT components of the college's General Education offerings (across divisions, departments, and campuses, as well as through interdepartmental collaboration), preparing an IT workforce through certificate and associate degree offerings, and providing IT students with seamless transfer opportunities to related Baccalaureate Degree programs.

#### **CAREER OUTLOOK**

Graduates of this concentration may transfer to bachelor's programs at four-year colleges.

- Design, implement, and maintain a software solution for a realistic problem by correctly employing and applying the principles of object oriented programming.
- Write C++ and Java Code.



### 21 Digital and Computer Forensics and Investigations Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE				
Applications/Concepts	CIT110 (Full-time students take CIT113)			ESL098 or RDG095 or placement
PROGRAM CURRICULUM				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Principles of Internet and Information Security	CIT118		3	CIT110, CIT113, or CIT120 or chair approval
Introduction to Computer Forensics	CIT121		3	CIT110, CIT112, CIT113, or chair approva
Introduction to Networking	CIT162		3	CIT110 or CIT113
Windows Operating Systems	CIT268		3	CIT110, CIT113, or chair approval
Visual Basic	CIT216		3	CIT110, CIT113, or CIT120 or chair approval
Advanced Computer Forensics	CIT221		3	CIT121
Information Security and Assurance	CIT219		3	CIT118 or chair approval
Batch File Programming	CIT271		1	pre/coreq CIT268
Special Topics in Digital and Computer Forensics	CIT223		3	CIT221
Directed Studies in Digital and Computer Forensics	CIT220		1	CIT221
Criminal Law	CRJ103		3	ENG095 or placement and ESL098 or RDG095 or placement
Evidence and Court Procedures	CRJ202		3	CRJ101 and CRJ103 or instructor approval
Cyber Crime in Today's Society	CRJ145		3	ENG095 or placement and ESL098 or RDG095 or placement
Career Elective	see note		3-4	
Career Elective	see note		3-4	
Career Elective	see note		3-4	
TOTAL CREDITS			66-69	

#### **OPTION OVERVIEW**

Digital and Computer Forensics is the name for a newly emerging field of study and practice that incorporates many areas of expertise including but not limited to internet, network and information security, intrusion detection, incident response, infrastructure protection, and computer crime investigation.

This program provides to Information Technology and Criminal Justice professionals the opportunity to obtain knowledge, training, and skills in Computer Forensics. Both civil and criminal offenders are using computers to commit crimes such as illegally downloading information, documents, or copyrighted materials, committing accounting fraud or releasing malicious code on computer networks to disrupt services. Internet crimes against children and other vulnerable populations have increased dramatically. Computers and other digital devices now play a part in many criminal activities. As a result, the need for computer forensics-based skills continues to grow.

#### **CAREER OUTLOOK**

This Associate Program is designed to align with the law enforcement, public safety, private industry and homeland security needs to ensure consistent, current and flexible training in the emerging technology field of Computer and Digital Forensics.

## UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Image and analyze the evidence found on a hard drive including file system analysis.
- Demonstrate knowledge of the issues surrounding a digital investigation including evidence and court procedures and search and seizure laws and regulations.
- Analyze digital evidence including evidence found in the seizure of cell phones, PDA's and other mobile devices

Note: The career elective may be selected from any non-required CIT courses.



### 22 Information Technology Transfer Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Applications/Concepts or IT Problem Solving	CIT110 or CIT113 satisfies LCS requirement		3	ESL098 or RDG095 or placement ENG090 and RDG090 or placement
Visual Basic	CIT216		3	CIT110, CIT113, or CIT120 or chair approval
Intermediate Visual Basic	CIT218		3	CIT216 or instructor or chair approval
HTML/Dreamweaver	CMT111		3	
Introduction to Networking	CIT162		3	CIT110 or CIT113
SQL Programming	CIT236		3	CIT110, CIT113, or CIT120 or chair approval
Windows Operating Systems or Linux Administration/Lab	CIT268 or CIT270		3	CIT110 or CIT113 or chair approval CIT162
Statistics I/Lab	MAT183		4	MAT094 or placement
College Algebra	MAT192 - see note		3	MAT094 or placement
Calculus for Management Sciences or Elective	MAT231 - see note		3-4	MAT192
Elective	see note		3	
Elective	see note		3	
Elective	see note		3	
Elective	see note		3	
TOTAL CREDITS			62-66	

Note: Students testing out of College Algebra (MAT192) will be required to take an additional elective.

Students entering UMB through the College of Management may choose to complete the Calculus for Management Sciences course at UMB and therefore should take an elective at BHCC.

Recommended electives: CIT118, 121, 219, 221, 223, 240, 264, 282; any programming course; CRJ103, 145, 202.

#### **OPTION OVERVIEW**

This program is designed to meet the needs of our Information Technology students who wish to pursue a Baccalaureate Degree. This program will allow our students to move seamlessly to colleges offering Baccalaureate Degrees in Information Technology. This program provides a core foundation in the major pillars of information technology and will allow a student to concentrate in one of the areas before transferring.

#### **CAREER OUTLOOK**

Graduates of this program can transfer to bachelor's programs at four-year colleges.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Demonstrate an understanding of the major pillars of Information Technology.
- Demonstrate the ability to solve technical programs and to apply critical thinking principles to Information Technology issues.
- Demonstrate an upper level understanding of networking, programming, database, or other technology fields.



## **Computer Technology Certificate Program Core Curriculum**

The Computer Information Technology Department (CIT) has a clear, well-articulated, three-pronged mission, which includes supporting the IT components of the college's General Education offerings (across divisions, departments, and campuses, as well as through interdepartmental collaboration), preparing an IT workforce through certificate and associate degree offerings, and providing IT students with seamless transfer opportunities to related Baccalaureate Degree programs.

The Computer Technology Certificate Program Core Curriculum affords students the opportunity to explore the many certificate career tracks in Information Technology before selecting a career as a Computer

Support, Data Base or EXCEL Support Specialist. To enhance employability, the certificate programs are designed to allow some students to earn more than a single certificate.

The department's goals are in concert with the college's goals. Using input from its Industry Advisory Committees and internship course, the department is continually updating and fine tuning its programs of study.

### **23** Computer Certificate Core Curriculum

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or Information Technology Fundamentals	CIT110 or CIT112		3	ESLO98 or RDG095 or placement
Principles of Information Security	CIT118		3	CIT110, CIT113 or CIT120 or chair approval
Introduction to MS Office	CIT133		3	
Introduction to Networking	CIT162		3	CIT110 or CIT113
PC Hardware	CIT182		3	
Help Desk Techniques	CIT230		3	CIT110, CIT113, or CIT120; one additional CIT course; ENG095 and RDG095 or placements
PC Keyboarding Techniques	OIM100		1	
SUB-TOTAL CORE CREDITS			19	



## **24** Computer Support Specialist Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Core Curriculum			19	
Advanced MS Office	CIT233		3	CIT133, CIT110, or CIT113 or chair approval
Window Operating Systems	CIT268		3	CIT110 or CIT113 or instructor or chair approval
TOTAL CREDITS			25	

#### **PROGRAM OVERVIEW**

This program prepares students to become vital links between the company and its customers; to educate users, solve hardware or software operation and application problems; and to become good sources of product information.

#### **CAREER OUTLOOK**

Graduates of this program qualify for entry-level support positions in hardware support and troubleshooting, help desk, and other Internet support positions.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- Have the skill set necessary to take the Comp TIA A+ Certification Examination.
- Understand help desk, Internet support, hardware and other entry level IT support professions.



## **Database Support Specialist Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
CORE CURRICULUM			19	
Database Design with MS Access	CIT128		3	CIT110, CIT113, or CIT120 or chair approval
Visual Basic	CIT216		3	CIT110, CIT113, CIT120 or chair approval
SQL Programming	CIT236		3	CIT110, CIT113, CIT120 or chair approval
TOTAL CREDITS			28	

#### **PROGRAM OVERVIEW**

This program prepares students to become database programmers or administrators who work with users to identify their needs and design and program reports and forms to meet those needs. The program prepares students to create security procedures, implement backup and recovery processes, and determine necessary system changes.

#### **CAREER OUTLOOK**

Graduates of this program qualify for entry-level database programming and support positions in a wide range of organizations.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

• Have the skill set necessary to take the first level of Oracle database certification.



## **Excel Applications Support Specialist Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
CORE CURRICULUM			19	
Principles of Accounting	ACC101		3	
Decision Support Using MS Excel	CIT234		3	CIT110, CIT113, or CIT120 or chair approval
Collaboration, Communication and Integration in MS Office Applications	CIT250		3	CIT110 or CIT113 or chair approval
TOTAL CREDITS			28	

#### PROGRAM OVERVIEW

This certificate is designed to prepare students for entry-level positions in Excel support. All courses are offered web-based to provide maximum scheduling flexibility for students, and most are offered in the traditional classroom setting each term. This certificate program is open to all CIT, BUS, OIM and other students.

#### **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. Over 1,500 requests for Excel skills can be found through Boston-area searches of job placement websites.

- 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.



### **27** Computer Forensics Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Internet and Information Security	CIT118		3	CIT110, CIT113, or CIT120 or chair approval
Introduction to Computer Forensics	CIT121		3	CIT110, CIT112, CIT113, or chair approval
Information Security and Assurance	CIT219		3	CIT118 or chair approval
Advanced Computer Forensics	CIT221		3	CIT121
Criminal Law	CRJ103		3	ENG095 or placement and ESL098 or RDG095 or placement
Evidence and Court Procedures	CRJ202		3	CRJ101 and CRJ103 or instructor approval
Criminal Justice Elective			3	
Computer Elective			3	
Computer or Criminal Justice Elective			3	
TOTAL CREDITS			27	

A Criminal Offender Record Information (CORI) may be required for internships, part-time or full-time employment in this field.

Demonstrated knowledge of IT skills through work experience or course work, is required for entrance to this program. Permission of department chair or program coordinator is required for non-coursework experience.

#### **PROGRAM OVERVIEW**

Computer and Digital Forensics is the name for a newly emerging field of study and practice that incorporates many areas of expertise including but not limited to internet, network and information security, intrusion detection, incident response, infrastructure protection, and computer crime investigation.

This certificate provides to the Information Technology and Criminal Justice professionals the opportunity to obtain knowledge, training and skills in Computer Forensics. Both Civil and Criminal offenders are using materials or releasing malicious code on computer networks to disrupt services. Internet Crimes against children and other vulnerable populations has increased dramatically. Computers and other digital devices now play a part in many criminal activities. As a result, the need for Computer Forensics based skills continues to grow.

#### CAREER OUTLOOK

This Certificate Program is designed to align with the law enforcement, public safety, private industry and homeland security needs to ensure consistent, current and flexible training in the emerging technology field of Computer and Digital Forensics.

- Image and analyze the evidence found on a hard drive including file system analysis.
- Demonstrate knowledge of the issues surrounding a digital investigation including evidence and court procedures and search and seizure laws and regulations.
- Analyze digital evidence including evidence found in the seizure of cell phones, PDA's and other mobile devices.



### 28 Network Technology and Administration Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Networking	CIT162		3	CIT110 or CIT113
Routers and Routing Basics	CIT167		3	CIT162
Switching Basics and Intermediate Routing	CIT267		3	CIT167
WAN Technologies	CIT274		3	CIT267
MS Windows Server Admin/Lab	CIT282		4	CIT162; pre/coreq CIT268
Linux Administration/Lab	CIT270		4	CIT162
Networking Security	CIT264		3	CIT162
Wireless Technology	CIT262		3	CIT162
PC Hardware	CIT182		3	
TOTAL CREDITS			29	

#### **PROGRAM OVERVIEW**

This program prepares students to maintain network hardware and software so that people within the organization receive timely and accurate information. The program prepares students to connect users to the company's computer system, by using cable, fiber optics, or wireless communications. It prepares students to identify, document, solve problems, and recommend system improvements, based on user needs and technological advances.

#### **CAREER OUTLOOK**

Graduates of this program may qualify to become network administrators, responsible for day-to-day network operations, and for other entry-level network positions.

- Set up, maintain, and support networks for small and medium sized businesses.
- Qualify to take the Microsoft Certified Professional (MCP) Examination, the Comp TIA Network+ and Comp TIA A+ Certification examinations, the Cisco Certified Network Administrator (CCNA) examination and the Certified Wireless Network Administrator (CWNA) examination.



## Object Oriented Computer Programming & Design Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Intro to Computer Science and Object Oriented Programming	CIT120	Semester I	4	ENG095 and MAT094 and RDG095 or placements
Precalculus	MAT197	Semester I	4	MAT194 or placement
C++ Programming	CIT237	Semester II	4	MAT194 or placement and CIT120 or chair approval
Advanced C++/00P	CIT284	Semester III	3	CIT237 and MAT194 or chair approval
Java Programming	CIT239	Semester III	4	ENG095 and MAT194 or placement; CIT120 or chair approval
Data Structures	CIT242	Semester IV	3	CIT239 and MAT197
Advanced Java	CIT285	Semester IV	3	CIT239 and MAT197
TOTAL CREDITS			25	

#### **PROGRAM OVERVIEW**

This certificate prepares students with in-depth knowledge of object oriented programming and design. Within two semesters of entering the program, students are expected to demonstrate acceptable keyboarding proficiency.

#### **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.

- Design, implement, and maintain software solutions for realistic problems by applying principles of object oriented programming.
- Write sophisticated and efficient code using the latest object oriented programming languages such as C++ and Java.
- Work in both Unix and Windows environments.



## **30** Cisco Systems CCNA Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or Info Technology Fundamentals or PC Hardware	CIT110 or CIT112 or CIT182		3	ESLO98 or RDG095 or placement
Introduction to Networking	CIT162		3	CIT110 or CIT113
Routers and Routing Basics	CIT167		3	CIT162
Switching Basics and Intermediate Routing	CIT267		3	CIT167
WAN Technologies	CIT274		3	CIT267
PC Keyboarding Techniques	OIM100		1	
TOTAL CREDITS			16	

#### PROGRAM OVERVIEW

This is a "fast-track" CCNA Certificate Program designed for those students interested in pursuing a career as Cisco Systems Networking Specialists. All course work is offered through the internationally recognized Cisco Systems Networking Academy.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- Qualified to apply for positions as entry-level network technicians.
- Prepared to take the Cisco CCNA Certification Examination(s).



### Associate in Science Degree: Computer Media Technology Program

The Computer Media Technology program provides students in the design, development, and production skills necessary for entry into the Computer Gaming Industry and the Computer Simulation industry. Students will satisfy the requirements of this program by completing a succession of General

Education courses and Gaming/Simulation specific courses as well as elective courses from within the program disciplines. Graduates of this program will qualify for entry-level positions in the computer Gaming and Computer Simulation industries.

### **31** Gaming/Computer Simulation Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111	Fall	3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112	Spring	3	ENG111
Oral Communication	ENG171	Spring	3	
Individual and Society	From Area 2	Spring	3	
World View	From Area 3	Fall	3	
College Algebra	MAT192 satisfies Area 4	Fall	3	MAT094 or placement
General Physics I	PHY201 satisfies Area 5	Fall	4	MAT197
Humanities	From Area 6	Spring	3	
Game Development Essentials	CMT101	Fall 1st year	3	ENG095 or placement and ESL098 or RDG095 or placement
Maya Foundations	CMT121	Fall 1st year	3	ENG095 or placement and ESL098 or RDG095 or placement
Maya Character Modeling	CMT123	Spring 1st year	3	CMT121
Maya Character Animation	CMT223	Fall 2nd year	3	CMT123
Creating 3-D Special Effects	CMT229	Fall 2nd year	3	CMT121
MEL Scripting in Maya	CMT231	Spring 2nd year	3	CMT229
The Human Character	CMT119	Spring 1st year	3	CMT101
Managing Game Development	CMT103	Spring 1st year	3	ENG095 and RDG095 or placements
Career Elective	see note	Fall 2nd year	3	Department approval
Career Elective	see note	Spring 2nd year	3	Department approval
Digital Imaging with Photoshop	VMA105	Fall 1st year	3	ENG095 and MAT092 or placements
Introduction to Audio Technology	VMA151	Spring 1st year	3	ENG095 and MAT092 or placements
TOTAL CREDITS			61	

Note: Select the career elective from the Computer Media Technology, Visual and Media Arts, or Computer Information Technology Departments.

#### PROGRAM OVERVIEW

This program prepares students in the fundamentals of 3D Game/Simulation design, development and production. Students learn how to utilize state-of-the-art software to create, construct, shape, texture, and animate 3D objects and characters in a computer game environment. The program also teaches students techniques and skills required to incorporate depth, lights, and shading into the 3D game to simulate real-world situations. Students are instructed on how to design and write scripts and programs to control the game animation and sequencing. Students are also instructed in the techniques and tools of game program management.

#### **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.

- · Create game characters.
- · Create 3D objects as game constructs.
- · Effectively light and shade the game scene.
- · Animate the game scene.
- Manage the game development process.



## 32 Web Development Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
Intro to Mass Media	VMA111 satisfies Area 3		3	ENG095 and MAT092
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Oral Communication	ENG171		3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Database Design with MS Access	CIT128		3	CIT110, CIT113 or CIT120 or chair approval
HTML and Dreamweaver	CMT111		3	
Javascript	CMT113		3	CIT110 and CMT111
Flash	CMT115		3	CIT110
XML	CMT117		3	CMT111
Introduction to Networking	CIT162 - see note		3	CIT110 or CIT113
XSL	CMT211 - see note		3	CMT111 and CMT117
ASP.NET	CMT215		3	CIT110 and CMT111 and CIT128 or CIT236
XML Web Services	CMT221		3	CMT111 and CMT113 and CMT117
Windows Operating Systems	CIT268		3	CIT110 or CIT113 or instructor or chair approval
Digital Imaging with Photoshop	VMA105		3	ENG095 and MAT092 or placements
Internship	CIT299N		3	chair approval
TOTAL CREDITS			64	

Note: Prior to enrolling in course, student must see Department Chairperson.

#### PROGRAM OVERVIEW

This program prepares students for entry-level positions in firms that specialize in web-based delivery and development of products, services, and web technologies. Additionally, students may fill entry-level positions in businesses that employ in-house staff to support and develop their own web delivery mechanisms for such support services as company directories and real-time content presentation. The program also provides students with a sound basis to enter the evergrowing opportunities available for independent web development consulting. Students are trained in the concepts and applications of leading-edge web delivery mechanisms such as XML (Extensible Markup Language), XML Transformation languages, ASP.net, advanced graphical techniques and database incorporation into web delivery technologies. The program prepares students to apply their knowledge towards the pursuit of Webmaster certification through a certification agency.

#### CAREER OUTLOOK

Graduates of this program will qualify as web developers and for web development support positions, and will have a solid basis for pursuing certification as a Webmaster.

- 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.



### 33 Web Development Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
HTML and Dreamweaver	CMT111		3	
Javascript	CMT113		3	CIT110 and CMT111
Flash	CMT115		3	CIT110
XML	CMT117		3	CMT111
XSL	CMT211		3	CMT111 and CMT117
ASP.NET	CMT215		3	CIT110 and CMT111 and CIT128 or CIT236
Windows Operating Systems	CIT268		3	CIT110, CIT113 or instructor or chair approval
Database Design with MS Access	CIT128		3	CIT110, CIT113 or CIT120 or chair approval
Digital Imaging with Photoshop	VMA105		3	ENG095 and MAT092 or placements
TOTAL CREDITS			27	

#### PROGRAM OVERVIEW

This program provides students with a sound basis for employment in the field of Web Development. The program trains students in the concepts and applications of leading-edge web delivery mechanisms. This program would also be beneficial to professionals with degrees in other disciplines who are seeking new career options.

In addition, the knowledge gained can be applied toward the pursuit of Webmaster Certification through a certification agency.

#### **CAREER OUTLOOK**

Graduates of this program will qualify as entry-level web developers and web development support personnel.

- 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.

89



### **Associate in Science Degree: Culinary Arts Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111	Spring or Fall	3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112	Spring or Fall	3	ENG111
Individual and Society	From Area 2	Spring or Fall	3	
World View	Area 3 satisfied by program			
Topics in Career Math	MAT100 satisfies Area 4		3	MAT092 or placement or department approval
Nutrition Science/Lab	BI0115 satisfies Area 5	Spring	4	ENG095 and MAT092 or placement and ESL098 or RDG095 or placement
Humanities	Area 6 satisfied by program			
Food Service Sanitation and Skills	CUL111	Spring or Fall	3	
Introduction to Culinary Arts	CUL115	Fall	4	coreq CUL125
Principles of Baking	CUL125	Fall	4	coreq CUL115
Café and Bistro Cuisine	CUL135	Spring	4	CUL115 and CUL125
Advanced Desserts and Pastries	CUL145	Spring	4	CUL115 and CUL125
Menu Design and Purchasing	CUL211	Fall	3	CUL135 and CUL145
Essentials of Food Production	CUL215	Fall	4	CUL135 and CUL145; coreq CUL225
Essentials of Dining Service	CUL225	Fall	4	CUL135 and CUL145; coreq CUL215
Advanced and Ethnic Food Production	CUL235	Spring	4	CUL215 and CUL225; coreq CUL245
Food and Beverage Operations	CUL245	Spring	4	CUL215 and CUL225; coreq CUL235
Culinary Arts Internship	CUL299	Summer	3	chair approval
Hospitality Law	HRT117	Spring or Fall	3	
Culinary Arts Seminar	CUL101	Spring or Fall	3	
TOTAL CREDITS			63	

Note: Select the career elective from CIT110, CUL119, CUL217, HRT121, or Culinary Arts Seminar.

#### **PROGRAM OVERVIEW**

The mission of the Culinary Arts Program is to be a leader in Hospitality and Culinary Arts education and to develop future leaders for the Hospitality and Food Service industries. The Culinary Arts Program provides education for entry level careers in Restaurant Management, Food Service Management, and Culinary Arts. In addition, preparation for transfer to four-year, higher education programs and opportunities for professional development will be provided. Students will develop technological, communicative, critical thinking, quantitative, and human relation skills.

The Culinary Arts program prepares students with an intensive, practical application of skills and decision making demanded by the culinary arts profession. The program provides a hands-on curriculum interwoven with operational procedures found in most food production and service venues. Students participate in the operation of a restaurant on campus and in an internship experience. The curriculum is based on American Culinary Federation standards.

#### **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 four-year colleges or universities to pursue bachelor's degrees.

## UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL 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.



### **Solution** Culinary Arts Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Food Service Sanitation and Skills	CUL111	Fall	3	
Menu Design and Purchasing	CUL211	Fall	3	
Basic Culinary Skills	CUL116	Fall	4	
Basic Baking Skills	CUL108	Fall	4	
Advanced Culinary Skills	CUL216	Spring	4	CUL108 and CUL116
Advanced Baking Skills	CUL208	Spring	4	CUL108 and CUL116
TOTAL CREDITS			22	

#### **PROGRAM OVERVIEW**

This weekend program prepares students with the basic skills and knowledge required for entry-level positions in the food service industry. The two-semester, 22-credit program is scheduled from September through May.

#### **CAREER OUTLOOK**

Graduates of this program qualify for a variety of entry-level positions in food production, including restaurant and institutional line cooking, pastry preparation, steward departments, and other related positions. Students also qualify to transfer all credits to the Associate in Science Degree: Culinary Arts Program.

- Demonstrate practiced and acquired technical skills in the usage of tools and equipment found in a typical food service/food production setting.
- Demonstrate the 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.

91



## **Pastry Arts Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Food Service Sanitation and Skills	CUL111	Spring or Fall	3	
Introduction to Culinary Arts	CUL115	Fall	4	coreq CUL125
Principles of Baking	CUL125	Fall	4	coreq CUL115
Café and Bistro Cuisine	CUL135	Spring	4	CUL115 and CUL125
Advanced Desserts and Pastries	CUL145	Spring	4	CUL115 and CUL125
College Writing I	ENG111	Spring or Fall	3	ENG095 or placement and ESL098 or RDG095 or placement
Cake Decorating	CUL119	Fall	3	
Classical and International Pastries	CUL217	Spring	4	CUL145
TOTAL CREDITS			29	

#### **PROGRAM OVERVIEW**

This program prepares students with the basic skills and knowledge required for entry-level positions in the baking and pastry industry. This two semester, 29 credit program is scheduled from September through May.

#### **CAREER OUTLOOK**

Graduates of this program qualify for a variety of entry-level positions in retail bakeries, pastry shops and related pastry production facilities. Students also qualify to transfer most credits to the Associate in Science Degree in Culinary Arts.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- Demonstrate practiced an acquired technical skills in the usage of tools and equipment found in a typical bakery or commercial pastry production facility.
- Demonstrate the necessary administrative skills common to basic cost control and planning methods found in a typical commercial pastry shop.
- Demonstrate conceptual skills acquired through course work relative to operating a successful pastry shop or bakery facility.



### **37** Associate in Science Degree: Early Childhood Development Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Child Growth/Development	ECE103		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Program Environments	ECE106		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Issues in Early Childhood Education	ECE102		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Guidance/Discipline	ECE101		3	ECE103
Curriculum in Early Childhood Education	ECE104		3	ECE103
Observation/Recording Behavior	ECE117		3	ECE103
College Writing II	ENG112		3	ENG111
World View	From Area 3		3	
Principles of Psychology	PSY101 satisfies Area 2		3	ESL098 or RDG095 or placement
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Children's Literature I	LIT217 satisfies Area 6		3	Pre/coreq ENG111
Families/Community in Early Childhood Education	ECE112		3	ECE103 plus additional 3 courses in ECE or EDU
Practicum in Early Childhood Education I	ECE120		3	chair approval
Special Needs Child in Early Childhood Education	ECE111		3	ECE103 plus additional 3 courses in ECE or EDU
Practicum in Early Childhood Education II	ECE121		3	chair approval
Career Elective	see note		3	
Career Elective (Full-time students take LCS)			3	
Career Elective	see note		3	
TOTAL CREDITS			61	

Note: Career electives: ECE107, 108, 109, 110

Students with credentials from the Council for Early Childhood Professional Recognition as a Child Development Associate (CDA) may apply for six credits in the associate degree program through the Prior Learning Assessment Program (PLAP). See department chairperson for details. A Criminal Offender Record Information (CORI) check and/or a Sex Offender Registry Information (SORI) check are required for this program.

#### PROGRAM OVERVIEW

Early Childhood Education and Human Services Department's mission statement and goals state two primary purposes:

1) To provide knowledge, training and skill development for persons interested in working in the area of social services with specific educational opportunities for those interested in early childhood development, human services, and education, and 2) To serve the community as an information and knowledge-base in the area of social service, with specific expertise in early childhood education and development, human services, and education.

The Early Childhood Development Program prepares students in the fields of growth of the child, influences of the family upon the child, and environmental pressures upon the family.

#### **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.

## UPON COMPLETION OF THIS PROGRAM, 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.
- 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.



### **Early Childhood Development Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Issues in Early Childhood Education	ECE102		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Program Environments	ECE106		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Child Growth/Development	ECE103		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Guidance/Discipline	ECE101		3	ECE103
Curriculum in Early Childhood Education	ECE104		3	ECE103
Observation/Recording Behavior	ECE117		3	ECE103
TOTAL CREDITS			24	

A Criminal Offender Record Information (CORI) check and/or a Sex Offender Registry Information (SORI) check are required for this program.

Due to the prerequisite requirements, it may not be possible to complete this certificate program in one year.

#### PROGRAM OVERVIEW

This program prepares students as teachers and/or lead teachers in the State of Massachusetts. Students must meet additional experiential requirements by working in a licensed child care program during or after meeting the educational requirements for teacher and/or lead teacher certification.

#### 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 chairperson.

# UPON COMPLETION OF THIS PROGRAM, 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.
- 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.



### 39 Associate in Arts Degree: Education Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	Area 2 satisfied by program			
World View	Area 3 satisfied by program			
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	Area 5 satisfied by program			
Humanities	Area 6 satisfied by program			
CONCENTRATION COURSES				
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Child Growth/Development	ECE103		3	ESL098 and ESL099 or placement or RDG095 and ENG090 or placement
CIT Elective	CIT		3	ESL098 or RDG095 or placement
Oral Communication	ENG171		3	
World Civilization I	HIS111		3	ESL098 and ESL099 or RDG095 and ENG095 or placement
US History I or US History II	HIS151 or HIS152		3	ESL098 or RDG095 and ENG095 or placement
Children's Literature	LIT217		3	pre/coreq ENG111
Contemporary Math I	MAT172		3	MAT094 or placement
College Algebra	MAT192		3	MAT094 or placement
Principles of Biology I/Lab or Human Biology/Lab	BI0101 or BI0108		4	ENG095, MAT092, RDG095 or placements
Environmental Science I	ENV105		4	MAT092, ENG095, and RDG095 or placement
Intro and Foundations of Education	EDU101		3	ENG095 or RDG095 or placement
Special Needs Child	ECE111		3	ECE103 plus three (3) ECE or EDU courses or equivalent
Practicum in Instruction	EDU140		3	ENG090 and MAT092 or placement
Fine Arts Elective	VMA104, VMA122, VMA123, VMA124 or VMA161		3	·
Literature Elective	LIT		3	pre/coreq ENG111
Career Elective (Full time students take LCS)	ECE107, ECE109, ECE110, ECE112, or any LCS course		3	
Career Elective	ECE107, ECE109, ECE110, or ECE112		3	
TOTAL CREDITS			62	

A Criminal Offender Record Information (CORI) and/or a Sex Offender Registry Information (SORI) are required for this program.

#### **CONCENTRATION OVERVIEW**

Early Childhood Education and Human Services Department's mission statement and goals state two primary purposes:

1) To provide knowledge, training and skill development for persons interested in working in the area of social services with specific educational opportunities for those interested in early childhood development, human services, and education, and 2) To serve the community as an information and knowledge-base in the area of social service, with specific expertise in early childhood education and development, human services, and education.

The Education concentration prepares students seeking bachelor's degrees in education or liberal arts to transfer to four-year colleges or universities. In order to assure certification by the Massachusetts Department of Early Education and Care, students seeking entry-level work in child care should enroll in the Associate in Science Degree: Early Childhood Development Program. For more information, contact the department chairperson. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### **CAREER OUTLOOK**

Graduates of this concentration may qualify to transfer to fouryear colleges or universities as juniors. Potential teaching careers include teacher aid; early elementary, later elementary, middle school and high school teaching; preschool and kindergarten teaching; and special education teaching. Students must obtain a bachelor's degree as the minimum requirement for entry into these fields. Graduate work may be necessary, as well.

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

- Describe the interaction of history, culture, literature, economics, and science as studied within a broad liberal arts curriculum.
- Demonstrate a mastery in reading and writing/ literacy skills and the organization of critical thinking and problem solving behaviors.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158



### **Electric Power Utility Program – A Partnership with NSTAR**

In partnership with NSTAR and Local 369 UWUA, BHCC offers a two-year accredited Associate in Science Degree with a focus on Electric Power Utility Technology. Students receive much of their laboratory training at an NSTAR facility. Most classroom course work takes place at BHCC.

#### **ELECTRIC POWER UTILITY TECHNOLOGY (EPUT) PROGRAM REQUIREMENTS**

Students in this program must earn a grade of C or higher in all the courses required by the program. Failure to meet this academic standard will result in withdrawal from the program. Courses with EPU, MAT, and PHY prefixes must be taken and completed in the sequence indicated in the program grid.

Students in this program must successfully pass any random drug or alcohol screening tests mandated by NSTAR during the program; successfully complete all appropriate Skills Aptitude Tests administered by NSTAR; and maintain safety skills to NSTAR criteria as per OSHA 1910 and OSHA 1926 directives.

In addition to abiding by the BHCC Student Code of Conduct, EPUT students must also abide by all NSTAR policies contained in the *Student Progress Report, Good Standing Agreement*, and the *Student Guidelines for NSTAR Labs and Coops*. Students must abide by the *NSTAR Code of Conduct* while on NSTAR property. This code includes but is not limited to:

- 1.1.1. Violence in the Workplace Policy.
- 1.1.2. Equal Employment Opportunity Policy.
- 1.1.3. Sexual Harassment Policy.
- 1.1.4. Safety Policy.

In the event of dismissal from the program, students will immediately be denied further entry/access to NSTAR property and any courses taught at NSTAR facilities.

Students dismissed from the EPUT Program will no longer be eligible for financial support for their tuition and fees from NSTAR.

Re-instatement to the Program will be considered only for documented medical reasons. Extended absences due to illness must be reported immediately to NSTAR and to the Office of Student Affairs at BHCC in writing.

Students must petition for re-admission in writing, explaining their circumstances and providing appropriate documentation. To be considered for re-instatement students will be required to meet with a Board of NSTAR and BHCC faculty and staff. Decisions will be made on a case by case basis. The decision of the Board will be final.

NSTAR reserves the right to withhold a job interview from any student who fails to complete the entire program successfully.

#### ADMISSION REQUIREMENTS:

Students must apply to the program through the Admissions and Registration Office and:

- 1. Complete the NSTAR application.
- 2. Possess a high school diploma or GED certificate.
- Complete Fundamentals of Algebra (MAT094) or place into College Algebra (MAT195).
- Complete Writing Skills II (ENG095) or place into College Writing I (ENG111).
- Achieve a reading level of 10th grade or higher on the College Placement Test (CPT).
- Qualified applicants undergo a Criminal Offender Record Information (CORI) check and a drug and alcohol test before being accepted to the program.
- Qualified applicants must pass additional physical and mechanical testing.
- Qualified applicants may be invited to participate in a 2-week pole climbing camp, facilitated by NSTAR during the summer.

See program grid on next page.





## Associate in Science Degree: Electric Power Utility Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111	Semester I	3	ENG095 or placement and ESL098 or RDG095 or placement
Topics in Algebra and Trigonometry	MAT193 satsifies Area 4	Semester I	3	MAT094 or placement
DC Circuit Theory/Lab	EPU101	Semester I	4	pre/coreq MAT193
Fundamentals of Single Phase and Polyphase Metering	EPU151	Semester I	4	Acceptance in Program
College Writing II	ENG112	Semester II	3	ENG111
Applications/Concepts	CIT110	Semester II	3	ESL098 or RDG095 or placement
Group Dynamics	PSY107 satisfies Area 2	Semester II	3	
AC Circuit Theory/Lab	EPU104	Semester II	4	EPU101
Intro to Underground Operations	EPU203	Semester II	4	Acceptance in Program
Electric Power/Utility Tech Internship	EPU251	Summer I, Year I	3	EPU151 and EPU153 and PSY107
Intro to Mass Media	VMA111 satisfies Area 3	Semester III	3	ENG095 and MAT092 or placements
Principles of Management	MAN111	Semester III	3	ESL098 and ESL099 or RDG095 and ENG090 or placements
Intro to Substation Operations	EPU205	Semester III	4	Acceptance in Program
Power and Distribution Systems	EPU257	Semester III	3	EPU104
Intro to Physics	PHY191 satisfies Area 5	Semester IV	4	MAT193
Humanities	From Area 6	Semester IV	3	
Intro to Engineering/Lab	ENR101	Semester IV	4	MAT193
Intro to Overhead Linework	EPU207	Semester IV	4	Acceptance in Program
TOTAL CREDITS			62	

#### **CAREER OUTLOOK**

Based on a student's grades, skills, and attitude, employment opportunities exist with NSTAR or an NSTAR qualified contractor upon graduation. Current starting salary is approximately \$50,000 per year and overtime is also compensated. NSTAR offers a competitive and comprehensive benefits package including health and dental care, life insurance, pension plan, 401K plan (including company matching program), as well as continuing education reimbursement.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- Demonstrate practiced and acquired skills while working at NSTAR in a variety of electrical fields.
- Use a computer to access data and information.
- Communicate effectively both orally and in writing.
- . Obtain licenses from NSTAR.

#### STUDENTS WILL EARN THE FOLLOWING CERTIFICATIONS:

- OSHA 1910.269 Regulations.
- First Aid/CPR.
- CDL Pre-trip Training.
- DL Class B Drivers License.
- D.O.T. Medical Certification.



## **Associate in Science Degree: Engineering Program**

The Associate of Science in Engineering Program is offered as part of a response to the long-term shortage of skilled workers in the engineering workforce, and is consistent with the mission of the College. It is designed to meet the needs of BHCC students and to address the workforce demands of Greater Boston. The curriculum is structured to mirror the freshman and sophomore years of a

university engineering degree. Accordingly, the Science Department is developing articulation agreements with area universities to enable BHCC engineering graduates to transfer as juniors upon completing the Associate of Science degree. The curriculum offers two options: a Biomedical Engineering Option and an Engineering Transfer Option.

### 41 Biomedical Engineering Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	Area 5 satisfied by program			
Humanities	From Area 6		3	
Intro to Engineering /Lab	ENR101		4	MAT194; see note
Biomedical Engineering/Lab	BME100		4	MAT281 and CHM201 co-req MAT282
Biomedical Engineering II	BME200		3	BME100 and MAT282; co-req MAT283
Biomedical Engineering III	BME250		3	BME200; co-req MAT285
Calculus I	MAT281		4	MAT196 or MAT197
Calculus II	MAT282		4	MAT281
Calculus III	MAT283		4	MAT282
Ordinary Differential Equations	MAT285		4	MAT282
College Physics I/Lab	PHY251		4	MAT281; see note
College Physics II/Lab	PHY252		4	PHY251; pre/coreq MAT282; see note
General Chemistry I/Lab	CHM201		4	MAT194; see note
General Chemistry II/Lab	CHM202		4	CHM201; see note
General Biology I/Lab	BI0195		4	ENG095 and MAT194 or placement and RDG095 or placement; see note
General Biology II/Lab	BI0196		4	BIO195; see note
TOTAL CREDITS			69	

Note: All science, engineering, and math courses that are pre or co-requisites of other science and engineering courses require a grade of C or better.

#### **OPTION OVERVIEW**

This option brings engineering design and technology into the field of biology and medicine. The option prepares students to transfer to four-year institutions as Biomedical Engineering majors, or for direct employment in entry-level positions.

#### **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.

- 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.



### **Engineering Transfer Option**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	Area 5 satisfied by program			
Humanities	From Area 6		3	
Intro to Engineering /Lab	ENR101		4	MAT194; see note
Engineering Statics	ENR260		3	PHY251; pre/coreq MAT282; see note
Ordinary Differential Equations	MAT285		4	MAT282
Engineering Dynamics	ENR265		3	ENR260; coreq MAT285; see note
Strength of Materials	ENR270		3	ENR260; coreq MAT285; see note
Calculus I	MAT281		4	MAT196 or MAT197
Calculus II	MAT282		4	MAT281
Calculus III	MAT283		4	MAT282
College Physics I/Lab	PHY251		4	MAT281; see note
College Physics II/Lab	PHY252		4	PHY251; pre/coreq MAT282; see note
General Chemistry I/Lab	CHM201		4	MAT194; see note
General Chemistry II/Lab	CHM202		4	CHM201; see note
Career Elective	see note		3-4	departmental approval
Career Elective	see note		3-4	departmental approval
TOTAL CREDITS			66-68	

Note: Career elective selection must be recommended and approved by the Engineering Advisor and/or the Engineering Department.

All science, engineering, and math courses that are pre or co-requisites of other science and engineering courses require a grade of C or better.

#### **OPTION OVERVIEW**

This option provides students with the technical coursework and laboratory experience that enables them to succeed in undergraduate engineering programs. Students planning to transfer into Civil, Mechanical, Electrical, Structural, Materials, or other related engineering degree programs should enroll in this option. Upon graduation from BHCC, students are able to pursue further study at four-year colleges and universities.

#### **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.

- 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.



### 43 Associate in Arts Degree: English Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	Area 6 satisfied by program			
CONCENTRATION COURSES				
Writing Tutor Seminar I	ENG115		1-4	instructor approval
Literature Course			3	pre/coreq ENG111
Literature Course			3	pre/coreq ENG111
Literature Course			3	pre/coreq ENG111
Literature Course			3	pre/coreq ENG111
English Elective			3	
Foreign Language Elective			3	
Foreign Language Elective			3	
Behavioral Science Elective			3	
Social Science Elective			3	
Mathematics Elective			3	MAT094 or placement
Lab Science Elective			4	
Elective (Full-time students take LCS)			3	
Elective			3	
TOTAL CREDITS			60-63	

#### **CONCENTRATION OVERVIEW**

The English Department offers programs which qualify graduates to transfer to four-year institutions that prepare them for careers in teaching, journalism, public relations, and media communications. 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, advertising, public relations, and journalism.

The English concentration prepares students to transfer to four-year colleges or universities. Students who select this concentration may be particularly interested in pursuing a career in teaching or journalism. This concentration, however, would be of value in any career in which good communication skills are fundamental to success. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### **CAREER OUTLOOK**

Graduates of this concentration qualify to transfer to four-year institutions that prepare students for careers in teaching, journalism, public relations, and media communications. 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, advertising, public relations, and journalism. In order to advance in some fields, graduate work may be required.

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

- Demonstrate competence as a writer. Write for a variety of purposes, adapting to various audiences.
- Demonstrate proficiency in critical thinking.
- Demonstrate a basic understanding of a language other than English.
- Demonstrate strong interpersonal communication skills.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.

99



### Associate in Arts Degree: Foreign Language Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	Area 6 satisfied by program			
CONCENTRATION COURSES				
First Foreign Language	select 200 level course		3	see note
First Foreign Language	sequential 200 level course		3	see note
Second Foreign Language	select 100 level course		3	
Second Foreign Language	sequential 100 level course		3	
History of Western Civilization I	HIS101		3	ESL098 or RDG095 or placement and ENG095 or placement
History of Western Civilization II	HIS102		3	ESL098 or RDG095 or placement and ENG095 or placement
Masterpieces of World Literature I	LIT211		3	pre/coreq ENG111
Masterpieces of World Literature II	LIT212		3	pre/coreq ENG111
Lab Science Elective			4	
Behavioral Science Elective			3	
Mathematics Elective			3	MAT094 or placement
Elective (Full-time students take LCS)			3	
Elective			3	
Elective			3	
Elective			3	
TOTAL CREDITS			62	

Note: Students must enter with elementary level proficiency.

To enter this program, students should have completed study of at least one foreign language at an elementary level (First Foreign Language in grid).

#### **CONCENTRATION OVERVIEW**

The mission of the Foreign Language department at Bunker Hill Community College is to expose students to a language and culture in order to enable them to become knowledgeable and active members of a global society. Students learn to use modern foreign languages for meaningful communication in both spoken and written form. Students completing classes in the Foreign Language Program will gradually achieve course-appropriate outcomes in the four basic language skills of speaking, listening comprehension, reading and writing of the target language. Through foreign language study, students develop sensitivity to other cultural and linguistic heritages, and are prepared to participate in a society characterized by linguistic and cultural diversity.

The Foreign Language concentration prepares students to transfer to four-year colleges or universities with a major in a foreign language. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### CAREER OUTLOOK

Graduates of this concentration often qualify for careers that require bilingual skills.

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

- Demonstrate the basic skills for understanding and speaking a foreign language.
- Read and comprehend simple selections in a foreign language.
- Express their thoughts and ideas in writing in an uncomplicated manner in a foreign language.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



### 45 Associate in Arts Degree: General Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Behavioral Science Elective			3	
Social Science Elective			3	
Mathematics Elective			3	MAT094 or placement
Lab Science Elective			4	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Elective (see note)			3	
Elective			3	
TOTAL CREDITS			62	

Note: Full-time students must take a Learning Community Seminar course within the first year of enrollment.

