

# Bunker Hill Community College 2014–2015 Catalog



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#### 2014 - 2015 Bunker Hill Community College Catalog

### Message from the President

Welcome to Bunker Hill Community College!

I want to extend a warm and personal welcome to you at the start of a new academic year. You have come to the right place, at the right time. Whatever your educational dreams are, our purpose at Bunker Hill Community College is to ensure your success.

We have numerous opportunities for you. Nurse education takes students into the major medical institutions of Greater Boston, including some of the world's most celebrated hospitals, to learn with seasoned experts. Our Learn and Earn internship program offers students paid work two days a week throughout a full semester in some of Greater Boston's most prestigious companies, where they pick up real-world experience, make connections and often receive job offers.

We offer you a choice of more than 100 degree and certificate programs in all of today's fastest growing fields, from biotechnology to sustainability, computer gaming, nursing and many areas of medical technology. If you are unsure of your direction, visit LifeMap Commons in E235. Determine which program might be best for you, as well as how to get started, what courses to take, how to map out a career based on your interests and goals, and how to prepare a compelling portfolio of your work right from your first course.

And there's so much more. We want to help you meet your goals, finish what you start, and walk across the stage at Commencement one day soon to receive your degree or certificate.

You are now part of our community of learners, and I wish you every success in achieving your educational goals at Bunker Hill Community College.

Pam Eddu

Pam Y. Eddinger, Ph.D.

President Bunker Hill Community College



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# About the Bunker Hill Community College Catalog

This publication serves the purpose of providing information about Bunker Hill Community College to persons who may be interested in applying for admission, to parents, teachers, counselors, 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.

#### **Accreditation Statements**

Bunker Hill Community College is accredited by the New England Association of Schools and Colleges, Inc. (NEASC), 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, 3 Burlington Woods Road, Suite 100, Burlington, MA 01803; telephone: 781-425-7700; fax: 781-425-1001; email: cihe@neasc.org; URL: www.neasc.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: www.state.ma.us/dph.

**The Diagnostic Medical Sonography Program** is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of The Joint Review Committee on Education in Diagnostic Medical Sonography. Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756, Phone: 727-210-2350; URL: www.caahep.org.

**The Medical Laboratory Technician** is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS), 5600 North River Rd. Suite 720, Rosemont, IL 60018; telephone 773-714-8880. URL: www.naacls.org.

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

The Practical Nursing Program has initial approval status granted by the Massachusetts Board of Registration in Nursing, 239 Causeway Street, Suite 500, 5th Floor, Boston, MA 02114; telephone: 617-973-0900; or 1-800-414-0168; fax: 617-973-0984; URL: http://www. mass.gov/dph/boards/rn and is in the process of seeking accreditation by the National League for Nursing Accrediting Commission (NLNAC), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; telephone: 404-975-5000; fax: 404-975-5020; email: nlnac@nlanc.org; URL: www.nlnac.org. The Associate Degree Registered Nursing Program is

accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; telephone: 404-975-5000; fax: 404-975-5020; email: info@acenursing.org; URL: www.acenursing.org, and approved by the Massachusetts Board of Registration in Nursing, 239 Causeway Street, Suite 500, 5th Floor, Boston, MA 02114; telephone: 617-973-0900; or 1-800-414-0168; fax: 617-973-0984 URL: http://www.mass.gov/dph/boards/rn.

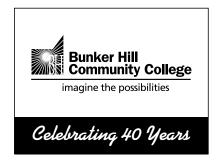
**The Surgical Technology Program** is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 35 East Wacker Drive, Suite 1970, Chicago, IL 60601-2208; telephone: 312-553-9355; fax: 312-553-9616; email: caahep@caahep.org; URL: www.caahep.org.

#### **College Catalog Addendum Statement**

The College reserves the right to make changes at any time with respect to course offerings, degree and program requirements. Web addendum will be made to be used in conjuction with the published version of the catalog so that students may have access to the most current and up-to-date information.

#### Statement of Student Responsibility

In all cases, the student bears ultimate responsibility for reading the College Catalog and following the academic policies and regulations of the College. For the most up-to-date Catalog information including changes or corrections to curricula, course descriptions, and tuition and fees, see the 2014-2015 BHCC Catalog Web Addendum at www.bhcc.mass.edu/catalog. The addendum should be used in conjunction with the published version of the 2014-2015 Bunker Hill Community College Catalog. Information in the 2014-2015 BHCC Catalog Web Addendum supersedes the published version of the 2014-2015 BHCC printed Catalog.