Students should consult their intended transfer institution to determine appropriate electives for this program. A two-semester language sequence is recommended for two of the electives.

#### **CONCENTRATION OVERVIEW**

This concentration prepares students who have not yet chosen a major field of study to transfer to four-year colleges or universities. The college encourages students to take electives in disciplines in which they may major at a four-year institution. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### **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.

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

- Describe the interaction of history, culture, literature, economics, and science as studied within a broad liberal arts curriculum.
- Demonstrate skills as critical thinkers, readers, and writers.
- Demonstrate competence in basic computer use.

This program also is available through the Weekend College Program.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



### Associate in Science Degree: Medical Imaging Program

## THE MEDICAL IMAGING PROGRAM PREPARES STUDENTS IN FOUR DIFFERENT ASSOCIATE IN SCIENCE DEGREE OPTIONS:

- The full-time Cardiac Sonography Option 24 months in duration
- The full-time General Sonography Option 24 months in duration
- The full-time Medical Radiography Option 21 months in duration
- The part-time Medical Radiography Option 35 months in duration

#### PROGRAM ACCREDITATIONS ARE AS FOLLOWS:

- The Cardiac Sonography and General Sonography Options are accredited by the Commission on Accreditation of Allied Health Education Programs.
- The Medical Radiography Options are accredited by the Joint Review Committee on Education in Radiologic Technology.

Refer to the BHCC Accreditation Statements on the inside the back cover of this catalog for contact information for each of the accrediting agencies.

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% 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 space-available 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. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 172 - 178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of medical imaging courses. If a student is found to have a CORI issue, he/she will be referred to the BHCC CORI officer for further discussion. If a CORI offense precludes participation in the clinical component of the program, the student will be withdrawn from the program. Admission to the medical imaging program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. Individuals with previous court convictions must also meet eligibility requirements of the previously mentioned credentialing bodies. For further information, please see the department chairperson.

The application process for the Medical Imaging Program is highly competitive and selective. Potential applicants are ranked based on prerequisite grades, reading score on the College Placement Test (LOEP for ESL students), general education courses taken at BHCC, and related work experience. Consideration is also given for completion of a prior college-level physics class. Interviews will be scheduled for the 70 highest ranking Medical Radiography applicants (40 for full-time and 30 for part-time options), and the 20 highest ranking applicants to Cardiac Sonography and General Sonography. When interviews are scheduled, job shadows will be recommended for applicants.

#### PREREQUISITES FOR ALL MEDICAL IMAGING OPTIONS:

- 1. Attend one MANDATORY information session. (Refer to BHCC website for dates)
- 2. Possess a high school diploma or GED certificate.
- 3. Take college placement test (CPT), or LOEP for ESL students.
- 4. Complete the following courses with a grade of C or better:
  - a. One semester of college algebra (MAT192) or equivalent;
  - b. One semester of college level Anatomy/Physiology I/Lab (must be completed within 5 years of application unless currently working in related healthcare position).

#### ADDITIONAL PREREQUISITES FOR GENERAL SONOGRAPHY & CARDIAC SONOGRAPHY STUDENTS

1. One semester of College Writing I (ENG111) or equivilent with a grade of C or better.

#### AFTER ALL PREREQUISITES ARE COMPLETED:

- Prospective students must apply through the Admissions and Registration Office during the fall enrollment period, approximately October 15 - December 31. Check with the Admissions and Registration Desk for exact dates.
- 2. Top-scoring applicants in each option will be invited to interview with the Medical Imaging Admissions Committee.
- 3. Job shadows will be recommended to each of these applicants prior to the interview.
- Communication skills and overall knowledge of the field will be ranked during the interview process.
- 5. The Medical Imaging Admissions Committee will evaluate each candidate's record at the completion of interviews.
- 6. Admission to the Medical Imaging Program will be based on the initial ranking as well as the ranking of the interview.

Note: A college physics course, with a grad of C or better, is required for accepted General Sonography or Cardiac Sonography Students. The physics course will be offered in the summer prior to the start of the program.

102 2011 - 2012 College Catalog



## **46** Cardiac Sonography Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PROGRAM CURRICULUM				
Imaging Technology I or General Physics/Lab	MIG111 or PHY201		3 4	MAT197
Patient Care in Medical Imaging	MIG109	Fall	4	coreq MIG101
Intro to Ultrasound	MIG101	Fall	2	acceptance to Cardiac Program
Ultrasound Physics and Instrumentation	MIG105	Fall	3	acceptance to Cardiac Program
Anatomy/Physiology II/Lab	BI0204	Fall	4	BI0203
Echo I	MIG112	Spring	3	MIG101
Interpretation I	MIG115	Spring	4	MIG109
Vascular Ultrasound	MIG205	Summer I	3	MIG119
Echo II	MIG119	Summer I	3	MIG112
College Writing II	ENG112	Summer I	3	ENG111
Principles of Sociology	SOC101	Summer II	3	ESL098 or RDG095 or placement
Interpretation II	MIG203	Summer II	3	MIG115
Related Pharmacology	MIG121	Summer II	2	MIG115
Echo III	MIG201	Fall	4	MIG119
Ultrasound Physics and Instrumentation for the Cardiac Sonographer	MIG207	Fall	2	MIG105 and MIG119
Cardiac Sonography Clinical I	MIG211	Fall	3	MIG119; coreq MIG201
Cardiac Sonography Clinical II	MIG213	Spring	4	MIG211; coreq MIG215
Echo IV/Interpretation	MIG215	Spring	4	MIG203
Advanced Interpretation Seminar	MIG216	Spring	2	MIG211 and MIG203; coreq MIG215
Applications/Concepts	CIT110	Spring	3	ESL098 or RDG095 or placement
Cardiac Sonography Clinical III	MIG217	Summer	4	MIG213
TOTAL CREDITS			66-67	

Imaging Technology I or General Physics/Lab must be completed, with a grade of C or better, in the summer prior to the start of the program.

#### **OPTION OVERVIEW**

This option prepares students in the imaging of the human heart with soundwaves. Students are prepared to use the equipment that produces soundwaves, obtains an image, and provides the physician with diagnostic information for treatment.

#### **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.

## UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Demonstrate general knowledge and technical skills required to perform cardiac echo examinations as an entry-level 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.



## 47 General Sonography Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES		
PROGRAM CURRICULUM						
Imaging Technology I or General Physics/Lab	MIG111 or PHY201		3 4	MAT197		
Patient Care in Medical Imaging	MIG109	Fall	4	coreg MIG101		
Introduction to Ultrasound	MIG101	Fall	2	acceptance to General Sonography Program		
Ultrasound Physics and Instrumentation	MIG105	Fall	3			
Cross Sectional Anatomy	S0N113	Fall	4	coreq BI0204		
Anatomy/Physiology II/Lab	BI0204	Fall	4	BI0203		
Abdominal Ultrasound	S0N115	Spring	3	coreq SON121		
Applications/Concepts	CIT110	Spring	3	ESL098 and RDG095 or placement		
Ultrasound Scanning Protocols and Pathology	SON117	Spring	4	coreq SON121		
Subspeciality Sonography and Neurosonography	SON119	Spring	3	coreq SON121		
General Sonography Clinical I	S0N121	Spring	3	coreqs SON115 and SON117 and SON119		
Vascular Ultrasound	MIG205	Summer I	3	coreq SON123		
General Sonography Clinical II	S0N123	Summer	3	SON121; coreq MIG205		
College Writing II	ENG112	Fall	3	ENG111		
Ultrasound Physics and Instrumentation for the General Sonographer	S0N213	Fall	2	MIG105; coreq SON223		
Advanced General Sonography Seminar I	S0N215	Fall	2	SON115; coreq SON223		
Obstetrical/Gynecological Sonography I	S0N219	Fall	3	SON123; coreq SON223		
General Sonography Clinical III	S0N223	Fall	3	SON123; coreq SON213 SON215, and SON219		
Principles of Sociology	S0C101	Spring	3	ESL098 or RDG095 or placement		
Advanced General Sonography Seminar II	S0N217	Spring	2	SON215; coreq SON225		
Obstetrical/Gynecological Sonography II	S0N221	Spring	3	SON219; coreq SON225		
General Sonography Clinical IV	S0N225	Spring	3	SON223; coreqs SON217 and SON221		
General Sonography Clinical V	S0N227	Summer	3	S0N225		
TOTAL CREDITS			69-70			

Imaging Technology I or General Physics/Lab must be completed, with a grade of C or better, in the summer prior to the start of the program.

#### **OPTION OVERVIEW**

This program prepares students to pursue careers and registry-status in diagnostic medical sonography through comprehensive instruction and clinical experience. The program covers ultrasound physics, abdominal sonography, obstetrical and gynecological sonography, sonographic subspecialties, and cross-sectional anatomy.

#### 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.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL 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).



## 48 Medical Radiography Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Patient Care in Medical Imaging	MIG109	Fall	4	coreq MIG107
Intro to Medical Radiography	MIG107	Fall	2	acceptance to Medical Radiograpy Program
Positioning I	MIG122	Fall	3	coreq MIG124F
F.T. Medical Radiography Clinical I	MIG124F	Fall	2	
Anatomy/Physiology II/Lab	BI0204	Spring	4	BI0203
Radiologic Imaging I	MIG120	Spring	3	MIG107
Imaging Technology I	MIG111	Spring	3	MAT094 or placement
Positioning II	MIG126	Spring	3	MIG122; coreq MIG128F
F.T. Medical Radiography Clinical II	MIG128F	Spring	2	MIG124F
F.T. Medical Radiography Clinical III	MIG222F	Summer	3	MIG128F
College Writing I	ENG111	Summer II	3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Sociology	SOC101	Summer II	3	ESL098 or RDG095 or placement
Positioning III	MIG220	Fall	2	MIG126
F.T. Medical Radiography Clinical IV	MIG228F	Fall	3	MIG222F
Imaging Technology II	MIG224	Fall	3	MIG111
Radiologic Imaging II	MIG226	Fall	3	MIG120
Pharmacology of Radiology	MIG227	Fall	1	MIG109 and BIO204
College Writing II	ENG112	Fall	3	ENG111
Radiation Protection	MIG230	Spring	3	MIG226
F.T. Medical Radiography Clinical V	MIG236F	Spring	3	MIG228F
CT/Cross Sectional Anatomy	MIG234	Spring	2	BI0204
Applications/Concepts	CIT110	Spring	3	ESL098 or RDG095 or placement
Advanced Medical Radiography Seminar	MIG238	Spring	2	MIG224 and MIG226
TOTAL CREDITS			63	

#### **OPTION OVERVIEW**

This option prepares students to perform entry level diagnostic examinations on patients utilizing analog and digital technology to produce diagnostic images in a diverse healthcare environment. The field of radiography includes general radiography, computed tomography (CT), magnetic resonance imaging (MRI), mammography, and cardiovascular and interventional technology.

#### **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.

## UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Demonstrate competence in the essential aspects of medical radiography at the entry level.
- Demonstrate skills in problem-solving, critical thinking, and effective communication.
- Promote life-long learning, professional growth, values, and ethics.



### Medical Radiography Part-time Evening Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Patient Care in Medical Imaging	MIG109	Fall	4	coreq MIG107
Intro to Medical Radiography	MIG107	Fall	2	acceptance to Medical Radiography Program
College Writing I	ENG111	Fall	3	ENG095 or placement and ESL098 or RDG095 or placement
Imaging Technology I	MIG111	Spring	3	MAT094 or placement
Radiologic Imaging I	MIG120	Spring	3	MIG107
College Writing II	ENG112	Spring	3	ENG111
Imaging Technology II	MIG224	Summer	3	MIG111
Principles of Sociology	SOC101	Summer	3	ESL098 or RDG095 or placement
Applications/Concepts	CIT110	Summer	3	ESL098 or RDG095 or placement
Radiologic Imaging II	MIG226	Fall	3	MIG120
Radiation Protection	MIG230	Fall	3	coreq MIG226
Positioning I	MIG122	Spring	3	coreq MIG124P
Anatomy/Physiology II/Lab	BI0204	Spring	4	BI0203
P.T. Medical Radiography Clinical I	MIG124P	Spring	1	
Positioning II	MIG126	Summer	3	MIG122; coreq MIG128P
Pharmacology of Radiology	MIG227	Summer	1	MIG109 and BIO204
P.T. Medical Radiography Clinical II	MIG128P	Summer	1	MIG124P
Positioning III	MIG220	Fall	2	MIG126
P.T. Medical Radiography Clinical III	MIG222P	Fall	1	MIG128P
CT/Cross Sectional Anatomy	MIG234	Fall	2	BI0204
P.T. Medical Radiography Clinical IV	MIG228P	Spring (day)	5	MIG222P
Advanced Medical Radiography Seminar	MIG238	Spring	2	MIG224 and MIG226
P.T. Medical Radiography Clinical V	MIG236P	Summer (day)	5	MIG228P
TOTAL CREDITS			63	

#### **OPTION OVERVIEW**

This option prepares students to perform entry level diagnostic examinations on patients utilizing analog and digital technology to produce diagnostic images in a diverse healthcare environment. The field of radiography includes general radiography, computed tomography (CT), magnetic resonance imaging (MRI), mammography, and cardiovascular and interventional technology.

#### **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.

## UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Demonstrate competence in the essential aspects of medical radiography at the entry level.
- Demonstrate skills in problem-solving, critical thinking, and effective communication.
- Promote life-long learning, professional growth, values, and ethics.



### **Computed Tomography Certificate Program**

This CT Certificate Program is designed for experienced medical imaging professions seeking to enter the field of computed tomography. The didactic and clinical content is structured to meet the content requirements of the American Registry of Radiologic Technologists (ARRT) Post-primary Registry Exam in CT, and will help professionals prepare for the examination. Didactic courses are delivered online in an interactive format to accommodate the working adult student. Students are responsible for finding a host hospital in which to complete the 100 hour clinical internship in which relevant skills will be reinforced. Students must earn a numerical grade of 80 or higher in all courses. Failure to meet internship objectives or failure to obtain a numerical course grade of 80 or better constitutes failure in that course. Students may apply for readmission to the program one time.

All CT students are required to undergo a physical examination; complete the necessary immunization forms, including three (3) Hepatitis B series; have malpractice and health insurance, and undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusetts General Laws. Chapter 6 172-178 and regulations pursuant to these

statutes, CORI checks are required prior to participation in the internship component of the Computed Tomography Certificate program. The outcome of the CORI check may impact the student's ability to participate in the internship experience.

#### **ADMISSION REQUIREMENTS:**

Student must apply to the program through the Admissions Office and:

- 1. Present a completed application with fee.
- 2. Submit a copy of the current ARRT or NMTCB card.
- 3. Submit a letter of interest.
- 4. Submit a letter of recommendation from a supervisor, including guarantee of a clinical site for the clinical internship.

Admission is selective. Completed applications will be reviewed by the Medical Imaging Department in April and July for a September start.

### Computed Tomography Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Computed Tomography I	CTC111		3	acceptance into CT Program
Computed Tomography II	CTC211		3	CTC111
Computed Tomography Internship	CTC299		3	chair approval; pre/coreq CTC211
TOTAL CREDITS			9	

#### PROGRAM OVERVIEW

This certificate helps to prepare students for the American Registry of Radiologic Technologists' (ARRT) post-primary registry examination in CT, as well as for entry-level CT positions. It is intended for ARRT or Nuclear Medicine Technologist Certification Board (NMTCB) registered imaging professionals.

#### **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.

# UPON COMPLETION OF THIS PROGRAM, 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.



### **Imaging Informatics Certificate Program**

PACS Administration, or Picture Archival and Communication Systems, is designed for experienced computer science or medical imaging professionals seeking to enter the field of PACS Administration. This program provides relevant knowledge of both IT and Medical Imaging concepts in a web-based format for the working adult. This is a full-time, two semester program. Many of the courses are offered each semester, and through the summer for flexibility, and the program may be extended to a third semester if necessary. Students are responsible for finding a host hospital in which to complete the 100 hour internship in which relevant skills will be reinforced. Students must earn a numerical grade of 80 or higher in all courses. Failure to meet internship objectives or failure to obtain a numerical course grade of 80 or better constitutes failure in that course. Students may apply for readmission to the program one time.

All PACS students are required to undergo a physical examination; complete the necessary immunization forms, including three (3) Hepatitis B immunization series; have malpractice and health insurance and undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the internship component

of the PACS Certificate Program. The outcome of the CORI check may impact the student's ability to participate in the internship experience.

### **ADMISSION REQUIREMENTS:**

Students must apply to the program through the Admissions Office between September 15 – December 31 and:

- Have a degree in a computer science field, extensive experience as determined by the Chair of the CIT Department, or be a graduate of an accredited Medical Imaging Program and be credentialed with a recognized national agency.
- 2. Submit an application with high school and college transcripts.
- 3. Submit a letter of interest with professional resume and references.
- 4. Attend an on-site or phone interview.

Admission is selective. Completed applications will be reviewed by the Medical Imaging and CIT Department Chairs in April for a September start.

### **Imaging Informatics Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Diagnostic Imaging and PACS	MIG161	Fall	3	Admission to PACS Certificate Program
Information Technology Fundamentals	CIT112	Fall	3	ESL098 or RDG095 or placement
Principles of Information Security	CIT118	Fall	3	CIT110, CIT113, or CIT120 or chair approval
PACS Administration I	CIT141	Fall	3	CIT112 or chair approval
PACS Administration II	CIT241	Spring	3	CIT141
PC Hardware	CIT182	Spring	3	
Advanced PACS Seminar	MIG251	Spring or Summer	3	MIG161 and CIT141
PACS Administration Internship	MIG299	Spring or Summer	3	Admission to PACS Certificate Program
TOTAL CREDITS			24	

#### **CAREER OUTLOOK**

Hospitals across the country are in the process of migrating their medical imaging department to a filmless state due to PACS technology. Every hospital will need at least one PACS administrator, and many will need more than one. Teaching hospitals have already begun this process, and community hospitals are now in the process of planning for and purchasing these database management systems for their departments.

- Manage medical image databases, and interact with other information system databases used in healthcare facilities.
- Evaluate and implement practical operational strategies that will make the workflow more efficient.
- Function as an entry-level PACS Administrator.



### Magnetic Resonance (MR) Certificate Program

This Magnetic Resonance (MR) Certificate Program is designed for experienced medical imaging professionals seeking to enter the field of MR imaging. The didactic and clinical content is structured to meet the content requirements of the American Registry of Radiologic Technologists (ARRT) Post-primary Examination in MR, and will help professionals prepare for the examination. Didactic courses are delivered online in an interactive format to accommodate the working adult student. Students are responsible for finding a host hospital in which to complete the 100 hour clinical internship in which relevant skills will be reinforced. Students must earn a numerical grade of 80 or higher in all courses. Failure to meet internship objectives or failure to obtain a numerical course grade of 80 or better constitutes failure in that course. Students may apply for readmission to the program one time.

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, and undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the internship component of the MR

Certificate program. The outcome of the CORI check may impact the student's ability to participate in the internship experience.

### **ADMISSION REQUIREMENTS:**

Student must apply to the program through the Admissions Office and:

- 1. Present a completed application with fee.
- 2. Submit a copy of the current ARRT card.
- 3. Submit a letter of interest.
- 4. Submit a letter of recommendation from a supervisor, including guarantee of a clinical site for the clinical internship.

Admission is selective. Completed applications will be reviewed by the Medical Imaging Department in April and July for a September start.

### 52 Magnetic Resonance (MR) Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
MR Concepts I	MRC111		3	acceptance into MR Program
MR Concepts II	MRC211		3	MRC111
MR Clinical Internship	MRC299		3	chair approval; pre/coreq MRC211
TOTAL CREDITS			9	

### PROGRAM OVERVIEW

This certificate helps to prepare students for the American Registry of Radiologic Technologists' (ARRT) Post-primary Registry Examination in Magnetic Resonance, as well as for entry-level MR positions. It is intended for ARRT registered imaging professionals.

### **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.

## UPON COMPLETION OF THIS PROGRAM, 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.



### **Mammography Certificate Program**

This Mammography Certificate Program is designed for experienced medical imaging professionals seeking to enter the field of mammography. The didactic and clinical content is structured to meet the content requirements of the American Registry of Radiologic Technologists (ARRT) Post-primary Examination in Mammography, and will help professionals prepare for the examination. Didactic courses are delivered online in an interactive format to accommodate the working adult student. Students are responsible for finding a host hospital in which to complete the 100 hour clinical internship in which relevant skills will be reinforced. Students must earn a numerical grade of 80 or higher in all courses. Failure to meet internship objectives or failure to obtain a numerical course grade of 80 or better constitutes failure in that course. Students may apply for readmission to the program one time. 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, and undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the internship component of the

Mammography Certificate program. The outcome of the CORI check may impact the student's ability to participate in the internship experience.

### **ADMISSION REQUIREMENTS:**

Student must apply to the program through the Admissions Office and:

- 1. Present a completed application with fee.
- 2. Submit a copy of the current ARRT card.
- 3. Submit a letter of interest.
- Submit a letter of recommendation from a supervisor, including guarantee of a clinical site for the clinical internship.

Admission is selective. Completed applications will be reviewed by the Medical Imaging Department in April and July for a September start.

### 53 Mammography Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Mammography I	MAC111		3	acceptance into Mammography Program
Mammography Principles II	MAC211		3	MAC111
Mammography Clinical Internship	MAC299		3	chair approval; pre/coreq MAC211
TOTAL CREDITS			9	

### PROGRAM OVERVIEW

This certificate helps to prepare students for the American Registry of Radiologic Technologists' (ARRT) Post-primary Registry Examination in Magnetic Resonance, as well as for entry-level MR positions. It is intended for ARRT registered imaging professionals.

#### **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.

- 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.



### **Vascular Sonography Certificate Program**

This program prepares students for career positions in the profession of vascular ultrasound (vascular technology). This one-year certificate program combines didactic and clinical experience in the areas of arterial, venous and cerebrovascular ultrasound as well as a course in vascular instrumentation. In addition to exposure to ultrasound protocols the student will become acquainted with other types of diagnostic instruments used to assess blood flow.

### **ADMISSION REQUIREMENTS:**

To be considered for admission into this program, applicants must apply to the program through the Admissions and Registration Office and:

- 1. Attend a MANDATORY information session.
- Be a graduate of a CAAHEP accredited Diagnostic Ultrasound Program with an A.S. or be a graduate with a B.S. from an allied health program.
- 3. If a graduate of a non-CAAHEP approved ultrasound program, applicant must be registered by the American Registry of Diagnostic Medical Sonography (ARDMS).

- 4. Complete Anatomy and Physiology I and II.
- 5. Show evidence of good physical and emotional health as indicated by a physician's recommendation.
- 6. High school physics or college physics is recommended.
- Qualified applicants may be asked to complete an interview process conducted by academic and clinical faculty.
- Must provide an original letter from a credentialed sonographer (Registered Vascular Technologist) or physician stating that the student has secured a clinical site prior to the start of the program.

Admission is selective. Completed applications will be reviewed by the Medical Imaging Department in April and July for a September start.

### 54 Vascular Sonography Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Vascular Principles and Instrumentation	VSN111	Fall	3	acceptance to Vascular Program
Peripheral Arterial Testing	VSN113	Fall	3	acceptance to Vascular Program
Vascular Ultrasound Clinical I	VSN115	Fall	3	coreqs VSN111 and VSN113
Peripheral Venous Testing	VSN211	Spring	3	VSN113
Cerebrovascular Testing	VSN213	Spring	3	VSN113 or program director approval
Vascular Ultrasound Clinical II	VSN215	Spring	3	VSN115; coreq VSN211 and VSN213
Vascular Ultrasound Clinical III	VSN217	Summer	3	VSN215
TOTAL CREDITS			21	_

### **CAREER OUTLOOK**

According to the United States Department of Labor, employment in the field of Vascular Technology is expected to grow faster than most imaging modalities. Graduates of this program are qualified for entry-level positions as Vascular Technologists in hospitals and clinical settings.

## UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

 Demonstrate entry level competence to pursue employment opportunities as entry-level Vascular Technologists.



### Associate in Science Degree: Medical Laboratory Technician Program

For this program, students must earn a numerical grade of 77 or higher in all Biology, Chemistry, and Medical Laboratory Technician courses. Either failure to meet clinical objectives or failure to obtain a numerical course grade of 77 or better constitutes failure in that course. Students may apply for readmission to the program.

All Medical Laboratory Technician students are required to: undergo a physical examination, complete the necessary immunization forms, including the three (3) dose Hepatitis B immunization series; carry malpractice and health insurance; and undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical

component of courses. The outcome of the CORI check may impact the student's ability to participate in the clinical experience.

## STUDENTS MUST APPLY TO THE PROGRAM THROUGH THE ADMISSIONS AND REGISTRATION OFFICE AND:

- Possess a high school diploma or GED certificate.
- 2. Attend a mandatory informational session and interview with the Program Director.
- 3. Complete with a grade of C or better; ENG095, ESL098 or RDG095, and MAT194 or exemption from reading, writing, and math requirements by placement testing.
- 4. Complete BIO195 with a grade of C or better.

### **Associate in Science Degree: Medical Laboratory Technician**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Principles of Psychology	PSY101 satisfies Area 2		3	ESL098 or RDG095 or placement
World View	From Area 3		3	
Statistics	MAT181 satisfied Area 4		3	MAT094
Anatomy/Physiology I & Lab	BI0203		4	BIO101 or BIO108 or BIO195
Anatomy/Physiology II & Lab	BI0204		4	BI0203
Microbiology	BI0205		4	BIO195 or BIO203
Chemical Science I & Lab or Principles of Inorganic Chemistry	CHM110 or CHM120		4	ENG095 and MAT094 or placements MAT197
Chemical Science II & Lab or Principles of Organic & Biochemistry	CHM111 or CHM121		4	CHM110 CHM110 or CHM120 or chair approval
Intro to Clinical Laboratory Sciences I	MLT111		2	Admission to CLS Program
Urinalysis	MLT112		1	Admission to CLS Program
Hematology & Hemostasis	MLT211		3	CLS111
Medical Microbiology & Lab	MLT212		4	CLS111 and BIO205
Immunology & Serology	MLT213		3	CLS111
Immunohematology	MLT241		3	CLS213
Clinical Chemistry	MLT242		3	CHM111 or CHM121 and CLS213
Clinical Laboratory Science Practicum	MLT251		12	All CLS coursework
TOTAL CREDITS			66	

### **PROGRAM OVERVIEW**

This program prepares students through lectures, laboratory activities and hospital-based clinical experience to become Medical Laboratory Technicians. Students will acquire the skills and knowledge essential to working in a medical laboratory and performing tests that aid in the diagnosis and treatment of disease and the maintenance of health.

### **CAREER OUTLOOK**

Graduates of this program are eligible to take the CLT/MLT certification exam administered by the American Society of Clinical Pathology. Graduates are then qualified for employment in hospitals, clinics and health maintenance organizations.

### PROGRAM ACCREDITATION

The Program is currently in the Serious Applicant stage of pursuing accreditation by the National Accrediting Agency for Clinical Laboratory Sciences, 5600 North River Road, Suite 720, Rosemont, IL 60018, telephone 773-714-8880. Graduates of the Program will be eligible to take the national certification examination.

## UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- Collect and prepare clinical specimens for analysis.
- · Operate laboratory instruments.
- Prepare a variety of diagnostic analyses according to prescribed methodology.
- Relate test results to other patient information to the extent required for understanding the analyses.



### **Associate in Science Degree: Nursing Program**

This program prepares students to become nurses at the associate's degree level and prepares students to become eligible to take the National Council Licensure Exam for Registered Nurses (NCLEX-RN). The National League for Nursing Accrediting Commission (N.L.N.A.C.) 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326, 404-975-5000, accredits the Nursing program and the Massachusetts Board of Registration in Nursing approves it. In order to provide a sound theoretical base for the practice of nursing, the curriculum offers general education courses concurrently with nursing courses. Students begin clinical learning experiences in the first semester and the clinicals continue throughout the program. The program curriculum begins with the fall and spring semesters. Due to the nature of clinical placements, students in any nursing program option may complete their clinical experience in day, evening or weekend hours. Students are responsible for their own transportation to clinical sites.

Students must earn a numerical grade of 78 or higher in all nursing courses and a grade of C or higher in all science courses. Either failure to meet clinical objectives or failure to obtain a numerical course grade of 78 or better constitutes failure in that course. Students may apply for readmission to the program one time.

All nursing students are required to: undergo a physical examination; complete the necessary immunization forms, including, but not limited to the three (3) dose Hepatitis B immunization series; proof of immunity against measles, mumps, rubella and chicken pox; current proof of freedom from tuberculosis and any other immunization(s) that clinical sites require. Students must complete all health requirements prior to entering any clinical experience. Students who do not complete health requirements will not be allowed to enter the clinical component and may jeopardize their standing in the nursing program. All nursing students must have current American Heart Association CPR certification for the Healthcare Provider, carry malpractice and health insurance; and undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusets General Laws, Chapter 6 § 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of nursing courses. Admission to the nursing program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. Individuals with previous court convictions also must meet eligibility requirements of the Massachusetts Board of Registration in Nursing for licensure. Answering yes to any of the following questions may impact upon a person's ability to meet good moral character requirements specified by the Massachusetts Board of Registration in Nursing, be eligible to sit for the NCLEX-RN examination, and ultimately to practice as a registered nurse in Massachusetts:

- Has any disciplinary action ever been taken against you by a professional and/or trade licensing/certification board located in the United States or any country/foreign jurisdiction, including removal from a long-term care nursing aide registry program?
- 2. Are you the subject of pending disciplinary action by a professional and/or trade licensing/certification board located in the United States or any foreign country/foreign jurisdiction?
- 3. Have you ever applied for, and been denied, a professional and/or trade license/certification in the United States or any other country/foreign jurisdiction?
- 4. Have you ever surrendered or resigned a professional and/or trade license/certificate in the United States or any other country/foreign jurisdiction?
- 5. Have you ever been convicted of a felony or misdemeanor in the United States or any other country/foreign jurisdiction?

For further information, please see the department chairperson.

This is a full-time two and one half-year program. Students may select either day, evening or weekend program options.

### PREREQUISITES FOR THE NURSING PROGRAM:

- 1. Attend one MANDATORY information session.
- 2. Possess a high school diploma or GED certificate.
- 3. Achieve a reading level of 10th grade or higher on the College Placement Test (CPT).
- 4. Complete the following courses with a grade of C or better:
  - One year of high school chemistry with lab or one semester of college chemistry with lab.
  - MAT094 Fundamentals of Algebra or placement above MAT094.
  - BI0203 Anatomy and Physiology I/Lab (credits for Anatomy and Physiology/Lab that were earned more than five (5) years prior to enrollment in the nursing program are not accepted).
  - ENG111 College Writing I.
  - . NUR100 Drug Calculations.
  - Students applying to the hybrid option must also complete three (3) credits of online or hybrid coursework with a C or better to be considered for the hybrid option.

#### AFTER ALL PREREQUISITES ARE COMPLETED:

- Prospective students must apply through the Admissions and Registration Office during enrollment periods. Approximate dates are Fall Program: September 15 - December 31; Spring Program: May 1 - August 31. Check with the Admissions and Registration Office for exact dates.
- 2. After applying, qualified applicants will be invited to take the Nursing admissions test: Test of Essential Academic Skills (TEAS).
- 3. Applicants must score at least 47.6% in reading, 46.7% in math and 37.5% in science on the TEAS V to be considered for the nursing program.
- 4. Admission to the Nursing Program will be based on a ranking system that includes student performance on the TEAS as well as performance in other courses in the nursing curriculum.

Applicants are accepted into the Nursing Program after evaluation of the applicant's record by the Nurse Education Admissions Committee. Applicants who are not selected for admission to the Nursing Program must meet with a member of the advising staff before reactivating thier application. Applicants may apply to the Nursing Program three consecutive times.

#### COSTS OF THE NURSING PROGRAM YEAR I AND II:

Costs associated with the nursing program are different than other programs at Bunker Hill Community College and include:

#### **TUITION AND FEES:**

For Massachusetts Residents	\$11,100.00
For Non-Mass Residents/International Students	\$25,300.00
Uniforms	\$200.00
Malpractice/Liability Insurance 10/1-9/30	\$15.00 yearly
Books/ ATI Materials	\$1,500.00
Nursing Pin	\$60.00
Licensure Application/Exam Fees	\$430.00

NOTE: Costs are estimates and may change



### 55 Nursing Program: Day/Evening Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Anatomy/Physiology/Lab I	BI0203		4	BIO101 or BIO108 or BIO195
Drug Calculation	NUR100		1	MAT094 or placement
PROGRAM CURRICULUM				
College Writing II	ENG112		3	ENG111
Principles of Sociology	SOC101 satisfies Area 2		3	ESL098 or RDG095 or placement
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	Area 5 satisfied by program			
Humanities	Area 6 satisfied by program			
Anatomy/Physiology/Lab II	BI0204	Semester 1	4	BI0203
Principles of Psychology	PSY101	Semester 1	3	ESL098 or RDG095 or placement
Physical Assessment/Basic Skills	NUR101	Semester 1	2	BIO203 and ENG111 and NUR100
Nursing I	NUR111	Semester 1	7	BIO203 and ENG111 and NUR100
Human Growth/Development	PSY213	Semester 2	3	PSY101
Nursing II	NUR112	Semester 2	10	BIO204 and NUR101 and NUR111 and PSY101
Microbiology/Lab	BI0205	Semester 2	4	BIO203 or BIO195
Nursing III	NUR211	Semester 3	9	BIO205 and NUR112 and PSY213
Nursing IV	NUR212	Semester 4	9	NUR211
Nursing Seminar	NUR213	Semester 4	1	NUR211
TOTAL CREDITS			69	

### **OPTION OVERVIEW**

This program includes 35 credits of nursing theory and clinical practice in health care facilities. NUR111, Nursing I, requires clinical practice six (6) hours per week. NUR112, NUR211 and NUR212, Nursing II, III and IV, each require clinical practice twelve (12) hours per week. Students must earn a grade of 78 or higher in all NUR courses with the exception of NUR100, in which students must earn a grade of 80 or higher. Students who fail to meet either the clinical objective or the grade requirement of an NUR course fail that course. To ensure currency, credits for BIO203, 204 and 205 earned more than five years prior to enrollment in the nursing clinical sequence are not accepted. Note that there are many requirements that must be met for acceptance to the nursing programs. These requirements are spelled out in detail in the Associate in Science Degree: Nursing Program description preceding this grid.

### **CAREER OUTLOOK**

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

- Apply the nursing process and critical thinking in the delivery of holistic nursing care in a variety of settings.
- Apply scientific knowledge and technology in the delivery of holistic nursing care.
- Integrate the roles of the associate degree nurse into nursing practice.
- Communicate effectively with individuals, families, and groups within the health care system.
- Integrate cultural competence in the delivery of nursing care to a transcultural, diverse population throughout the lifespan.
- Integrate principles of teaching/learning in the delivery of holistic nursing care.
- Integrate the legal, ethical, and professional standards in the delivery of care.
- Demonstrate accountability as a manager of care utilizing delegation and leadership skills.



### Nursing Program: Hybrid/Weekend Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Anatomy/Physiology/Lab I	BI0203		4	BIO101 or BIO108 or BIO195
Drug Calculation	NUR100		1	MAT094 or placement
Anatomy/Physiology/Lab II	BI0204		4	BI0203
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Human Growth/Development	PSY213		3	PSY101
College Writing II	ENG112		3	ENG111
Microbiology/Lab	BI0205		4	BI0203 or BI0195
Principles of Sociology	SOC101 satisfies Area 2		3	ESL098 or RDG095 or placement
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	Area 5 satisfied by program			
Humanities	Area 6 satisfied by program			
PROGRAM CURRICULUM				
Physical Assessment/Basic Skills	NUR101	Fall, year 1	2	BIO203 and ENG111 and NUR100
Nursing I	NUR111	Fall, year 1	7	BIO203 and ENG111 and NUR100
Nursing II	NUR112	Spring, year 1	10	BIO204 and NUR101 and NUR111 and PSY101
Nursing III	NUR211	Fall, year 2	9	BIO205 and NUR112 and PSY213
Nursing IV	NUR212	Spring, year 2	9	NUR211
Nursing Seminar	NUR213	Spring, year 2	1	NUR211
TOTAL CREDITS			69	

#### **OPTION OVERVIEW**

This program includes 35 credits of nursing theory and clinical practice in health care facilities. NUR111, Nursing I, requires clinical practice six (6) hours per week. NUR112, NUR211 and NUR212, Nursing II, III and IV, each require clinical practice twelve (12) hours per week. Students must earn a grade of 78 or higher in all NUR courses with the exception of NUR100, in which students must earn a grade of 80 or higher. Students who fail to meet either the clinical objective or the grade requirement of an NUR course fail that course. To ensure currency, credits for BIO203, 204 and 205 earned more than five years prior to enrollment in the nursing clinical sequence are not accepted. Note that there are many requirements that must be met for acceptance to the nursing programs. These requirements are spelled out in detail in the Associate in Science Degree: Nursing Program description preceding these grids.

#### **CAREER OUTLOOK**

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

## UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Apply the nursing process and critical thinking in the delivery of holistic nursing care in a variety of settings.
- Apply scientific knowledge and technology in the delivery of holistic nursing care.
- Integrate the roles of the associate degree nurse into nursing practice.
- Communicate effectively with individuals, families, and groups within the health care system.
- Integrate cultural competence in the delivery of nursing care to a transcultural, diverse population throughout the lifespan.
- Integrate principles of teaching/learning in the delivery of holistic nursing care.
- Integrate the legal, ethical, and professional standards in the delivery of care.
- Demonstrate accountability as a manager of care utilizing delegation and leadership skills.



### **Associate in Science Degree: Respiratory Therapy Program**

This program prepares students to become respiratory therapists at the associate degree level and prepares students to be eligible to take the CRT Examination offered by the National Board for Respiratory Care (NBRC). The Commission on Accreditation for Respiratory Care (CoARC) accredits the Respiratory program. Refer to the BHCC Accreditation Statements on the inside the back cover of this catalog for contact information for each of the accrediting agencies. The program begins in the fall semester, and didactic and clinical education is carefully correlated to provide reinforcement in the clinical setting of skills learned in the classroom.

All respiratory students are required to: undergo a physical examination; complete the necessary immunization forms, including, but not limited to the three (3) dose Hepatitis B immunization series; proof of immunity against measles, mumps, rubella and chicken pox; current proof of freedom from tuberculosis and any other immunization(s) that clinical sites require. Students must complete all health requirements prior to entering any clinical experience. Students in the program must earn a grade of C or better in all respiratory classes. All students are required to undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of courses. The outcome of the CORI check may impact the student's ability to participate in the clinical experience.

#### PREREQUISITES FOR RESPIRATORY THERAPY:

- 1. Attend one MANDATORY information session. (Refer to BHCC website for dates)
- 2. Possess a high school diploma or GED certificate.
- 3. Take college placement test (CPT), or LOEP for ESL students.
- 4. Complete the following courses with a grade of C or better:
  - a. One semester of college algebra (MAT192) or equivalent;
  - b. One semester of college level Anatomy/Physiology I/Lab (must be completed within 5 years of application unless currently working in related healthcare position).

### AFTER ALL PREREQUISITES ARE COMPLETED:

- Prospective students must apply through the Admissions and Registration Office.
   Check with the Admission and Registration Office for application deadline.
- 2. Top scoring applicants in each CPT and course prerequisites will be invited to interview with the Respiratory Therapy Admissions Committee.
- 3. Student will be requested to present an unofficial copy of transcripts of any completed college courses and a 1-2 typed page essay titled "Why I wish to be a Respiratory Therapist" at the interview.
- 4. Communication skills and overall knowledge of the field will be ranked during the interview process.

5. Admissions to the Respiratory Therapy Program will be based on the initial ranking well as the ranking of the interview and essay.



116 2011 - 2012 College Catalog



### **Associate in Science Degree: Respiratory Therapy Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES				
Anatomy/Physiology I/Lab	BIO203 satisfies Area 5			BIO101or BIO108 or BIO195
College Algebra	MAT192 satisfies Area 4			MAT094 or placement
PROGRAM CURRICULUM				
Principles of Respiratory Therapy I	RTH101	Fall, year 1	4	coreqs RTH111 and RTH121
Modalities of Respiratory Therapy I	RTH111	Fall, year 1	2	coreqs RTH101 and RTH121
Clinical Practice in Respiratory Therapy I	RTH121	Fall, year 1	2	coreqs RTH101 and RTH111
Respiratory Therapy Pharmacology	RTH132	Fall, year 1	1	
Anatomy/Physiology II/Lab	BI0204	Spring, year 1	4	BI0203
Principles of Inorganic Chemistry/Lab	CHM120	Spring, year 1	4	ENG095 and MAT094 and RDG095 or placements
Principles of Respiratory Therapy II	RTH102	Spring, year 1	4	RTH101
Modalities of Respiratory Therapy II	RTH112	Spring, year 1	2	RTH101 and RTH111
Clinical Practice in Respiratory Therapy II	RTH122	Spring, year 1	2	RTH101and RTH111 and RTH121
Cardiopulmonary Physiology	RTH134	Spring, year 1	2	
College Writing I	ENG111	Summer, year 1	3	ENG095 or placement and ESL098 or RDG095 or placement
Microbiology/Lab	BI0205	Summer, year 1	4	BI0195 or BI0203
College Writing II	ENG112	Fall, year 2	3	ENG111
Principles of Respiratory Therapy III	RTH201	Fall, year 2	4	RTH102 and RTH112 and RTH122
Modalities of Respiratory Therapy III	RTH211	Fall, year 2	3	RTH102 and RTH112 and RTH122
Clinical Practice in Respiratory Therapy III	RTH221	Fall, year 2	4	RTH102 and RTH112 and RTH122
Cardiopulmonary Diseases	RTH232	Fall, year 2	2	RTH134
Principles of Psychology	PSY101 satisfies Area 2	Spring, year 2	3	ESL098 or RDG095 or placement
Principles of Respiratory Therapy IV	RTH202	Spring, year 2	4	RTH201 and RTH211 and RTH221
Modalities of Respiratory Therapy IV	RTH212	Spring, year 2	2	RTH201 and RTH211 and RTH221
Clinical Practice in Respiratory Therapy IV	RTH222	Spring, year 2	4	RTH201 and RTH211 and RTH221
TOTAL CREDITS			63	

All respiratory therapy students are required to undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act:

Massachusetts General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of courses. The outcome of the CORI check may impact the student's ability to participate in the clinical experience.

### PROGRAM OVERVIEW

This 21-month respiratory therapist program prepares students through lectures, laboratory activities and hospital based hands-on clinical experience, to evaluate, treat and care for patients with breathing disorders. Respiratory students work under the direction of a physician in a variety of health care settings, such as acute hospitals, long term facilities, neonatal and pediatric care specialties, pulmonary rehabilitation and home care.

### **CAREER OUTLOOK**

This program prepares students to pursue careers as respiratory therapists at the associate degree level and prepares students to be eligible to take the CRT Examination offered by the National Board for Respiratory Care (NBRC). Having successfully earned the CRT credential the graduate is eligible to take the advanced-level NBRC Registry examinations to earn the RRT credential. Respiratory care practitioners are licensed in the state of Massachusetts.

## UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- · Administer oxygen and other medical gases.
- Administer humidification and aerosol therapy, including aerosolized medications.
- Interpret and report tests in diagnosing lung and breathing disorders and recommending treatment methods.
- Manage mechanical ventilators and artificial airway devices for patients who can't breath normally on their own.
- Perform postural drainage, bronchopulmonary hygiene, breathing exercises, pulmonary rehabilitation, and cardiopulmonary resuscitation.
- Educate patient and families about lung conditions so they can maximize their recovery.



### **Medical Assistant Certificate Program**

This program is offered at the Chelsea Campus.

Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of courses. Admission to an Allied Health program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. For further information, see the department chairperson. Students must maintain a grade of B- or better in AHE110 and AHE112 in order to continue into the second semester.

### **ADMISSION REQUIREMENTS:**

To be admitted to this program, students must apply to the program through the Admissions and Registration Office and:

- Possess a high school diploma or GED certification.
- Attend an information session and an interview with program staff.
- Complete college placement tests in reading, math, and English.
- Provide evidence of health insurance and complete a health form.

### Medical Assistant Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Clinical Practice	AHE110		3	
Medical Assisting Skills	AHE112		3	coreq AHE110
Health Employment Issues or Human Growth/Development	AHE104 or PSY213		3	PSY101
Advanced Clinical Skills	AHE201		3	AHE111 or AHE112
Practicum/Medical Assistant	AHE205		3	AHE112; coreq AHE201
Practicum Seminar/Allied Health	AHE209		1	coreq AHE205
Computer or Office Adm. Course			3	
Procedures for the Medical Office	0IM170		3	
Elective			3	
TOTAL CREDITS			25	
ESL OPTION:				
Principles of Clinical Practice	AHE110		3	
Medical Assisting Skills	AHE112		3	coreq AHE110
Health Employment Issues or Human Growth/Development	AHE104 or PSY213		3	PSY101
ESL Health Communications	ESL052		3	
Advanced Clinical Skills	AHE201		3	AHE111 or AHE112
Practicum/Medical Assistant	AHE205		3	AHE112; coreq AHE201
Practicum Seminar/Allied Health	AHE209		1	coreq AHE205
Computer or Office Adm. Course			3	
Procedures for the Medical Office	0IM170		3	
TOTAL CREDITS			25	

### PROGRAM OVERVIEW

This program prepares students to function as members of a health care delivery team and to perform administrative and clinical duties. The program prepares students in Healthcare Provider CPR, EKG, and phlebotomy.

#### **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.

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



### **Medical Interpreting Certificate Program**

This program is offered at the Chelsea campus as a part-time evening program.

Students will be assessed in both English as well as their primary language. English will be assessed with either the Accuplacer Computerized Placement Test (CPT) or the Accuplacer ESL Level of English Proficiency Test (LOEP). The student's primary language will be assessed by an examination administered by the program. This exam requires the student to write and speak in both English and their primary language. Sections include demographic information, vocabulary, interpretation, and written paragraphs in each language regarding medical interpreting. In accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6, 172-178 and regulations pursuant to these statutes, Criminal Offender Record Information (CORI) checks are required prior to participation in the clinical component of courses. Admission to the medical interpreting program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. For further information, see the department chairperson. Students must maintain a grade of B- or better in all required courses.

### **ADMISSION REQUIREMENTS**

Students must apply to the program through the Admissions and Registration Office and:

- 1. Possess a High School Diploma or GED Certification.
- 2. Complete college placement tests in English and reading.
- 3. Place out of, or complete ESL level 3 courses with grades of B or better.
- 4. Place out of, or complete, ENG 095 and RDG 095.
- 5. Be literate in their native language.
- 6. Be fluent in English.
- 7. Provide evidence of health insurance and complete a health form.

When they have completed the admission requirements, qualified applicants will be invited for an interview.

### Medical Interpreting Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Medical Interpreting I	AHE101 - see note	Fall	3	ENG090 and RDG095 or placements
Health Employment Issues	AHE104	Fall	3	
Medical Terminology	NHP180	Fall	3	
Computer Course	CIT	Fall	3	
Medical Interpreting II	AHE102	Spring	2	AHE101
Medical Interpreting Internship	AHE299	Spring	1	AHE102
Communication Skills for Health Care	AHE117	Spring	3	
TOTAL CREDITS			18	

Note: A grade of B- or better in the Medical Interpreting I course is required for progression in the program.

#### PROGRAM OVERVIEW

This program prepares students, through lectures and hospital-based clinical experience, to be medical interpreters in a variety of health care settings.

#### CAREER OUTLOOK

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

## UPON COMPLETION OF THIS PROGRAM, 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.



### **Patient Care Technician Certificate Program**

This program is offered at the Chelsea Campus.

Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of courses. Admission to an Allied Health program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. For further information, see the department chairperson.

Students must maintain a grade of B- or better in AHE110 and AHE111 in order to continue into the second semester.

#### **ADMISSION REQUIREMENTS:**

To be admitted to this program, students must apply to the program through the Admissions and Registration Office and:

- · Possess a high school diploma or GED certification.
- · Attend an information session and an interview with program staff.
- Complete college placement tests in reading, math, and English.
- Provide evidence of health insurance and complete a health form.

### Patient Care Technician Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Clinical Practice	AHE110		3	
Patient Care Skills	AHE111		3	coreqs AHE106 and AHE110
CNA Practicum	AHE106		1	coreqs AHE110 and AHE111
Health Employment Issues or Human Growth/Development	AHE104 or PSY213		3	PSY101
Advanced Clinical Skills	AHE201		3	AHE111 or AHE112
Practicum/Patient Care Technician	AHE204		3	AHE111; coreq AHE201
Practicum Seminar/Allied Health	AHE209		1	coreq AHE204
Computer or Office Adm. course			3	
Elective			3	
Elective			3	
TOTAL CREDITS			26	
ESL OPTION:				
Principles of Clinical Practice	AHE110		3	
Patient Care Skills	AHE111		3	coreq AHE106 and AHE 110
CNA Practicum	AHE106		1	coreqs AHE110 and AHE111
Health Employment Issues or Human Growth/Development	AHE104 or PSY213		3	PSY101
ESL Health Communications	ESL052		3	
Advanced Clinical Skills	AHE201		3	AHE111 or AHE112
Practicum/Patient Care Technician	AHE204		3	AHE111; coreq AHE201
Practicum Seminar/Allied Health	AHE209		1	coreq AHE204
Computer or Office Adm. course			3	
Elective			3	
TOTAL CREDITS			26	

#### PROGRAM OVERVIEW

This program prepares students to deliver direct patient care through classroom teaching, lab practice, and actual clinical experience in hospitals and long-term care facilities. The program prepares students for a variety of positions in health care and also allows them to take prerequisite courses for the Nursing, Medical Imaging, Respiratory Therapy, Clinical Laboratory Sciences, or other related programs.

#### **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.

- Perform direct patient care competently.
- · Perform basic computer skills.



### **Phlebotomy Technician Certificate Program**

This program is offered at the Chelsea Campus.

Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of courses. Admission to an Allied Health program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. For further information, see the department chairperson.

#### **ADMISSION REQUIREMENTS:**

To be admitted to this program, students must apply to the program through the Admissions Office and:

- · Possess a high school diploma or GED certification.
- · Attend an information session and an interview with program staff.
- Complete college placement tests in reading, math, and English.
- · Provide evidence of health insurance and complete a health form.

### Phlebotomy Technician Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Phlebotomy Theory/Lab	AHE115	Semester I	4	ENG090 and MAT091 and RDG090 or placement
Comunication Skills for Health Care	AHE117	Semester I	3	
Computer or Office Administration Course		Semester I	3	
Medical Terminology	NHP180	Semester I	3	
Practicum/Phlebotomy Tech	AHE206	Semester II	3	AHE110 and AHE115
Practicum Seminar/Allied Health	AHE209	Semester II	1	coreq AHE206
TOTAL CREDITS			17	

### PROGRAM OVERVIEW

This program prepares students to perform blood collection by venipuncture.

### CAREER OUTLOOK

Graduates of this program qualify for employment in hospitals, clinics, chronic care facilities, health maintenance organizations, and physicians' offices as phlebotomy technicians.

## UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- · Perform blood collection by venipuncture.
- Perform basic computer skills.



### **Central Processing Certificate Program (Sterile Processing and Distribution Management)**

This program is offered at the Chelsea Campus as a part time evening program.

In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 § 172-178, and regulations pursuant to these statutes, Criminal Offender Record Information (CORI) checks are required prior to participation in the clinical component of central processing courses. Admission to the central processing program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. For further information, see the department chairperson.

#### **ADMISSION REQUIREMENTS**

Students must apply to the program through the Admissions and Registration Office and:

- 1. Possess a high school diploma or GED certificate.
- 2. Complete the college placement tests in reading, math, and English (may be taken during the first semester in the program)

### **Central Processing Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Central Processing I	SGT109		2	
Central Processing I Clinical	SGT109A		2	
Medical Terminology	NHP180		3	
Central Processing II	SGT110		2	SGT109 and ENG090 and MAT091 and RDG090
Central Processing II Clinical	SGT110A		2	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Central Processing Clinical	SGT111		2	SGT110
Principles of Accounting	ACC101		3	
TOTAL CREDITS			19	

### **PROGRAM OVERVIEW**

This evening program prepares working students to enter this expanding field as Registered Central Processing Technicians. The program prepares students to assume leadership roles within the profession, through a blend of clinical skills and business concepts. The program prepares students in computer competency, accounting, medical terminology, central processing functions, central processing skills and regulations.

### **CAREER OUTLOOK**

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

- Qualify for the Registered 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.



### **Surgical Technology Certificate Program**

This program is offered at the Chelsea Campus.

Students must maintain a grade of C or better in all surgical technology courses. In accordance with the Criminal Records Information Act: Massachusetts General Laws, Chapter 6 § 172-178, and regulations pursuant to these statutes Criminal Offender Record Information (CORI) checks are required prior to participation in the clinical component of surgical technology courses. Admission to the surgical technology program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. For further information, see the department chairperson.

#### **ADMISSION REQUIREMENTS**

Students must apply to the program through the Admissions and Registration Office and:

- 1. Possess a high school diploma or GED certificate.
- Complete Writing Skills II (ENG095) with a grade of C or better or place into College Writing I (ENG111).
- 3. Complete Prealgebra (MAT092) with a grade of C or better or place above Prealgebra on the college placement test.
- 4. Complete the college placement tests in reading, math, and English (10th grade reading level preferred).

When they have completed the admission requirements, qualified applicants will be invited for an interview.

### **Surgical Technology Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111	Fall	3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Psychology	PSY101	Fall	3	ESL098 and RDG095 or placement
Human Biology/Lab	BI0108	Fall	4	ENG095 and MAT092 and RDG095 or placement
Surgical Technology I	SGT105	Fall	5	ENG095 and MAT091 or placement
Human Growth/Development	PSY213	Spring	3	PSY101
Surgical Technology II	SGT106	Spring	8	BIO108 and SGT105
Surgical Technology III	SGT107	Summer	3	SGT106
TOTAL CREDITS			29	

### PROGRAM OVERVIEW

Through classroom teaching, lab observation and practice, and clinical experience, this full-time, 11-month certificate program prepares students to work closely with surgeons, anesthesiologists, registered nurses, and other surgical personnel to deliver patient care in the operating room. The program prepares students to handle the instruments, supplies and equipment necessary during the surgical procedure; to understand the procedures being performed and anticipate the needs of the surgeon; to have the necessary knowledge and ability to provide quality patient care during the operative procedure and to maintain sterile technique. Students spend two days per week in area hospitals during spring semester and work full-time during June and July.

#### **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 certification exam after a few months of on-the-job experience.

## UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

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



### Associate in Arts Degree: History and Government Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	Area 2 satisfied by program			
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
History of Western Civilization I or World Civilization I	HIS101 or HIS111		3	ESL098 or RDG095 and ENG095 or placement
History of Western Civilization II or World Civilization II	HIS102 or HIS112	choose sequential course	3	ESL098 or RDG095 or placement and ENG 095 or placement
State/Local Politics	G0V103		3	ESL098 or RDG095 and ENG095 or placements
Government/Politics in US	G0V101		3	ESL098 or RDG095 and ENG095 or placement
US History I	HIS151		3	ESL098 or RDG095 and ENG095 or placement
US History II	HIS152		3	ESL098 or RDG095 and ENG095 or placement
Foreign Language Elective			3	
Foreign Language Elective			3	
Literature in America I or Masterpieces of World Lit. I	LIT203 or LIT211		3	pre/coreq ENG111
Literature in America II or Masterpieces of World Lit. II	LIT204 or LIT212	choose sequential course	3	pre/coreq ENG111
Behavioral Science Elective			3	
Mathematics Elective			3	MAT094 or placement
Lab Science Elective			4	
Elective (Full-time students take LCS)	see note		3	
Elective	see note		3	
TOTAL CREDITS			62	

Note: ECO201 and GOV111 strongly recommended; ECO202, GEO101, and PHL111 recommended.

### **CONCENTRATION OVERVIEW**

This concentration prepares students to transfer to four-year colleges or universities and provides a foundation for advanced studies for students who major in history or political science. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

### **CAREER OUTLOOK**

Graduates of this concentration may qualify to transfer to fouryear 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.

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

- Understand how societies change over time and the implications for today.
- Understand the social, political and economic developments of specific societies at specific moments in history.
- Use the critical thinking and writing skills developed in the classroom in a variety of academic and employment situations.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



### Associate in Science Degree: Hotel/Restaurant Program

This program prepares students in four options: Hotel and Restaurant Management, Management of Assisted Living and Institutional Facilities, Meeting and Event Planning, and Travel and Tourism Management. The program prepares students in a variety of industry-oriented learning settings and a

variety of teaching and learning environments that reflect the unique circumstances of the hospitality industry. Well-trained graduates are in great demand, with opportunities to advance, based upon their technical and critical thinking skills.

### 66 Hotel/Restaurant Management Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Individual and Society	PSY101 or SOC101 satisfies Area 2	Spring	3	ESL098 or RDG095 or placement
World View	From Area 3 - see note		3	
College Algebra	MAT192 satisfies Area 4		3	MAT094 or placement
Nutrition Science w/Lab	BI0115 satisfies Area 5		4	ENG095 and MAT092 or placement; and ESL098 or RDG095 or placement
Humanities	From Area 6		3	
Principles of Management and Service in Hospitality	HRT121		3	
Hospitality Seminar	HRT105 satisfies LCS requirement		3	
Hospitality Marketing Management	HRT109		3	HRT121
Basics of Meeting Management	HRT119		3	
Principles of Accounting I	ACC101		3	
College Writing II	ENG112		3	ENG111
PC Keyboarding Techniques	OIM100		1	
Principles of Hospitality Finance and Accounting	HRT125		3	ACC101
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Front Office Operations w/ Technology Component	HRT131		3	
Advanced Lodging Operations	HRT231		3	HRT131
Food and Beverage Operations for Hospitality Professionals	HRT112		3	
Hospitality Law	HRT117		3	HRT121
Culinary Theory in Hospitality	HRT133		3	HRT121
Food Service Sanitation and Skills	CUL111		3	
Hospitality Internship	HRT210	Summer only	3	HRT121
TOTAL CREDITS			65	

Note: GEO101 is recommended.

#### **OPTION OVERVIEW**

The mission of the Hospitality Management programs is to be a leader in programs providing education for entry level careers in Hotel and Restaurant Management, Food Service Management, and Travel and Tourism Management. In addition, preparation for transfer to four-year, higher education programs and opportunities for professional development are provided. Students develop technological, communicative, critical thinking, quantitative, and interpersonal skills.

This option prepares students in skills training and decision making in such crucial areas as guest services, human resources, and hotel and restaurant operations. A variety of teaching methods lead students to a better understanding of the importance of the tourism industry as an economic growth vehicle and as a method of working with a culturally diverse workforce.

#### **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.

## UPON COMPLETION OF THIS OPTION, 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.



### Management of Assisted Living and Institutional Facilities Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Management and Service in Hospitality	HRT121		3	
Hospitality Marketing Mgt.	HRT109		3	HRT121
Hospitality Law	HRT117		3	
Principles of Hospitality Finance and Accounting	HRT125		3	ACC101
Hospitality Seminar	HRT105 satisfies LCS requirement		3	
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Psychology or Principles of Sociology	PSY101 or SOC101 - satisfies Area 2		3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Principles of Accounting I	ACC101		3	
Front Office Operations	HRT131	Fall only	3	
College Algebra	MAT192 satisfies Area 4		3	MAT094 or placement
Nutrition Science w/Lab	BI0115 satisfies Area 5		4	ENG095 and MAT092 or placement; and ESL or RDG095 or placement
College Writing II	ENG112		3	ENG111
Humanities Elective	From Area 6		3	
Advanced Lodging Operations	HRT231	Spring only	3	HRT131
Food and Beverage Operations for Hospitality	HRT112		3	
Marketing and Managing Institutional Facilities	HRT135		3	HRT109
Assisted Living Internship	HRT299	Summer only	3	HRT121, HLT111, PSY141, CUL111, and HRT135
Food Service Sanitation and Skills	CUL111		3	
Social Aspects of Aging	PSY141 Satisfies Area 3		3	
Health Aspects of Aging	HLT111		3	
TOTAL CREDITS			64	

#### **OPTION OVERVIEW**

This option prepares students in various aspects of the management of assisted living communities. Managing an assisted living complex requires skills in many areas. The director of a facility is comparable in scope to that of the general manager at a resort hotel. Your guests, however, are long term instead of transient. This creates a different focus in terms of both sales and service.

Day to day management of the facility and its programs has many similarities to Hospitality Management, the ability to maintain the highest level of service being imperative. The terms 'Guest' and 'Resident' become interchangeable within this segment of the industry. Management must provide hotel based services including dining room service, housekeeping and entertainment in order to meet guest needs. The medical and social requirements of residents demand a strong understanding of geriatric care in order to manage healthcare providers.

#### CAREER OUTLOOK

According to the Assisted Living Federation of America there are 36,000 assisted living communities nationwide serving more than one million senior citizens. Forty-one states, including Massachusetts, allow low-income residents to live in assisted living. The 74 million boomers who are now considering this option for their parents will be the next generation of assisted living residents, making it the most preferred and fastest growing long-term care option for seniors.

The career outlook is very good in the underserved, almost nonexistent field of Assisted Living Management. The industry is experiencing rapid growth and there are very few programs preparing skilled managers able to meet the diverse needs of the market. These factors combine to provide a strong job market for graduates.

- Recognize and respond to the needs of a geriatric resident population.
- Guide financial health of an Assisted Living facility.
- Properly staff all areas of operations.
- Understand the responsibilities in the areas of Sales and Marketing, Food Service, Health Services and Engineering.
- Manage staff in areas of Sales and Marketing, Food Service, Health Services and Engineering.
- Coordinate staffing responsibilities between departments to create a seamless resident experience.
- Respond to crises in an appropriate manner.



### Meeting and Event Planning Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Management and Service in Hospitality	HRT121		3	
Basics of Meeting Management	HRT119		3	
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Individual and Society	From Area 2		3	
World View	From Area 3		3	
College Algebra	MAT192 satisfies Area 4		3	MAT094 or placement
Nutrition Science w/Lab	BIO115 satisfies Area 5		4	ENG095 and MAT092 or placement; and ESL or RDG095 or placement
Humanities	From Area 6		3	
PC Keyboarding Techniques	0IM100		1	
Hospitality Marketing Mgt.	HRT109		3	HRT121
Hospitality Seminar	HRT105 satisfies LCS requirement		3	
Principles of Accounting I	ACC101		3	
College Writing II	ENG112		3	ENG111
Hospitality Internship	HRT210	Summer only	3	HRT121
Principles of Hospitality Finance and Accounting	HRT125		3	ACC101
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Event Planning	HRT223		3	HRT119
Hospitality Law	HRT117		3	
Managing Groups	HRT221		3	HRT119
Culinary Theory in Hospitality	HRT133		3	HRT121
Corporate Travel Management	HRT229		3	
Career Elective	see note		3	
TOTAL CREDITS			65	

Note: Select the career elective from HRT112, 127, 131, 225; CUL111.

#### **OPTION OVERVIEW:**

The mission of the Hospitality Management programs is to be a leader in programs providing education for entry level careers in Hotel and Restaurant Management, Travel and Tourism Management, Meeting and Event Planning Management and Assisted Living. In addition, preparation for transfer to four year, higher education programs and opportunities for professional development will be provided. Students will develop technological, communicative, critical thinking, quantitative, and interpersonal skills.

This option prepares students in skills training and decision making in such crucial areas as guest services, event planning, and meeting management. A variety of teaching methods lead students to a better understanding of the importance of the meeting and event planning industry as an economic growth vehicle and as a method of working with a culturally diverse workforce.

### **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.

## UPON COMPLETION OF THIS OPTION, 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.

127



### Motel and Restaurant Management Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Management and Service in Hospitality	HRT121		3	
Front Office Operations w/ Technology Component	HRT131		3	
Principles of Accounting I	ACC101		3	
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
PC Keyboarding Techniques	0IM100		1	
Food and Beverage Operations for Hospitality Professionals	HRT112		3	
Culinary Theory in Hospitality	HRT133		3	HRT121
Advanced Lodging Operations	HRT231		3	HRT131
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Food Service Sanitation and Skills	CUL111		3	
TOTAL CREDITS			28	

#### PROGRAM OVERVIEW:

The mission of the Hospitality Management programs is to be a leader in programs providing education for entry level careers in Hotel and Restaurant Management, Travel and Tourism Management and Meeting and Event Planning Management. In addition, Preparation for transfer to four year, higher education programs and opportunities for professional development will be provided. Students will develop technological, communicative, critical thinking, quantitative, and interpersonal skills.

This option prepares students in skills training and decision making in such crucial areas as guest services, human resources, and hotel and restaurant operations. A variety of teaching methods lead students to a better understanding of the importance of the hotel and restaurant industry as an economic growth vehicle and as a method of working with a culturally diverse workforce.

### **CAREER OUTLOOK:**

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.

- 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 needs of the hotel and restaurant industry.



### Meeting and Event Planning Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Basics of Meeting Management	HRT119	Fall	3	
Principles of Management and Service in Hospitality	HRT121	Fall	3	
Corporate Travel Management	HRT229	Fall	3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Managing Groups	HRT221	Spring	3	HRT119
Event Planning	HRT223	Spring	3	HRT119
Culinary Theory in Hospitality	HRT133	Spring	3	HRT121
Principles of Accounting I	ACC101	Spring	3	
PC Keyboarding Techniques	OIM100	Spring	1	
TOTAL CREDITS			28	

### PROGRAM OVERVIEW:

The mission of the Hospitality Management programs is to be a leader in programs providing education for entry level careers in Hotel and Restaurant Management, Travel and Tourism Management and Meeting and Event Planning Management. In addition, Preparation for transfer to four year, higher education programs and opportunities for professional development will be provided. Students will develop technological, communicative, critical thinking, quantitative, and interpersonal skills.

This option prepares students in skills training and decision making in such crucial areas as guest services, event planning, and meeting management. A variety of teaching methods lead students to a better understanding of the importance of the meeting and event planning industry as an economic growth vehicle and as a method of working with a culturally diverse workforce.

### **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.

## UPON COMPLETION OF THIS OPTION, 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.

129



### Associate in Science Degree: Human Services Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Psychology	PSY101 satisfies Area 2		3	ESL098 or RDG095 or placement
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Intro to Human Services Profession w/ Field Practice	HSV101		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
College Writing II	ENG112		3	ENG111
Case Management in Human Services	HSV118		3	PSY215
World View	From Area 3		3	
Child Growth/Development	ECE103		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Adolescent/Adult Development	PSY224		3	PSY101
Addiction	HSV112		3	PSY101
Counseling	PSY215		3	PSY101
Humanities	From Area 6		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Human Services Practicum I	HSV120		3	chair approval
Science and Technology	From Area 5		4	
Human Services Practicum II	HSV121		3	chair approval and HSV120
Issues in HSV	HSV117		3	HSV101 and PSY101 and PSY215 and PSY224
Pre-Practicum Prep w/Field Experience	HSV116 - see note		3	see note
Computer Elective			3	
Career Elective (Full-time students take LCS)			3	
Career Elective	HSV115, HSV119, PSY233, AHE104, or PSY227		3	
TOTAL CREDITS			61	

Note: The prerequisite for Associate degree students is ENG112 with a grade of C or better and a minimum of 27 credits completed toward the A.S. in Human Services including HSV101, HSV112, PSY215, and PSY224 with a grade of C or better or permission of Department Chair.

A Criminal Offender Record Information (CORI) check and/or a Sex Offender Registry Information (SORI) check are required for this program.

#### PROGRAM OVERVIEW

Early Childhood Education and Human Services Department's mission statement and goals state two primary purposes:

1) To provide knowledge, training and skill development for persons interested in working in the area of social services with specific educational opportunities for those interested in early childhood development, human services, and education, and 2) To serve the community as an information and knowledge-base in the area of social service, with specific expertise in early childhood education and development, human services, and education.

This program prepares students as assistants and paraprofessionals in careers that direct the delivery of services to people.

#### **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.

## UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL 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.



### **Community Health Worker Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Counseling	PSY215		3	PSY101
Addiction	HSV112		3	PSY101
Health Employment Issues	AHE104		3	
Current Issues for the Community Health Worker	HSV119		3	AHE104 and PSY215
Pre-Practicum Prep w/Field Experience	HSV116 - see note		3	see note
Case Management in Human Services	HSV118		3	PSY215
TOTAL CREDITS			24	

Note: The prerequisite for Certificate students is ENG111 with a grade of C or better and a minimum of 9 credits completed toward the Certificate Option including, at a minimum, PSY215 and HSV112.

A Criminal Offender Record Information (CORI) and/or a Sex Offender Registry Information (SORI) are required for this program.

Due to the prerequisite requirements, it may not be possible to complete this certificate program in one year.

### PROGRAM OVERVIEW

This certificate program prepares students for direct service jobs in a specialty area of Human Services – providing training for those providing community health work to community agencies.

### **CAREER OUTLOOK**

Students completing the certificate qualify for careers providing community health work. Work may take place in social welfare, mental health, or community-based human services organizations. Multi-age populations are served. Job outlook is excellent with many agencies offering employment in this area of specialty.

- 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 decision-making 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.



### **Professional Human Services Work Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Intro to Human Services Profession w/ Field Practice	HSV101		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Addiction	HSV112		3	PSY101
Counseling	PSY215		3	PSY101
Case Management in Human Services	HSV118		3	PSY215
Abnormal Psychology	PSY227		3	PSY101 or instructor approval
Pre-Practicum Prep w/Field Experience	HSV116 - see note		3	see note
TOTAL CREDITS			24	

Note: The prerequisite for Certificate students is ENG111 with a grade of C or better and a minimum of 9 credits completed toward the Certificate Option including, at a minimum, PSY215 and HSV112.

A Criminal Offender Record Information (CORI) and/or a Sex Offender Registry Information (SORI) are required for this program.

Due to the prerequisite requirements, it may not be possible to complete this certificate program in one year.

### **PROGRAM OVERVIEW**

This certificate prepares students for direct service jobs in human services providing the delivery of services to participants in human service organizations.

### **CAREER OUTLOOK**

Students completing the certificate qualify for careers in social welfare, mental health, community development, or other similar human service organizations in the community serving families and children, adolescents, elders, or other specific populations in need of services through community programming.

- 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 decision-making 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.



### **74** Psychiatric Rehabilitation Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Counseling	PSY215		3	PSY101
Addiction	HSV112		3	PSY101
Intro to Psychiatric Rehabilitation	PSY233		3	PSY101
Pre-Practicum Prep w/Field Experience	HSV116 - see note		3	see note
Case Management in Human Services	HSV118		3	PSY215
Abnormal Psychology	PSY227		3	PSY101 or instructor approval
TOTAL CREDITS			24	

Note: The prerequisite for Certificate students is ENG111 with a grade of C or better and a minimum of 9 credits completed toward the Certificate Option including, at a minimum, PSY215 and HSV112.

A Criminal Offender Record Information (CORI) and/or a Sex Offender Registry Information (SORI) are required for this program.

Due to the prerequisite requirements, it may not be possible to complete this certificate program in one year.

### PROGRAM OVERVIEW

This certificate program prepares students for direct service jobs in a specialty area of Human Services – providing services to those with mental illness.

### **CAREER OUTLOOK**

Students completing the certificate qualify for careers serving those with mental illness. Work may take place in social welfare, mental health, or community-based human services organizations. Job outlook is excellent with many agencies offering employment in this area of specialty.

## UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL 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 decision-making 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.

133



### **55** Substance Abuse Services Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Counseling	PSY215		3	PSY101
Addiction	HSV112		3	PSY101
Abnormal Psychology	PSY227		3	PSY101 or instructor approval
Case Management in Human Services	HSV118		3	PSY215
Intro to Substance Abuse Counseling	HSV115		3	HSV112, PSY215
Pre-Practicum Prep w/Field Experience	HSV116 - see note		3	see note
TOTAL CREDITS			24	

Note: The prerequisite for Certificate students is ENG111 with a grade of C or better and a minimum of 9 credits completed toward the Certificate Option including, at a minimum, PSY215 and HSV112.

A Criminal Offender Record Information (CORI) and/or a Sex Offender Registry Information (SORI) are required for this program.

### PROGRAM OVERVIEW

This certificate prepares students for direct service entry level jobs providing the delivery of services to clients with substance abuse problems and their families.

### **CAREER OUTLOOK**

Students completing the certificate may qualify for careers in social welfare, mental health, community development, or other similar human service organizations in the community serving families and children, adolescents, elders, or other specific populations in need of services through community programming.

- 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 decision-making 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.



### Associate in Science Degree: Criminal Justice Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Criminal Justice	CRJ101 satisfies LCS requirement		3	ENG095 or placement and ESL098 or RDG095 or placement
Criminal Law	CRJ103		3	ENG095 or placement and ESL098 or RDG095 or placement
Introduction to Corrections	CRJ107		3	ENG095 or placement and ESL098 or RDG095 or placement
Criminal Investigations	CRJ108		3	CRJ101 or CRJ103 or instructor approval
Management for Criminal Justice	CRJ201		3	CRJ101 and CRJ103 or instructor approval
Evidence and Court Procedure	CRJ202		3	CRJ101 and CRJ103 or instructor approval
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Principles of Sociology	SOC101 satisfies Area 2		3	ESL098 or RDG095 or placement
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Criminology	SOC207		3	PSY101 or SOC101
State/Local Politics	G0V103		3	ESL098 or RDG095 and ENG095 or placement
Oral Communication	ENG171		3	
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3-4	
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Career Elective	see note		3	
Career Elective	see note		3	
Career Elective	see note		3	
Career Elective	see note		3	
TOTAL CREDITS			61-62	

Note: Select the career elective from CRJ courses.

#### PROGRAM OVERVIEW

The Criminal Justice Program provides academically rigorous education to prepare students for careers in security, law enforcement, and corrections. Preparation is also provided for transfer to four-year programs and opportunities for professional development for those already employed in areas that are important in the Criminal Justice field. In addition to specific content knowledge, students develop critical thinking, technological, cross-cultural and gender competencies, and ethical understanding and communication skills.

#### **CAREER OUTLOOK**

Graduates of this program qualify for entry-level positions in security, law enforcement, and corrections in local, state, and some federal law enforcement agencies.

- Meet specific competencies in the following areas:
   ethics and professional responsibility; applying
   theory to policy and procedure; community
   involvement; constitutional issues; correctional
   institutions and processes; crime, justice and
   society; criminal justice administration; criminal
   law; forensics; innovations in police policy and
   management; issues of race, class, and gender;
   and researching criminal justice issues.
- · Communicate effectively both orally and in writing.
- Use a computer to access data and information.



### Associate in Science Degree: Fire Protection and Safety Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or
				RDG095 or placement
College Writing II	ENG112		3	ENG111
Principles of Sociology	SOC101 satisfies Area 2		3	ESL098 or RDG095 or placement
World View	From Area 3		3	
College Algebra or Contemporary Math II	MAT192 or MAT173 satisfies Area 4			MAT094 or placement
Principles of Inorganic Chemistry & Lab	CHM120 satisfies Area 5		4	ENG095, RDG095, MAT094 or placements
Humanities	From Area 6		3	
The Fire Service, This Century and the Next, What Should We Expect	FPS111	First year	3	First-time college students
Principles of Fire and Emergency Services Safety & Survival	FPS119		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Emergency Services	FPS123		3	ENG095 or placement and RDG095 or placement
Fire Prevention	FPS139		3	ENG095 or placement and RDG095 or placement
Fire Protection Systems	FPS133		3	ENG095 or placement and ESL098 or RDG095 or placement
Fire Behavior and Combustion	FPS135		3	ENG095 or placement and ESL098 or RDG095 or placement
Building construction for Fire Protection	FPS223		3	FPS123
Oral Communication	ENG171		3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Behavioral Science Elective			3	
Career Elective	see note		3	
Career Elective	see note		3	
Elective			3	
TOTAL:			61	

Note: Choose two career elective if FPS111 has been completed. If FPS111 has been waived, three career electives are required. Choose from the following career electives:FPS121, FPS125, FPS127, FPS137, and FPS221.

This program is offered in the late afternoon and evening.

### **PROGRAM OVERVIEW**

This program prepares students with practical and technical information and instruction. Students may include both potential fire fighters and in-service fire fighters wishing to upgrade their career status. An associate degree in fire protection and safety may lead to higher scores on promotional examinations.

### 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.

- 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.



### Associate in Science Degree: Paralegal Studies Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	ENG095 and MAT092
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
Introduction to Law	PLG101		3	ENG095 or placement and ESL098 or RDG095 or placement
Legal Research and Writing	PLG102		3	PLG101
Litigation	PLG103		3	PLG101
Ethics	PLG104		3	PLG101
Business Law	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Computer Applications/Concepts	CIT110 - see note		3	ESL098 or RDG095 or placement
Behavioral Science Elective			3	
Behavioral Science Elective			3	
Lab Science Elective			4	
Humanities Elective			3	
Humanities Elective			3	
OPTION ELECTIVES (CHOOSE 3)				
Business Organizations	PLG202		3	BUS201
Criminal Law	CRJ103		3	ENG095 or placement and ESL098 or RDG095 or placement
Family Law	PLG201		3	PLG101
Real Estate	PLG203		3	ENG095 or placement and ESL098 or RDG095 or placement
Wills, Estates, and Trusts	PLG204		3	ENG095 or placement and ESL098 or RDG095 or placement
Paralegal Internship	PLG299		3	All required PLG courses and a 3.0 GPA
TOTAL CREDITS			62-65	

Note: This course may be waived on the basis of previous coursework or experience. Please see the Dean of Professional Studies.

#### PROGRAM OVERVIEW

This program prepares students for legal employment by training them to assist lawyers in gathering and analyzing factual data, drafting correspondence, researching legal questions, and preparing legal documents. Paralegal employment provides flexibility (full-time, part-time, per diem, temporary or freelance) and the opportunity to enter the legal field without first obtaining a law degree. Graduates of the program may directly enter the work force or opt to continue their education and pursue a four-year degree.

### **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.

- 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.
- Understand, identify and resolve legal and ethical issues associated with the paralegal profession.



### Fire Protection and Safety Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
The Fire Service, This Century and the Next, What Should We Expect – Learning Community Seminar	FPS111		3	First-time college students
Principles of Fire and Emergency Services Safety & Survival	FPS119		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Emergency Services	FPS123		3	ENG095 or placement and ESL098 or RDG095 or placement
Fire Protection Systems	FPS133		3	ENG095 or placement and ESL098 or RDG095 or placement
Fire Behavior and Combustion	FPS135		3	ENG095 or placement and ESL098 or RDG095 or placement
Fire Prevention	FPS139		3	ENG095 or placement and ESL098 or RDG095 or placement
Building construction for Fire Protection	FPS223		3	FPS123
Career Elective	see note		3	
TOTAL:			27	

Note: Choose two career elective if FPS111 has been completed. If FPS111 has been waived, three career electives are required. Choose from the following career electives:FPS121, FPS125, FPS127, FPS137, and FPS221.

#### PROGRAM OVERVIEW

This program prepares students with practical and technical information and instruction. Students may include both potential fire fighters and in-service fire fighters wishing to upgrade their career status. A certificate in fire protection and safety may lead to higher scores on promotional examinations. This program is offered in the afternoon and evening.

### **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 the two-year Associate in Science Degree: Fire Protection and Safety. This program also prepares fire fighters who wish to upgrade their career status.

- Understand the principles of fire protection and safety.
- Demonstrate preparedness to be a fire company officer.
- Understand the principles of arson investigation (see FPS209).
- Demonstrate familiarity with inspections for fire prevention.
- Demonstrate preparedness to take promotional civil service fire exams.



### **Law Enforcement Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Criminal Justice	CRJ101		3	ENG095 or placement and ESL098 or RDG095 or placement
Criminal Law	CRJ103		3	ENG095 or placement and ESL098 or RDG095 or placement
Evidence and Court Procedure	CRJ202		3	CRJ101 and CRJ103 or instructor approval
Policing in a Democratic Society	CRJ220		3	CRJ101 and CRJ103 or instructor approval
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Sociology	SOC101		3	ESL098 or RDG095 or placement
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Criminology	S0C207		3	PSY101 or SOC101
Oral Communication	ENG171		3	
TOTAL CREDITS			27	

#### PROGRAM OVERVIEW

Developed in cooperation with the Massachusetts Chiefs of Police Association, the Law Enforcement Certificate Program has been approved by the Massachusetts Department of Higher Education for participation in the Police Career Incentive Program (PCIP-Quinn Bill). The certificate combines specialized criminal justice and general education coursework to provide students with the knowledge and skills they need to compete for entry into the Massachusetts law enforcement field. All of the credits earned in the certificate program can be applied to a Quinn Bill eligible Associate in Science degree in criminal justice.

### **CAREER OUTLOOK**

The certificate program has been ratified by the Massachusetts Chiefs of Police Association's Training and Education Committee as an important step in their goal to have a better-educated and more professional workforce. Although the certificate is not yet a requirement in the hiring and training procedures, it is anticipated that it will substitute for a significant part of the Massachusetts Training Council curriculum in the future. Since the Law Enforcement Certificate Program will only be offered at PCIP approved colleges, all courses qualify students for the pay incentives once they earn the A.S. degree in Criminal Justice.

- Demonstrate enhanced cultural awareness and interpersonal communication skills.
- Demonstrate specific content knowledge of criminal justice and criminal law.



### **Paralegal Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Law	PLG101	Fall	3	ENG095 or placement and ESL098 or RDG095 or placement
Legal Research/Writing	PLG102	Fall	3	PLG101
Litigation	PLG103	Fall	3	PLG101
Ethics	PLG104	Fall	3	PLG101
Business Law	BUS201	Fall	3	ENG095 or placement and ESL098 or RDG095 or placement
Business Organizations	PLG202	Spring	3	ENG095 or placement and ESL098 or RDG095 or placement
Family Law	PLG201	Spring	3	PLG101
Real Estate	PLG203	Spring	3	ENG095 or placement and ESL098 or RDG095 or placement
CONCENTRATION ELECTIVES (CHOOSE 1)				
Criminal Law	CRJ103	Spring	3	ENG095 or placement and ESL098 or RDG095 or placement
Willis, Estates, and Trusts	PLG204	Spring	3	ENG095 or placement and ESL098 or RDG095 or placement
Paralegal Internship	PLG299	Spring	3	All required PLG courses and a 3.0 GPA
TOTAL CREDITS			27	

### **PROGRAM OVERVIEW**

This program introduces students to paralegal practice and procedures. Students develop paralegal skills and knowledge that enables them to assist lawyers in conducting research and in preparing legal documents. The program is intended for students with an associate or bachelor's degree; however, students without degrees will be admitted provided they satisfy the program entrance requirements.

### **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.

- 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.
- Understand, identify and resolve legal and ethical issues associated with the paralegal profession.



### **Associate in Arts Degree: Mathematics Concentration**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	Area 5 satisfied by program			
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Calculus I	MAT281		4	MAT196 or MAT197
Calculus II	MAT282		4	MAT281
Calculus III	MAT283		4	MAT282
Ordinary Differential Equations	MAT285		4	MAT282
Linear Algebra	MAT291		3	MAT281
College Physics I/Lab	PHY251		4	MAT281; see note
College Physics II/Lab	PHY252		4	PHY251; pre/coreq MAT282; see note
Computer Elective			3	
Behavioral Science Elective			3	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Social Science Elective			3	
Elective (Full-time students take LCS)			3	
TOTAL CREDITS			60	

Note: All science, engineering, and math courses that are pre or corequisites of other science and engineering courses require a grade of C or better.

### **CONCENTRATION OVERVIEW**

This concentration prepares students to transfer to four-year colleges or universities to seek bachelors' degrees in mathematics. After transferring, students study to become more proficient in areas such as abstract algebra, complex variables, vector calculus, number theory and partial differential equations. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

### **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.

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

- Analyze and solve quantitative problems.
- Reason logically from hypothesis to conclusion.
- Understand and appreciate an analytical approach to problem solving.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



### Associate in Arts Degree: Music Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	Area 6 satisfied by program			
CONCENTRATION COURSES				
Music Appreciation I	MUS118		3	
Foundations of Music	MUS122		3	
Social Science Elective			3	
Mathematics Elective			3	MAT094 or placement
Music Appreciation II	MUS119		3	MUS118 or permission
Counterpoint and Harmonization	MUS135		3	MUS122
Behavioral Science Elective			3	
Lab Science Elective			4	
Electronic Music I	see note		3	
Music in the United States	see note		3	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Music Elective (Full-time students take LCS)			3	
Music Elective			3	
TOTAL CREDITS			62	

Note: See the department chair for substitute course.

### **CONCENTRATION OVERVIEW**

This concentration prepares students in the foundations of music theory, history, and practice. It prepares students to transfer to four-year colleges or universities to seek bachelors' degrees in music. It also helps students develop skills in music for their personal enrichment. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

### **CAREER OUTLOOK**

Graduates of this concentration qualify for entry-level positions in the music field. Depending on electives selected, students begin work toward a career in music education, performance, or music management. Graduates of this concentration qualify to transfer to four-year colleges or universities for bachelors' degrees in music.

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

- Create or analyze work that has aesthetic value.
- Explain personal preferences and interpret the underlying meanings of music as expressed in a specific historical period or contemporary popular culture.
- Demonstrate knowledge of musical expression and identify unifying factors.
- Examine and compare various modes of musical expression.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



# Associate in Science Degree: Office and Information Management Program

This program offers two degree options: Administrative Information Management and Medical Information Management. Each option prepares students to develop computer, human relations, and organizational skills required by information management professionals. Students use the most current computer applications in a hands-on environment. The options include software programs in Microsoft Word, Access, Excel, PowerPoint, and Outlook, as well as in the use of e-mail and the Internet. Students who plan to transfer to a four-year business administration or information management program should contact the department chairperson for more information.

# Office and Information Management Certificate Program

This program offers two certificates: Medical Information Management Assistant and Information Management Specialist. Each program prepares students for a variety of entry-level positions in office administration. The majority of credits earned in either certificate can be applied to the Associate in Science degree programs within the department.