### Bunker Hill Community College Long Range Goals

#### **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.

# **BHCC Board of Trustees**



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Viet Phan Student Trustee



Hung T. Goon



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TBD, University of Massachusetts Student Advisor

\*as of May 1, 2014

# Academic Calendar: Fall 2014 and Spring 2015

	Fall 2014 Semester
August 14	Last day for fax registration for credit courses
August 29	Last day for fax registration for online classes
August 29	Last day to register for classes
August 29	Last day to be accepted to the College
September 2	Classes begin
September 9	Last day for adjusting schedules (add/drop)
September 10	Updated rosters available online
September 12	Last day for fax registration for Web Late-Start (WBL) classes
September 15	Mini Session I and Web Late-Start (WBL) classes begin
September 17	Last day for adjusting schedule (add/drop) for Mini Session I
September 22	Last day for adjusting schedule (add/drop) for Web Late-Start (WBL)
September 29	NA grades due online
October 3	Last day to register for CSDL classes
October 13	Columbus Day – College closed
October 15	Last day for Mini Session I class withdrawal
October 22	Warning grades due online
October 31	Last day to apply for December 2015 graduation
November 2	Mini Session I classes end
November 3	Mini Session II classes begin
November 5	Last day for adjusting schedules (add/drop) for Mini Session II
November 5	Registration for spring 2014 begins for currently enrolled students
November 11	Veterans' Day – College closed
November 12	Last day for course withdrawal
November 14	First Day to Apply for June 2015 Graduation
November 27-30	Thanksgiving Day Recess – no classes

December 2	Registration for spring semester 2015 (open registration) begins
December 3	Last day for Mini Session II class withdrawal
December 11	Last day to officially withdraw from the College
December 14	Classes end
December 15-18	Final exams
December 19	Final exams Make-up day
December 19-21	Weekend College final exams
December 21	Mini Session II classes end
	Spring 2015 Semester
January 9	Last day for fax registration for credit classes
January 16	Last day for fax registration for online classes
January 16	Last day to register for classes
January 16	Last day to be accepted to the College
January 20	Classes begin
January 27	Last day for adjusting schedules (add/drop)
January 28	Updated rosters available online
January 30	Last day for fax registration for Web Late-Start (WBL) classes
February 2	Mini Session I and Web Late-Start (WBL) classes begin
February 4	Last day for adjusting schedule (add/drop) for Mini Session I
February 9	Last day for adjusting schedule (add/drop) for Web Late-Start (WBL)
February 13	Last day to register for CSDL classes
February 16	Presidents Day – College closed
February 17	NA grades due online
March 4	Last day for Mini Session I class withdrawal
March 6	Warning grades due online
March 16-22	Spring Break – no classes
March 29	Mini Session I classes end

### Academic Calendar: Summer 2015

Spring 2015 Semester continued	
March 30	Mini Session II classes begin
March 31	Last day to apply for June 2015 graduation
April 1	Last day for adjusting schedules (add/drop) for Mini Session II
April 1	First day to apply for December 2015 graduation
April 7	Registration for summer 2015 begins for currently enrolled students
April 8	Registration for fall 2015 semester begins for currently enrolled students
April 9	Last day for class withdrawal
April 14	Registration for summer 2015 begins
April 20	Patriots Day – College closed
April 29	Last day for Mini Session II class withdrawal
May 6	Registration for fall 2015 begins (open registgration)
May 7	Last day to officially withdraw from the College
May 10	Web Late-Start classes (WBL) end
May 11	Classes end
May 12-15	Final exams
May 15-17	Weekend College final exams
May 17	Mini Session II classes end
May 18	Final exam/make-up day
May 25	Memorial Day – College closed
May 27	ABE Ceremony
May 28	Honors Ceremony
May 30	Graduation

Summer 2015 Sessions	
May 28	Last day for fax registration for Session I, Bridge, ESL, and Web classes
May 29	Last day to register for Session I, Bridge, ESL, and Web classes
June 1	Session I/Bridge/Academic ESL classes begin
June 3	Last day for adjusting schedules (add/drop) for Session I, Bridge, and Academic ESL
June 5	Updated rosters available online
June 24	Last day for Session I class withdrawal
June 26	Last day to register for CSDL classes
July 3	Last day for Bridge Session class withdrawal
July 4	Independence Day – College closed
July 8	Last day for Academic ESL Session class withdrawal
July 9	Session I classes end
July 9	Last day for fax registration for Session II classes
July 10	Last day to register for Session II classes
July 13	Session II classes begin
July 15	Last day for adjusting schedules (add/drop) for Session II
July 23	Bridge Session classes end
July 29	Last day for CSDL and Web class withdrawal
July 31	Academic ESL Session classes end
August 5	Last day for Session II classes withdrawal
August 5 August 13	Last day for Session II classes withdrawal CSDL classes end

Please note that Fast-track (FT) sections have specific deadline dates to withdraw. Please check with the Academic Records office for those dates.