#### PREREQUISITE OR COREQUISITE TO PROGRAMS

OIM101, Keyboarding: Document Generation I, should be taken prior to or during the first semester. Students with NO previous keyboarding experience or who type less than 35 words per minute should take OIM101 in the first semester. Students who type 35 words per minute or more and know MS Word can arrange to take an exemption test for OIM101. This should be done prior to the beginning of the semester through the Center for Self-Directed Learning in Room E235.





# 84 Administrative Information Management Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CORE COURSES				
Office and Information Management: Technology on the Move	OIM199 satisfies LCS requirement		3	ENG095 or placement and ESL098 or RDG095 or placement pre/coreq OIM101; coreq PSY107
Group Dynamics	PSY107 satisfies Area 2		3	coreq OIM199
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Introduction to Business	BUS101		3	ESL098 and ESL099 or RDG095 and ENG090 or placements
Records and Information Management	OIM106		3	pre/coreqs OIM101 and CIT110
Documentation Generation II	OIM110		3	OIM101 and CIT110 or chair approval
Business Correspondence and Editing	OIM130		3	ENG095; pre/coreq OIM101
Admin Tech and Procedures	OIM115		3	pre/coreqs OIM101 and CIT110
Principles of Internet and Information Security	CIT118		3	CIT110, CIT113, or CIT120 or chair approval
Admin Business Communication	OIM230 - see note	Fall only	3	pre/coreqs OIM106, OIM110, OIM115, and OIM130
Database Design with MS Access	CIT128		3	CIT110, CIT113, or CIT120 or chair approval
Design Support Using MS Excel	CIT234		3	CIT110, CIT113, or CIT120 or chair approval
Collaboration, Communication and Integration in MS Office	CIT250		3	CIT110, CIT113, or chair approval
Office and Information Management Internship	OIM299	Spring only	3	pre/coreq all core courses or chair approval
TOTAL CREDITS			61	

OIM101 is a prerequisite or corequisite to program, which should be taken prior to or during the first semester. An exemption exam is available through the Center for Self-Directed Learning in Room E235 for students who type 35 words per minute or more with accuracy and know MS Word and document format. Note: Administrative Business Communication must be taken during the fall semester prior to enrolling in OIM299.

#### **OPTION OVERVIEW**

The Office and Information Management Department's mission is to provide industry-identified knowledge, skills, and abilities to prepare students for entry-level careers within office administration and/or medical office administration fields. For individuals already employed within these fields, professional development can be obtained through the more advanced courses. In addition, transfer to four-year programs is possible. The department offers a capstone internship program for all degree students.

The Administrative Information Management Option prepares students to work in an executive office environment. The option focuses on MS Office applications including security issues and integration of software. Students participate in an internship in a business setting during their last spring semester to reinforce skills learned. Classes in this option are suitable for individuals who seek retraining, upgrading of computer or management skills, or who seek MOUS certification.

#### **CAREER OUTLOOK**

Graduates of this option qualify for job opportunities within a wide range of businesses, corporations, and government agencies. Graduates qualify for entry-level positions such as account specialist or representative, executive/administrative assistant, executive secretary, office administrator, computer applications specialist, customer service representative, or information processing specialist.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:

- Demonstrate proficiency in computer operations and software applications.
- Qualify for the MOUS certification exam.
- Use the complete range of Microsoft applications effectively and efficiently.
- Demonstrate proficiency in office operations and communication media.



# **Medical Information Management Option**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Humanities	From Area 6		3	
CORE COURSES				
Office and Information Management: Technology on the Move	OIM199 satisfies LCS requirement		3	ENG095 or placement and ESL098 or RDG095 or placement; pre/coreq OIM101; coreq PSY107
Group Dynamics	PSY107 satisfies Area 2		3	coreq OIM199
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Medical Terminology	NHP180		3	
Medical Information Management	OIM190		3	pre/coreq OIM101
Records and Information Management	OIM106		3	pre/coreqs CIT110 and OIM101
Documentation Generation II	OIM110		3	OIM101 and CIT110 or chair approval
Business Correspondence and Editing	OIM130		3	ENG095; pre/coreq OIM101
Intro to Physicians' Billing	OIM200		3	pre/coreq NHP180
Admin Tech and Procedures	OIM115		3	pre/coreqs OIM101 and CIT110
Principles of Internet and Information Security	CIT118		3	CIT110, CIT113, or CIT120 or chair approval
Database Design with MS Access or	CIT128 or		3	CIT110, CIT113, or CIT120 or chair approval
Collaboration, Communication	CIT250			CIT110 or CIT113 or chair approval
Admin Business Communication	OIM230 - see note	Fall only	3	pre/coreqs OIM106, OIM110, OIM115, and OIM130
Principles of Biology I/Lab or Nutrition Science/Lab	BIO101 or BIO115 satisfies Area 5		4	ENG095 and MAT092 or placement and ESL098 or RDG095 or placement
Office and Information Management Internship	OIM299	Spring only	3	pre/coreq all core courses or chair approval
TOTAL CREDITS			61	

OIM101 is a prerequisite or corequisite to program, which should be taken prior to or during the first semester. An exemption exam is available through the Center for Self-Directed Learning in Room E235 for students who type 35 words per minute or more with accuracy and know MS Word and document format.

Note: Administrative Business Communication must be taken during the fall semester prior to enrolling in OIM299.

#### **OPTION OVERVIEW**

The Office and Information Management Department's mission is to provide industry-identified knowledge, skills, and abilities to prepare students for entry-level careers within office administration and/or medical office administration fields. For individuals already employed within these fields, professional development can be obtained through the more advanced courses. In addition, transfer to four-year programs is possible. The department offers a capstone internship program for all degree students.

The Medical Information Management Option prepares students to work as professionals within a medical office environment. The option prepares students in basic medical terminology, which is then applied using MediSoft computer applications, a patient accounting software package. It also prepares students in third-party billing and coding. Students participate in an internship in a medical office setting during their last spring semester to reinforce skills learned.

# **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.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL 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.



# Information Management Specialist Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Office and Information Management: Technology on the Move	OIM199		3	ENG095 or placement and ESL098 or RDG095 or placement; pre/coreq OIM101; coreq PSY107
Group Dynamics	PSY107		3	coreq OIM199
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Records and Information Management	OIM106		3	pre/coreqs OIM101 and CIT110
Business Correspondence and Editing	01M130		3	ENG095; pre/coreq OIM101
Documentation Generation II	0IM110		3	OIM101 and CIT110 or chair approval
Admin Tech and Procedures	OIM115		3	pre/coreqs OIM101 and CIT110
Principles of Internet and Information Security	CIT118		3	CIT110, CIT113, or CIT120 or chair approval
Database Design with MS Access or	CIT128 or		3	CIT110, CIT113, or CIT120 or chair approval
Design Support Using MS Excel	CIT234			GITTIO, GITTIS, OF GITTZO OF CHAIF APPROVAL
TOTAL CREDITS			27	

Note: OIM101 is a prerequisite or corequisite to program, which should be taken prior to or during the first semester. An exemption exam is available through the Center for Self-Directed Learning in Room E235 for students who type 35 words per minute or more with accuracy and know MS Word and document format.

#### **PROGRAM OVERVIEW**

This certificate program provides students with the practical skills needed to work in an executive office environment. The option focuses on MS Office applications including security issues and either database or spreadsheet applications.

# **CAREER OUTLOOK**

Graduates of this program qualify for entry-level positions such as receptionists, data-entry clerks, information processing specialists, office assistants, or customer service representatives in a wide variety of businesses and corporations. All courses in this certificate program may be applied to any option in the Associate in Science Degree: Office and Information Management Program.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- Demonstrate proficiency in computer operations and software applications.
- Use the complete range of Microsoft applications effectively and efficiently.
- Demonstrate proficiency in office operations and communication media.



# **Medical Information Management Assistant Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Office and Information Management: Technology on the Move	OIM199		3	ENG095 or placement and ESL098 or RDG095 or placement; pre/coreq OIM101; coreq PSY107
Group Dynamics	PSY107		3	coreq OIM199
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Medical Terminology	NHP180		3	
Medical Information Management	OIM190		3	pre/coreq OIM101
Records and Information Management	OIM106		3	pre/coreqs CIT110 and OIM101
Documentation Generation II	OIM110		3	OIM101 and CIT110 or chair approval
Business Correspondence and Editing	OIM130		3	ENG095; pre/coreq OIM101
Introduction to Physicians' Billing	OIM200		3	NHP180
TOTAL CREDITS			27	

Note: OIM101 is a prerequisite or corequisite to program, which should be taken prior to or during the first semester. An exemption exam is available through the Center for Self-Directed Learning in Room E235 for students who type 35 words per minute or more with accuracy and know MS Word and document format.

#### PROGRAM OVERVIEW

This certificate program is designed to prepare students to work as professionals within a medical office environment. Students learn basic medical terminology, which is then applied using MediSoft patient accounting software, a patient accounting software package. It also prepares students in third-party billing and coding. All program requirements may be applied to the Associate in Science Degree: Office and Information Management Program.

#### **CAREER OUTLOOK**

Graduates of the program qualify for job opportunities in physicians' and dentists' offices, clinics, HMOs, community health agencies, long-term care facilities, and hospitals. They also qualify for jobs within large corporations that provide onsite health services, engage in medical research, or produce medical products. Graduates will qualify for entry-level positions such as medical receptionists, medical records management specialists, patient service representatives, and medical administrative assistants. Students also may qualify for at-home opportunities as medical transcriptionists.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL:

- Demonstrate proficiency in computer operations and the 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.
- Have demonstrated proficiency in medical office operations and communication media.



# **Associate in Arts Degree: Physics Concentration**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	Area 5 satisfied by program			
Humanities	From Area 6		3	
CONCENTRATION COURSES				
College Physics I/Lab	PHY251		4	MAT281; see note
College Physics II/Lab	PHY252		4	PHY251; pre/coreq MAT282; see note
Calculus I	MAT281		4	MAT196 or MAT197
Calculus II	MAT282		4	MAT281
Calculus III	MAT283		4	MAT282
Ordinary Differential Equations	MAT285		4	MAT282
Linear Algebra	MAT291		3	MAT281
General Chemistry I/Lab	CHM201		4	MAT194; see note
General Chemistry II/Lab	CHM202		4	CHM201; see note
Computer Elective or Introduction to Engineering	CIT or ENR101		3	MAT194 or placement
Behavioral Science Elective			3	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Social Science Elective			3	
TOTAL CREDITS			65	

Note: All science, engineering, and math courses that are pre or corequisites of other science and engineering courses require a grade of C or better.

#### **CONCENTRATION OVERVIEW**

This concentration prepares students to transfer to four-year colleges or universities to seek bachelors' degrees in physical science or physics. After transferring, students study to become more proficient in one or more of the divisions of the physical sciences; e.g., theoretical physics, particle physics, astrophysics, biophysics, or applied physics. Graduates of the concentration may qualify to transfer using benefits of MassTransfer to one of the Massachusetts State Universities or the University of Massachusetts. For current information on eligible programs, visit www.mass.edu/masstransfer.

## **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.

# 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.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.



# Associate in Arts Degree: Psychology Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	Area 2 satisfied by program			
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Principles of Sociology	S0C101		3	ESL098 or RDG095 or placement
Human Growth/Development	PSY213		3	PSY101
Psychology of Adjustment	PSY203		3	PSY101
Intro to Behavioral Research	PSY235		3	PSY101
Statistics I or Statistics I/Lab	MAT181 or MAT183		3-4	MAT094 or placement
Mathematics Elective			3	MAT094 or placement
Lab Science Elective			4	
Social Science Elective			3	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Career Elective	see note		3	
Elective (Full-time students take LCS)			3	
Elective			3	
Elective			3	
TOTAL CREDITS			62-63	

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.

#### **CONCENTRATION OVERVIEW**

The mission of the Behavioral Science Department is to produce students who are critical thinkers, who can examine various propositions, theoretical statements and social assertions they encounter with an analytical eye and a healthy skepticism. Additionally, students gain an understanding of basic research methods and techniques employed by psychologists, sociologists and cultural anthropologists. In addition, we seek to assure that our students are acquainted with the fundamental theoretical foundations of their respective fields of study.

The Psychology concentration prepares students to transfer to four-year colleges or universities for bachelors' degrees in the behavioral sciences. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### 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.

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

- Describe the characteristics of the major psychological theories.
- Understand current perspectives regarding the relationship between the mind and body.
- Understand the current schools of psychotherapy.
- Describe the biological, cognitive, affective, and emotional stages of human development throughout the life span.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



# **Associate in Science Degree: Biological Sciences Program**

This program offers two degree options: Biology Transfer and Biotechnology. Each option prepares students for employment and for transfer to four-year colleges and universities. Each option engages

students in industry-level, inquiry based laboratory activities in order to develop and strengthen their critical thinking as well as their industry skills.

# Biology Transfer Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Humanities	From Area 6		3	
General Biology I/Lab	BI0195 satisfies Area 5		4	ENG095 and RDG095 and MAT194 or placements, see note
General Biology II/Lab	BI0196		4	BIO195; see note
Cell Biology/Lab	BI0207		4	BIO195 or CHM201 or department approva see note
Genetics and Lab	BI0208		4	BIO196 or department approval; see note
General Chemistry I/Lab	CHM201		4	MAT194; see note
General Chemistry II/Lab	CHM202		4	CHM201; see note
General Physics I/Lab or College Physics I/Lab	PHY201 or PHY251		4	MAT197; see note MAT281; see note
General Physics II/Lab or College Physics II/Lab	PHY202 or PHY252		4	PHY201; see note PHY251; pre/coreq MAT282; see note
Calculus I	MAT281satisfies Area 4		4	MAT196 or MAT197 or placement
Option Electives			11-13	
OPTION ELECTIVES (CHOOSE 3)				
Organic Chemistry/Lab I	CHM251		4	CHM202; see note
Organic Chemistry/Lab II	CHM252		4	CHM251; see note
Statistics I/Lab	MAT183		4	MAT094
Calculus II	MAT282		4	MAT281
Intro to Biotechnology	BI0120		4	ENG095 and MAT092 or placement and ESL098 or RDG095 or placement; see note
Molecular Biotechnology and Lab	B10260		5	BIO120, BIO207, and BIO208 or departmental approval; see note
Honors Seminar	H0N200		3	
TOTAL CREDITS			62-64	

Note: All science, engineering, and math courses that are pre or corequisites of other science and engineering courses require a grade of C or better.

#### **OPTION OVERVIEW**

This option provides students with the technical coursework and laboratory experience that enables them to succeed in undergraduate biology programs. Upon graduation from BHCC, students are able to pursue further study at four-year colleges and universities in any number of areas including physiology, ecology, cell biology, biotechnology, genetics, botany, zoology, microbiology, biochemistry, wildlife conservation, or any of the health sciences. BHCC has articulation agreements with UMass Boston, UMass Amherst and UMass Lowell, enabling Biology Transfer graduates to enroll in any one of these universities as juniors, without losing credits.

#### **CAREER OUTLOOK**

This option will allow students to transfer to four-year colleges and universities to seek a bachelor's degree in biology. Students planning to transfer into a pre-medical, preveterinary, pre-dental, pharmacy or chiropractic degree program should enroll in this program.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL 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.



# 91 Biotechnology Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Humanities	From Area 6		3	
General Biology I/Lab	BIO195 satisfies Area 5		4	ENG095 or placement; ESL098 or RDG095 and MAT195; or placement; see note
General Biology II/Lab	BI0196		4	BIO195; see note
Introduction to Biotechnology/Lab	BI0120		4	ENG095 and MAT092 or placement; ESL098 or RDG095 or placement
General Chemistry I/Lab	CHM201		4	MAT194; see note
General Chemistry II/Lab	CHM202		4	CHM201; see note
Cell Biology/Lab	BI0207		4	BIO195 or CHM201 or departmental approval see note
Genetics and Lab	BI0208		4	BIO196 or department approval; see note
Molecular Biotechnology and Lab	BI0260		5	BIO120, BIO207, and BIO208 or departmental approval; see note
Precalculus	MAT197 satisfies Area 4		4	MAT194
Option Electives			11-12	
OPTION ELECTIVES (CHOOSE 3)				
Microbiology/Lab	BI0205		4	BIO195 or BIO203; see note
Principles of Organic Biochemistry/Lab	CHM121		4	CHM120; see note
Statistics I/Lab	MAT183		4	MAT094
Calculus I	MAT281		4	MAT196 or MAT197
Honors Seminar	HON200		3	
TOTAL CREDITS			63-64	

Note: All science, engineering, and math courses that are pre or corequisites of other science and engineering courses require a grade of C or better.

#### **OPTION OVERVIEW**

This option covers the concepts, methodology and techniques of biochemistry, cell biology, genetics, cell culture, molecular biology, immunology, bioinformatics and microbiology. The option provides students with a rigorous academic background as well as industry-specific laboratory skills including sophisticated laboratory procedures, experimental design, data interpretation, and equipment maintenance. The program also reinforces general industry-specific skills such as communication, organization and teamwork. Graduates of this program may transfer to four-year colleges and universities to continue their studies in biotechnology or other life sciences.

#### **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.

# UPON COMPLETION OF THIS OPTION, GRADUATES WILL 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 sciencerelated 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.



# **Associate in Arts Degree: Chemical Science Concentration**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	Area 5 satisfied by program			
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Calculus I	MAT281		4	MAT196 or MAT197 or placement
Calculus II	MAT282		4	MAT281
General Chemistry I/Lab	CHM201		4	MAT194; see note
General Chemistry II/Lab	CHM202		4	CHM201; see note
Organic Chemistry I/Lab	CHM251		4	CHM202; see note
Organic Chemistry II/Lab	CHM252		4	CHM251; see note
College Physics I/Lab	PHY251		4	MAT281; see note
College Physics II/Lab	PHY252		4	PHY251; pre/coreq MAT282; see note
Social Science Elective			3	
Behavioral Science Elective			3	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Concentration Elective			3-4	
CONCENTRATION ELECTIVE (CHOOSE 1)				
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Statistics I/Lab	MAT183		4	MAT094 or placement
Calculus III	MAT283		4	MAT282
Honors Seminar	H0N200		3	instructor approval
TOTAL CREDITS			62-63	

Note: All science, engineering, and math courses that are pre or corequisites of other science and engineering courses require a grade of C or better.

#### **CONCENTRATION OVERVIEW**

This concentration prepares students to transfer to four-year colleges or universities to seek bachelor's degrees in chemistry. After transferring, students develop a course of study to become proficient in one or more of the divisions of chemistry; e.g., polymer chemistry, physical chemistry, organic chemistry, biochemistry, analytical chemistry, chemical engineering, or hazardous waste management. A further goal of the program is to provide students with the technical coursework and laboratory experience that would enable them to enter the work force as entry-level laboratory technicians in positions that require some background in the physical and/or biological sciences. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

# **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.

# UPON COMPLETION OF THIS CONCENTRATION, GRADUATES WILL 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.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.

153



# **Associate in Arts Degree: Sociology Concentration**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	Area 2 satisfied by program			
World View	From Area 3		3	
Quantitative Thought	Area 4 satisfied by program			
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Principles of Sociology	SOC101		3	ESL098 or RDG095 or placement
Statistics I/ Lab	MAT181 or 183		3-4	MAT094 or placement
Cultural Anthropology	SOC109		3	ESL098 or RDG095 or placement
Mathematics Elective			3	MAT094 or placement
Lab Science Elective			4	
Urban Sociology	SOC205		3	SOC101
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Behavioral Science Elective			3	
Computer Essentials or Applications/Concepts	CIT101 or CIT110		3	ESL098 or RDG095 or placement
The Family	S0C111		3	
Intro to Behavioral Research	PSY235		3	PSY101
Elective (Full-time students take LCS)			3	
Elective			3	
TOTAL CREDITS			62-63	

#### **CONCENTRATION OVERVIEW**

The mission of the Behavioral Science Department is to produce students who are critical thinkers, who can examine various propositions, theoretical statements and social assertions they encounter with an analytical eye and a healthy skepticism. Additionally, students gain an understanding of basic research methods and techniques employed by psychologists, sociologists and cultural anthropologists. In addition, we seek to ensure that our students are acquainted with the fundamental theoretical foundations of their respective fields of study.

The Sociology concentration prepares students to transfer to four-year colleges or universities to seek bachelor's degrees in the behavioral sciences. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### **CAREER OUTLOOK**

Graduates of this concentration qualify for entry-level positions in the general field of human services. Graduates may wish to transfer to a four-year college or university, however, because career opportunities in sociology and/or social work require a minimum of a bachelor's degree and often a master's degree is required.

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

- Understand and describe the Functionalist, Interactionist, and Conflict perspectives.
- Apply these theories to social structure, socialization, stratification, social control, and deviance.
- Understand the development of societies from hunter-gathers to post-modern information.
- Describe the nature of urban life and globalization.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



# Associate in Arts Degree: Theatre Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5		4	
Humanities	Area 6 satisfied by program			
CONCENTRATION COURSES				
Acting I	THE107		3	
Play Production Workshop	THE109		3	
Oral Communication	ENG171		3	
Social Science Elective			3	
Mathematics Elective			3	MAT094 or placement
Humanities Elective			3	
Humanities Elective			3	
Theatre Elective			3	
Theatre Elective			3	
Lab Science Elective			4	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Elective (Full-time students take LCS)			3	
Elective			3	
TOTAL CREDITS			62	

#### **CONCENTRATION OVERVIEW**

This concentration prepares students to transfer to four-year colleges or universities to seek bachelor's degrees in theatre arts, theatre education (elementary or secondary), early childhood education, literature/drama, public speaking, or communication. Students should complete requirements for the associate's degree before transferring to a four-year institution for the bachelor's degree. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### **CAREER OUTLOOK**

Graduates of this concentration with a strong theatre background qualify for careers in all aspects of print and broadcast journalism; radio/TV production; dance and expressive movement; art and art therapies, as they are related to counseling and psychology; elementary and secondary teaching; communication; and literature.

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

- Demonstrate familiarity with the components necessary to produce a play.
- Know and understand theatre history and literature.
- Demonstrate practical experience in producing a play from planning to performing.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 158.



# **95** Associate in Arts Degree: Fine Arts Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3	MAT094 or placement
Scientific View of the World	From Area 5		4	
Humanities	Area 6 satisfied by program			
CONCENTRATION COURSES				
VMA Freshman Seminar	VMA100 satisfies LCS requirement	Fall	3	ENG095 and MAT091
Two-Dimensional Design	VMA102	Fall	3	ENG095 and MAT092
Drawing I	VMA104	Fall	3	ENG095
Drawing II	VMA204	Spring	3	VMA104
Introduction to Mass Media	VMA111		3	ENG095 and MAT092
Art History Prehistoric to Medieval or Art History Renaissance to Contemporary	VMA112 or VMA113	Spring	3	ENG095 and MAT092
Three-Dimensional Design	VMA103	Spring	3	VMA102
Painting I	VMA122	Fall	3	ENG095 and MAT092
Painting II	VMA222	Spring	3	VMA122
Portfolio Prep. Seminar	VMA209	Spring	1	
Career Elective	see note	Spring	3	
Behavioral Science Elective			3	
Social Science Elective			3	
Lab Science Elective			4	
Literature Elective			3	pre/coreq ENG111
Literature Elective			3	pre/coreq ENG111
Mathematics Elective			3	MAT094 or placement
TOTAL CREDITS			66	

Note: Select the career elective from VMA courses.

#### **CONCENTRATION OVERVIEW**

This concentration prepares students to transfer to four-year colleges or universities offering fine arts degrees. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer.

#### **CAREER OUTLOOK**

Graduates of this concentration qualify to transfer to bachelor's degree-granting colleges or universities. Potential careers in the visual arts, which vary according to the chosen major, include teaching, museum work, illustration, medical and scientific illustration, advertising and printing, photography, and merchandise display.

A bachelor's degree is the minimum requirement for entry into these fields. Graduate work may be necessary, as well.

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

- Develop a portfolio in preparation for transfer to a four-year college or university.
- Demonstrate proficiency in the techniques of drawing and painting.
- Demonstrate a basic understanding of color theory.

Students enrolling in this degree program can earn World Studies Emphasis Certification simultaneously. See page 158.



# **Associate in Science Degree: Graphic Design Option**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual/Society	From Area 2		3	
Introduction to Mass Media	VMA111 satisfies Area 3		3	ENG095 and MAT092
Quantitative Thought	From Area 4		3	MAT094 or placement
Scientific View of the World	From Area 5		4	
Drawing I	VMA104 satisfies Area 6	Fall	3	ENG095
VMA Freshman Seminar	VMA100 satisfies LCS requirement	Fall	3	ENG095 and MAT091
Two-Dimensional Design	VMA102	Fall	3	ENG095 and MAT092
Digital Imaging w/Photoshop	VMA105		3	ENG095 and MAT092
Three-Dimensional Design	VMA103		3	VMA102
History of Graphic Design	VMA114	Spring	3	ENG095 and MAT092
Intro to Desktop Publishing	VMA131		3	ENG095 and MAT092
Typography	VMA132	Fall	3	ENG095 and MAT092
Drawing II or Graphic Design Internship	VMA204 or VMA299G - see note	Spring	3	VMA104 VMA232
Graphic Design Applications	VMA231		3	VMA131
Design Communication I	VMA232	Fall	3	VMA131 and VMA132
Design Communication II	VMA233	Spring	3	VMA232
Publication Design	VMA234	Spring	3	VMA232 or chair approval
Portfolio Prep Seminar	VMA209	Spring	1	
Career Elective	see note		3	
Career Elective	see note		3	
TOTAL CREDITS			65	

Note: Transfer track students must take VMA204. Career track students must take VMA299G. Select the career elective from VMA courses.

#### PROGRAM OVERVIEW

This program introduces students to the aesthetics, materials, and methods of effective visual communication for commercial art and design. The program combines theoretical elements with practical experience, up-to-date technologies, and professional equipment to give students a complete knowledge and understanding of career options, requirements, and responsibilities. Students may take elective courses in options other than their own, as scheduling permits. Because courses are offered sequentially, students must take courses in the appropriate semester.

# **CAREER OUTLOOK**

Graduates of this program qualify for job opportunities in advertising, communications, marketing, packaging, publishing, and in companies using printed and electronic materials in their product or in the promotion of that product.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- Demonstrate proficiency in basic visual design skills and production skills.
- Demonstrate proficiency in basic computer operation and page layout software applications.
- Demonstrate proficiency in drawing and image software applications.
- Use the Internet and integrate Internet text and images in media.
- Demonstrate their understanding of paper, finishing, printing processes, and the distribution or delivery process.



# Associate in Science Degree: Media Communication Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	From Area 2		3	
Introduction to Mass Media	VMA111 satisfies Area 3		3	ENG095 and MAT092
Quantitative Thought	From Area 4		3	MAT094 or placement
Science and Technology	From Area 5	Fall	4	
Drawing I	VMA104 satisfies Area 6	Fall	3	ENG095
VMA Freshman Seminar	VMA100 satisfies LCS requirement	Fall	3	ENG095 and MAT091
Two-Dimensional Design	VMA102	Fall	3	ENG095 and MAT092
Elements of Video Production	VMA141		3	ENG095 and MAT092
Digital Imaging w/Photoshop	VMA105		3	ENG095 and MAT092
History of Moving Image	VMA115	Spring	3	ENG095 and MAT092
Introduction to Audio Tech	VMA151	Spring	3	ENG095 and MAT092
Advanced Video Production	VMA241	Fall	3	VMA141 or instructor approval; coreq VMA242
Video Post-Production	VMA242	Fall	3	VMA141 or instructor approval; coreq VMA241
Projects in Video Production	VMA243	Spring	3	VMA241 and VMA242 or instructor approval
DVD Authoring	VMA274	Spring	3	VMA105 and VMA141
Media Project Planning	VMA244	Fall	3	VMA141
Media Communications Internship	VMA299M		3	VMA241 or chair approval
Portfolio Preparation Seminar	VMA209	Spring	1	
Career Elective	see note		3	
TOTAL CREDITS			62	

Note: Select the career elective from VMA courses.

#### **PROGRAM OVERVIEW**

The Media Communication Program provides a wellintegrated learning environment to prepare students for careers as professional digital media producers and wellinformed mass media consumers. Our mission is to lay the foundation for professional careers as digital media producers, managers, and technical staff through extensive academic and technical experiences related to digital media industries and production, including video and audio production, Web page design, and multimedia programs. The Media Communication Program promotes creativity. independence, and critical thinking as valuable life skills in a fast-changing and technology-driven world. This program seeks to promote creative problem-solving skills as well as a thorough technical background aimed at providing students with educational and professional career opportunities in both artistic and commercial settings. Courses in theory, organization, and applications complement the lab courses. In addition to basic program requirements, students participate in an internship in a commercial setting and take a course in career-related electives appropriate to career goals.

#### **CAREER OUTLOOK**

Graduates of this program qualify to continue their education in programs leading to a bachelor's degree. Graduates also qualify for employment in educational media centers, media service organizations, corporate media departments, cable television, libraries, and hospitals.

# UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:

- · Write clearly and intelligently about mass media issues.
- Demonstrate an understanding of the processes involved in planning, scripting, shooting, and editing a media production.
- Demonstrate an understanding of the basic technical aspects of the video camera, lighting for video, audio recording, videotape recording and digital editing.
- Demonstrate a basic level of skill in using the video camera, various kinds of microphones, a lighting kit and nonlinear editing systems.
- Demonstrate a knowledge, understanding and basic skill in the use of audio production elements.
- Demonstrate a knowledge, understanding and basic skill in the production of multimedia projects using various computer software programs.



# 98 World Studies Emphasis Certification

CHOOSE FIVE COURSES FROM ONLY THREE OF THE FOLLOWING AREAS:	COURSE TITLE	COURSE #	CREDITS	PREREQUISITES
AREA I: LANGUAGES	Arabic	ARB	3	
	French	FRE	3	
	Spanish	SPN	3	
	Portuguese	POR	3	
	Mandarin	CHN	3	
	Japanese	JPN	3	
AREA II: LITERATURE	Literature in America I	LIT203	3	pre/coreq ENG111
	Literature in America II	LIT204	3	pre/coreq ENG111
	Masterpieces of World Literature I	LIT211	3	pre/coreq ENG111
	Masterpieces of World Literature II	LIT212	3	pre/coreq ENG111
	African Literature	LIT219	3	pre/coreq ENG111
	Latin American Literature	LIT221	3	pre/coreq ENG111
	Immigrant Experience in Literature	LIT223	3	pre/coreq ENG111
	Middle East Literature	LIT224	3	pre/coreq ENG111
AREA III: HISTORY	History of Western Civilization I	HIS101	3	ESL098 or RDG095 and ENG095 or placement
	History of Western Civilization II	HIS102	3	ESL098 or RDG095 and ENG095 or placement
	World Civilization I	HIS111	3	ESL098 or RDG095 and ENG095 or placement
	World Civilization II	HIS112	3	ESL098 or RDG095 and ENG095 or placement
	US History I	HIS151	3	ESL098 or RDG095 and ENG095 or placement
	US History II	HIS152	3	ESL098 or RDG095 or placement
AREA IV: SOCIOLOGY	Cultural Anthropology	SOC109	3	ESL098 or RDG095 or placement
AREA V: GEOGRAPHY	World Regional Geography	GE0101	3	
AREA VI: RELIGION	World Religions	PHL111	3	
AREA VII: SCIENCE	Environmental Science I/Lab	ENV105	4	ENG095 and MAT092 or placement and ESL098 or RDG095 or placement
TOTAL CREDITS			15-16	

World Studies Emphasis certification is an additional credential to the Associate in Arts degree. It cannot be taken as a stand-alone program. Students must choose five courses from only three of the seven areas listed in the grid.

#### **PROGRAM OVERVIEW**

This program enables students enrolled in Associate in Arts degree programs to obtain World Studies Emphasis certification with no additional coursework through careful selection of general education and elective courses needed to fulfill their degree requirements. World Studies Emphasis certification is an additional credential to demonstrate acquired knowledge, skills, and competencies needed to live and work in a globally interdependent world. Students must complete five courses from the World Studies Emphasis menu. The common objective of these courses is to foster an ability to appreciate, analyze, and deal constructively with historical/contemporary experiences of diversity in the United States and other parts of the world. The menu includes courses in the areas of history, sociology, geography, science, religion, language, and literature.

#### CAREER OUTLOOK

Graduates who transfer to four-year colleges or universities with a major in international studies, geography, history, literature, languages, education, classics, sociology, anthropology, religion, or a regional studies program such as Middle East Studies, find World Studies Emphasis certification to be an asset. Graduates with World Studies Emphasis certification enhance their future employability because business, government, non-profit, and education leaders now seek employees with an understanding of world issues and the capacity to work in a multicultural environment.

# UPON COMPLETION OF THIS PROGRAM, IN ADDITION TO THE REQUIRED ASSOCIATE IN ARTS DEGREE, GRADUATES WILL BE ABLE TO:

- Demonstrate an understanding of the geographical, political, and social issues of a country or region other than their own.
- Understand the impact of historical events, culture, Opolitical structures, religion, and/or geography on world events.
- Demonstrate open-mindedness and curiosity with respect to other countries and cultures.
- View global issues from multiple perspectives.



# **Course Descriptions**

# **Accounting**

# ACC-101 Principles of Accounting I

3 Credits

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.

# ACC-102 Principles of Accounting II 3 Credits

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 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 cost-volume analysis as well as gaining exposure to accounting for manufacturers. Prerequisite: Principles of Accounting I (ACC101).

# ACC-105 Accounting Information Systems

3 Credits

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 (ACC101), Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095).

#### ACC-111 Investments 3 Credits

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 (ACC102).

#### ACC-112 Personal Finance 3 Credits

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.

# ACC-201 Intermediate Accounting I 3 Credit

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 Intermediate Accounting II

3 Credits

A continuation of Intermediate Accounting I (ACC201), this course discusses accounting problems for long-term assets, current, and long-term 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 (ACC201).

#### ACC-203 Federal Income Tax I

3 Credits

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 (ACC102).

#### ACC-204 Federal Income Tax II

3 Credits

A continuation of Federal Income Tax I (ACC203), 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: Federal Income Tax I (ACC203).

#### ACC-205 Volunteer Income Tax Assistance

3 Credits

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 (ACC203).

# ACC-207 Cost Accounting

3 Credits

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 (ACC102).

#### ACC-210 Financial Management

3 Credits

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 (ACC102).

## ACC-211 Money and Banking

3 Credits

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 (ECO201) and Microeconomics (ECO202).

#### ACC-216 Managerial Accounting

3 Credits

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 decision-making, cost volume profit analysis, capital budgeting decisions, and control of decentralized organizations. Prerequisite: Cost Accounting I (ACC207).



# **Allied Health**

# AHE-095 Topics in Health Care

3 Credits

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

3 Credits

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. Prerequisite: Writing Skills II (ENG095) and Reading Skills II (RDG095) or placements.

# AHE-102 Medical Interpreting II

3 Credits

A continuation of Medical Interpreting I, this course includes an in depth discussion of cross-cultural 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. Other 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 (AHE101).

# AHE-104 Health Employment Issues

3 Credits

This course introduces students to the challenges and responsibilities of health care and health care systems. Discussions center on cross-cultural issues, AIDS, drugs and alcohol, human growth and development, and on-the-job interpersonal relations.

#### AHE-106 CNA Practicum Patient Care

1 Credit

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-108 CNA/Home Health Aide

7 Credits

This course provides the training and skills necessary to take the Certified Nurse Aide and Home Health Aide exams. The course includes CPR training. There is a 21-hour clinical practicum at a long-term care facility, which may be scheduled on Saturdays and/or evenings. The course requires health clearance forms. (Students must assume responsibility for CNA testing.) Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Writing Skills I (ENG090) and Reading Skills I (RDG090).

#### AHE-110 Principles of Clinical Practice

3 Credits

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. The course is open to Allied Health certificate program students only. Additional expenses may include supplies, equipment, and/or uniforms.

#### AHE-111 Patient Care Skills

3 Credits

This course covers the patient care theory and skills required to take the Certified Nurse Aide and Home Health exams. Co-requisites: CNA Practicum (AHE106) and Principles of Clinical Practice (AHE110).

#### AHE-112 Medical Assistant Skills

3 Credits

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 Phlebotomy/Medical Lab Theory

4 Credits

This course teaches the anatomy and physiology of the circulatory system and the process of collecting blood samples. This course and Practicum/Phlebotomy Technology (AHE206) meet the requirements necessary to take one of the phlebotomy certification exams which are offered by several private certification groups. Certification is the responsibility of the student. In order to enroll in AHE115, students are required to have a Provider CPR Certification. Prerequisites: Writing Skills I (ENG090), Fundamentals of Math (MAT091), and Reading Skills I (RDG090).

#### AHE-117 Communication Skills for Health Care

3 Credits

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 Advanced Clinical Skills

3 Credits

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 (AHE111) or Medical Assisting Skills (AHE112).

#### AHE-204 Patient Care Technician

3 Credits

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 (AHE111). Co-requisite: Advanced Clinical Skills (AHE201).

# AHE-205 Practicum Medical Assistant

3 Credits

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 (AHE112). Co-requisite: Advanced Clinical Skills (AHE201).

# AHE-206 Practicum Phlebotomy Technician

3 Credits

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-207 Practicum Lab Assistant

3 Credits

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: Phlebotomy/Laboratory Theory (AHE115).



# AHE-208 Clinical Laboratory Procedures

3 Credits

This course emphasizes performance in the clinical laboratory. The processes of safety and infection control are reviewed. Main focus of the course includes waived testing, point of care testing, quality control assurance, and specimen handling and collection. Prerequisite: Phlebotomy/Laboratory Theory (AHE115) or Advanced Clinical Skills (AHE201).

#### AHE-209 Allied Health Practicum Seminar

1 Credit

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 (AHE204) or Practicum Medical Assistant (AHE205) or Practicum Phlebotomy Technician (AHE206) or Practicum Laboratory Assistant (AHE207).

#### AHE-299 Medical Interpreting Internship

1 Cradi

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 (AHE102).

# Arabic

# ARB-101 Elementary Arabic I

3 Credits

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 Elementary Arabic II

3 Credits

A continuation of Elementary Arabic I (ARB101), this course emphasizes conversational skills and sentence structure. The course stresses practical applications of the Arabic language. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Elementary Arabic I (ARB101).

# **Astronomy**

#### AST-102 Astronomy/ Lab

1 Cradit

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 General Education "Science and Technology" Requirement Area 5. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095) and a grade of C or better in Fundamentals of Algebra (MAT094) or placement equivalency.

# **Biology**

#### BIO-101 Principles of Biology I/Lab

4 Credits

This integrated course focuses on a unified conceptual approach to the study of living organisms, with emphasis on the application of units of measurement, molecular and cellular basis of life processes, morphology, physiology, human health and nutrition, and issues in

biotechnology. The course meets General Education "Science and Technology" Requirement Area 5. The course does not satisfy the biology requirement of the A.S. Biological Science Program. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), a grade of C or better in Prealgebra (MAT092), and Reading Skills II (RDG095) or placement equivalency.

# BIO-102 Principles of Biology II & Lab

4 Cred

This integrated course focuses on a unified, functional approach to the study of living organisms, with emphasis on their evolution, classification, genetics, diversity, and ecology. The course does not satisfy the biology requirement of the Biological Science concentration. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), a grade of C or better in Prealgebra (MAT092), and Reading Skills II (RDG095) or placement equivalency.

#### BIO-108 Human Biology/Lab

4 Cred

This course is designed to introduce students pursuing careers in the health fields to the structure and function of the human body. It is intended to help students with a limited scientific background grasp the fundamental concepts of biology as well as human anatomy and physiology. Pathophysiology, genetics and relevant clinical aspects are discussed with each system so that students can apply their clinical learning. This course does not substitute for programs that require BIO203 and BIO204. Open to all students and satisfies General Education "Science and Technology" Requirement Area 5. Course meets 3 hrs. lecture; 1.5 hrs. lab. Note: May be used as a prerequisite for Anatomy & Physiology I/Lab (BIO203). Prerequisites: Writing Skills II (ENG095), a grade of C or better in Prealgebra (MAT092), and Reading Skills II (RDG095) or placement equivalent.

#### **BIO-111** Food/Nutrition

3 Credits

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 Nutrition Science & Lab

4 Credits

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 chemistry and biology of food, personal nutrition evaluation, nutrition-related health problems, and global food and nutrition issues. Laboratory exercises 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. The course meets General Education "Science and Technology" Requirement Area 5. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), a grade of C or better in Prealgebra (MAT092), Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement equivalency.

# BIO-120 Introduction to Biotechnology & Lab

4 Credits

This course offers an introduction to the field of biotechnology designed for students in all programs of study. General principles of biology, their applications in biotechnology and the concepts and work practices of the biotechnology industry will be presented. The medical, social, political, and ethical implications of recombinant DNA technology and the Human Genome Project will be discussed. Career opportunities in biotechnology will also be

# Biomedical Engineering



presented. Students will be introduced to basic investigative techniques and procedures used in Biotechnology research. Labs are designed to reinforce lecture concepts. This course meets General Education "Science and Technology" Requirement Area 5. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), Prealgebra (MAT092), and Reading Skills (RDG095) or placement equivalency.

# BIO-195 General Biology I & Lab

4 Credits

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 Principles of Biology I/Lab (BIO101) or Human Biology/Lab (BIO108). This course meets General Education "Science and Technology" Requirement Area 5. Prerequisites: Writing Skills II (ENG095) and Reading Skills II (RDG095) or placement and a grade of C or better in College Algebra-STEM (MAT194).

# BIO-196 General Biology II & Lab

4 Credits

As a continuation of General Biology I/Lab (BIO195), the course begins with a study of 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. Prerequisite: Grade of C or better in General Biology I/Lab (BIO195).

#### BIO-203 Anatomy/Physiology I & Lab

4 Credits

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, 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 better in Principles of Biology I/Lab (BIO101), Human Biology (BIO108) or General Biology I/Lab (BIO195).

#### BIO-204 Anatomy/Physiology II & Lab

4 Credits

As a continuation of Anatomy/Physiology I (BIO203) 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, lymphatic and immune systems, respiratory system, digestive system, urinary system and reproductive system. Laboratory activities will enhance the students' comprehension of the structure and function of the human body. Course meets: 3 hrs. Lecture; 3 hrs. lab. Prerequisite: Grade of C or better in Anatomy/Physiology I/Lab (BIO203).

# BIO-205 Microbiology & Lab

4 Credits

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 cultivationa nd growth characteristics, staining and bacterial isolation techniques, differential biochemical tests, identification of unkown 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 (BIO195) or admission to the Nursing Program.

# BIO-207 Cell Biology & Lab

4 Credits

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: A grade of C or better in General Biology I/Lab (BIO195), a grade of C or better in General Chemistry I/Lab (CHM201) or permission of the science and engineering department.

#### BIO-208 Genetics and Lab

4 Credits

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, population and human genetics. Experimental work will focus on the theory and practice of current techniques in genetics. Prerequisite: A grade of C or better in General Biology II/Lab (BIO196) or permission of science and engineering department.

#### BIO-260 Molecular Biotechnology and Lab

**5 Credits** 

This capstone course presents the 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. Laboratory activities will emphasize proper laboratory protocol and documentation, inquiry based investigations, formal laboratory report writing, and standard laboratory skills used in biotechnology research. 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. Course meets: 3 hrs. lecture, 4 hrs. lab. Prerequisites: grade of C or better in Introduction to Biotechnology (BIO120), Cell Biology and Lab (BIO207) and Genetics and Lab (BIO208) or department approval.

# **Biomedical Engineering**

# BME-100 Biomedical Engineering I

4 Credits

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 an 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; 2 hrs. laboratory. Prerequisites: Grade of C or better in Calculus I (MAT281) and a grade of C or better in General Chemistry I/Lab (CHM201). Co-requisite: Calculus II (MAT282).

# BME-200 Biomedical Engineering II

3 Credits

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 better in Biomedical Engineering I (BME100) and a grade of C or better in Calculus II (MAT282). Co-requisite: Calculus III (MAT283).

#### BME-250 Biomedical Engineering III

4 Credits

This course explores Fourier analysis, Laplace analysis and transforms along with the techniques for generating quantitative mathematical models of physiological control systems and the behavior of physiological control systems using both time and frequency domain methods. Computer problems are implemented in MATLAB. Class meets: 3 hrs. lecture. Prerequisite: Grade of C or better in Biomedical Engineering II (BME200). Co-requisite: Ordinary Differential Equations (MAT285).

# **Business**

## **BUS-101** Introduction to Business

3 Credits

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, Accounting, 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: Grade of C or better in Academic Reading I (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills (ENG090) or exemption by placement testing.

#### BUS-103 Principles of Retailing

3 Credits

This course provides an interdisciplinary overview of the retailing industry. Primary focus will be on the customer-facing activities of retailers, including assortment planning, private label development and the management of in-store operations, and the back-door activities (forecasting and supply-chain management) that support customer interaction. In addition, current issues facing retailer, such as customer relationship management, and supplier relations, will be explored. This course will also survey topics in finance and operations and information technology as they relate to retail. Prerequisites: Foundations of Algebra (MAT094) and Application/Concepts (CIT110). Pre/Co-requisite: Principles of Marketing (MAN105).

#### **BUS-106** International Business I

3 Credits

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 (ECO201) or Microeconomics (ECO202).

# **BUS-108** Exporting/Importing

3 Credits

This course presents an overview of the steps involved in international movement of goods and services from the point of origin to their final destination. In addition to providing a working knowledge of the various terms and techniques essential to the export/import process, the course includes an introduction to the role of important organizations such as the freight forwarder, the international banker, the freight carrier, the insurance company, and U.S. Customs. The course also includes tariff regulations and documentation. Prerequisite: International Business (BUS106).

# **BUS-112** International Logistics

3 Credits

This course presents the various functions, practices, and principles of freight forwarding. Specific topics include government regulations, maritime laws, and transportation agreements as they influence traffic movement by water, air, motor, and rail. Prerequisite: International Business (BUS106).

#### **BUS-114** International Business Issues

3 Credits

This course covers an in-depth analysis of contemporary issues in international business. Due to the ever-changing nature of the subject matter, topics in this course likely change periodically. The instructor announces specific topics when the course is scheduled. Prerequisite: International Business (BUS106).

# BUS-201 Business Law I

3 Credits

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 (ENG095) or placement and Academic Reading Skills III (ESL098) or Reading Skills II (RDG095) or placement.

#### **BUS-202** Business Law II

3 Credits

This concentrated course reviews and emphasizes corporation and basic contract law, product liability, sales, warranties, bankruptcy, repossession, sale and transfer, foreclosure, insurance, trusts, and wills. Prerequisite: Business Law I (BUS201).

#### **BUS-207** Professional Communication

3 Credits

This course is designed to give students a comprehensive view of communication, its scope and importance in business, and the role of communication in establishing a favorable outside of the firm environment, as well as an effective internal communications program. Issues regarding cross-cultural communications and ethical considerations in business communication are discussed. The various types of business communication media are covered. This course also develops an awareness of the importance of succinct written expression to modern business communication. Prerequisites: Grade of C or better in College Writing I (ENG111).



# **BUS-224** Merchandising

3 Credits

General retail and merchandise policies are considered in this course, including types of firms and store organization. Selecting merchandise, buying, planning price lines and price line adjustments; assortment planning, display, and inventory and budget control. Prerequisite: Foundations of Algebra (MAT094) or placement and Academic Reading II (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or placement.

# **Chemistry**

# CHM-120 Principles of Inorganic Chemistry & Lab 4 Credits

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 (ENG095), Reading Skills II (RDG095), and Prealgebra (MAT094) or placement equivalencies.

# CHM-121 Principles of Organic & Biochemistry & Lab 4 Credits

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. Prerequisites: Grade of C or better in Chemical Science I & Lab (CHM110) or Principles of Inorganic Chemistry & Lab (CHM120).

# CHM-151 Basic Chemistry (Non-Lab) 3 Credits

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 better in Fundamentals of Algebra (MAT094).

# CHM-201 General Chemistry I & Lab 4 Credits

This course covers a consideration of chemical principles including atomic structure and bonding, stoichiometry, gas laws, and solution chemistry. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in College Algebra-STEM (MAT194). Note: This course is intended for students planning to transfer as science majors. Pre-allied health students should enroll in Principles of Inorganic Chemistry & Lab (CHM120).

# CHM-202 General Chemistry II & Lab 4 Credits

Topics for this course include solution chemistry, acids and bases, oxidation and reduction, reaction, rates and equilibrium, and an introduction to methods of qualitative analysis. Students required to purchase approved safety goggles. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in General Chemistry I/Lab (CHM201).

# CHM-251 Organic Chemistry I and Lab

4 Credits

This course covers a study of carbon compounds including nomenclature, molecular structure, and functional groups. Topics include stereochemical relationships of compounds, the reactivity and properties of saturated, unsaturated, and aromatic compounds. The course uses mechanisms that relate to chemical changes as a unifying principle. The laboratory component of the course presents and uses instrumental methods of analysis as they relate to organic compounds. Students required to purchase approved safety goggles. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in General Chemistry II/Lab (CHM202).

#### CHM-252 Organic Chemistry II and Lab

4 Credits

This course covers a continuation of Organic Chemistry I/Lab (CHM251). The course places additional emphasis on the manipulation of functional groups and synthetic approaches. Compounds discussed in this course include carbon compounds, acid derivatives, amines, and carbohydrates. The laboratory places an emphasis on synthesis, isolation and purification of synthetic compounds, and instrumental techniques in organic chemistry. Students required to purchase approved safety goggles. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in Organic Chemistry I/Lab (CHM251).

# **Chinese**

## CHN-101 Elementary Mandarin I

3 Credits

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 Mandarin 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 Mandarin.

# **Computed Tomography (CT)**

# CTC-111 Computed Tomography I

3 Credits

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, quality control and patient does will be discussed. Multislice 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 CT Certificate Program.

#### CTC-211 Computed Tomography II

3 Credits

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 (CTC111).



## CTC-299 Computed Tomography Clinical Internship

3 Credits

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 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: permission of department chair, Medical Imaging Department. Pre/co-requisite: Computed Tomography II (CTC211).

# **Computer Information Technology**

#### CIT-101 Computer Essentials

3 Credits

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-Mail, 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.mass.edu.

#### CIT-110 Applications/Concepts

3 Credits

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 WINDOWS™ 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.mass.edu. Prerequisite: Reading Skills II (RDG095) or Academic Reading III (ESL098) or exemption from reading requirement by placement testing or enrollment in an integrated course. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

# CIT-112 Information Technology Fundamentals 3 Credits

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 Network 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 related 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 Management 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 Massachusetts 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

3 Credits

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 Applications/Concepts (CIT110). This course is not for Computer Science Transfer, Gaming or Web majors. Prerequisite: Grade of C or better in Reading Skills I (RDG090) and Writing Skills I (ENG090) or placement.

# CIT-118 Principles of Internet & Info Security

3 Credits

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: Computer Applications/Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science & OOP (CIT120), equivalent experience or permission of the department dhair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-120 Intro to Computer Science and Object

4 Credits

This 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 and flow control, objects, classes, methods, and polymorphism. Students will use an Object Oriented Programming language as

# Computer Information Technology



they design code, debug and implement several programs covering the topics presented. Students taking this course are expected to have solid knowledge of basic computer terminology, internet navigation and email, operating system and file management skills. Strong analytical skills are recommended for students enrolling in this course. Please note that this course is a four credit course with six contact hours and analogous homework. This course fulfills the Learning Community Seminar requirement for students in AA Computer Science, AS Computer Science, and AS Computer Engineering areas of study. Other 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: Fundamentals of Algebra (MAT094), Writing Skills II (ENG095), and Reading Skills II (RDG095) or placement. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

# CIT-121 Introduction to Computer Forensics 3 Credits

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 cyber crime, 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: Applications & Concepts (CIT110) or Information Technology Fundamentals (CIT112) or IT Problem Solving (CIT113) or Intro to Computer Science & Object Oriented Programming (CIT120) or permission of the department chair.

## CIT-128 Database Design with MS Access 3 Credits

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 functionality 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: Computer Applications/Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science & OOP (CIT120), equivalent experience or permission of the department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-133 Introduction to Microsoft Office (Formerly ITB133) 3 Credits

This introductory course covers the use and application of integrated PC applications software based on the most current version of Microsoft Office. 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.mass.edu.

# CIT-140 Practical Computer System Integration & Troubleshooting Computer-based Training (CBT) 3 Credits

Using several multi-media tools, this course covers most major technical issues related to Personal Computer and/or Workstation troubleshooting. Through real-world simulations, students gain an understanding of situations where hardware & software problems lead to lost productivity and "downtime". Students are taught methodologies and techniques that can be used to resolve problems that arise from complex computer system integration. Although intended primarily for students in the business and medical fields, anyone interested in learning more about Windows XP, hardware and software issues relating to PC and workstation connection to networks and the Internet should consider taking this course. Troubleshooting fundamentals, tools, error messages and their meaning and use of the command prompt are also taught. Upon completion of this course, students will have detailed knowledge, skills and competencies required to troubleshoot most PC and workstation problems. All Learner Outcomes and Competencies in this course are approved by the National Workforce Center for Emerging Technologies (NWCET). Prerequisite: Reading Skills II (RDG095) or Academic Reading II I (ESL098) or exemption from reading requirement by placement testing. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

# CIT-141 PACS Administration I

3 Credits

This is an introductory course covering the major aspects of administering Picture Archiving & Communication Systems, PACS. This course provides students with an overview and introduction to the core aspects PACS Systems Administration and Technology including but not limited to: PACS components, functions and standards, PACS network and infrastructure, PACS image acquisition, archiving, query, storage and retrieval, and PACS Management Software modules. This course focuses on an understanding and appreciation of the duties of PACS administration professional and how PACS relates to and interacts with the Hospital Information (HIS) and Radiology Information (RIS) Systems. Upon completion of this course students will have the knowledge, skills and competencies necessary to administer PACS Systems at a basic level. Students taking the course are expected to have a solid knowledge of computer terminology, internet navigation and e-mail, operating system and file management skills. Prerequisite: Information Technology Fundamentals (CTT112), equivalent course, equivalent experience or permission of the CIT department chair. Pre/co-requisite: Introduction to Diagnostic Imaging & PACS (MIG161).

# CIT-162 Introduction to Networking

3 Credits

This course introduces students to fundamental networking concepts and technologies. The material in this course encompasses a broad range of technologies that facilitate how people work, live, play, and learn by communicating with voice, video, and other data. First, you will examine human versus network communication and see the parallels between them. Next, you will be introduced to the two major models used to plan and implement networks: OSI and TCP/IP. You will gain an understanding of the "layered" approach to networks and examine the OSI and TCP/IP layers in detail to understand their functions and services. You will become familiar with the various network devices, network addressing schemes and, finally, the types of media used to carry data across the network. In this course, you will gain



experience using networking utilities and tools, such as Packet Tracer and Wireshark®, to explore networking protocols and concepts. These tools will help you to develop an understanding of how data flows in a network. A special "model Internet" is also used to provide a test environment where a range of network services and data can be observed and analyzed. Prerequisite: Applications and Concepts (CIT110) or Information Technology Fundamentals (CIT112) or IT Problem Solving (CIT113) or Intro to Computer Science & Object Oriented Programming (CIT120) or permission of the department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-167 Routers and Routing Basics

The primary focus of this course is on routing and routing protocols. The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. This course includes both static routing and dynamic routing protocols. By examining multiple routing protocols, you will gain a better understanding of each of the individual routing protocols and a better perspective of routing in general. Learning the configuration of routing protocols is fairly simple. Developing an understanding of the routing concepts themselves is more difficult, yet is critical for implementing, verifying, and troubleshooting routing operations. Each static routing and dynamic routing protocol chapter uses a single topology throughout that chapter. You will be using that topology to configure, verify, and troubleshoot the routing operations discussed in the chapter. The labs and Packet Tracer activities used in this course are designed to help you develop an understanding of how to configure routing operations while reinforcing the concepts learned in each chapter. Prerequisite: Introduction to Networking (CIT162). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-182 PC Hardware 3 Credits

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 hands-on 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. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-211 System Analysis and Design 3 Credits

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 Object 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 (ENG111). Prerequisites: Applications/Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science & Object Oriented Programming (CIT120) and at least two other CIT courses. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

## CIT-216 Visual Basic

3 Credits

3 Credits

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 event-driven 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) or IT Problem Solving (CIT113) or Introduction to Computer Science & OOP (CIT120) or equivalent experience or permission of the department dhair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-218 Intermediate Visual Basic

3 Credit

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 chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

# CIT-219 Information Security & Assurance

3 Credits

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 Oath, a Code of Ethics form the International Information Systems Security Certification Consortium, Inc. (www.isc2.org). Prerequisite: Internet and Information Security (CIT118), equivalent experience or permission of the department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

# CIT-220 Directed Study in Digital and Computer Forensics 1 Credit

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 cyber crime 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.mass.edu.

# CIT-221 Advanced Computer Forensics

3 Credits

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 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 (CIT121).

# Computer Information Technology



#### **CIT-223 Special Topics in Digital and Computer Forensics** 3 Credits

This course is designed to cover emerging and Forensics changing issues in Computer and Digital 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/co-requisite: Advanced Computer Forensics (CIT221). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-230 Help Desk Techniques

3 Credits 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 associations, and standards of ethical conduct for help desk personnel. Prerequisites: Applications /Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science & Object Oriented Programming (CIT120), Writing Skills II (ENG095), Reading Skills II (RDG095) and one additional completed CIT course. For additional information and/or a course syllabus contact CITDept@bhcc.mass.edu.

#### CIT-233 **Advanced Microsoft Office** 3 Credits

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: Introduction to MS Office (CIT133) or Computer Applications & Concepts (CIT110) or IT Problem Solving (CIT113), or equivalent experience or permission of the department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-234 **Decision Support Using MS Excel** 3 Credits

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 data base 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 Office 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: Computer Applications/ Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science & OOP (CIT120), equivalent experience or permission of the department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-236 **SQL Programming**

3 Credits

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 data base, 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, student 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 (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science and Object Orient Programming (CIT120), or permission of the department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

# C++ Programming

4 Credits

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 Object Oriented 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) or equivalent experience with permission of the department chair. For addition information and/or a course syllabus contact CITDepartment@bhcc.mass.edu. All prerequisites must be completed with a C or better.

#### **JAVA Programming** CIT-239

4 Credits

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 Java Programming Language. The course emphasizes the principles of top-down structured design and Object Oriented 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 Java Applications and Java Applets including event handling, animation, and audio. Prerequisite: Grade of C or better in Writing Skills II (ENG095), College Algebra-STEM (MAT194) and Introduction to Computer Science & Object Oriented Programming (CIT120) or equivalent experience with permission of department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-240 **Database Programming**

3 Credits

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-241 PACS Administration II

3 Credits

3 Credits

This course covers the more complex aspects of Picture Archiving & Communication Systems and proceeds to advanced topics including but not limited to: PACS workflow monitoring, clinical PACS system review, archive back-up, PACS system security, disaster recovery, and advanced features of PACS display software. 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, telemedicine and teleradiology. Upon completion of this course students will have the knowledge, skills and competencies necessary to administer PACS systems. Prerequisite: PACS Administration I (CIT141). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

## CIT-242 Data Structures 3 Credits

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. The department strongly recommends that students achieve a grade of B- or better in Java Programming (CIT239). Prerequisite: Java Programming (CIT239) and Precalculus (MAT197). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-245 Database Administration

This course is designed to introduce students to the fundamentals of Relational Database Administration, using the most current versions of the Oracle RDBMS engine. Students will learn the basics of database maintenance including installing and configuring the database, controlling the data dictionary, managing the database tables including constraints, indexes and user roles. Students gain extensive real-world experience utilizing the DBA tools associated with Oracle. This course will present the material covered in the Database Fundamentals I Oracle Certification Exam #1Z0-031. Students will also be provided with the personal edition of the Oracle software. Prerequisite: SQL Programming (CIT236), equivalent experience or permission of the department chair. For additional information and/or a course syllabus contact CITDeptment@bhcc.mass.edu.

#### CIT-247 Programming in C 3 Credits

This course is for programmers already knowledgeable in some high-level language (e.g., having taken one semester of introductory programming in Java or C++. C is presented as both a general-purpose and machine-level language. Topics covered include representation of integer and character date, bitwise operations, masking, memory allocation methods, pointers, dynamic data structures, file I/O, separate compilation, program development tools and use of debuggers. Prerequisite: College Algebra-STEM (MAT194) and C++ Programming (CIT237) or Java Programming (CIT239) with a grade of C or better in each of the prerequisites, or equivalent experience with permission of department chair.

# CIT-250 Collaboration, Communication & Integration in MS Office Applications 3 Credits

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 Meeting, 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, POWERPOINT 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: Applications/Concepts (CIT110) or IT Problem Solving (CIT113) or equivalent course or experience or permission of department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

# CIT-262 Wireless Technology

3 Credits

This course introduces students to the fundamentals 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: Introduction to Networking (CIT162).

# CIT-264 Networking Security

3 Credits

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: Introduction to Networking (CIT162).

# CIT-267 Switching Basics & Intermediate Routing 3 Credits

The goal of this course is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. The primary focus of this course is on LAN switching and wireless LANs. The goal is to develop an understanding of how a switch communicates with other switches and routers in a small- or medium-sized business network to implement VLAN segmentation. This course focuses on Layer 2 switching protocols and concepts used to improve redundancy, propagate VLAN information, and secure the portion of the network where most users access network services. This course will go to great lengths to explain the underlying processes of the common Layer 2 switching technologies. The better the underlying concepts are understood, the easier it is to implement, verify, and troubleshoot the switching technologies. Each switching concept will be introduced within the context of a

# Computer Information Technology



single topology for each chapter. The individual chapter topologies will be used to explain protocol operations as well as providing a setting for the implementation of the various switching technologies. The labs and Packet Tracer activities used in this course are designed to help you develop an understanding of how to configure switching operations while reinforcing the concepts learned in each chapter. Prerequisite: Routers and Routing Basics (CIT167). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

# CIT-268 Windows Operating Systems

3 Credits

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. Prerequisite: Applications & Concepts (CIT110) or Information Technology Fundamentals (CIT112) or IT Problem Solving (CIT113) or Intro to Computer Science & Object Oriented Programming (CIT120) or permission of the department chair. For additional information and/or a course syllabus contact CITDept@bhcc.mass.edu.

## CIT-270 Linux Administration/Lab

4 Credits

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: Introduction to Networking (CIT162). For additional information and/or a course syllabus contact CITDept@bhcc.mass.edu.

#### CIT-271 Batch File Programming

1 Credit

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/co-requisite: Windows Operating Systems (CIT268). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-274 WAN Technologies

3 Credits

The primary focus of this course is on accessing wide area networks (WAN). The goal is to develop an understanding of various WAN technologies to connect small- to medium-sized business networks. The course introduces WAN converged applications and quality of service (QoS). It focuses on WAN technologies including PPP, Frame Relay, and broadband links. WAN security concepts are discussed in detail, including types of threats, how to analyze network vulnerabilities, general methods for mitigating common security threats and types of security appliances and applications. The course then explains the principles of traffic control and access control lists (ACLs) and describes how to implement IP addressing services for an Enterprise network, including how to configure NAT and DHCP. IPv6 addressing concepts are also discussed. During the course, you will learn how to use Cisco Router and Security Device Manager (SDM) to secure a router and implement IP addressing services. Finally, students learn how to detect, troubleshoot and correct common Enterprise network implementation issues.

The labs and Packet Tracer activities used in this course are designed to help you develop an understanding of how to configure routing operations while reinforcing the concepts learned in each chapter. Prerequisite: Switching Basics & Intermediate Routing (CIT267). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

## CIT-281 Netware Network Administration/Lab

4 Credits

This course provides students with the necessary knowledge and hands-on skills required to manage the most current and industry accepted version of Novell NetWare. The course tailors information to requirements necessary to complete the Novell NetWare Certified Administrator (CNA) exam. Topics include, but are not limited to, Novell Directory Services (NDS), the network file system, installation, managing users, groups and login security, rights and attributes, printing, login scripts, and network projects. The course includes related lab projects that challenge the student to piece together new and old networking concepts that reinforce each topic. Class meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisite: Introduction to Networking (CIT162). Pre/co-requisite: Windows Operating Systems (CIT268). For additional information and/or a course syllabus contact CITDept@bhcc.mass.edu.

#### CIT-282 Ms Windows Administration/Lab

4 Credits

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: Introduction to Networking (CIT162). Pre/co-requisite: Windows Operating Systems (CIT268). For additional information and/or a course syllabus contact CITDdept@bhcc.mass.edu.

#### CIT-284 Advanced C++/OOP

3 Credits

This course covers intermediate-level programming. Students learn advanced topics of 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 (CIT237) and College Algebra STEM (MAT194) or permission of the department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

## CIT-285 Advanced Java Programming

3 Credits

This course thoroughly examines many of the sophisticated features of the Java programming language, including interfaces, advanced graphics, some data structures, file I/O techniques, multithreading, advanced JDBC Servlets, and Java 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 JAVA in an internet-based, integrative environment that utilizes cross-platform tools. Prerequisites: Grade of C or better in Java Programming (CIT239) and Precalculus (MAT197). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.



# CIT-299C Computer Technology Internship

3 Credits

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 chair to register for this course.

# CIT-299N Networking Internship

3 Credits

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 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 chair.

# **Computer Media Technology**

# **CMT-101** Game Development Essentials

3 Credits

This 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 Reading Skills II (RDG095) or placement.

#### CMT-103 Managing Game Development

3 Credits

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 (ENG095) and Reading Skills II (RDG095).

# CMT-111 HTML & Dreamweaver (Formerly ITB111)

3 Credits

This course teaches the student the principles and concepts of designing and creating WEB pages in an HTML format. The course is designed to expose the student to the constructs of HTML tags, the attribute modification of HTML tags, the incorporation of CSS tags, CSS pseudo tags, dynamic effects using styles, and class assignments. Additionally, the course will teach the student the utilization of graphics and dynamic graphics used in Web design. Also included will be content presentation control via HTML tables, HTML layers, and HTML frames. The course will explore the requirements, tools and controls used in WEB page development by lecture, in-class practical exercises, and home study exercises. The course will also teach the student to create WEB sites using Dreamweaver as a state-of-the-art web authoring tool to enable rapid deployment of WEB development projects.

# CMT-113 Javascript

3 Credits

This course teaches students the concepts and practical application of JavaScript 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 JavaScript functions using iteration loops, conditional statements, switch statements, parameter passing, location redirection, in-line JavaScript and remote access JavaScript utilization. Prerequisites: Applications/Concepts (CIT110) and HTML & Dreamweaver (CMT111). For additional information and/or a course syllabus contact CITDept@bhcc.mass.edu.

CMT-115 Flash 3 Credits

Flash is a vector based animation and web authoring tool that provides the capability to design and develop animated graphics, animated movies, animated buttons, and interactive navigation menus that are a predominate part of modern day WEB design strategies. Flash is the technology behind on-line interactive training programs, student lessons, tutorial movies, advertising delivery programs, music players, and corporate presentations across the internet. Flash provides a web message delivery medium that is unique, attention grabbing, and very effective when viewed. Its incorporation as a web design skill can be considered a requisite part of an overall web development strategy. Prerequisite: JavaScript (CMT113).

# CMT-117 XML (Formerly ITB117)

3 Credits

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 XML format documents. Prerequisite: HTML and Dreamweaver (CMT111).

# **CMT-119** The Human Character

3 Credits

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 (CMT101).

#### CMT-121 Maya Foundations

3 Credits

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. Prerequisite: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095).

#### CMT-123 Maya Character Modeling

3 Credits

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 of 3D characters and conversion from NURBS to polygonals. These



skills are requisite skills or 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 (CMT121).

## CMT-125 Cascading Style Sheets

3 Credits

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 being incorporated as an in-line component, and embedded component, and a remote component of every HTML, JavaScript, XML, ASP.net, PHP, and Ruby pages written. It is prevalent and used in IE Explorer, Firefox, Mozilla, Safari, Opera, 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 name-pair attribute coding scheme of the previous web design technology. Prerequisite: Corequisite HTML & Dreamweaver (CMT111).

CMT-211 XSLT 3 Credits

This course is designed to add a new dimension to the students XML Web Design learning foundation by introducing them to the XSL style sheet and transformation language. XSL is a specialized formatting and manipulation that is uniquely applicable to the XML markup language which enables the developer of XML Web content to perform such tasks as contextual formatting, conditional selection of Web content from a data source, sorting of content on a Web page, dynamic counting, dynamic summarization, attribute processing, and creating dynamic document-wide numbering schemes. Prerequisite: HTML & Dreamweaver (CMT111) and XML (CMT117).

CMT-215 ASP.NET 3 Credits

This course will teach the student the concepts and practical applications of the web-to-database interface. ASP.net is a powerful web technology that permits the construction of web sites that extract data from server side databases and present the data to the user dynamically. The ASP.net language is comprehensive and incorporates SQL server and scripting languages as part of its construction. ASP.net technology is widespread in use and is the technology behind many on-line e-commerce sites today. Prerequisite: JavaScript (CMT113).

# CMT-221 XML Web Services 3 Credits

This course is designed to teach students how to program and utilize Web services architectures using the Extensible Markup Language (XML) as the foundation language. XML Web services are services consisting of a combination of programming and data that are made available from a business's Web server for Web users or other Web-connected programs. Web services range from such major services as storage management and customer relationship management down to much more limited services such as the furnishing of a stock quote and the checking of bids for an auction item such as is done on E-bay. The accelerating creation and availability of these services is a major Web trend. This course will prepare students to employ XML Web services within an overall Web design architecture. Prerequisites: HTML & Dreamweaver (CMT111) and Javascript (CMT113) and XML (CMT117).

# **CMT-223** Maya Character Animation

3 Credits

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". Prerequisites: Maya Character Modeling (CMT123).

# CMT-229 Creating 3-D Special Effects

3 Credits

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". Prerequisites: Maya Foundations (CMT121).

# CMT-231 Mel Scripting in Maya

3 Credits

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).

# **Criminal Justice**

# **CRJ-101** Introduction to Criminal Justice

3 Credits

A survey of the history, development and the role of American Criminal Justice System are presented. Included are the organizations and jurisdictions of the various agencies, a review of the court process, professional orientation, and the current trends in the criminal justice system. The course will offer students the ability to use state of the art technology and interactive instruction. It stresses the application of knowledge learned to real-life situations. Ethical behavior issues will be raised and students will develop strategies to set boundaries, understand differences among people, develop professional codes of conduct and behavior, and develop a professional moral code of conduct. The course fulfills the Learning Community Seminar requirement for students in AS Criminal Justice. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

# CRJ-102 Delinquency, Adjudication and Correction

3 Credits

This course examines the causative factors in the development of youthful offenders, the civil and new 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) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.



#### CRJ-103 Criminal Law

#### 3 Credits

This course examines the substantive law of crimes including the general and social parts of criminal law; classification of crimes against persons, property, and the public welfare; nature of crime; criminal liability; elements of crimes; and jurisdiction. Through case studies, the course emphasizes matters affecting law enforcement. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

# CRJ-104 American Legal System

3 Credits

This introductory course covers American law. The course examines the origins of the American legal system through an analysis of its function, its sources, and its varied aspects. It explores the uniqueness of the American legal system through a thorough analysis of due process. The course covers the myths versus the realities of law.

#### CRJ-106 Principles of Security Management

3 Credits

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) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

#### **CRJ-107** Introduction to Corrections

3 Credits

This survey course covers the correctional process from arrest to probation or parole. The course provides students with an understanding of corrections as an essential component in the criminal justice system and gives an orientation to current correctional concepts and various correctional institutions. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

#### **CRJ-108** Criminal Investigation

3 Credits

This course identifies and traces the significance and application of the tools of criminal investigation. It includes fundamentals and theory of an investigation, crime scene procedures, report writing, collection and preservation of evidence, methods of gathering information, and specialized and scientific methods. Prerequisites: Writing skills II (ENG095) or placement; Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement; and Introduction to Criminal Justice (CRJ101) or Criminal Law (CRJ103) or instructor approval.

## CRJ-109 Crime Victims 3 Credits

This course examines current theories and research relating to victims of crime. It pays particular attention to special victim groups such as children, the elderly, women, and gays. The course explores victim interactions with the criminal justice system. It assesses current victim initiatives such as restitution, mediation, compensation, and victim rights legislation. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

# CRJ-110 Race, Ethnicity and Cultural Issues in the American Criminal Justice System 3 Credits

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. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

# **CRJ-111 Criminal Procedure**

3 Credits

This course explores constitutional issues related to criminal justice. Students learn the Incorporation Doctrine and the views of Justices Black and Frankfurter concerning this doctrine. In addition, the course examines the nuances of search and seizure under the 4th Amendment, 5th Amendment self-incrimination issues, 6th Amendment right to counsel issues, as well as the use of informants and electronic interceptions. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

#### CRJ-114 White Collar & Organized Crime

3 Credits

This survey course covers the nature and extent of white-collar and organized crime, the social-psychological makeup of white-collar/organized criminals, historical roots, and the interrelationship of white-collar criminals and organized crime. It explores possible solutions, the scope of techniques used in combating crime, interagency and jurisdictional problems, and the benefits of cooperation. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

#### CRJ-115 Terrorism

3 Credits

This course examines terrorism from both a philosophical and historic perspective. It covers right and left wing organizations, international and domestic groups as well as the ways terrorism relates to the business community. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

# **CRJ-145** Cyber Crime in Today's Society

3 Credits

This course will focus on the issues, trends and problems associated with crimes perpetrated over the Internet or other telecommunications networks. This course will discuss crimes ranging from embezzlement to auction fraud and social engineering to digital warfare and cyber terrorism. Investigative techniques and issues will also be presented. Prerequisites: Writing Skills II (ENG095) and Academic Reading III (ESL098) and Reading Skills II (RDG095).

#### CRJ-201 Management in Criminal Justice

3 Credits

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: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

#### **CRJ-202** Evidence/Court Procedures

3 Credit

This course covers rules of evidence in law enforcement procedures from investigations to courtroom hearings. It examines burden of proof, judicial notice, and admissibility of testimonial and documentary evidence, relevancy, materiality, and competency. The course analyzes state and federal court cases as well as trial techniques and presentation of evidence. Prerequisites: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

#### CRJ-203 Rehabilitation of the Offender

3 Credits

This course covers an examination of 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. The course includes an examination of alternatives to incarceration. Prerequisites: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.



# **CRJ-212** Community Corrections

3 Credits

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: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

## **CRJ-214** Negotiations and Mediations

3 Credits

This course examines skills needed to negotiate and mediate in the criminal justice system. It provides strategies to achieve settlements and to intervene in disputes. Students conduct actual negotiations and mediations. Students critique and videotape both of these activities. Prerequisites: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

# CRJ-216 Street Drugs and Pharmaceuticals

3 Credits

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 Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

# CRJ-218 Information & Electronic Security 3 Credits

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 Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

#### CRJ-220 Policing in a Democratic Society 3 Credits

This course covers an introduction to the philosophy and techniques of contemporary policing including the history, traditions, and social developments that have resulted in the present system. The course emphasizes the effects of economics, social developments, and Supreme Court decisions on the evolution of the modern system. Discussion focuses on police accountability and the measurement of effectiveness of operations. The course traces the shift from technological policing to community and problem solving policing. Prerequisites: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

# CRJ-228 Criminal Investigation II 3 Credits

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 Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

## CRJ-230 American Drug Law 3 Credits

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 effect 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 Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

## CRJ-232 Civil Rights & Civil Liberties

3 Credits

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 everchanging concept of civil rights and liberties as they conflict with "homeland security" and the "war against terrorism." Prerequisites: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

# CRJ-234 Ethics/Prof Responsibility in CJ System

3 Credits

This course gives students an overview of the ethical dilemmas facing criminal justice professionals in American society. It aids students in the comprehension and retention of diverse ethical issues by analyzing the aspects of ethical behavior and decision-making in law enforcement, court procedure and operations, and corrections. Prerequisites: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.

## CRJ-299 Criminal Justice Internship

3 Credits

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 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 official 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. Prerequisite: Permission of the instructor.

# **Culinary Arts**

#### CUL101 Culinary Arts Seminar

3 Credits

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.

# CUL-108 Basic Baking Skills

4 Credits

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** Food Service Sanitation and Skills

3 Credits

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-115** Introduction to Culinary Arts

4 Credits

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 (CUL125).

# CUL-116 Basic Culinary Skills

4 Credits

This course sill provide students with the 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 lean 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 Cake Decorating

3 Credits

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.

#### CUL-125 Principles of Baking

4 Credits

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 (CUL115).

#### CUL-135 Cafe and Bistro Cuisine

4 Credits

This course introduces students to the procedures of the art of Garde Manager 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 café 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 (CUL125).

# **CUL-145** Advanced Desserts and Pastries

Credits

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. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Introduction to Culinary Arts (CUL115) and Principles of Baking (CUL125).

#### **CUL-208** Advanced Baking Skills

4 Credits

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 (CUL108) and Basic Culinary Skills (CUL116).

# CUL-211 Menu Design and Purchasing

3 Credits

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. Prerequisites: Café and Bistro Cuisine (CUL135) and Advanced Desserts and Pastries (CUL145).

## **CUL-215** Essentials of Food Production

4 Credits

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: Café and Bistro Cuisine (CUL135) and Advanced Desserts and Pastries (CUL145). Co-requisite: Essentials of Dining Service (CUL225).

# **CUL-216** Advanced Culinary Skills

4 Credits

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 (CUL116) and Basic Baking Skills (CUL108).

# CUL-217 Classical & International Pastries

4 Credits

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

# Early Childhood Development



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 (CUL145).

# **CUL-225** Essentials of Dining Service

4 Credits

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. This course is for Culinary Arts students only or by department chair permission. Prerequisite: Cafe and Bistro Cuisine (CUL135) and Advanced Desserts and Pastries (CUL145). Co-requisite: Essentials of Food Production (CUL215).

## CUL-235 Advanced & Ethnic Food Production 4 Credits

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 (CUL215) and Essentials of Dining Service (CUL225).

# CUL-245 Food and Beverage Operations 4 Credits

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 (CUL215) and Essentials of Dining Service (CUL225).

#### CUL-299 Culinary Arts Internship

3 Credits

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 300 hours of work experience in an approved foodservice facility.

# **Early Childhood Development**

# ECE-095 Early Care and Education

3 Credits

An introduction to early childhood care and education for students in the early childhood development or human services programs who need to develop their own literacy skills. Emphasis is on the basic concepts which make up the field of early childhood development including child development; health, safety, and nutrition; program design and curriculum; guidance and discipline of young children, and careers in childcare. Use of these concepts to strengthen literacy skills of students in speaking, listening, reading, and writing will be the

main focus of the course. Pre/co-requisite: Can be taken concurrently with RDG and ENG developmental coursework. This course is open only to those students scoring into Reading Skills I (RDG090), Reading Skills II (RDG095), Writing Skills I (ENG090), or Writing Skills II (ENG095). Not open to students who have already completed both Reading Skills II (RDG095) and Writing Skills II (ENG095) or levels of ENG above writing skills II (ENG095) or the equivalent. Course may not be used for elective credit in associate degree programs.

# ECE-101 Guidance and Discipline

3 Credits

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 (ECE103).

#### ECE-102 Issues in Early Childhood Education

3 Credits

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: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or exemption from reading and writing requirements by placement testing.

# ECE-103 Child Growth and Development

3 Credits

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 Office of Child Care Services guidelines for child growth and development. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or exemption from reading and writing requirements by placement testing.

## ECE-104 Curriculum in Early Childhood Education

3 Credits

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 Program Environments Early Child Ed

3 Credits

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: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or exemption from reading and writing requirements by placement testing.

# ECE-107 Literacy Development & Learning for Children 3 Credits

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 (ECE103) (or its equivalent) and Curriculum in Early Childhood Education (ECE104) or Child Growth & Development (ECE103) and Introduction and Foundations of Education (EDU101).



# ECE-108 Infant/Toddler Curriculum Development

3 Credits

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 Office of Child Care Services requirements for Infant/Toddler Lead Teacher certification. Prerequisites: Child Growth/Development (ECE103) and a grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or exemption from reading and writing requirements by placement testing.

## ECE-109 Math Concepts and Learning for Children 3 Credits

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 & Development (ECE103) (or its equivalent) and Curriculum in Early Childhood Education (ECE104) or Child Growth & Development (ECE103) and Introduction and Foundations of Education (EDU101).

# ECE-110 Science Concepts & Learning for Children 3 Credits

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-111 Special Needs Child Early Childhood Education 3 Credits

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-112 Families/Community in Early Childhood Education 3 Credits

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/Development (ECE103) plus three (3) ECE or EDU courses.

#### ECE-113 Child Care Administration I 3 Credits

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-115 Supervision in Early Childhood Ed 3 Credits

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 Office for Child Care Services Director II certification requirements. Prerequisite: Lead teacher qualifications or permission of department chair prior to enrollment.

# ECE-117 Observation/ Recording Behavior

3 Credits

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/Development (ECE103).

# ECE-120 Practicum in Early Childhood Education I

3 Credits

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 make application for placement and enrollment one semester prior to registration. 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. The course is graded on a pass-fail scale. The course is open only to students matriculated in the Associate in Science Degree: Early Childhood Concentration. Prerequisite: Permission of department chair.

# ECE-121 Practicum/Early Childhood Education II

3 Credits

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 make application for placement and enrollment one semester prior to registration. 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. The course is graded on a pass-fail scale. The course is open only to students matriculated in the Associate in Science Degree: Early Childhood Development Program. Prerequisite: Permission of department chair.

# **Economics**

#### ECO-201 Macroeconomics

3 Credits

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. The course meets General Education "World View" Requirement Area 3. Prerequisites: Fundamentals of Algebra (MAT094) and Reading Skills II (RDG095) or placement.

# ECO-202 Microeconomics 3 Credits

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 meets General Education "World View" Requirement Area 3. Prerequisites: Fundamentals of Algebra (MAT094) and Reading Skills II (RDG095) or placement.

# **Education**

#### **EDU-101** Introduction & Foundations of Education

3 Credits

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

# **Electric Power Utility**



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: Grade of C or better in Writing Skills II (ENG095) and Reading Skills II (RDG095) or exemption by placement testing.

#### **EDU-140** Practicum in Instruction

3 Credits

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 & Foundations of Education (EDU101).

# **Electric Power Utility**

#### EPU-101 DC Circuit Theory & Lab

4 Credits

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/co-requisite: Topics of Algebra/Trigonometry (MAT193).

# EPU-104 AC Circuit Theory/Lab

4 Credits

This course provides in-depth coverage of alternating current electrical theory. Topics covered include inductance, transformers, capacitance, reactance, impedance, and resonance. The joperator is employed. Course meets 3 hrs. lecture/3 hrs. lab. Prerequisite: DC Circuit Theory/Lab (ETT101).

# EPU-151 Fund of Single Phase & Polyphase Metring 4 Credits

This course introduces students to the fundamentals of Single Phase & Polyphase Metering, such as terminology and basic principles of meters. Students review basic math (learned in MAT095) 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: Admittance into the Electric Power Utility Program.

#### EPU-153 Basics of Underground & Substation Operations 4 Credits

This course introduces students to the basic operation of the underground and substation systems. Students will become familiar with the underground network electrical system and the various job classifications of personnel. Using the power formula to determine wire size an electrical heat shrink joint will be constructed, and manhole entry/exit procedures will be discussed. Cable types and sizes and an equipment orientation will be performed to provide students with a basic understanding of underground apparatus. In addition students will learn the purpose of substations and become familiar with the various types of equipment involved.

Students will become familiar with the dispatch center and its functions. Prerequisite: Admittance into the Electric Power Utility Program.

#### **EPU-203** Introduction to Underground Operations

4 Credits

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 EPU153, Underground and Substation Operations, but in greater detail and with more depth and hands-on practice.) Prerequisite: Acceptance into Electric Power Utility Program – General Worker Option.

#### **EPU-205** Introduction to Substation Operations

4 Credits

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 EPU153, Underground and Substation Operations, but in greater detail and with more depth and hands-on practice.) Prerequisite: Acceptance into the Electric Power Utility Program -General Worker Option. 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 EPU153, Underground and Substation Operations, but in greater detail and with more depth and hands-on practice.) Prerequisite: Acceptance into the Electric Power Utility Program - General Worker Option.

#### EPU-207 Introduction to Overhead Linework 4 Credits

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 Program-General Worker Option.



# EPU-251 Electric Power/Utility Tech Internship

# 3 Credits

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 everyday 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-253 Fundamentals of Overhead Linework I 4 Credits

This course introduces students to the basic fundamentals of overhead line work and begins to perform more advanced pole work techniques. During this intensive training period students will learn to become comfortable working at heights in excess of 35' by performing industry approved procedures. Students will be introduced to and become familiar with important sections of the Safety Manual as they pertain to Overhead Line Work. Hand tools will be assigned and students will learn how to care for and use their equipment. Prerequisite: Electric Power/Utility Tech Internship (EPU251).

# EPU-255 Fundamentals of Overhead Linework II 4 Credits

Lectures on basic electricity will be performed and students will become familiar with voltage test instruments. The proper usage of power tools will be introduced and a basic introduction to NSTAR vehicles and state Public Safety Laws when using a bucket truck and/or digger derrick. During this semester students will use geometric functions for ladder and pole work. Students will excavate holes to set poles, use Ohm's Law to determine wire size, and be shown safe cutting techniques. Holes will be bored in poles at various heights and appropriate cross arms will be installed. Prerequisite: Electric Power/Utility Tech Internship (EPU251).

#### EPU-257 Power and Distribution Systems 4 Credits

This course introduces the basic concepts of electrical power systems. Subject areas include on 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 (EPU104).

# EPU-259 Intermediate Overhead Linework I 4 Credits

This course introduces students to more advanced tasks and functions associated with overhead line work. Students will continue to lash poles, run wire and install cross arms of various types and heights. Guy wires and anchors will be installed using geometric functions to determine their location. Single and three phase electrical services will be installed from a bucket truck using concepts learned in AC/DC theory courses. Hands on usage of 600-voltage test equipment will be demonstrated and performed by the students. Students will also begin installing streetlights using Ohm's Law to determine wattage and wire size. Prerequisites: Fundamentals of Overhead Linework I (EPU253) and Fundamentals of Overhead Linework II (EPU255).

#### **EPU-261** Intermediate Overhead Linework II

4 Credits

Students will become qualified by issuance of a state approved hoisting license to operate bucket trucks and corner mounts. Trainees will also become familiar with various types of equipment and understand transformer theory and installation. Heat shrink joints and Underground Residential Distribution (URD) services will be explored. The job specifications for a Grade C Line Worker will also be distributed and discussed. Prerequisites: Fundamentals of Overhead Linework I (EPU253) and Fundamentals of Overhead Linework II (EPU255).

# **Emergency Medical Technician**

## EMT-103 Emergency Medical Technician

7 Credits

This course covers the rendering of emergency care to the sick and injured promptly and efficiently. It conforms to the EMT-B national 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.

# **Engineering**

## ENR-101 Introduction to Engineering/Lab

4 Credits

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 problem- solving. Emphasis is on team-building and teamwork approach to engineering projects. Course meets 3 hrs. lecture - 3 hrs. lab. Pre/corequisite: Grade of C or better in College Algebra – STEM (MAT194).

# **ENR-260** Engineering Statics

3 Credits

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 better in College Physics I/Lab (PHY251). Pre/corequisite: Grade of C or better in Calculus II (MAT282).

#### **ENR-265** Engineering Dynamics

3 Credits

The course covers Kinematics and Kinetics of particles and rigid bodies, with the application of Newton's Second Law and the principles of work-energy 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 heart and bladder, to predictions of the motions of satellites, spacecraft, etc. Course meets 3 hours lecture. Prerequisite: Grade of C or better in Engineering Statics (ENR260). Co-requisite: Ordinary Differential Equations (MAT285).

# **ENR-270** Strength of Materials

3 Credits

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 better in Engineering Statics (ENR260). Co-requisite: Ordinary Differential Equations (MAT285).

## **English**

## ENG-090 Writing Skills I 3 Credits

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).

#### ENG-095 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 better in Writing Skills I (ENG090) or placement.

## ENG-111 College Writing I 3 Credits

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, students must pass the College Writing Exam and earn a grade of C or better for this course. The course meets General Education "College Writing" Requirement Area 1. Prerequisite: Grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

#### ENG-112 College Writing II 3 Credits

This course focuses on the research paper, the longer essay, argumentation, critical writing, and reading. The course meets General Education "College Writing" Requirement Area 1. Prerequisite: Grade of C or better in College Writing I (ENG111).

#### ENG-115 Writing Tutor Seminar I 3 Credits

This course prepares skilled writing students to work as peer tutors in the college's Writing Place. It provides advanced instruction in grammar and composition, with special emphasis on the writing process. Through the weekly seminar and tutoring sessions, students develop teaching strategies, problem-solving skills, and greater understanding of composition theory and practice. Prerequisite: Permission of the instructor.

#### ENG-171 Oral Communication 3 Credits

This course develops students' poise and self-confidence through oral expression. The course emphasizes presentation of individual talks and participation in class discussions.

#### **ENG-203** Creative Writing Workshop

3 Credits

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. Prerequisite: Writing Skills II (ENG095) or placement in College Writing I (ENG111).

#### ENG-241 Journalism I 3 Credits

This course combines class discussions of journalistic principles with practice in writing news stories. The course then shifts emphasis to field work for the student newspaper, The Third Rail, or another newspaper. In this phase, students follow news leads, evaluate them, compose better ones, and check copy for accuracy and clarity. The course encourages students to proofread, edit, sell ads, and lay out final copy for the printer. Prerequisite: Writing Skills II (ENG095).

#### ENG-242 Journalism II 3 Credits

A continuation of Journalism I (ENG241), this course analyzes the elements of journalism and the writing of the feature story, the human-interest story, and magazine articles. The course encourages students to proofread, edit, sell ads, and lay out final copy for the printer. Prerequisite: Writing Skills II (ENG095).

## **English as a Second Language**

#### ESL-052 Health Communication

3 Credits

This course gives students further practice in the oral skills necessary for employment in health care. It includes various listening and speaking activities designed to strengthen the student's ability to communicate effectively with patients and staff.

## ESL-074 Listening Comprehension & Discussions 3 Credits

This low-intermediate course focuses on listening and discussion skills. Students begin to develop academic listening skills and to improve their listening comprehension. Students will also participate in discussions based on articles and classroom lectures. Students will learn grammar in the context of the materials used for listening activities and student generated writing. Students may be required to complete assignments in the Language Lab. Prerequisite: Placement into ESL Level I.

#### ESL-075 Grammar Structures & Editing

3 Credits

This low-intermediate course focuses students improving grammar and editing skills. Students will develop their ability to compose grammatically-correct and comprehensible sentences and short writings. Instruction will be individualized according to need, as determined by student-generated writing. Students may be required to complete assignments in the Language Lab. Prerequisite: Placement in ESL I.

#### ESL-078 Academic Reading I

3 Credits

This low-intermediate course focuses on reading skills and vocabulary development. Students demonstrate an understanding of reading materials with comprehension questions and writing assignments. Students learn grammar in the context of the reading materials and student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: ESL placement test.



#### ESL-079 Academic Writing I

3 Credits

This low-intermediate course focuses on the fundamentals of sentence structure and paragraph writing. Students write paragraphs from personal experience and from readings. Students learn grammar in the context of the readings and student generated writing. Students may be required to complete assignments in the language lab. Students must pass the ESL Writing Competency Exam in order to receive a passing grade for this course. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: ESL placement test.

## ESL-083 Pronunciation for Academic and Professional Success 3 Credits

This course for non-native speakers of English focuses on the pronunciation, rhythm and intonation of the English language to enable clearer, more effective, and native-like pronunciation in English. The course is designed for students who have a least intermediate fluency in English, but who require considerable accent reduction for academic and professional purposes. Students may be required to complete assignments in the Language Lab. Prerequisites: placement in Academic ESL Level I or higher.

#### ESL-085 Intermediate Grammar and Editing 3 Credits

This course is for ESL Level II students and focuses on improving grammar and editing skills. Students will develop their ability to compose grammatically-correct and comprehensible sentences, paragraphs, and essays. Instruction will be individualized according to students' needs, as determined by student-generated writing. Students may be required to complete assignments inthe Language Lab. Prerequisite: a "C" grade or better in all ESLII courses or advanced ESL placement test score. Prerequisite: Placement into ESL Level II.

#### ESL-086 Academic Listening and Note-Taking 3 Credits

This high-intermediate course focuses on listening and note-taking skills. Students continue to develop a system for note-taking and learn how to use their notes to answer comprehension questions. 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 may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisites: Grade of C or better in all ESL level I courses or ESL placement test.

#### ESL-087 Contemporary Issues and Conversations 3 Credits

This high-intermediate course focuses on the speaking skills necessary in an academic setting. Students discuss academic reading materials in small groups and begin to 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 in the context of speaking, in the context of the reading materials, and in the context of student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisites: Grade of C or better in all ESL level I courses or ESL placement test.

#### ESL-088 Academic Reading II 3 Credits

This high-intermediate course focuses on reading skills and vocabulary development. Students demonstrate an understanding of reading materials with comprehension questions and writing assignments. Students learn grammar in the context of the reading materials and in student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take

other ESL courses. Prerequisites: Grade of C or better in all ESL level I courses or ESL placement test.

#### ESL-089 Academic Writing II

3 Credits

This high-intermediate course focuses on the fundamentals of sentence structure and paragraph and essay writing. Students write paragraphs from personal experience and from readings. Students learn grammar in the context of the readings and student generated writing. Students may be required to complete assignments in the language lab. Students must pass the ESL Writing Competency Exam in order to receive a passing grade for this course. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisites: Grade of C or better in all ESL level I courses or ESL placement test.

#### ESL-095 Advanced Grammar & Editing

3 Credits

This course is for ESL Level III students and focuses on improving grammar and editing skills. Students will develop their ability to compose grammatically-correct and comprehensible sentences, paragraphs, and essays. Instruction will be individualized according to students' needs, as determined by student-generated writing. Students may be required to complete assignments in the Language Lab. Prerequisite: Grade of C or better in all ESLII courses or advanced ESL placement test score.

#### ESL-096 Lecture Comprehension & Academic Vocabulary 3 Credits

This advanced course focuses on note-taking skills. Students continue to develop an academic note-taking system and learn how to use their notes to answer comprehension questions. Students listen to academic lectures, take notes, and learn how to answer essay type questions and write essays based on the lectures. All note-taking activities include reading and writing exercises. Students learn grammar in the context of the readings used for the lectures and in student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisites: Grade of C or better in all ESL level II courses or ESL placement test.

#### ESL-097 Academic Discussions & Presentations 3 Credits

This advanced course focuses on the speaking skills necessary in an academic setting. Students discuss academic reading materials in small groups. Students develop a method for delivering an oral presentation to a large group and increase self-confidence. All speaking activities are organized around reading and writing exercises. Students learn grammar in the context of speaking, in the context of the reading materials, and in the context of student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: Grade of C or better in all ESL level II courses or ESL placement test.

#### ESL-098 Academic Reading III

3 Credits

This advanced course focuses on the critical and analytical reading skills necessary in content courses. Students learn to cite sources and answer essay type questions based on readings. Students demonstrate comprehension of reading materials with writing assignments. Students learn grammar in the context of the reading materials and student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisites: Grade of C or better in all ESL level II courses or ESL placement test.

#### ESL-099 Academic Writing III

3 Credits

This advanced course focuses on the academic writing skills necessary for content courses. Students continue to develop their abilities with sentence structure, paragraph writing, and



essay writing. Students write paragraphs and essays from personal experiences and from readings. Students learn to cite sources and answer essay questions from readings. Students learn grammar in the context of the readings and student generated writing. Students may be required to complete assignments in the language lab. Students must pass the ESL Writing Competency Exam in order to receive a passing grade for this course. Students must complete the course with a grade of C or better in order to take ESL courses. Prerequisites: Grade of C or better in all ESL level II courses or ESL placement test.

#### **Environmental Science**

#### ENV-105 Environmental Science I/Lab 4 Credits

This course covers an introduction to the physical and biological structure of the natural environment within a global perspective. The course emphasizes both a local and global perspective on the study of natural systems and the impacts of human society on these systems. Topics include: ecosystem dynamics, international conservation biology, biodiversity, evolution and adaptation, population dynamics, climate, and the role of science and technology in business and society, and sustaining ecosystems and wildlife. Laboratory investigations develop critical thinking and formal report writing skills. The department recommends this course for A.S. degree students as the General Education "Science and Technology" Requirement Area 5. Course meets 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), a grade of C or better in Prealgebra (MAT092), and Reading Skills II (RDG095) or placement.

#### ENV-106 Environmental Science II/Lab 4 Credits

This course examines the global and local impact of human culture upon the natural systems. Students investigate both destructive and constructive elements of human action within the natural environment. Also, students learn the role of science and technology in the environment and society. Topics include: air and water pollution; toxicity; ozone depletion; global warming; hazardous waste; the role of science and technology in business and society; and renewable and nonrenewable energy resources. Laboratory investigations develop students' critical thinking skills and formal report writing skills. Course meets 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), a grade of C or better in Fundamentals of Math (MAT091) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095), or placement.

#### **ENV-120** Tropical Field Studies

4 Credits

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. Course meets General Education "Science and Technology" Requirement Area 5. Study-Abroad scholarships are available for qualified students. Prerequisite: submission of study-abroad application and approval of the science and engineering department.

#### Film

#### FLM-101 Film As Art

3 Credits

This course covers film techniques, terminology, and criticism, using a variety of recent popular films on television and videotape as the subjects for discussion and analysis. This course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### FLM-102 American Cinema

3 Credits

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 John Ford, Howard Hawks, and Martin Scorsese. This course meets General Education Requirement "Humanities" Area 6.

## **Fire Protection and Safety**

## FPS-111 The Fire Service, This Century and the Next, What Should We Expect

3 Credits

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 for 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 NFPA (National Fire Protection Association) 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 Principles of Fire and Emergency Services Safety and Survival

3 Credits

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: A grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### FPS121 Occupational Health and Safety

3 Credits

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations. Topics include risk and hazard evaluation nd control procedures for emergency service organizations. Prerequisites: A grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.



#### FPS-123 Principles of Emergency Services

3 Credits

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; life safety initiatives. Prerequisites: A grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### FPS-125 Hazardous Materials Chemistry 3 Credits

This course provides 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 better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### FPS-127 Fire Protection Hydraulics and Water Supply

3 Credits

3 Credits

This 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 better in Writing Skills II (ENG095) or by placement testing; a grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) or by placement testing; and a grade of C or better in Prealgebra (MAT094) of by placement testing.

#### FPS-133 Fire Protection Systems 3 Credits

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 or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### FPS-135 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 better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### FPS-137 Legal Aspects of the Emergency Services 3 Credits

This course will address the Federal, State, and local laws that regulate emergency services and include a review of national standards, regulations, and consensus standards. A grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### FPS-139 Fire Prevention 3 Credits

This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; 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 better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Writing Skills II (RDG095).

#### FPS-221 Strategy and Tactics

3 Credits

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents. Prerequisites: Principles of Emergency Services (FPS123) and a grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### FPS-223 Building Construction for Fire Protection

3 Credits

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are show to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Prerequisites: A grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing and Principles of Emergency Services (FPS123) or instructor approval.

#### FPS-225 Fire Investigation I

3 Credits

This course is intended to provide the student with advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and court-room testimony. Prerequisite: Principles of Emergency Services (FPS123), Building Construction for Fire Protection (FPS223), and Fire Behavior and Combustion (FPS135) or instructor approval a grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### FPS-227 Fire Investigation II

3 Credits

This course is intended to provide the student with advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and court-room testimony. Prerequisites: Fire Investigation I (FPS225) and a grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

#### **French**

#### FRE-101 Elementary French I

3 Credits

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

3 Credits

This course covers a continuation of Elementary French I (FRE101) and places emphasis on speaking and reading skills. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Elementary French I (FRE101) or one year of high school French.

#### FRE-201 Intermediate French I

3 Credits

This course is a review of basic language skills with emphasis on conversational skills and graded reading selections for the acquisition of a broad, active vocabulary. Prerequisite: Elementary French II (FRE102) or two years of high school French.

#### FRE-202 Intermediate French II

3 Credits

183

This course is a continuation of Intermediate French I with emphasis on self-expression through speaking and writing. Prerequisite: Intermediate French I (FRE201) or three years of high school French.

2011 - 2012 College Catalog



## Geography

#### GEO-101 World Regional Geography

3 Credits

This course examines the geographical context of major social, cultural, economic, and political issues in selected regions of the world and develops a mastery of maps and other graphic aids as means of learning and communication. Major regional emphases vary from semester to semester among areas of Eastern Europe, the former USSR, the Middle East, the Orient, Latin America, and Africa. The course meets "World View" General Education Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or exemption by placement testing.

#### German

#### **GER-101** Elementary German I

3 Credits

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.

#### **GER-102** Elementary German II

3 Credits

This course builds upon the skills learned in Elementary German I (GER101) by advancing the language structures, word forms, and vocabulary. Elementary German I and II present a firm foundation for advanced conversational and literature courses in German. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Elementary German I (GER101). This course is offered in alternate years.

#### Government

#### **GOV-101 Government/Politics in US**

3 Credits

The course explores some questions and theories that interest political scientists and historians, and methods they use to explain governmental operations. Insight into the nature of political ideals, as embodied in the Constitution, is developed. Topics include federalism, organization and functions of the three branches of the national government, civil liberties and civil rights, public opinion and voting behavior, the media, bureaucracies, and public policy. This course meets General Education "Individual and Society" Requirement Area 2. Prerequisite: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095); and Writing Skills II (ENG095) or exemption by placement testing.

#### **GOV-103 State/Local Politics**

3 Credits

This course acquaints students with the history and functions of state and local governance. It includes an analysis of political organization and structure; state and local government taxing powers; economic, educational, and police powers; and public service functions of government. The course meets General Education "Individual and Society" Requirement Area 2. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or exemption by placement testing.

#### **GOV-211 Comparative Governments**

3 Credits

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.

## **History**

#### HIS-101 History of West Civilization I

3 Credits

This course covers a multi-disciplinary survey of the evolution of Western civilization from its roots in the ancient world through the Medieval and Early Modern periods. It examines artistic, ideological, economic, social, and political questions in order to assist students to understand the development of modern Western culture. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or exemption by placement testing.

#### HIS-102 History of Western Civilization II

3 Credits

This course covers a survey of the major intellectual, social, economic, and political developments in Western civilization since the 17th century. It emphasizes the roots of contemporary institutional and ideological problems. The course meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or exemption by placement testing.

#### HIS-111 World Civilization I

3 Credits

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 meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills II (ENG095), or exemption from reading and writing requirements by placement testing.

#### HIS-112 World Civilization II

3 Credits

This course examines similarities and differences among the major world civilizations in the modern era. Topics include traditions of governance, art, religion and philosophy, technology, family structure, and everyday life. The course meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills II (ENG095), or exemption from reading and writing requirements by placement testing.

#### HIS-117 Women in U.S. History

3 Credits

This class will explore women's roles in American history. It will provide a chronology of the role of women in society and their journey 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. Prerequisite: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or placement equivalencies.

#### HIS-151 United States History I

3 Credits

This course traces the growth and development of America from colonial beginnings to 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 meets General Education "World View" Requirement Area 3. Prerequisite: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095), and Writing Skills II (ENG095) or exemption by placement testing.



#### **United States History II**

3 Credits

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 "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or exemption by placement testing.

#### **Honors**

#### **HON-200** Honors Seminar

3 Credits

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 "Humanities" Requirement Area 6.

## **Hospitality**

#### HRT-105 Hospitality Seminar

3 Credits

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.

#### **Hospitality Marketing Management** 3 Credits

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 **Food and Beverage Operations** for Hospitality Professionals

3 Credits

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 with 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 Hospitality Law

3 Credits

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 American with Disabilities Act compliance are also addressed. Prerequisite: Principles of Management and Service in Hospitality (HRT121).

#### HRT-119 Basics of Meeting Management

3 Credits

This course covers applied knowledge and skill 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.

#### Principles of Management and Service in Hospitality 3 Credits

The 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 insuring quality service within the hospitality and travel industries.

#### 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-127 Travel Services Management

3 Credits

Travel Service Management gives students an understanding of the different aspects of the current travel industry. Topics include Air travel and reservations, hotels, tours, cruises and ground transportation. Primary focus is placed on the sale of commissionable travel products and meeting client needs.

#### HRT-131 Front Office Operations w/Technology Component 3 Credits

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 Culinary Theory in Hospitality

3 Credits

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-210 Hotel/Rest/Tour Field Exp Internship

3 Credits

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 (HRT121).

#### HRT-221 **Managing Groups**

3 Credits

This course introduces students to group sales, support and tour management. Students will learn the skills to necessary to handle the management of large groups of people over different modes of travel and to different destinations. Prerequisite: Basics of Meeting Management (HRT119).

#### HRT-223 **Event Planning**

3 Credits

185

This course covers applied knowledge and skill 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 (HRT119).

2011 - 2012 College Catalog



#### HRT-225 Tourism and Destination Development

3 Credits

This course introduces students to the principles of tourism growth including its economic, social and cultural impact upon the modern world. The course fosters an understanding of destination infrastructure and super-structure, natural resources, capital needs within the context of economic and cultural development. Prerequisite: Principles of Management and Service in Hospitality (HRT121).

#### HRT-227 Travel Reservations Systems

3 Credits

This course introduces students to ticketing, tariffs, routing, scheduling as well as money and data management through an automated system. The specialized agency tasks of air, hotel, car rental, cruise and rail reservations using the SABRE global distribution system are covered. Prerequisite: Travel Services Management (HRT127).

#### HRT-229 Corporate Travel Management

3 Credits

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. Prerequisite: Travel Services Management (HRT127).

#### HRT-231 Advanced Lodging Operations

3 Credits

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 w/ Technology Component (HRT131).

### **Human Services**

#### **HSV-101** Intro Human Services W/Field Practice

3 Credits

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. Prerequisite: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090), or exemption from reading and writing requirements by placement testing.

#### HSV-112 Addiction

3 Credits

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 (PSY101).

#### HSV-115 Introduction to Substance Abuse Counseling 3 Credits

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 (HSV112) and Counseling (PSY215).

#### HSV-116 Pre-Practicum Preparation w/ Field Experience

3 Credits

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 C.O.R.I. background check. A grade of "B" or better is required in this course to allow for enrollment in further practicum coursework in the program. Prerequisites: for Associate degree students: Grade of C or better in College Writing II (ENG112) and a minimum of 27 credits completed toward the A.S. in Human Services including, at a minimum, a grade of C or better in HSV101, HSV112, PSY215 and PSY224. For Certificate students: Grade of C or better in College Writing I (ENG111) and a minimum of 15 credits completed toward the Certificate Option including, at a minimum, PSY215 and HSV112.

#### **HSV-117** Current Issues in Human Services

3 Credit

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: Intro to the HS Profession w/Field Practice (HSV101), Principles of Psychology (PSY101), Counseling (PSY215), and Adolescent & Adult Development (PSY224).

#### HSV-118 Case Management in Human Services

3 Credits

This is an introductory course on case management that uses the framework of the strengthsbased 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 (PSY215).

#### **HSV-119** Current Issues for the Community Health

3 Credits

This course is designed to prepare community Worker 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-120 Practicum in Human Services I

3 Credits

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. Upon successful completion of the three courses, the student will be eligible to sit for examination for the Family Development Credential, a national certification for direct line human service workers. Course is graded on a pass/fail scale. HSV120, 121, and 122 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-121** Practicum in Human Services II

3 Credits

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

186 2011 - 2012 College Catalog



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. Upon successful completion of the three courses, the student will be eligible to sit for examination for the Family Development Credential, a national certification for direct line human service workers. Course is graded on a pass/fail scale. HSV120, 121, and 122 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 (HSV120).

## **Interdisciplinary Humanities**

#### INT-110 American Culture

3 Credits

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 cross-cultural comparisons with the students' native cultures. Materials include film, music, and short works of literature. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption from reading requirement by placement testing.

## Italian

#### ITL-101 Elementary Italian I

3 Credits

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

3 Credits

This course is a continuation of Elementary Italian I (ITL101), emphasizing speaking and reading skills. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Elementary Italian I (ITL101) or one year of high school Italian. This course is offered in alternate years.

#### ITL-201 Intermediate Italian I

3 Credits

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.

#### ITL-202 Intermediate Italian II

3 Credits

A continuation of Intermediate Italian (ITL201) with greater emphasis rough speaking, reading, and writing. Prerequisite: Intermediate Italian I (ITL201) or three years of high school Italian.

## **Japanese**

#### JPN-101 Elementary Japanese

3 Credits

This course is an introduction to the sounds and structures of the Japanese language with emphasis on the acquisition of a limited but useful vocabulary. The course is designed for

students who want to learn essential Japanese 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

#### JPN-102 Elementary Japanese II

3 Credits

This course covers a continuation of the study of basic structures of the Japanese language. The course stresses additional useful vocabulary through reading, writing, and conversation. The course covers material that allows students to learn essential Japanese as quickly and effectively as possible. The course emphasizes encouraging and helping students obtain the ability to use the Japanese 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 "Humanities" Requirement Area 6. Prerequisite: Elementary Japanese I (JPN101).

#### JPN-201 Intermediate Japanese I

3 Credits

This course offers instruction in intermediate Japanese. 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 Japanese culture and customs will be introduced and discussed throughout the semester. Prerequisite: Elementary Japanese (JPN102) or equivalent.

## **Learning Community Seminar**

#### LCS-101 Learning Community Seminar for First Year Students 3 Credits

The Learning Community Seminar enables first-year students to make a successful transition to college. The seminar develops students' abilities to reflect and assess; discover their strengths; explore career interests; set goals and problem solve; connect with peers, faculty and staff; develop critical thinking, information literacy and communication skills; collaborate in active, diverse learning environments; and make connections between classroom learning and the larger community. Each Learning Community Seminar explores a different topic. Students may choose a Seminar based on their program of study or general interests.

#### Literature

#### LIT-201 Introduction to Literature

3 Credits

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 story, and drama. The course meets General Education Humanities Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-203 Literature in America I

3 Credits

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. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-204 Literature in America II

3 Credits

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. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-205 English Literature I

3 Credits

This course examines major themes, techniques, and genres in English literature from Beowulf to Samuel Johnson. Students read and discuss such authors as Chaucer, Spencer, Shakespeare, Donne, Milton, Swift, Pope, Addison, Gray, and Johnson. The list may vary. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-206 English Literature II

3 Credits

This course continues the survey of English literature by studying themes, techniques, and genres from the Romantic poets to the modern writers such as Joyce, Lawrence, and Eliot. The list may vary. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-207 Literature and Society I

3 Credits

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. The course meets General Education Humanities Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-208 Literature and Society II

3 Credits

This course investigates the literature of the individual in a pluralistic society. It examines the importance of awareness and knowledge in personal growth and relationships. It illuminates the struggle of "the hero" to maintain individuality in a complex society. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-211 Masterpieces of World Literature I 3 Credits

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"Neill, MacLeish, Stoppard, and Joyce. The list may vary. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-212 Masterpieces of World Literature II 3 Credits

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 meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-217 Children's Literature I 3 Credits

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 meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-218 Children's Literature II

3 Credits

As follow-up to Children's Literature I (LIT217), 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. The course meets General Education "Humanities" Requirement Area 6. Pre/corequisite: College Writing I (ENG111).

#### LIT-219 African Literature

3 Credits

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 Africa. 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. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-221 Latin American Literature

3 Credits

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. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-223 Immigrant Experience in Literature 3 Credits

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. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-224 Middle East Literature

3 Credits

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 meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-225 Introduction to Dramatic Literature 3 Credits

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. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).

#### LIT-227 African-American Literature

3 Credits

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 meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).



## **Magnetic Resonance (MR)**

#### MRC-111 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 MR Concepts II

#### 3 Credits

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).

#### MRC-299 MR Clinical Internship

#### 3 Credits

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 Student Manual 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 II (MRC211) and permission of department chair.

## Mammography

#### MAC-111 Mammography Principles I

3 Credits

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 Mammography Clinical Internship 3 Credits

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 (MAC111).

## MAC-299 Mammography Clinical Internship 3 Credits

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: Permission of department chair. Prerequisite/co-requisite: Mammography Principles II (MAC521).

## **Management**

#### MAN-105 Principles of Marketing

3 Credits

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 (ESL098) or Reading Skills II (RDG095) or placement and Writing Skills I (ENG090) or placement.

#### MAN-106 International Marketing

3 Credits

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 Marketing (MAN105).

#### MAN-107 Introduction to Entrepreneurship

3 Credits

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.

#### MAN-111 Principles of Management

3 Credits

The skills and functions, theories and principles of management are studied in respect to the socio-cultural 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 (BUS101) for Business Concentration, Management and Finance options only. A grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or exemption from reading or writing requirements by placement testing.

#### MAN-112 Organizational Behavior/Design

3 Credits

Organizational behavior and design, social systems and contemporary management issues are explored, experienced with an emphasis on interrelationship of culture, organizational structure and policies upon individual, group and organizational performance. Topic coverage includes: 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 meets General Education "Individual/Society" Requirement Area 2 for A.A. and A.S. Business Administration students except for the A.S. International Business option.

#### MAN-201 Management Seminar

3 Credits

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 (MAN111) and Principles of Marketing (MAN105).

#### MAN-202 Supervisory Management

3 Credits

This course covers an introduction to first-level supervision (operating management). Readings and case studies focus on superior/subordinate relationships, discipline, daily direction, labor relations, and operation control.

#### MAN-204 Entrepreneurship and Innovation 3 Credits

This course is a business simulation where students experience the business world by creating and operating virtual firms and taking virtual products to market in the global economy of over 600 firms in over 40 countries. Activities include hands-on experience with concept development, business planning, e-commerce, marketing, strategic planning, finance, accounting and management in an interactive and realistic business environment. A portfolio, business plan, company reports and reflective blogs are required. Unlike a traditional online course, this course uses students' existing knowledge supplemented by additional learning drawn from tutorials, independent research, and faculty and students consultants in order to grow the business. Like a real business, each student brings a wealth of personal and professional experiences to the table and the firm is charged with capitalizing on these human resources in order to develop the firm to its maximum potential. Prerequisite: Introduction to Entrepreneurship (MAN107) or Instructor approval.

#### MAN-207 Small Business Management 3 Credits

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 small 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 will also be requirements of the course. Prerequisite: Principles of Accounting II (ACC102) or Accounting Information Systems (ACC105); Principles of Management (MAN111); Principles of Marketing (MAN105) or permission of instructor.

#### MAN-210 Personnel Management

3 Credits

This course examines the roles and concepts of personnel management, contingency thinking, and motivation. It covers planning for recruiting, employee selection and placement, discipline, and labor/management relations, as well as training and development programs for women, minorities and the handicapped, and the dynamics of maintaining the workforce.

## MAN-212 Operations Management for Business 3 Credits

This course provides an introduction to the opportunities and benefits of applying operations management concepts to problems that typical businesses face. The objective is to improve the efficiency, effectiveness and ultimate profitability and sustaining of the business. The course covers the application of operations management concepts to key decisions during the various stages of business operation, including facility size, location, and layout; demand forecasting; production and workforce planning; inventory management; supply chain management; customer relationship management; quality control; and product and service design. Prerequisite: Principles of Management (MAN111); Contemporary Math II (MAT173)

or Statistics I (MAT181) or Statistics I/Lab (MAT183); and Introduction to MS Office (CIT133) or Applications/Concepts (CIT110).

#### MAN-213 Mutual Fund Industry

3 Credits

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 (ACC111).

#### MAN-215 Project Management

3 Credits

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 (CIT110), Fundamental of Algebra (MAT094), and Principles of Management (MAN111).

#### MAN-217 E-Commerce Marketing Management

3 Credits

This course provides an overview of the way e-commerce is conducted, marketed, and managed, and describes its major opportunities, limitations, issues, and risks. E-Commerce is an interdisciplinary topic and, therefore, is of interest to managers and professional people in any functional area of the business world. The course describes the manner in which transactions take place over networks, mostly the Internet. The course covers descriptions and discussions of the process of electronically buying and selling goods, services, and information. It introduces specific applications, such as buying and selling stocks or books on the Internet, which are growing at a rate of several hundred percent a year. Prerequisite: Principles of Marketing (MAN105).

#### MAN-299 Business Internship

3 Credits

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.

#### **Mathematics**

#### MAT-091 Fundamentals of Mathematics

3 Credits

This course develops a solid base in the principles of arithmetic. It includes operations and applications of whole numbers, fractions and decimals and an introduction to percent numbers. Math study skills and successful student strategies are integrated throughout the course. Note: Students earn no credit for this course if they have already received credit for a mathematics course having a higher course number. The course does not satisfy the college math requirement for graduation.

#### MAT-092 Prealgebra

3 Credits

This course further develops arithmetic operations and applications and introduces basic algebraic concepts. It includes ratio, proportion, percent, measurement, metric geometry,



signed numbers, variables, expressions and solutions to basic equations. Math student skills and successful student strategies are integrated throughout the course. The course does not satisfy the college math requirement for graduation. Prerequisite: Grade of C or better in Fundamentals of Mathematics (MAT091) or placement.

#### MAT-094 Fundamentals of Algebra

3 Credits

This course introduces further applications of algebraic expressions and equations. It includes solutions of linear equations and inequalities, the Cartesian coordinate system, linear equations in two variables and their graphs, systems of linear equations, integer exponents, polynomials, factoring, and an introduction to quadratic equations. Math study skills and successful student strategies are integrated throughout the course. The course does not satisfy the college math requirement for graduation. Prerequisite: Grade of C or better in Prealgebra (MAT092) or placement.

#### MAT-100 Topics in Career Math

3 Credits

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. Prerequisite: Grade of C or better in Prealgebra (MAT092) or placement.

#### MAT-133 Introduction to Metric System

1 Credit

This course enables students to recognize and use metric terms, roughly measure using body parts, and use estimation within the metric system.

#### MAT-171 Finite Mathematics

3 Credits

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 "Quantitative Thought" Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT094).

#### MAT-172 Contemporary Math I

3 Credits

This course covers varied mathematical topics that have applications in contemporary society. Topics include number theory (divisibility, Fermat's Theorem, characterization of primes, Diophantine equations), mathematical systems (base n and modular arithmetic, groups, rings, fields), logic (simple and compound statements, conditionals, symbolic logic, truth tables), and patterns and symmetries (Fibonacci sequence, Golden Ratio, natural and artistic illustrations, fractals). The course encourages students to interpret, analyze, and evaluate from a mathematical perspective. The course meets General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT094) or placement.

#### MAT-173 Contemporary Math II

3 Credits

This course covers varied mathematical topics that have applications in contemporary society. Topics include statistics (sampling, measures of central tendency, measures of variation, normal distribution, frequency distributions and histograms), graph theory (modeling, Eulerian and Hamiltonian graphs, directed graphs, optimization procedures), calculators (specialized functions, number patterns, use in problem-solving), consumer math (payroll, investments, financing, budgets) and computers (algorithms, flowcharts, application to the course's other topics). The course encourages students to interpret, analyze, and evaluate from a mathematical perspective. The course meets General Education "Quantitative Thought"

Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT094) or placement.

#### MAT-181 Statistics I

3 Credits

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 General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT094) or placement.

#### MAT-183 Statistics I/Lab

3 Credits

This computer-based 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 General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT094).

#### MAT-184 Statistics II/Lab

4 Credits

This course covers a continuation of Statistics I and includes chi-square and F distributions; analysis of variance, multiple correlation and regression; and non-parametric methods. Prerequisite: Statistics I/Lab (MAT183).

#### MAT-192 College Algebra

3 Credits

This course is designed primarily as a college-level mathematics course for students whose intended course of study falls outside the areas of science, technology, engineering, computer science and mathematics. The course extends the fundamental concepts of algebra, including linear equations and inequalities, algebraic functions, absolute value equations and inequalities, distance and midpoint formulas and circles, systems of equations, integral and rational exponents, radicals, addition, subtraction, multiplication and division of rational expressions, and an introduction to exponential and logarithmic functions. The course meets General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT094) or placement.

#### MAT-193 Topics in Algebra/Trigonometry

3 Credits

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 better in Fundamentals of Algebra (MAT094).

#### MAT-194 College Algebra-STEM

4 Credits

This course is designed for science, technology, engineering, computer science, and mathematics students and provides a solid preparation for precalculus. The course covers systems of linear equations, matrices, partial fractions, linear programming, algebra of functions, quadratic equations, polynomials, rational and radical functions, complex numbers, exponential and logarithmic functions, maximum and minimum problems, symmetry, lines, conic sections, graphs of relations and functions, and applications. A graphing calculator is required for this course. This course meets General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade C or better in Fundamentals of Algebra (a grade of B or better is recommended) (MAT094) or placement.



## MAT-196 College Trigonometry

3 Credits

This course covers basic principles of trigonometry, including solution of triangles, radian measure, graphs of trigonometric functions, identities, and equations. It includes an introduction to polar forms and polar coordinates. Prerequisite: Grade of C or better in College Algebra-STEM (MAT194) or placement.

#### MAT-197 Precalculus 4 Credits

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 geometry, and sequence and series notation. Graphing calculator is required. Prerequisite: Grade of C or better in College Algebra-STEM (MAT194) or placement.

#### MAT-231 Calculus for Management Science

4 Credits

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. Graphing calculator is required. Prerequisite: Grade of C or better in College Algebra (MAT192) or placement.

#### MAT-281 Calculus I 4 Credits

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. Graphing calculator required. Prerequisite: Placement or grade of C or better in Trigonometry (MAT196) or Precalculus (MAT197).

#### MAT-282 Calculus II 4 Credits

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. Graphing Calculator is required. Prerequisite: Grade of C or better in Calculus I (MAT281) or placement.

#### MAT-283 Calculus III 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. Graphic Calculator is required. Prerequisite: Grade of C or better in Calculus II (MAT282) or placement.

#### MAT-285 Ordinary Differential Equations 4 Credits

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. Material on linear systems will be incorporated. Prerequisite: Grade of C or better in Calculus II (MAT282).

## MAT-291 Linear Algebra

4 Credits

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 onmathematical structure and axiomatic reasoning aided by the use of computer software. Pre/co-requisite: Grade of C or better in Calculus I (MAT281).

## **Medical Imaging**

#### MIG-101 Introduction to Ultrasound

2 Credits

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: Admittance into the Cardiac or General Sonography programs.

#### MIG-105 Ultrasound Physics and Instrumentation

3 Credits

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: Admission in to the Cardiac or General Sonography Program.

#### MIG-107 Introduction to Medical Radiography

2 Credits

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 Patient Care for Medical Imaging

4 Credits

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. Corequisite: Introduction to Medical Radiography (MIG107) or Introduction to Ultrasound (MIG101).

#### MIG-110 Ultrasound Scanning Protocols/Pathology 3 Credits

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 to use the equipment in the classroom. Prerequisite: Ultrasound Instrumentation I (MIG105).



#### MIG-111 Imaging Technology I

3 Credits

4 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: Fundamentals of Algebra (MAT094) or placement.

MIG-112 Echo I 3 Credits

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).

#### MIG-115 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 Echo II 3 Credits

This continuation course of the material presented in Echo I deals specifically with left ventricular function, cardiomyopathy, CAD, color Doppler, and imaging technique used to aid in the demonstration of these diseased states. This course also includes the technique of transesophageal, stress, and contrast echo technique. Prerequisite: Echo I (MIG112).

## MIG-120 Radiologic Imaging I 3 Credits

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 (MIG107).

#### MIG-121 Related Procedures in Pharmacology 2 Credits

This course provides students with knowledge of diagnostic cardiac procedures, emphasizing indications, utility, and limitation of these procedures. The course also provides students with a basic knowledge and understanding of clinical pharmacology as it relates to cardiovascular disease and echocardiography. Prerequisite: Interpretation I (MIG115).

#### MIG-122 Positioning I 3 Credits

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. Corequisite: Full-Time Medical Radiography Clinical I (MIG124F) or Part-Time Medical Radiography Clinical I (MIG124P).

#### MIG-124F Full-Time Medical Radiography Clinical I

2 Credits

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 I

1 Credit

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 Positioning II

3 Credits

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 (MIG122). Co-requisite: Full Time Medical Radiography Clinical II (MIG128F) or Part Time Medical Radiography Clinical II (MIG128P).

#### MIG-128F Full-Time Medical Radiography II

2 Credit

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 Part-Time Medical Radiography Clinical II

1 Credit

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-161 Intro to Diagnostic Imaging and PACs 3 Credits

Designed for students with previous experience in Medical Imaging or Computer Science who wish to pursue a career in PAC"s administration, this course introduces the students to the history of medical imaging with a focus on state-of-the-art 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.

#### MIG-201 Echo III 4 Credits

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).



#### MIG-203 Interpretation II

3 Credits

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 Vascular Ultrasound

3 Credits

This course covers an introduction to the fundamentals of vascular ultrasound. It includes hemodynamic, Doppler spectral analysis, and duplex visualization of the cerebrovascular system. It also covers carotid, venous, and transcranial Doppler techniques. Prerequisite: Echo II (MIG119) for Cardiac Sonography Option. Co-requisite: General Sonography Clinical II (SON123) for General Sonography Option.

## MIG-207 Ultrasound Physics & Instrumentation for the Cardiac Sonographer

2 Credits

This course is a continuation of Ultrasound for the Cardiac Sonographer 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. Prerequisite: Ultrasound Physics and Instrumentation (MIG105) and Echo II (MIG119).

#### MIG-211 Cardiac Sonography Clinical I

3 Credits

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). Co-requisite: Echo III (MIG201).

#### MIG-213 Cardiac Sonography Clinical II

This course covers a continuation of clinical practical experience in echocardiography andfurther 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). Co-requisite: Echo IV (MIG215).

#### MIG-215 Echo IV/Interpretation

4 Credits

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 Advanced Interpretation Seminar

2 Credits

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 Cardiac Sonography Clinical III

4 Credits

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 evaluates 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).

#### MIG-220 Positioning III

2 Credits

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 Full-Time Medical Radiography Clinical III 3 Credits

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 Part-Time Medical Radiography Clinical III 1 Credit

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 two (2) evenings/week, with 8 hours of clinical practice weekly. Prerequisite: Part-Time Medical Radiography Clinical II (MIG128P).

#### MIG-224 Radiologic Technology II

3 Credits

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

3 Credits

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 Pharmacology of Radiology 1 Credit

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 (BIO204).

#### MIG-228F Full-Time Medical Radiography Clinical IV 3 Credits

This course allows students to develop additional experience in the materials covered in Positioning I, Positioning II, and Positioning III, and further to 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 Part-Time Medical Radiography Clinical IV 5 Credits

This course allows students to develop additional experience in the materials covered in Positioning I, Positioning II, and Positioning III, and further to 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).

#### MIG-230 Radiation Protection 3 Credits

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 importance of this issue today. Prerequisite: Radiologic Imaging II (MIG226) for day option only. Co-requisite: Radiologic Imaging II (MIG226) for evening option.

#### MIG-234 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 (BIO204).

#### MIG-236F Full-Time Medical Radiography Clinical V 3 Credits

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 Medical Radiography Clinical IV (MIG228F).

#### MIG-236P Part-Time Medical Radiography Clinical V 5 Credits

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 Medical Radiography Clinical IV (MIG228P).

#### MIG-238 Advanced Medical Radiography Seminar 2 Credits

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).

#### MIG-251 Advanced PACS Seminar

3 Credits

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

3 Credits

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 (BIO203), Anatomy & Physiology II (BIO204), or current ARRT, NMTCB or ARDMS registry status.

#### MIG-299 PACS Administration Internship

3 Credits

This course enhances the academic experience for students. All internships take place at preapproved 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 before 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.

## **Medical Laboratory Technician**

## MLT-101 Intro to Clinical Laboratory Sciences I

3 Credits

This course provides an orientation to the clinical laboratory. Topics include the history and scope of clinical laboratory technology, professionalism, ethics, safety practices, computer and laboratory information system, basic laboratory procedures. Disciplines introduced will include: Phlebotomy, Urinalysis, Hematology, and Coagulation. Prerequisite: Admission to the MLT program.



#### MLT-102 Intro to Clinical Laboratory Sciences II

This course is a continuation of Clinical Laboratory Sciences I, providing an orientation to the clinical laboratory. Emphasis is on topics relevant to foundation knowledge and those specialized techniques required prior to entry into the laboratory practicum. Topics included are: Coagulation Disorders, Immunology, and Serodiagnostic Testing, Infectious Diseases, and Safety Precautions. Additional topics: Hematology and Erythrocytes. Prerequisite: Introduction to Clinical Laboratory Science I (MLT101).

### MLT-201 Clinical Laboratory Sciences Seminar I

3 Credits

3 Credits

This course is highly specialized consisting of lectures in Clinical Laboratory Technology-the diagnosis of disease by laboratory methods. The seminar provides the formal theory for the experiences gained during the laboratory practicum. Emphasis on Clinical Chemistry and Immunohematology. Prerequisite: Introduction to Clinical Laboratory Sciences II (MLT02).

#### MLT-202 Clinical Laboratory Sciences Seminar II 3 Credits

This course is highly specialized consisting of lectures in Clinical Laboratory Technology "the diagnosis of disease by laboratory methods. The seminar provides the formal theory for the experiences gained during the laboratory practicum. Emphasis on Diagnostic Microbiology, Hematology, and Coagulation. Prerequisite: Clinical Laboratory Sciences Seminar I (MLT201) and Clinical Laboratory Science Practicum I (MLT251).

#### MLT-203 Clinical Laboratory Sciences Seminar III 3 Credits

This course is highly specialized consisting of lectures in clinical laboratory Technology "the diagnosis of disease by laboratory methods. This seminar provides the formal theory for the experiences gained during the laboratory practicum. Emphasis on Body fluids & Urinalysis, Clinical Immunology/Serology, Parasitology, Mycology and review of Clinical Chemistry and Immunohematology. Prerequisite: Clinical Laboratory Science Seminar II (MLT202) and Clinical Laboratory Science Practicum II (MLT252).

#### MLT-251 Clinical Laboratory Sciences Practicum I 4 Credits

This course consists of Practicum experiences at one of the college's clinical laboratory affiliates in which the student acquires knowledge and experience in laboratory practices and procedures. Prerequisite: Clinical Laboratory Science Seminar I (MLT201) and Clinical Laboratory Science Practicum I (MLT251).

#### MLT-252 Clinical Lab Sciences Practicum II 4 Credits

This course consists of a continuation practicum experiences at one of the college's clinical laboratory affiliates in which the student acquires knowledge and experience in laboratory practices and procedures. Prerequisite: Introduction to Clinical Laboratory Sciences II (MLT102).

#### MLT-253 Clinical Lab Sciences Practicum III 4 Credits

This course is a continuation of practicum experiences at one of the college's clinical laboratory affiliates in which the student acquires knowledge and experience in laboratory practices and procedures. Prerequisites: Clinical Laboratory Science Seminar II (MLT202) and Clinical Laboratory Science Practicum II (MLT252).

#### Music

#### MUS-102 College Chorus

3 Credits

This participatory class for students of all cultural and linguistic backgrounds presents musical programs throughout the semester. Choral performances consist of a variety of music from

around the world. Students learn vocal techniques, along with rudimentary music reading skills. Students need no previous singing or other musical experience. The department encourages members of this class to participate in all the college chorus performances. Students may repeat this course three times, earning 1 credit for each repetition.

#### MUS-113 Jazz Ensemble

1-3 Credits

Designed for students with previous experience in music, this course concentrates on application of basic skills of reading, improvisation, and standard performance practices in the small jazz ensemble. Students must audition for admission. Students may repeat this course three times, earning 1 credit for each repetition.

#### MUS-118 Music Appreciation I

1-3 Credits

An introduction to the history and development of music, this course covers basic questions dealing with the roles of the listener, performer, and composer, as well as representative samples from the first music of the medieval era to the end of the classical era. The course explores music's relationship to historical events and other art forms of the periods. This course meets General Education "Humanities" Requirement Area 6.

#### MUS-119 Music Appreciation II

3 Credits

A continuation of the history and development of music, this course presents representative samples of music from the romantic era to the present. It explores music's relationship to historical events and other art forms of the periods. This course meets General Education "Humanities" Requirement Area 6. Prerequisite: Music Appreciation I (MUS118) or permission of the department chair.

#### MUS-122 Foundations of Music

3 Credits

This course covers the full spectrum of rhythm, intervals, scales, key signatures, chords, triads and sevenths, and cadences for beginning students. The course fosters ear training, note reading, some keyboarding application, and much creative activity.

#### MUS-129 Rock & Roll History

3 Credits

Beginning with the roots of rock in the rockabilly and blues traditions, continuing through the classical rock of the 50's and 60's, this course covers all styles of rock, current and past. The course covers listening to and identifying specific idiosyncrasies of various performers that are central to the study. This course meets General Education "Humanities" Requirement Area 6.

#### MUS-131 Piano I 3 Credits

This course provides group instruction for the beginner in keyboard technique, including note reading, fundamentals of rhythm, intervals, chords and scales, and a variety of keyboard literature. Students progress at their individual pace.

#### MUS-132 Piano II 3 Credits

A continuation of Piano I (MUS131), this course emphasizes music reading and expands the repertoire.

#### MUS-135 Counterpoint and Harmonization

3 Credits

A sequel to Foundations of Music (MUS122), this course explores in depth two powerful musical forces. Students learn to apply counterpoint, the art of combining independent melodies, and harmonization, which provides suitable chordal accompaniment to melody. Prerequisite: Foundations of Music (MUS122).

2011 - 2012 College Catalog



#### MUS-140 Music for Children

#### 3 Credits

This course is designed for students interested in teaching music at the primary level. Students need not have the ability to read music. The course covers techniques and materials for teaching music to primary-age children. Students leave this course with a repertoire of lesson plans.

#### MUS-151 Music in the United States 3 Credits

A survey of musical practice in the United States from the earliest colonial period to the present, this course is designed to give the student an understanding of the richness of our country's musical heritage, both popular (vernacular) and classical (cultivated). Students listen to and discuss old and new music of many styles - folk, symphonic, rock, opera, religious, ethnic, jazz, and pop.

#### MUS-157 Vocal Performance Workshop 3 Credits

This is a workshop class that offers instruction in basic vocal skills. Instruction in these techniques will lead students to develop their ability to sing accurately and with confidence in any style. This class is open to anyone with a sincere interest in becoming a better singer, regardless of past vocal experience. Each class begins with a group warm-up session that leads to individual performances before the instructor and the rest of the class.

#### MUS-159 Vocal Performance Workshop II 3 Credits

A continuation of Vocal Performance I, this class offers additional instruction in vocal skills. Instructions in these techniques will further develop the student's ability to sing accurately and confidently in any style. Prerequisite: Vocal Performance Workshop I (MUS157).

#### MUS-161 World Music 3 Credits

This course fosters an appreciation of music from around the world (especially non-Western music.) Students will explore the music of Africa, the Middle East, Asia, East Asia, the Indian subcontinent, and the Americas, including the Caribbean. Students will learn how music functions as an expression of social customs and shared values, and how it is impacted by the history and geography of each culture. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or exemption by placement testing.

## Nursing

#### NUR-095 Success in Nursing

3 Credits

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 and those students planning to apply to the Nursing Program. Course meets: 3 hrs. lecture.

## NUR-100 Drug Calculation 1 Credit

This course covers the apothecary, metric, and household systems of weights and measures and is designed for students admitted to the Nursing Program. The course focuses on the computation of drug dosages for oral and parenteral medications. It emphasizes the applications of skills necessary to compute dosages for infants, children, and adults and the calculations of intravenous infusions and medications. Class meets: 1 hr. lecture. Prerequisite: Fundamentals of Algebra (MAT094) or placement.

#### NUR-101 Health Assessment & Basic Skills/Lab

2 Credits

This course introduces students to basic health assessment of the adult client using the body systems approach. Students acquire hands on physical assessment skills and then transfer these skills to the clinical setting. Students also learn the basic nursing skills necessary to provide care to the whole person in the clinical setting. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 1 hr. lecture; 3 hrs. simulation lab. Prerequisites: Acceptance into the Nursing Program and Anatomy/Physiology I/Lab (BIO203), College Writing I (ENG111), and Drug Calculations (NUR100).

#### NUR-111 Nursing I

7 Credits

This course provides the foundation for the theory and practice of associate degree nursing. The concepts of optimal health, person, nurse, environment, and holistic nursing are introduced within the framework of health promotion, health restoration, and health maintenance. The student is introduced to the critical thinking skills required for nursing practice. The student learns and begins to apply the nursing process in the promotion of health for adult clients using functional health patterns categories. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 5 hrs. lecture; 6 hrs. clinical practice in selected health care facilities. Prerequisite: Acceptance into the Nursing Program and Anatomy/Physiology I/Lab (BIO203), College Writing I (ENG111), and Drug Calculations (NUR100).

#### NUR-112 Nursing II

10 Credits

This course builds upon the concepts introduced in Nursing I (NUR111). Students apply the nursing process within the framework of health restoration, health maintenance, and health promotion in the care of adults with medical/surgical and mental health problems. Students use critical thinking skills to meet the health care needs of the adult client. Students also learn beginning acute care nursing skills necessary to provide care to the whole person. Additional expenses may include supplies, equipment, and/or uniforms. Class meets: 5 hrs. lecture; 3 hrs. simulation lab; 12 hrs clinical practice in selected health care facilities. Prerequisites: Anatomy/Physiology II/Lab (BIO204), Health Assessment and Basic Skills/Lab (NUR101), Nursing I (NUR111), and Principles of Psychology (PSY101).

#### NUR-211 Nursing III 9 Credits

This course builds upon the concepts in NUR101, NUR111, and NUR112 and includes the nurses role in health promotion, health restoration, and health maintenance for the childbearing and childrearing family. Students use critical thinking skills in the application of the nursing process. Students provide nursing care to the childbearing family, and to children with physical and mental health problems. Additional expenses may include supplies, equipment, and/or uniforms. Class meets: 5 hrs. lecture; 12 hrs. clinical practice in selected health care facilities. Prerequisites: Microbiology/Lab (BIO205), Nursing II (NUR112), and Human Growth/Development (PSY213).

#### NUR-212 Nursing IV

9 Credits

This course builds on all previous courses focusing on health promotion, health restoration, and health maintenance for persons with complex health problems. Students apply the principles of delegation and leadership in the clinical setting. Students integrate critical thinking skills in the application of the nursing process and in clinical decision-making. Clinical practice includes hospital/health care facilities/community experiences, selected observations, and use of the computer lab. Course meets: 5 hrs. lecture; 12 hrs. clinical practice in selected health care facilities. Prerequisites: Nursing III (NUR211).

## Office and Information Management



#### NUR-213 Nursing Seminar

1 Credit

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).

## Office and Information Management

#### OIM-100 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 WPM with one (1) error or less. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### OIM-101 Keyboarding: Document Generation I

3 Credits

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 2007. It covers formatting for basic business documents, such as resumes, letters, 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.

#### OIM-102 Medical Computer Applications

3 Credits

This course includes keyboarding instruction with an emphasis on proper technique, speed building, and proofreading. Students learn the correct format for business letters, memorandums, business reports, and medical documents. Students use the Internet for e-mail and job searches. In addition, they create a resume, reference sheet, and cover letter. Note: For Allied Health students or by permission of department chair.

## OIM-106 Records and Information Management 3 Credits

This course provides an introduction to records management, including alphabetic, subject, numeric and geographic filing guidelines, as well as storage media, space limitations, compliance and risk management, and disaster recovery. Students will complete hands-on projects using Outlook for customizing and flagging e-mail, using search folders, creating and using contacts/notes, scheduling meetings, and integrating Word merge functions using contacts. File management using Windows Explorer and business research using Internet Explorer are integrated with PowerPoint presentations to tie together all the various professional skills using a qualitative approach. Pre/co-requisite: Keyboarding: Document Generation I (OIM101) and Applications/Concepts (CIT110).

#### OIM-110 Document Generation II

3 Credits

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, template bullets and numbering, leaders, merging, sorting, hyperlinks, section breaks, styles, formulas, clip art, WordArt, and column layout. Diagnostic and speed building exercise 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 (Microsoft Office User Specialist) certification. Prerequisites: Grade of C or better in Keyboarding Document Generation I (OIM101) and Applications/Concepts (CIT110) or chair approval.

#### OIM-115 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: Keyboarding: Document Generation I (OIM101) and Applications/Concepts (CIT110).

#### OIM-130 Business Correspondence/Editing

3 Credits

3 Credits

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 (ENG095). Pre/co-requisite: Keyboarding: Document Generation I (OIM101).

#### OIM-170 Procedures for the Medical Office

3 Credits

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: Keyboarding: Document Generation I (OIM101) or Medical Computer Application (OIM102; formerly OIM142) or any computer applications course or by permission of the department chair.

#### OIM-190 Medical Information Management

3 Credits

This course covers the medical environment and staff 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 presentation on an issue related to medical office administration. Pre/corequisite: Keyboarding: Document Generation I. (OIM101).

#### OIM-199 Office and Information Management: Technology on the Move

3 Credits

Students explore career opportunities in medical, legal, and executive 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. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading (ESL098) or Reading Skills II (RDG095) or placement. Pre/co-requisite: Keyboarding: Document Generation I (OIM101). Co-requisite: Group Dynamics (PSY107). Note: This change will not affect PSY107 requirements.

#### OIM-200 Introduction to Physicians' Billing 3 Credits

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 Administrative Business Communication 3 Credits

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: Completion of or concurrent with Records and Information Management (OIM106), Document Generation II (OIM110), Administrative Technology and Procedures (OIM15), and Business Correspondence and Editing (OIM130).

#### OIM-299 Office/Information Management Internship 3 Credits

This 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. Prerequisites or co-requisites: All courses within major should be completed prior to or during the semester the internship is done or by permission of department chair. Note: Administrative Business Communication (OIM230) is offered fall semester only and must be taken the fall semester prior to internship.

## **Paralegal**

#### PLG-101 Introduction to Law

3 Credits

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: Writing Skills II (ENG095), Reading Skills II (RDG095) or Academic Reading III (ESL098) or placement.

#### PLG-102 Legal Research & Writing

3 Credits

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 Litigation

3 Credits

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 Legal Ethics

3 Credits

This course presents the major areas of legal 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-201 Family Law

3 Credits

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** Business Organizations

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 Massachusetts incorporation procedures. Prerequisite: Business Law I (BUS201).

#### PLG-203 Real Estate

3 Credits

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: Writing Skills II (ENG095), Reading Skills II (RDG095) or Academic Reading III (ESL098) or placement.

#### PLG-204 Wills, Estates and Trusts

3 Credits

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: Writing Skills II (ENG095), Reading Skills II (RDG095) or Academic Reading III (ESL098) or placement.

#### PLG-299 Paralegal Internship

3 Credits

An internship in Paralegal Studies is a hands-on learning experience at law firms, public agency, corporation, 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. 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. Students meet biweekly 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.

## **Philosophy**

#### PHL-101 Introduction to Philosophy

3 Credits

This introductory course acquaints students with the philosophic method, the problems and living issues of philosophy, and the great philosophers. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or exemption by placement testing.

PHL-103 Ethics 3 Credits

This course covers the major philosophical issues in normative ethics and moral philosophy. It covers discussions regarding philosophical views about what is morally right or wrong and the applications to the individual and society. This course emphasizes contemporary problems, issues, and value conflicts. Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills I (RDG090) and Writing Skills I (ENG090), or exemption by placement testing.

#### PHL-111 World Religions

3 Credits

This course analyzes the beliefs and practices of major world religions, including Hinduism, Buddhism, Judaism, Christianity, and Islam. Through study of these religions, students compare the beliefs of various traditions and understand their values in an historical context. The course meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095) or exemption b y placement testing.

#### PHL-113 Religions of the Middle East

3 Credits

This course analyzes the beliefs and practices of religions of the Middle East, including Judaism, Christianity, and Islam. Through study of these religions, students compare the beliefs of these religions and understand their values in an historical context. The course meets General Education "World View" Requirement Area 3.

## **Physics**

#### PHY-191 Introduction to Physics/ Lab

4 Credits

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 meets General Education "Science and Technology" Requirement Area 5. This course is for Electric Power Utility Program students only. Prerequisite: A grade of C or better in Topics in Algebra/Trigonometry (MAT193).

#### PHY-201 General Physics I/Lab

4 Credits

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. Prerequisite: Grade of C or better in Precalculus (MAT197).

#### PHY-202 General Physics II/Lab

4 Credits

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 AS Chemical Science or Physics/Engineering concentrations or the physics requirement of the AS Engineering program. Prerequisite: Grade of C or better in General Physics I/Lab (PHY201).

#### PHY-251 College Physics I/Lab

4 Credits

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

4 Credits

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).

## **Portuguese**

#### POR-101 Elementary Portuguese I

3 Credits

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.

2011 - 2012 College Catalog



#### POR-102 Elementary Portuguese II

3 Credits

This continuation course of Elementary Portuguese I (POR101) 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 (POR101) or one year of high school Portuguese.

## **Psychology**

#### **PSY-101** Principles of Psychology

3 Credits

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 General Education "Individual and Society" Requirement Area 2. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or co-enrollment in integrated courses, or exemption by placement testing.

#### PSY-102 Psychology for Business & Industry

3 Credits

This course examines the application of psychological facts to human behavior in business and industry. Personnel selection, placement, and training, people in organizations, manmachine work environment, and consumer psychology are considered.

#### PSY-105 Psychology of Social Relations

3 Credits

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** Group Dynamics

3 Credits

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 "Individual and Society" Requirement Area 2. Co-requisite: For Office and Information Management majors, Office and Information Management: Technology on the Move (OIM199).

#### PSY-131 Psychology of Popular Culture

3 Credits

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-203 Psychology of Personal Adjustment

3 Credits

This course explores the development and expression of the personality through an examination of processes by which the self-concept 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: Principles of Psychology (PSY101) or permission of instructor.

#### PSY-209 Child Psychology

3 Credits

This course studies 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. This course is for non-ECE, non-HSV and non-EDU majors only. Prerequisite: Principles of Psychology (PSY101).

#### PSY-213 Human Growth and Development

3 Credits

This course examines the theories of the biological, social, and psychological development of human beings throughout the life span. Prerequisite: Principles of Psychology (PSY101).

#### PSY-215 Counseling

3 Credits

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, Psychology, or Sociology programs or by permission of the department chair of Education, Early Childhood, and Human Services or the department chair of Behavioral Sciences. Prerequisite: Principles of Psychology (PSY101).

#### PSY-219 Social Psychology

3 Credit

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: Principles of Psychology (PSY101).

#### PSY-223 Personality

3 Credits

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: Principles of Psychology (PSY101).

#### PSY-224 Adolescent & Adult Development

3 Credits

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: Principles of Psychology (PSY101).

#### PSY-227 Abnormal Psychology

3 Credits

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: Principles of Psychology (PSY101) or permission of instructor.

#### PSY-233 Intro to Psychiatric Rehabilitation

3 Credits

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

2011 - 2012 College Catalog

## Respiratory Therapy



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 Introduction to Behavioral Research 3 Credits

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 Reading Skills I

3 Credits

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 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 exit-level requirements or pass a departmental reading final in order to earn a passing grade of C in this course.

#### RDG-095 Reading Skills II

3 Credits

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 exit-level 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.

## **Respiratory Therapy**

### RTH-101 Principles of Respiratory Therapy I

4 Credits

This course introduces students to the profession of Respiratory Therapy. Course content includes: communication in the health care setting, patient safety, charting and recordkeeping, ethical and legal implicat ions of the practice of respiratory therapy, decision-making protocols, applied anatomy and physiology as well as gas exchange and transport. Prerequisite: Admission to the Respiratory Therapy Program. Co-requisites: Modalities of Respiratory Therapy I (RTH111) and Clinical Practice in Respiratory Therapy I (RTH121).

#### RTH-102 Principles of Respiratory Therapy II 4 Credits

This course continues to build students' knowledge of the profession of Respiratory Therapy. Course contents include: solutions, fluids, electrolytes, and acid-base balance related to the human body; regulation of breathing; principles of humidity, and principles of medical aerosols. Class meets: 4 hours lecture. Prerequisites: Principles of Respiratory Therapy I (RTH 101). Co-requisites: Modalities of Respiratory Therapy II (RTH112) and Clinical Practice of Respiratory Therapy II (RTH122).

#### RTH-111 Modalities of Respiratory Therapy I

2 Credits

This course introduces students to diagnostic and therapeutic modalities used in Respiratory Therapy. Students study the equipment and techniques related to computers in Respiratory Care, patient assessment, lung expansion therapy, emergency ventilation, and bronchial hygiene therapy. Course meets: 1 hr lecture; 2 hrs. lab. Prerequisite: Admission to the Respiratory Therapy Program. Co-requisites: Principles of Respiratory Therapy I (RTH101) and Clinical Practice in Respiratory Therapy I (RTH121).

#### RTH-112 Modalities of Respiratory Therapy II

2 Credits

This course familiarizes students with additional diagnostic and therapeutic modalities used in Respiratory Therapy. Students study the equipment and techniques related to the analysis and monitoring of gas exchange, storage and distribution of medical gases, medical gas therapy, humidity therapy, aerosol therapy, and electrocardiograms. Course meets: 1 hour lecture; 2 hours lab. Prerequisites: Principles of Respiratory Therapy I (RTH101), Modalities of Respiratory Therapy I (RTH111), and Clinical Practice in Respiratory Therapy I (RTH121). Co-requisites: Principles of Respiratory Therapy II (RTH102) and Clinical Practice in Respiratory Therapy II (RTH122).

#### RTH-121 Clinical Practice/Respiratory Therapy I

2 Credits

This course introduces students to the hospital environment and the practice of Respiratory Therapy. Students employ infection control techniques, use the medical record, communicate with the health care team, perform lung expansion and bronchial hygiene therapies, and apply respiratory care protocols. Course meets 8 hrs. clinical practice in selected health care facilities. Prerequisite: Admission to the Respiratory Therapy Program. Co-requisites: Principles of Respiratory Therapy I (RTH101) and Modalities of Respiratory Therapy I (RTH111).

#### RTH-122 Clinical Practice in Respiratory Therapy

2 Credits

This course provides students with hands-on experience in the practice of Respiratory Therapy. Students perform arterial blood gas sampling and analysis, administer and monitor oxygen therapy, perform humidity therapy, administer aerosol therapy, perform electrocardiograms, and apply respiratory care protocols. Course meets: 8 hours clinical practice in selected health care facilities. Prerequisites: Principles of Respiratory Therapy I (RTH101), Modalities of Respiratory Therapy I (RTH111), and Clinical Practice in Respiratory Therapy 1 (RTH121). Co-requisites: Principles of Respiratory Therapy II (RTH102) and Modalities of Respiratory Therapy II (RTH112).

#### RTH-132 Respiratory Therapy Pharmacology

1 Credit

This course introduces students to the principles of pharmacology, the anatomy and physiology, of the autonomic nervous system, and the major classifications of drugs used in relation to the practice of respiratory therapy, including bronchodilators, mucus controlling agents, inhaled corticosteroids, non-steroidal anti-asthma drugs, aerosolized anti-infective agents, and anti-microbial agents. Course meets 1 hr lecture. Prerequisite: Admission to the Respiratory Therapy Program.

#### RTH-134 Cardiopulmonary Physiology

2 Credits

This course is an in-depth study of respiratory physiology and the development, structure and function of the cardiopulmonary system. The physical principles involved in ventilation, control of ventilation and gas transport are also reinforced. Included is an introduction to renal function, acid-base balance, and hemodynamic measurements. Course meets: 2 hours lecture Prerequisite: Anatomy/Physiology 1/Lab (BIO203).



#### RTH-201 Principles of Respiratory Therapy III

4 Credits

This course continues introduces students to acute and critical care, with a particular focus on the critically ill adult patient. Course content includes: understanding of acute and chronic respiratory failure, principles of and physiology associated with mechanical ventilation and its affect on various systems of the body, monitoring the ICU patient, and current techniques for the discontinuation of mechanical ventilatory support. The use of evidence-base approach will be emphasized. Course meets: 4 hours lecture. Prerequisites: Principles of Respiratory Therapy II (RTH102), Modalities of Respiratory Therapy II (RTH112), Clinical Practice in Respiratory Therapy III (RTH211), Clinical Practice in Respiratory Therapy III (RTH212) and Cardiopulmonary Disease (RTH232).

#### RTH-202 Principles of Respiratory Therapy IV 4 Credits

This course introduces students to a variety of important topics involved in respiratory care including such areas as neonatal and pediatric care, preventative medicine and the long-term care environment. Nutritional aspects of health and disease will be discussed, along with the scientific basis for cardiopulmonary rehabilitation. Students will be presented with an overview of the provision of respiratory care in alternative settings such as acute care and home care. Course meets 4 hours lecture. Prerequisites: Principles of Respiratory Therapy III (RTH201), Modalities of Respiratory Therapy III (RTH211), and Clinical Practice in Respiratory Therapy IV (RTH212) and Clinical Practice of Respiratory Therapy IV (RTH222).

#### RTH-211 Modalities of Respiratory Therapy III 3 Credits

This course introduces students to the hands-on maintenance of the natural and artificial airway. Content for the lab course includes the study and application of airway management techniques including the performance of emergency procedures such as endotracheal intubation, suctioning and cuff pressure measuring monitoring. Students will also study the equipment and techniques related to invasive and non-invasive mechanical ventilation, as well as those devices used in the monitoring of these patients. Independent lab study is required. Course meets: 2 hours lecture; 2 hours lab. Prerequisite: Principles of Respiratory Therapy II (RTH102), Modalities of Respiratory Therapy II (RTH112), Clinical Practice of Respiratory II (RTH122). Co-requisites: Modalities of Respiratory Therapy III (RTH201), Clinical Practice in Respiratory Therapy III (RTH202) and Cardiopulmonary Disease (RTH232).

## RTH-212 Modalities of Respiratory Therapy IV 2 Credits

This course introduces students to the hands-on application of pulmonary function techniques. Additional diagnostics monitoring techniques including CT, MRI, PET, and V/Q scans will also be discussed. Students will be the opportunity to work with neonatal and pediatric mechanical ventilation and compare how that differs from conventional adult ventilation. A portion of this course will be dedicated to ACLS and PALS certification. Course meets: 1 hour lecture; 2 hours lab. Prerequisites: Principles of Respiratory Therapy III (RTH201), Modalities of Respiratory Therapy III (RTH211), Clinical Practice in Respiratory Therapy III (RTH221). Co-requisites: Principles of Respiratory Therapy IV (RTH202) and Clinical Practice in Respiratory Therapy IV (RTH222).

#### RTH-221 Clinical Practice in Respiratory Therapy III 4 Credits

This course introduces students to the hospital III critical care environment. Students will perform techniques and procedures related to patient assessment, airway management and mechanical ventilatory support. Students will demonstrate competence in the provision of

invasive and non-invasive ventilation, as well as the proper techniques for monitoring the critically ill patient. Course meets: 16 hours clinical practice in selected health care facilities. Prerequisite: Principles of Respiratory Therapy II (RTH102), Modalities of Respiratory Therapy II (RTH112), Clinical Practice of Respiratory II (RTH122). Co-requisites: Principles of Respiratory Therapy III (RTH201), Modalities of Respiratory Therapy III (RTH211), and Cardiopulmonary Disease (RTH232).

#### RTH-222 Clinical Practice in Respiratory Therapy IV 4 Credits

This course provides additional exposure to the IV hospital critical care environment. In addition to the adult critical care environment, students will gain a basic understanding of providing respiratory care in specialty areas including neonatal, pediatrics, home care and long-term care. Course meets 16 hours clinical practice in selected health care facilities. Prerequisites: Principles of Respiratory Therapy III (RTH201), Modalities of Respiratory Therapy III (RTH211), and Clinical Practice in Respiratory Therapy III (RTH 221). Corequisites: Principles of Respiratory Therapy IV (RTH202) and Modalities of Respiratory Therapy IV (RTH212).

#### RTH-232 Cardiopulmonary Disease

2 Credits

This course is designed to provide the students with the basic knowledge and understanding that is essential to assess and plan treatment for patients with respiratory-related diseases. Case study discussion and practice will be emphasized. Course meets: 2 hours lecture. Prerequisites: Cardiopulmonary Physiology (RTH134).

#### Russian

## RUS-101 Elementary Russian I

3 Credits

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.

## Sociology

#### **SOC-101** Principles of Sociology

3 Credits

This course covers an introduction to the concepts and theories of society and social institutions. The course meets General Education "Individual and Society" Requirement Area 2. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or co-enrollment in integrated courses or exemption from reading requirement by placement testing.

#### SOC-109 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 "Individual and Society" Requirement Area 2. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or co-enrollment in integrated courses or exemption from reading requirement by placement testing.

#### SOC-110 Physical Anthropology

3 Credits

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

## Surgical Technology



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; where do we go from here" This course is offered through the Center for Self-Directed Learning only.

#### SOC-111 The Family 3 Credits

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-127 Race, Class, and Gender 3 Credits

This course explores issues of color, gender, class, and caste as they exit in contemporary American society. 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. Topics to be discussed include racism, sexism, multiculturalisms and Eurocentrism. Prerequisite: Principles of Sociology (SOC101) or Principles of Psychology (PSY101) or Cultural Anthropology (SOC109).

#### SOC-205 Urban Sociology 3 Credits

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 (SOC101).

#### SOC-206 Juvenile Delinquency 3 Credits

The 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.

#### SOC-207 Criminology 3 Credits

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. Other 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-225 Sociology of Homosexuality 3 Credits

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. Other 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-229 Sociology of Film 3 Credits

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.

## **Surgical Technology**

#### SGT-105 Surgical Technology I

5 Credits

This course covers an introduction to the profession of surgical technology. The course covers principles of aseptic technique, sterilization and disinfection, universal precautions, surgical equipment, and instrumentation in a coordinated class and simulated laboratory setting. An included seminar defines and develops a surgical conscience and professional demeanor. Prerequisites: Writing Skills II (ENG095) and Fundamentals of Math (MAT091).

#### SGT-106 Surgical Technology II

8 Credits

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 (BIO107) and Surgical Technology I (SGT105).

#### SGT-107 Surgical Technology III

3 Credits

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. Prerequisite: Surgical Technology II (SGT106).

#### SGT-109 Central Processing I

2 Credits

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 Central Processing I Clinical

2 Credits

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

#### SGT-110 Central Processing II

2 Credits

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: Central Processing I (SGT109), Writing Skills I (ENG090), Fundamentals of Math (MAT091) and Reading Skills I (RDG090).

#### SGT-110A Central Processing II Clinical

2 Credits

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.

#### SGT-111 Central Processing Clinical

2 Credits

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.

204 2011 - 2012 College Catalog



## **Sonography**

#### SON-113 Cross Sectional Anatomy

4 Credits

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 (BIO204).

#### SON-115 Abdominal Ultrasound 3 Credits

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 (SON113). Co-requisite: General Sonography Clinical I (SON121).

#### SON-117 Ultrasound Scanning and Pathology 4 Credits

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 to use the equipment in the classroom. Prerequisite: Cross-Sectional Anatomy (SON113). Co-requisite: General Sonography Clinical I (SON121).

#### **SON-119** Subspecialty Sonography and Neurosonography

3 Credits

3 Credits

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 (SON113). Co-requisite: General Sonography Clinical I (SON121).

#### SON-121 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 (SON113). Co-requisites: Abdominal Ultrasound (SON115), Ultrasound Scanning and Pathology (SON117), and Subspecialty Songoraphy/Nerosonography (SON119).

#### SON-123 General Sonography Clinical II 3 Credits

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 (MIG105). Co-requisite: General Sonography Clinical III (SON223).

# SON-213 Ultrasound Physics and Instrumentation for the General Sonographer

2 Credits

This hybrid course presents Physics of Ultrasound for the General Sonographer and its applications to the performance and instrumentaiton 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, sonographic artifacts. Special emphasis is placed on bioeffects and safety in the performance of General Sonography. The advancements in songoraphic applications and instrumentation such as harmonics, 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 (MIG105). Corequisite: General Sonography Clinical III (SON223).

#### SON-215 Advanced General Sonography I

2 Credits

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 Journal of Ultrasound in Medicine and the Journal of Diagnostic Medical Sonography will be reviewed and discussed. Registry practice exams will be taken online on a regular basis. Prerequisite: Abdominal Ultrasound (SON115). Co-requisite: General Sonography Clinical III (SON223).

#### SON-217 Advanced General Sonography II

2 Credit

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 Journal of Ultrasound in Medicine and the Journal of Diagnostic Medical Sonography will be reviewed and discussed. Registry practice exams will be taken online on a regular basis. Prerequisite: Advanced General Sonography (SON215). Co-requisite: General Sonography Clinical IV (SON225).

## SON-219 Obstetrical/Gynecological Sonography I 3 Credits

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 (SON123). Co-requisite: General Sonography Clinical III (SON123).

## SON-221 Obstetrical and Gynecological II

3 Credits

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 are described. Sonographic/medical terminology, pathophysiology, clinical presentation and associated laboratory findings as they relate to the second and third trimesters will be covered. Prerequisite: Obstetrical/Gynecological Sonography I (SON219) Co-requisite: General Sonography Clinical IV (SON225).



#### SON-223 General Sonography Clinical III

3 Credits

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 (SON123). Co-requisites: Obstetrical and Gynecological Sonography I (SON219), Advanced General Sonography (SON215), and Diagnostic Instrumentation (SON213).

#### SON-225 General Sonography Clinical IV 3 Credits

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. Prerequisites: General Sonography Clinical III (SON223). Co-requisites: Obstetrical and Gynecology Sonography II (SON221) and Advanced General Sonography (SON217).

#### SON-227 General Sonography Clinical V 3 Credits

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 (SON225).

## **Spanish**

#### SPN-101 Elementary Spanish I

3 Credits

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

3 Credi

This continuation course of Elementary Spanish I (SPN101) emphasizes conversational skills and simple readings. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Elementary Spanish I (SPN101) or one year of high school Spanish.

#### SPN-201 Intermediate Spanish I

3 Credits

This course covers a review of basic language skills and emphasizes conversational and reading skills. Prerequisite: Elementary Spanish II (SPN102) or two years of high school Spanish or permission of instructor.

#### SPN-202 Intermediate Spanish II

3 Credits

This continuation course of Intermediate Spanish I (SPN201), emphasizes self-expression through speaking, reading, and writing. Prerequisite: Intermediate Spanish I (SPN201) or three years of high school Spanish or permission of instructor.

## **Theatre**

## THE-107 Acting I

3 Credits

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 "Humanities" Requirement Area 6.

## THE-108 Acting II

3 Credits

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

1-3 Credits

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.

#### **THE-111** Improvisation

1-3 Credits

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. Students may repeat this course three times, earning one credit for each repetition.

#### THE-113 Voice and Movement

3 Credits

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.

## **Vascular Sonography**

#### VSN-111 Vascular Principles & Instrumentation

3 Credits

This course will introduce the student to the field of vascular technology/ultrasound. Topics include the principles of sound, sound transmission and reflection, Doppler principles including spectral display, artifacts, and equipment performance. In addition to the previous mentioned topics, instruction will also include information regarding tissue mechanics, fluid dynamics with attention towards the pressure flow relationship, other testing modalities such as plethysmography, and bioeffects/quality assurance. Prerequisite: Admission into the Vascular Ultrasound Program or permission of Program Director.

#### VSN-113 Peripheral Arterial Testing

3 Credits

This course will review the anatomy and physiology of the peripheral arterial system. Students will gain knowledge of the scanning/testing protocols for both upper and lower extremities. Instruction will be provided on direct and indirect methods of arterial testing such a 2D ultrasound, Doppler, Spectral Display, color Doppler and Pressure and Waveform analysis. In addition to learning about exam protocols the student will also be exposed to diagnostic criteria for assessing both normal and pathological findings. The student will also review a range of diagnostic and treatment options in the area of peripheral arterial disease. Prerequisite: Admission into the Vascular Ultrasound Program or permission of Program Director.

#### VSN-115 Vascular Ultrasound Clinical I

3 Credits

This course introduces the students to the basic techniques of vascular ultrasound/testing and familiarizes the student with the equipment. Students will gain this knowledge through scanning and performing tests in the clinical setting under the supervision of the clinical



instructor. Students will be expected to prepare patients for the appropriate exam and take a patient history. The student's performance shall be evaluated through clinical competencies, which the student must demonstrate to successfully complete Vascular Ultrasound Clinical I. This clinical will take place on 3 eight hour days per week. Prerequisites: Admission into the program with a letter of a secured clinical placement with an appropriately credentialed Vascular Technologist/Sonographer. Co-requisite: Vascular Principles and Instrumentation (VSN111) and Peripheral Arterial Testing (VSN113).

#### VSN-211 Peripheral Venous Testing 3 Credits

This course will review the anatomy of the peripheral venous system. Students will gain knowledge of the scanning testing protocols for both upper and lower extremities including the deep and superficial venous systems. Instruction will be provided on such testing methods as 2D ultrasound, Doppler, Spectral Display, Color Doppler and Plethysmographty. In addition to learning about exam protocols the student will be exposed to diagnostic criteria for assessing both normal and pathological findings. The student will also review a range of diagnostic and treatment options in the area of peripheral venous disease. Prerequisite: Peripheral Arterial Testing (VSN113).

#### VSN-213 Cerebrovascular Testing 3 Credits

This course will review the anatomy and physiology associated with cerebrovascular disease. Students will gain knowledge of the noninvasive ultrasound techniques used to evaluate the extra and intracranial circulation Instruction will be provided on such testing methods as 2D ultrasound, Doppler, Spectral Display and TCD. In addition to learning about exam protocols the student will be exposed to diagnostic criteria for assessing both normal and pathological findings. The student will also review a range of diagnostic and treatment options in the area of cerebrovascular disease. Prerequisite: Peripheral Arterial Testing (VSN113) or permission of the Program Director.

#### VSN-215 Vascular Ultrasound Clinical II 3 Credits

This course is a continuation of scanning and testing technique and interpretation of exams. Students will continue to gain knowledge through scanning and testing patients at their clinical site under the supervision of the clinical instructor. The student's performance shall be evaluated through clinical competencies. This clinical will take place on 3 eight hour days per week. Prerequisite: Vascular Ultrasound Clinical I (VSN115) and a verified letter of clinical placement with an appropriate credentialed Vascular Technologist/Sonographer. Co-requisites: Peripheral Venous Testing (VSN211) and Cerebrovascular Testing (VSN213).

#### VSN-217 Vascular Ultrasound Clinical III 3 Credits

This course is a continuation of scanning and testing technique and interpretation of exams. Students will continue to gain knowledge through scanning and testing patients. Students will be required to document their findings by writing concise preliminary findings under the direct supervision of their clinical instructor. Students will be expected to make clinical correlations and present findings to the appropriate medical personnel. The student's performance shall be evaluated through clinical competencies. It is recommended that this clinical take place on 4 eight-hour days. Prerequisites: Vascular Ultrasound Clinical II (VSN215) and a verified letter of clinical placement with an appropriate credentialed Vascular Technologist/Sonographer.

#### Visual & Media Arts

#### VMA-100 VMA Freshman Seminar

3 Credits

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 (ENG095) and Fundamentals of Math (MAT091).

#### VMA-102 Two-Dimensional Design

**Credits** 

This course introduces the student to the elements and concepts of two-dimensional design. Familiarity with the terminology, concepts, and basic materials utilized in the studio by visual artists will be explored. These elements are shape, value, texture, color, line, and mass. Visual sensitivity and a working knowledge of the design elements are developed by solving a series of 2-D problems, employing a variety of media and materials. There is an emphasis on writing and communication skills for mastery of basic vocabulary, and process of evaluation and critique. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-103 Three-Dimensional Design

3 Credits

This course introduces the student to the elements, principles, terminology and materials of Three-Demensional Design, as well as expand upon the graphic design techniques and principles introduced in Two-Dimensional Design. Students work on problem sequences dealing with modeled and constructed forms, both in relief and free-standing. Other problems introduce students to more conceptual and site-specific approaches to sculpture. There is emphasis on writing and communication skills for mastery of basic vocabulary and process of evaluation and critique. Prerequisite: Two-Dimensional Design (VMA102).

#### VMA-104 Drawing I

3 Credits

An introductory studio course designed to examine basic vocabulary and drawing skills and concepts. Using a wide range of drawing media, students work primarily from observation mastering the concepts of objective drawing. While concentrating on the formal visual elements "line, shape, value, texture and (limited) color, students explore such concepts as figure/ground, scale, positive and negative space, proportion, perspective, volume, light, compositional issues and pictorial unity. There is an emphasis on writing and communication skills for mastery of basic vocabulary, and process of evaluation and critique. This course meets General Education "Humanities" Requirement Area 6. Prerequisite: Writing Skills II (ENG095).

#### VMA-105 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 (ENG095) and Prealgebra (MAT092).

#### VMA-111 Introduction to Mass Media

3 Credits

This course covers an overview of the history and theory of mass media, including print, radio, television, the Internet, movies, advertising and public relations. The course covers general concepts of mass media, the media industries, and practical methods to analyze and understand the influence of the mass media on social, cultural, and political life, not only in the United States, but also around the globe. In addition, the course looks at ways individuals themselves can influence the media. The course meets General Education World View Requirement Area 3. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).



#### VMA-112 Art History: Prehistory to Medieval

3 Credits

The course is a broad multicultural survey of the art and architecture of Egypt, Rome, Greece, the Near, Mid, and Far East, and Europe, from the Paleolithic Era through the Moyen Age. The course stresses the understanding of art through examining visual concepts such as composition, space, rhythm, symmetry, perspective, and subject matter, as well as its social, political, and cultural contexts. Students will experience and analyze works of art through lectures, written assignments, journal entries, identification and essay exams, presentations, group projects, and visits to museums. The course meets General Education "Humanities" Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-113 Art History: Renaissance to Contemporary 3 Credits

This course is a broad multicultural survey of art and architecture from the Early Renaissance through contemporary times. Major movements in both Western and non-Western traditions are covered. The course stresses the understanding of art through examining visual concepts such as composition, space, rhythm, symmetry, perspective, and subject matter, as well as its social, political, and cultural contexts. Students will experience and analyze works of art through lectures, written assignments, journal entries, identification and essay exams, presentations, group projects, and visits to museums. The course meets General Education "Humanities" Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

## VMA-114 History of Graphic Design 3 Credits

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 Graphic Design Program in the Visual & Media Arts Department. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

## VMA-115 The Moving Image 3 Credits

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 Media Communications Program in the Visual & Media Arts Department. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-120 Calligraphy 3 Credits

This course covers a study of hand lettering for pleasure and/or business. It develops students' skills in creating letters and illustrative designs using pen and ink. This course practices text lettering as an alphabet, while it covers others, such as Roman, Italic, and Chancery cursive, as a means of developing an individual style. The course explores simple techniques using colored inks. Prerequisite: Writing Skills II (ENG095).

#### VMA-122 Painting I 3 Credits

This course instructs students in the painting medium of acrylic and/or oil paint. The course places emphasis on drawing, composition, color, value, and paint quality. Students acquire basic skills in painting from observation. Class time includes one-on-one instruction and group critiques. The course meets General Education Humanities Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-123 Water Color I

3 Credits

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. The course meets General Education Humanities Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-124 Printmaking I

3 Credits

An introduction to a variety of printmaking processes, this course includes woodcut, monotype, engraving, and dry point. The course encourages experimentation in a self-motivated workshop environment. Class time includes one-on-one instruction and group critiques. Some drawing experience is desirable, although not required. The course meets General Education "Humanities" Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-131 Introduction to Desktop Publishing

3 Credits

This course introduces students to the fundamental knowledge required to operate Macintosh computers for use in desktop publishing. Students become computer literate by learning the basic principles of desktop publishing. Through an introduction to the word processing program Microsoft Word and the page layout program In Design, students learn about the production of documents that require the application of those principles. Recommended prerequisite: Applications/Concepts (CIT110) or previous computer experience. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-132 Typography

3 Credits

This course examines the theory and practice of typographic principles. Students undertake creative projects in typographic composition. The course considers both effectiveness and aesthetic value of the composition. The course is required of all first year graphic arts students. (Fall semester only.) Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-141 Elements of Video Production

3 Credits

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 digital 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 Prealgebra (MAT092).

#### VMA-151 Intro to Audio Technology

3 Credits

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 (ENG095) and Prealgebra (MAT092).



#### VMA-161 Intro to Digital Photography

3 Credits

Digital photography has made it technically possible to generate countless photographs at virtually no cost, yet the formal problems of picture-making remain. How is it possible to create photographs with power and significance" This course explores basic technical issues of the digital photography workflow joined with a formal exploration of seeing photographically, using both shooting assignments and lab exercises. Examples from the photographic tradition will be examined. Adobe Photoshop is used to adjust and manipulate images for printing. Inkjet printers are used to create photographic quality output. Students must have a digital camera and basic computer literacy. This course fulfills General Education Humanities Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Prealgebra (MAT092).

#### VMA-204 Drawing II 3 Credits

A studio course designed to examine basic vocabulary and drawing skills and concepts in the study of the human form. Using a wide range of drawing media, students work primarily from anatomical drawings and observation of the nude model to gain proficiency with gesture strategies, contour drawing, sighting and measuring, light in relation to planar relationships, and tonal structure of composition. Students develop an understanding of abstraction in relation to figure/ground, scale, positive & negative space, proportion, volume in relationship to light, compositional issues and pictorial unity. There is an emphasis on writing and communication skills for mastery of basic vocabulary, and process of evaluation and critique. Prerequisite: Drawing I (VMA104).

#### VMA-209 Portfolio Presentation Seminar 1 Credit

This course is required for all Visual & Media Arts students. Students will prepare, review and present a visual portfolio that best reflects the skills, knowledge and level of achievement in their program area. Additionally they will prepare a resume and identify interview skills. Emphasis is on developing a cohesive presentation format of projects reflecting various skills.

## VMA-222 Painting II 3 Credits

This course emphasizes developing students' personal sense of aesthetics and increasing their awareness of the painting process. Students choose to work in either acrylic or oil paint while exploring color theory, composition, value, and paint application. Class time includes one-on-one instruction and group critiques. Prerequisite: Painting I (VMA122) or permission of instructor.

#### VMA-223 Water Color II 3 Credits

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 Printmaking II 3 Credits

A continuation of Printmaking I (VMA124), this course further develops the techniques of drypoint, 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-231 Graphic Design Applications

3 Credits

This course explores the use of the computer as a design tool. Instruction emphasizes the mastery of fundamental computer functions and software operations. It prepares graphic design students in computer software and technology used in graphic design. Students explore the creative potential, solve design and layout problems, and exhibit an understanding of the professional requirements of document preparation and production. The course uses Adobe InDesign and Adobe Illustrator software. Prerequisite: Introduction to Desktop Publishing (VMA131).

#### VMA-232 Design Communication I

3 Credits

This course explores the use of the computer as a design tool. Instruction emphasizes the mastery of fundamental computer functions and software operations. It prepares graphic design students in computer software and technology used in graphic design. Students explore the creative potential, solve design and layout problems, and exhibit an understanding of the professional requirements of document preparation and production. The course uses Adobe InDesign and Adobe Illustrator software. Prerequisite: Introduction to Desktop Publishing (VMA131).

#### VMA-233 Design Communication II

3 Credits

This course covers a continuation of the examination and interpretation of the elements and principles of design as applied to the practice of graphic design and visual communication from visualization to production techniques. Students use the computer to create portfolio pieces for use in their future job search or in applications to four-year institutions. The course uses Microsoft Word, Adobe InDesign, Adobe Illustrator and Adobe Photoshop software. Prerequisite: Design Communication I (VMA232).

#### VMA-234 Publication Design

3 Credits

This advanced course for graphic arts students covers the design, layout, and format of books. Students design a book with images that is the culmination of all they have learned. This book is included in their portfolio. The course is required of all graphic arts students and is offered spring semester only. Prerequisite: Design Communication I (VMA232) or approval of department chair.

#### VMA-241 Advanced Video Production

3 Credits

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. Co-requisite: Video Post Production (VMA242).

#### VMA-242 Video Post-Production

3 Credits

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. Co-requisite: Advanced Video Production (VMA241).

#### VMA-243 Projects in Video Production

3 Credits

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 Media Project Planning

3 Credits

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 Audio Studio Production

3 Credits

This course will cover basic techniques for multi-track 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 Digital Photography Techniques

3 Credits

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. Prerequisite: Digital Imaging with Photoshop (VMA105), Intro to Digital Photography (VMA161), or permission of instructor.

#### VMA-271 Design for the World Wide Web

3 Credits

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-272 Two Dimensional Animation

3 Credits

This course will introduce students to techniques for creating 2-D animations in a timeline-based digital environment. Macromedia"s "Flash MX" will be the primary software used in this course. In addition to traditional animation techniques (such as "tweening" and key-framing) programmable interactivity using Action Scripting will also be covered. Finished animations may be written to videotape or film, and techniques for uploading for distribution through the Internet will be emphasized. Prerequisite: Digital Imaging with Photoshop (VMA105).

#### VMA-273 Motion Graphics & Compositing

3 Credits

This course will familiarize students with the aesthetic and technical requirements of using digital methods to combine video, photo, graphics, text and other visual elements. Through lecture, demonstration and hands-on projects, students will learn behavior-based animation, transfer modes, particle dynamics and simulation design, stylized title animation, blue screen keying techniques, DVD motion menu design, key framing, and integration with Final Cut Pro and DVD Studio Pro. Prerequisite: Digital Imaging with Photoshop (VMA105).

#### VMA-274 DVD Authoring

3 Credits

This course provides students the technical and aesthetic skills needed to design and author professional DVDs. Through lectures and hands-on 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-299G Graphic Design Internship

3 Credits

Required in the Graphic Design Program, this course is designed to provide students with practical experience in a professional setting and preparation for a successful career in the graphic design field. Designation of Internship site will be based on student academic and career goals. The internship is paired with in-class learning and weekly meetings with the instructor and/or the representative of the designated business or agency. Prerequisite: Design Communication I (VMA232).

#### VMA-299M Media Communication Internship

3 Credits

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.



210 2011 - 2012 College Catalog



# **Boston Welcome Back Center for Internationally Educated Nurses**

The Boston Welcome Back Center assists unemployed and underemployed nurses who earned their credentials outside the United States to obtain state licensure and re-enter the nursing workforce. The Center incorporates educational case management services, educational guidance and counseling and group activities to address the educational and vocational needs of internationally-educated nurses who want to work in Massachusetts.

The Welcome Back Center is a partnership of Bunker Hill Community College, Massachusetts Bay Community College, Massachusetts Department of Higher Education, Roxbury Community College and the University of Massachusetts at Boston. The Center's main office is located at Bunker Hill Community College's Charlestown Campus with branch offices located at Massachusetts Bay Community College and Roxbury Community College.

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 in order to expedite re-entry into the nursing profession.

For more information, visit the Welcome Back Center in Room B206 on the Charlestown Campus, email welcomeback@bhcc.mass.edu or call 617-228-ICAN.





# Workforce Development Center, ACT Center and Community Education



Through the Workforce Development Center, the ACT Center and Community Education, Bunker Hill Community College meets the needs of the community by developing and offering a variety of flexible yet specific nontraditional training programs designed for both organizations and individuals.

The College assists local businesses in assessing and upgrading the skills of their employees through contract training programs offered 24 hours a day, seven days a week. Individuals enroll in continuing education courses and computer-based training in order to acquire new skills leading to career enhancement, as well as for personal enrichment. The Workforce Development Center, the ACT Center and Community Education offer specialized services in order to meet the needs and interests of both organizations and individuals.

## The Workforce Development Center

The Workforce Development Center provides customized, hands-on training and consulting services to employees of businesses and organizations in the Greater Boston area. In collaboration with industry experts, the Center designs and develops services to address the unique business needs of each customer. Training topics may include, but are not limited to basic workplace skills, supervisory skills, leadership, customer service, team building, workplace English as a second language, computer literacy, manufacturing, allied health, food sanitation, criminal justice and occupational Spanish. The Center provides training, either at the worksite or at the College, scheduled at the convenience of the organization. Visit the Workforce Development Center in Room M107, Charlestown Campus, or call the Center at 617-228-2021.

#### The ACT Center

The ACT Center is a state-of-the-art training facility that uses computer-based technologies to build the job skills needed for success. Employers and individuals can take advantage of more than 2,000 web-based courses in topic areas such as computer software, time management, customer service, reading, writing and IT Certification. The Center also offers CLEP, Dantes and high-stakes testing. Visit the ACT Center in Room E222, Charlestown Campus, or call the Center at 617-228-2440.

## **Community Education**

The Office of Community Education at Bunker Hill Community College specializes in providing programs that meet the needs of Greater Boston area residents. These seminars, workshops, noncredit courses and programs help members of the community to keep up with the myriad of changes that affect them every day, at home and on the job. Courses relevant to workforce and career education include a dozen "green" courses, Real Estate Sales, GED Preparation and Ophthalmic Medical Assisting. The Office of Community Education offers an affordable way for individuals to learn new skills, prepare for new careers or just to have fun. Current class listings are available online at www.bhcc.mass.edu/CE. For more information visit Room M107, Charlestown Campus, or call 617-228-2462.



# The Bunker Hill Community College Alumni Association and The Bunker Hill Community College Foundation, Inc.

## 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. Membership in the BHCC Alumni Association is open to all degree graduates, certificate graduates and friends of the College.

Recognized as the College's best ambassadors and as an integral part of the College community, members of the Alumni Association actively participate in and support key programs that enhance the College's mission. Through the Association, interested alumni may stay actively involved with the College in a variety of ways, serving as alumni mentors for students, working on event committees or serving on the Alumni Association Board of Directors.

## The Bunker Hill Community College Foundation, Inc.

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 provides funding for student scholarships and the student emergency assistance fund, support for the Textbook Assistance Program (T.A.P.), cultural programs, the Art Gallery and many other activities that advance the goals and mission of the College. In addition, the Foundation is building an endowment to ensure academic excellence and accessibility for future generations, and the Foundation's Board of Directors is working with the College's Office of Institutional Advancement to coordinate a capital campaign.

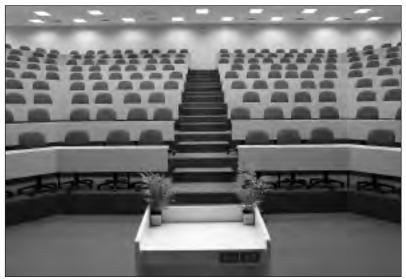






# Bunker Hill Community College Art Gallery Facilities Rental and Conference Planning





## **Bunker Hill Community College Art Gallery**

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. The Gallery hosts the Annual VMA Student Juried Art Exhibit and the President's Artistic Achievement Awards. Work-study and internship positions afford BHCC students hands-on Art Gallery experience. The Art Gallery's Art Mobile program delivers hands-on art projects to senior citizens in our neighboring communities, providing BHCC students with community service-learning opportunities. The Gallery's Arts Off The Wall programming hosts the Small Audience Film Screenings, Speak-Out, Word and Text as Art, Poetry and Open Mic events, Open Drawing sessions, and musical performances, all held in the A300 area. The annual exhibition schedule showcases artists, gallery talks and interactive workshops, and is designed to reflect the cultural and ethnic diversity of our international College community. Located adjacent to the A300 Auditorium on the Charlestown Campus, the Gallery maintains regular posted hours. Go to www.bhcc.mass.edu for the Gallery's current, upcoming and archived schedule of events, or call 617-228-2093 or email artgallery@bhcc.mass.edu for more information.

## **Facilities Rentals and Conference Planning**

Through the Office of Conference Planning and Special Events, the College supports onsite special events for public and private organizations. The College's central location makes it an ideal site for conferences, seminars, training sessions and receptions.

Bunker Hill Community College offers affordable rates for rental of the facilities as well as competitive pricing for supportive technology, security, maintenance and catering services. Our function and conference facilities accommodate groups of 10 to 400, and our skilled staff is equipped to handle your advanced communication requirements, including teleconferencing, Internet connectivity and comprehensive audio/visual resources. Our facility meets ADA requirements and is easily accessible by public transportation.

A professional staff coordinator works with the College catering service, campus police, maintenance staff and other College personnel to provide convenient, one-stop shopping and the very best possible customer service. Ample free parking is available during the evenings and on weekends. For more information, visit the Office of Conference Planning and Special Events in Room B303B, Charlestown Campus, or call 617-228-2017.



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Principal

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## Mike DeGregorio

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#### George Donnegan

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Fidelity FISC Operations

#### John English

Senior Product Manager

**Empirix** 

#### **Eric Marks**

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AgilePath Corporation

#### **George Mellor**

VP of Services and Operations

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Area Vice President & General Manager

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Department of Youth Services

Joan Esposito

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Sean McAdams

Assistant Deputy Superintendent

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**James Fantony** 

Cardiac Sonographer

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Michael-Ryan Roache, M.M., RDCS

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South Shore Hospital

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Clinical Instructor, DMS Massachusetts General Hospital

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Client Services

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**Charles Roberts** 

Professor, Media Communications

Fitchburg State College

Helene Zuckerbrod

Assistant Director of Admissions

Massachusetts College of Art



# **Directions to BHCC Campuses and Satellite Locations**



## **Directions to the Charlestown Campus**

250 New Rutherford Ave.

Boston, Massachusetts 02129-2995

Telephone: 617-228-2000 / TTY: 617-228-2051

## BY PUBLIC TRANSPORTATION

Bunker Hill Community College is conveniently located at the MBTA Rapid Transit Orange Line's Community College Station. Connections to the Orange Line can be made at MBTA subway stations throughout the system. Follow the Rapid Transit System maps posted in each station depicting the Forest Hills-Oak Grove (Orange) Line. Take the train to the Community College Station. The campus front door is only steps from the station exit (see the MBTA map on page 187). For more information on transit schedules and station accessibility, contact the MBTA at 617-222-3200 or visit www.mbta.com.

#### BY CAR

## From the North and West Via I-95 (Route 128); I-93

Follow I-95/128 to Exit 37A (Route I-93 South to Boston). From the North, follow I-93 South to Exit 28. Pass through Sullivan Square and proceed straight onto New Rutherford Avenue. The Hood Office Park will be on the right as you proceed on New Rutherford Avenue and shortly after, Bunker Hill Community College will also be on the right. Enter on the College's perimeter road and follow signs to Student Parking (Lots #1 & #2).

#### From Route 2 & Memorial Drive

Follow Route 2 to signs for Cambridge and Memorial Drive. Take Memorial Drive East along the Charles River past Harvard University. Enter "Memorial Drive East" underpass and continue past MIT. Continue on Memorial Drive along Charles River. Bear right as road curves over water and then to the left onto Edwin Land Boulevard (toward Charlestown). Continue on Land Boulevard past Royal Sonesta Hotel (on the right) and straight ahead across major intersection (traffic lights) onto the Gilmore Bridge. At the end of bridge, turn right at traffic lights and take first right again into the BHCC Student Parking Lot entrance. At stop sign turn right or left, and proceed to BHCC Student Parking (Lots #1 & #2).

## Via I-90 (Massachusetts Turnpike)

Follow I-90 East to Exit 18 (Allston-Cambridge). After toll plaza, follow ramp directions to "Cambridge." At the traffic light, go straight across intersection and across the bridge over the Charles River. At the end of the bridge, take right at traffic lights onto Memorial Drive. Enter "Memorial Drive East" underpass and continue past MIT. Continue on Memorial Drive along Charles River. Bear right as road curves over water (toward Charlestown) and then to the left onto Edwin Land Boulevard. Continue on Land Boulevard past Royal Sonesta Hotel (on the right) and straight ahead across major intersection (traffic lights) onto the Gilmore Bridge. At the end of bridge, turn right at traffic lights and take first right again into BHCC student parking lot entrance. At stop sign turn right or left, and proceed to BHCC Student Parking (Lots #1 & #2).

## Via Route 3 North and the Southeast Expressway (I-93 North)

Follow Expressway through the Liberty (South Station) Tunnel. Continue past the TD Banknorth Garden and take Exit 28. At the bottom of the ramp, take right onto Washington Street. At next light take another right onto New Rutherford Avenue. As you pass the Hood Dairy plant, Bunker Hill Community College is on the right. Enter via perimeter road and follow signs to Student Parking (Lots #1 & #2).

### From the Northeast Via Tobin (Mystic River) Bridge - Route 1 South

Coming off the bridge, bear right and follow signs for "Charlestown/Rutherford Avenue." At the traffic light, take a left turn into the far right lane onto New Rutherford Avenue that will bring you to Austin Street. Take a left at the U-turn before the traffic light to reverse direction on New Rutherford Avenue (Bunker Hill Community College will be visible on the far right). After the U-turn, the BHCC Student Parking Lot entrance will be on the right. Take first right into BHCC Student parking lot entrance. At stop sign turn right or left, and proceed to BHCC Student Parking (Lots #1 & #2).

2011 - 2012 College Catalog 239



## **Directions to the Chelsea Campus**

175 Hawthorne St., Bellingham Square Chelsea, Massachusetts 02150-2917 Telephone: 617-228-2101

BY PUBLIC TRANSPORTATION

## Telephone: 01/-226-2101

All of the following MBTA bus routes stop right in front of the BHCC Chelsea Campus in Bellingham Square, Chelsea:

- BUS ROUTE 111 runs between Haymarket Station (Green/Orange Lines) and Woodlawn.
- BUS ROUTE 112 runs between Maverick Station (Blue Line) and Wellington Station (Orange Line).
- BUS ROUTES 114/116/117 run between Maverick Station (Blue Line) and Wonderland Station (Blue Line).
- The MBTA Commuter Rail has a Chelsea stop at the corner of Arlington and Sixth Streets.

For more information on transit schedules, contact the MBTA at 617-222-3200 or visit www.mbta.com.

#### BY CAR

## From the South Via Route 3 North & Southeast Expressway (I-93 North)

Follow Expressway through South Station area and onto the Central Artery. Take "Route 1 North" exit and proceed through tunnel onto the Tobin (Mystic River) Bridge. Take the second Chelsea exit (Fouth Street), which will put you on Fourth Street. Go straight on Fourth Street past Chestnut Street and Broadway. Take a left onto Hawthorne Street. The Chelsea Campus is approximately 200 yards on the right at 175 Hawthorne Street.

#### From the North Via Route 1 South

Take Route 1 South toward Boston to Chelsea. Exit at "Route 16 West" (Everett/Somerville). Take left at lights onto Webster Ave, then right onto Broadway. At blinking arrows take right at City Hall Avenue, bear right to stop sign, then take sharp left to Chelsea Center. Proceed through set of lights and back onto Broadway. Take a left on Fourth Street and at stop sign take left onto Hawthorne Street. The Chelsea Campus is approximately 200 yards on the right at 175 Hawthorne Street.

## Via Route 16 East (Revere Beach Parkway)

From I-93 South take "Exit 31 East" (Revere). Follow Route 16 East approximately 3 miles. Take a right at Chelsea Stadium onto Everett Avenue. Proceed straight and under Tobin Bridge. Continue through lights to stop sign at Park Street. Take Left.

Continue straight one block, bear left onto Hawthorne Street. The College is approximately 500 yards ahead on the right.

## From Revere and Lynn, Massachusetts

Take Route 16 West (Revere Beach Parkway) and take "Broadway/Chelsea" exit. At blinking arrows, take right at City Hall Avenue, bear right to stop sign, then take sharp left to Chelsea Center. Proceed through set of lights and back onto Broadway. Take a left on Fourth Street and at stop sign, take left onto Hawthorne Street. The Chelsea Campus is approximately 200 yards on the right at 175 Hawthorne Street.

#### **Directions to the East Boston Satellite**

East Boston Neighborhood Health Center Education & Training Institute 155 Addison Street East Boston, MA 02128 Telephone: 617-568-6444

#### BY PUBLIC TRANSPORTATION

Take the MBTA Blue Line to Maverick Square. At street-level and take MBTA Bus Route 120/Orient Heights. Exit bus at Wordsworth Street. Take first right onto Saratoga Street. Take first left onto Addison Street.

#### BY CAR

#### From Boston/I-93

Follow signs to Logan Airport. Once you approach the Airport follow signs to Route 1-A. Keep to the left on the ramp (do not take Bennington Street exit) follow Revere/Lynn signs. Continue in right lane you will see a large Storage Company to your left; move to the right hand lane and at the end of the stone wall, will be Danilchuk Autobody - take that right onto Addison Street and follow the road until you see a brick building on your right, #155 Addison Street. NOTE: from the hours of 4 p.m. - 7 p.m. this exit can only be used by residents of Addison Street. For an alternate route: At the first set of lights (beyond Addison exit) turn right onto Boardman Street. At stop sign take a right onto Saratoga Street. Take second right onto Addison Street.

#### From the Ted Williams Tunnel

Stay to the Left at Tunnel exit follow Rt. 1A signs. Keep to the left on the ramp (DO NOT take Bennington Street exit) follow Revere/Lynn signs. Follow directions above for Boston/Route 93.



#### From Route 1A South

Follow Route 1S to Route 60E. Follow the signs to the Airport and Sumner Tunnel; continue to Route 1A (McClellan Highway). Stay in left lane. Take left at light at Madonna Shrine onto Boardman Street. Continue to end of Boardman. At stop sign take first right onto Saratoga Street. Take second right onto Addison Street.

## Directions to the Malden Satellite

Malden High School 77 Salem Street Malden, MA 02148

#### BY PUBLIC TRANSPORTATION

Orange Line: Exit at the Malden Center Station. Walk south toward Centre St/RT60. Turn left at Centre St/RT60. Turn left on to Main Street. Bear right and continue on to Salem Street. Malden High School is on the right side of the street, across from the Malden Public Library.

#### BY CAR:

#### From the North

Take Route 1 South. Take slight right at Route 99 (signs for MA-99/Everett/Malden). Turn right at Eastern Ave/RT 60. Turn right at Holden St. Turn left at Salem St. Malden High School is on the left across the street from the Malden Public Library.

#### From the South

Take 193 North to the RT60, Medford Exit. Enter the rotary and follow signs for RT60, Malden Center. Take a left at the intersection of RT60 and Main St. Follow Main St. and bear right onto Salem Street. Malden High School is on the right side of the street, across from the Malden Public Library.

## **Directions to the Somerville Satellite**

Mystic Activity Center 535 Mystic Avenue

Somerville, Massachusetts 02145

Telephone: 617-228-2408

#### BY PUBLIC TRANSPORTATION

 Via bus from Sullivan Square MBTA Station in Somerville, or from West Medford and Medford Square, take the No. 95 bus and get off at the Mystic Activity Center.  Via MBTA connect to the Orange Line toward Oak Grove. Exit at Sullivan Station and change to the No. 95 bus (see above).

For more information on transit schedules, contact the MBTA at 617-222-3200 or visit www.mbta.com.

## **Directions to the South End Satellite**

Inquilinos Boricuas en Acción (IBA)/Villa Victoria 405 Shawmut Avenue Boston, MA 02118 Telephone: 617-927-1707

#### BY PUBLIC TRANSPORTATION

**Green Line**: Exit at Copley Station. Exit and walk east on Dartmouth Street to Tremont Street. Cross Tremont Street and continue east on West Dedham Street. (Dartmouth becomes West Dedham). Walk east for one block on West Dedham, and take a right onto Shawmut Avenue. IBA is two blocks up Shawmut, on the right. (Located on the corner of Shawmut Avenue and West Brookline Street).

**Orange Line**: Exit at Bay Bay/South End Station. Exit and walk east on Dartmouth Street to Tremont Street. Cross Tremont Street and continue east on West Dedham Street. (Dartmouth becomes West Dedham). Walk east for one block on West Dedham, and take a right onto Shawmut Avenue. IBA is two blocks up Shawmut, on the right. (Located on the corner of Shawmut Avenue and West Brookline Street).

#### BY CAR

South East Expressway to East Berkley Street exit. Go straight down East Berkley, and at the second set of lights take a left onto Washington Street. Go straight and at the second set of lights, take a right onto West Dedham Street. At the stop sign, take a left onto Shawmut. Go two blocks to #405 Shawmut, on the corner of West Brookline and Shawmut.

## **Parking**

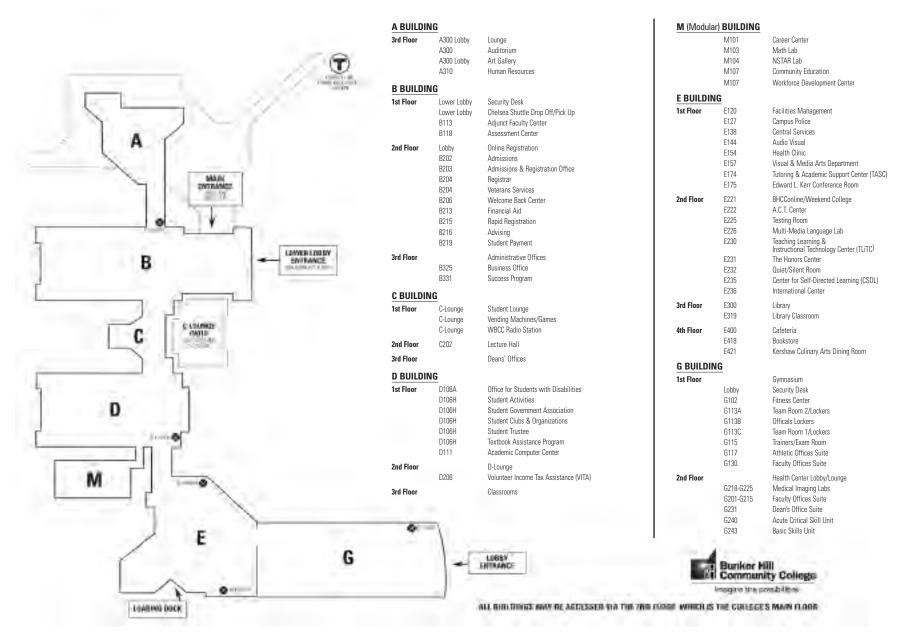
There is non-residential street parking on Shawmut Avenue between West Dedham and West Brookline Streets as well as along West Brookline between Shawmut Avenue and Washington Street. There are "Visitor Spots" on Shawmut between Upton Street and Union Park, as well as on Upton and Union Park themselves. Keep in mind that parking in the South End is a challenge (especially on a weekend). There are two garages within walking distance: one is on Dartmouth Street diagonally across from the Back Bay/South End station. The other is at the intersection of Harrison Avenue and East Brookline Street and is part of University Hospital.





242 2011 - 2012 College Catalog





2011 - 2012 College Catalog 243



# **Glossary of Academic Terms**

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 computers, electronics, 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 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.

ACADEMIC YEAR - Fall, spring, and summer semesters, generally from early September to mid-August.

ADD A COURSE - To enroll in additional courses after registration is complete, accomplished through the Admissions and Registration Office.

ADMINISTRATION - College staff members responsible for management and supervision.

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.

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.

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.

CO-REQUISITE - A course requirement that is taken concurrently with another course.

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.

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.

DROP - 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 the Admissions and Registration Office.

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.

FACULTY - Members of college staff who teach.

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).

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.

G.P.A. (CUMULATIVE G.P.A.) - Grade point average, used to compute student academic standing.

MATRICULATION - Formal application to and acceptance in a degree or certificate program.

MID-TERM - The point midway through an academic term.

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.

PREREQUISITE - Skill or course required for entry into a course or program of study.

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 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 the Admissions and Registration Office.

TUITION - Charges by the college to a student for registration in credit courses.

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.



For a complete directory of Associate Degree and Certificate Programs, General Education Requirements and Elective Courses, refer to the fold-out section in the back of this catalog. Academic programs begin on page 54.

# Index

Ability to Benefit Statement	13
Absence Due to Religious Beliefs	38
Academic Advising	30
Academic Calendar	4
Academic Information	30
Academic Policy and Procedure	38
Academic Probation	41
Academic Resources & Support	32
Academic Standing	41
Academic Suspension	42
ACT Center	212
Adding a Course	39
Administration, Faculty, and Staff	215-234
Admission	13
Admissions and Registration	13, 45, 48
Adult Basic Education Program (ABE)	33
Advising/Counseling	30, 45
Advisory Committees	235-238
Affirmative Action/Equal Opportunity	43
Alternative Learning	35
Appeals Process	25, 42
Articulation Agreements	16, 18
Assessment	31
Athletics	49
Attendance	38
Auditing a Course	39
BHCConline/Online Courses	35-36
BHCC Alumni Association	213

BHCC Art Gallery	214
BHCC Board of Trustees	3
BHCC Foundation, Inc.	213
BHCC Goals	2
BHCC Institutional Values	8
BHCC Statement on Civility	8
BHCC Vision	7
Bookstore	.11, 48, 49
Boston Welcome Back Center	211
Campus Security Information	44
Career and Vocational Technical Education (C	VTE)19
Career Center	47
Center for Self-Directed Learning (CSDL)	35
Change of Grades	39
Charlestown Campus Map	243
Chelsea Campus	10
Chelsea Campus Center for Student Access and Success	10
Child Care	.11, 48, 49
Clinical Experience Responsibilities	39
Code of Behavior	38
College-Level Examination Program (CLEP)	35
College Advising Corps (CAC)	19
College Connection	33
College Profile	9
Commonwealth Honors Program (CHP)	51
Community Center for Entrepreneurship (CCE	)47
Community Education	212
Community Engagement	51
Contract I consider	25

BHCC Art Gallery214	CORI - Criminal Offender Record Information14-15
BHCC Board of Trustees3	Cost of Attendance
BHCC Foundation, Inc213	Course Descriptions
BHCC Goals2	(listed in alphabetical order according to course prefix)159-210
BHCC Institutional Values8	Course Load39
BHCC Statement on Civility8	Course Prerequisites
BHCC Vision7	Credit by Departmental Exams35
Bookstore	Curriculum Year14
Boston Welcome Back Center211	Dean's List39
Campus Security Information	Degree and Certificate Programs
Career and Vocational Technical Education (CVTE)19	(complete list and index) Also see fold-out section54-158
Career Center	Degrees, Second and Subsequent31
Center for Self-Directed Learning (CSDL)35	Directions to BHCC Locations239-241
Change of Grades39	Directory Information44
Charlestown Campus Map243	Disability Support Services47
Chelsea Campus	Distance Education35
Chelsea Campus Center	Dropping a Course39
for Student Access and Success10	Dual Enrollment Program19
Child Care	Early Childhood Education Transfer Compact16
Clinical Experience Responsibilities39	East Boston Satellite
Code of Behavior38	Educational Records43
College-Level Examination Program (CLEP)35	Evening/Weekend Services48
College Advising Corps (CAC)	Facilities Rental & Conference Planning214
College Connection33	Final Examination Schedule39
College Profile9	Financial Aid23-25
Commonwealth Honors Program (CHP)51	Food Services
Community Center for Entrepreneurship (CCE)47	Fresh Start Policy14
Community Education	General Education Requirements
Community Engagement51	also see fold-out section in the back of this catalog
Contract Learning35	General Services48



Glossary of Academic Terms244
Grade Point Average (GPA)40
Grading and Notation System40
Graduation Information31
Graduation with Honors40
Grants
Hazing
Health Services
Health Insurance
Homeschooling Policy
I-20
Immunization Policy14
Institutional Policy Statements
International Center
International Student Admissions
Kids to College
Language Institute
Learning Communities
Library & Learning Commons
Malden Satellite
Massachusetts DECA
Massachusetts Department of Higher Education3
Massachusetts Educational Opportunity Program (MEOP)19
MassTransfer
Math Multimedia Computer Lab34
MBTA Subway Map242
MCAS Prep/Pathways to Success Program19
Midnight Courses
Merit List
Midvear Admission

Mission Statements	
Multi-Purpose Multi-Media Language Lab	
Non-Degree Students	
Online Services	45
Outstanding Financial Obligations	22
Parking	48
Partnerships with Secondary Schools	19
Payment2	
Placement Testing and Assessment	31
Prior Learning Assessment (PLA)	35
Program Changes	41
Program Requirements	14
Programs of Study	52-53
Progress Reports	41
Public Transportation48	, 239-241
Quality Point System	40
Re-admission Policy	14
Refund Policy	22
Repeating a Course	41
Residency Tuition	21
Satellite Locations	12
Satisfactory Academic Progress	25, 41
Scholarships & Awards	26-29
Security	48
Sexual Harassment	44
Somerville Satellite	12
SORI - Sexual Offender Registry Information	14-15
South End Satellite	12
Special Cost Courses	21
Statement on Inclusion	8
Student Activities and Athletics	40

Student Clubs and Organizations49
Student Handbook
Student Learning Outcomes Assessment Program (SLOAP)53
Student Lounges
Student Payment21, 45, 49
Student Right-To-Know44
Student Success Program33
Students Taking Action for Nursing Diversity (STAND)
Study Abroad Opportunities31
Suffolk University Joint Admissions Program16
Technology Support/Academic Computing33
Transitions to College Program33
Transfer Applicants
Transfer Counseling
Transfer Information
Tuition and Fees20
Tuition Waivers
Tutoring & Academic Support Center (TASC)32
Veterans Center
Web Advisor30
Web Courses
Weekend College37
Withdrawal from the College25, 42
Withdrawal from a Course42
Workforce Development Center212
Work-Study Program25
Writing Place34

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#### **Accreditation Statements**

Bunker Hill Community College is accredited by the New England Association of Schools and Colleges, Inc., through its Commission on Institutions of Higher Education. Inquiries regarding accreditation status by the New England Association should be directed to the administrative staff of the institution. Individuals may also contact: Commission on Institutions of Higher Education, New England Association of Schools and Colleges, 209 Burlington Road, Bedford, MA 01730-1433 (telephone: 781-271-0022; fax: 781-271-0950; email: cihe@neasc.org; URL: http://www.neasc.org).

The Nursing Program is accredited by the National League for Nursing Accrediting Commission (N.L.N.A.C.), 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326 (telephone: 404-975-5000; fax: 404-975-5020; email: nlnac@nlanc.org; URL: http://www.nlnac.org) and approved by the Massachusetts Board of Registration in Nursing, 239 Causeway Street, Suite 200, 2nd Floor, Boston, MA 02114 (telephone: 617-973-0800; fax: 1-800-414-0168; URL: http://www.state.ma.us/reg/boards/rn/).

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

The Surgical Technology Program, General Sonography Program and Cardiac Sonography Program are accredited by the Commission on Accreditation of Allied Health Education Programs (C.A.A.H.E.P.), 35 East Wacker Drive, Suite 1970, Chicago, IL 60601-2208 (telephone: 312-553-9355; fax: 312-553-9616; email: caahep@caahep.org; URL: http://www.CAAHEP.org).

The Certified Nurse Assistant Program is accredited by the Massachusetts Department of Public Health, Nurse Aide Registry, MDPH/Division of Health Care Quality, 10 West Street, 5th Floor, Boston, MA 02111-1212 (telephone: 617-753-8144; fax: 617-753-8096; URL: http://www.state.ma.us/dph/).

The Respiratory Therapy Program holds an initial accreditation from the Commission on Accreditation for Respiratory Care (CoARC), 1248 Harwood Road, Bedford Texas 76021-4244, (telephone 817-283-2835, URL: http://www.coarc.com).

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, people who work and study at the College, and to the general public. 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.



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# **General Education Requirements**

## **REQUIREMENT 1: College Writing**

This requirement area emphasizes the two core competencies: critical thinking and writing. Upon completing this requirement, a student will approach writing as a process, from planning and drafting through revising and editing. A student will write coherent, well-developed essays, research papers, argumentative essays and critical analysis, while summarizing and using sources responsibly. Students will use computers to write and revise their work and to conduct research.

#### Area 1:

ENG111 College Writing I ENG112 College Writing II

## **REQUIREMENT 2: Individual and Society**

This requirement area involves an examination of one of the fundamental issues we all face in our development and in our lives: the interrelationship of the individual and the community. The interaction of the individual with the family, the school or college, the workplace, the voluntary associations we form, and/or the state are studied. Emphasis is placed on how individuals shape and are shaped by institutions, belief systems, and conduct.

#### Area 2:

G0V101	Gov. & Politics in US	PSY131	Psychology of Popular Culture
G0V103	State & Local Politics	SOC101	Principles of Sociology
PSY101	Principles of Psychology	SOC109	Cultural Anthropology
PSY107	Group Dynamics		

## **REQUIREMENT 3: World View**

This requirement area involves a study of social, cultural, economic, ethical and political issues from a historical and global perspective. The modern global system is examined in the context of the significant forces, places and events which have, over time, determined the course and development of modern civilization. Students will learn to understand and appreciate diverse perspectives in order to critically evaluate potential resolutions to conflicts in our multicultural world.

#### Area 3:

EC0201	Macroeconomics	HIS151	US History I
EC0202	Microeconomics	HIS152	US History II
GE0101	World Regional Geography	VMA111	Intro. to Mass Media
HIS102	History of Western Civ II	PHL111	World Religions
HIS111	World Civilization I	PHL113	Religions of Middle East
HIS112	World Civilization II		

## **REQUIREMENT 4: Quantitative Thought**

In this requirement area, students will apply computational methods, generate problemsolving strategies, and construct mathematical models necessary in a technologically sophisticated society. The student will also organize, analyze, and interpret data, evaluate quantitative evidence and arguments, and draw valid conclusions from information presented.

#### Area 4:

MAT171	Finite Math	MAT181	Statistics I
MAT172	Contemporary Math I	MAT183	Statistics and Lab
MAT173	Contemporary Math II	MAT192	College Algebra
MAT194	College Algebra for STEM		

## **REQUIREMENT 5: Science and Technology**

In this requirement area, students will use scientific methods of inquiry to investigate the ideas, laws, and theories used to explain the physical universe, its life forms and its natural phenomena. Students will study the interrelationships between science and technology and how advances

in science and technology have impacted the global community, the environment, and the quality of life.

#### Area 5:

AST102	Astronomy/Lab	BI0120	Intro to Biotechnology
BI0101	Principles of Biology I/Lab	BI0195	General Biology I/Lab
BI0108	Human Biology/Lab	ENV105	Environmental Science I/Lab
BI0115	Nutrition Science/Lab	ENV120	Tropical Field Studies

## **REQUIREMENT 6: Humanities**

In this requirement area, the student will explore the dimensions of the human intellect and imagination and develop an informed appreciation of the diverse modes of creative expression. Students will learn how people have come to understand and express artistic, esthetic, moral, spiritual and philosophical dimensions of the human condition.

#### Area 6:

FLM101	Film as Art	VMA104	Drawing I	
FLM102	American Cinema	VMA112	Art History I	
H0N200	Honors Seminar	VMA113	Art History II	
HUM110	American Culture	VMA122	Painting I	
LIT	All Literature Courses	VMA123	Watercolor I	
MUS118	Music Appreciation I	VMA124	Printmaking I	
MUS119	Music Appreciation II	VMA161	Intro to Digital Photography	
MUS129	Rock & Roll History	All 102 Lev	All 102 Level Language Courses	
THE107	Acting I			

# **Associate Degree and Certificate Programs**

Academic programs offered by BHCC begin on page 54. They are organized alphabetically by academic subject. Below is a listing of all academic programs organized alphabetically by degree. Refer to the page number listed below for the program of interest. *Refer to this fold-out section for General Education Requirements.* 

	BHCC Commonwealth Honors Program	51
ASS	OCIATE IN ARTS DEGREES*	
GRID#	PROGRAM	PAGE
1	Business Concentration	56
92	Chemical Science Concentration	152
13	Communication Concentration	68
14	Computer Information Systems Concentration	69
15	Computer Science Concentration	70
39	Education Concentration	94
43	English Concentration	99
95	Fine Arts Concentration	155
44	Foreign Language Concentration	100
45	General Concentration	101
65	History and Government Concentration	124
82	Mathematics Concentration	141
83	Music Concentration	142
88	Physics/Engineering Concentration	148
89	Psychology Concentration	149
93	Sociology Concentration	153
94	Theatre Concentration	154
98	*World Studies Emphasis Certification	158
	Students enrolling in any A.A. degree program can earn World Studies Emphasis certification simultaneously.	

## **ASSOCIATE IN SCIENCE DEGREES**

RID#	PROGRAM	PAGE
	Biological Sciences Program:	
90	Biology Transfer Option	150
91	Biotechnology Option	151
	Business Administration Program:	
2	Accounting Option	57
3	Craft Entrepreneurship Option	58
4	Entrepreneurship Option	59
5	Finance Option	60
6	International Business Option	61
7	Management Option	62
8	Technical Business Option	63
	Computer Technology Program:	
16	Computer Technology Program Core Curriculum	71
17	Computer Support Specialist Option	72
18	Database Programming and Administration Option	73
19	Network Technology and Administration Option	74
20	Computer Science Transfer Option	75
21	Digital and Computer Forensics and Investigations Option	76
22	Information Technology Transfer Option	77
	Computer Media Technology Program:	
31	Gaming/Computer Simulation Option	86
32	Web Development Option	87
76	Criminal Justice Program	135
34	Culinary Arts Program	89
37	Early Childhood Development Program	92
40	Electric Power Utility Program	96
	Engineering Program:	
41	Biomedical Engineering Option	97
42	Engineering Transfer Option	
77	Fire Protection and Safety Program	

	Hotel/Restaurant/Travel Program:	
66	Hotel/Restaurant Management Option	125
67	Management of Assisted Living and Institutional Facilities Option	126
68	Meeting and Event Planning Option	127
71	Human Services Program	130
	Medical Imaging Program:	
46	Cardiac Sonography Option	103
47	General Sonography Option	104
48	Medical Radiography Option	
49	Medical Radiography Part-time Evening Option	
55	Medical Laboratory Science Program	112
	Nursing Program:	
56	Nursing Program: Day/Evening Option	114
57	Nursing Program: Hybrid/Weekend Option	115
	Office and Information Management Program:	
84	Administrative Information Management Option	
85	Medical Information Management Option	145
78	Paralegal Studies Program	137
58	Respiratory Therapy Program	117
	Visual and Media Arts Program:	
96	Graphic Design Option	156
97	Media Communication Option	157
CER	RTIFICATE PROGRAMS	
GRID#	PROGRAM	PAGE
	Allied Health:	
59	Medical Assistant	118
60	Medical Interpreting	119
61	Patient Care Technician	120
62	Phlebotomy Technician	121
	Business Administration:	
9	Accounting Information	64
10	Craft Entrepreneurship	65
11	Entrepreneurship	66
12	International Business	67
	Computer Technology:	
23	Computer Technology Certificate Program Core Curriculum	
24	Computer Support Specialist	79

25	Database Support Specialist	80
26	Excel Applications Support Specialist	81
27	Computer Forensics	82
28	Network Technology and Administration	83
29	Object Oriented Computer Programming and Design	
30	Cisco Systems CCNA	85
	Computer Media Technology:	
33	Web Development	88
	Legal Studies and Public Safety:	
80	Law Enforcement	139
81	Paralegal	140
	Culinary Arts:	
35	Culinary Arts	90
36	Pastry Arts	91
38	Early Childhood Development	93
79	Fire Protection and Safety	138
	Hotel/Restaurant:	
69	Hotel/Restaurant Management	128
70	Meeting and Event Planning	129
	Human Services:	
72	Community Health Worker	131
73	Professional Human Services Work	
74	Psychiatric Rehabilitation	133
75	Substance Abuse Services	134
	Medical Imaging:	
50	Computed Tomography	107
51	Imaging Informatics	108
52	Magnetic Resonance (MR)	109
53	Mammography	
54	Vascular Sonography	111
	Office and Information Management:	
86	Information Management Specialist	
87	Medical Information Management Assistant	147
	Surgical Technology:	
63	Central Processing	122
64	Surgical Technology	123