# Institutional Mission and Vision Statements

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

#### Mission of the Massachusetts 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, 9 state universities, and 5 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 15 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, multicampus 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.

#### 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 selfimposed 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.

#### **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.

#### 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.



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**INFORMATION** 

# **Institutional Policy Statements**

# Affirmative Action and Equal Opportunity Policy

Bunker Hill Community College is an affirmative action/equal opportunity institution and does not discriminate on the basis of race, creed, religion, color, sex, sexual orientation, gender identity, age, disability, genetic information, maternity leave, and national origin in its education programs or employment pursuant to Massachusetts General Laws, Chapter 151B and 151C, Titles VI and VII, Civil Rights Act of 1964; Title IX, Education Amendments of 1972; Section 504, Rehabilitation Act of 1973; Americans with Disabilities Act, and regulations promulgated thereunder, 34 C.F.R. Part 100 (Title VI), Part 106 (Title IX) and Part 104 (Section 504). All inquiries concerning application of the above should be directed to Thomas L. Saltonstall, Director of Diversity and Inclusion, Affirmative Action Officer, and Coordinator of Title IX and Section 504, at 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, creed, religion, color, national origin, age, sex, gender identity, genetic information, maternity leave, sexual orientation or disability status, the College's Affirmative Action Plan provides an informal complaint process and a formal complaint process which may be accessed by any member of the College community. Whether a complaint/grievance is formal or informal, the College will conduct a prompt, thorough, fair and objective investigation, and will take such corrective action as is appropriate under the circumstances. No student or employee shall be retaliated against for filing a discrimination complaint/grievance or for cooperating with the College's investigation thereof.

For more information, to file a complaint/grievance, or for a copy of the plan and/or complaint/grievance procedure, contact Thomas L. Saltonstall, the College's Affirmative Action Officer at 617-228-3311.





#### Annual Security Report Notice of Availability

Bunker Hill Community College's Office of Public Safety is responsible for issuing crime alerts in compliance with the Clery Act. In the event a situation arises, either on or about the campus, these alerts are issued to keep the campus community informed about safety and security matters. This report includes statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings or property owned or controlled by Bunker Hill Community College; and on public property within, or immediately adjacent to and accessible from, the campus. The report also contains information regarding campus security and personal safety, including topics such as: crime prevention, law enforcements practices and authority, crime reporting policies, and other matters of importance related to security on campus.

As required by law, Bunker Hill Community College's Office of Public Safety and Campus Police, publishes and distributes this report annually by October 1. To obtain a copy of this report, contact the Office of Public Safety and Campus Police, Room E127 or access the report at www.bhcc.mass.edu/PublicSafety/ ASR.

#### **College Assessment**

In keeping with Bunker Hill Community College's commitment to excellent educational experiences and high-quality programs for its students, and consistent with practices at institutions within the state and nationally, the college routinely engages in the assessment of student learning at the course, program, institution and system levels as part of the institution's planning and assessment cycle for continuous quality improvement in teaching and learning. The learning outcomes assessment process may include a variety of methods such as pre/posttests, student surveys and focus groups, campus developed instruments, and a review of student course and co-curricular work. In assessments beyond the course level, the identity of the student will be protected. The student's identifying information will be removed before student work is reviewed. Selected student work may be subject to review by a limited cohort of higher educational personnel, primarily faculty.

### Institutional Policy Statements

Assessment activities will not affect a student's grade, academic standing, ability to transfer, or ability to graduate. The College will take necessary steps to ensure the confidentiality of student records and student work reviewed through this process in accordance with FERPA regulation.



#### **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 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. Non-consensual release of directory information may be submitted to the Department of Defense in accordance with the Solomon Amendment.

#### **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



**INFORMATION** 

another school official in performing his or her task. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility.

• The right of Complaint, to file a complaint with the U.S. Department of Education concerning alleged failures by Bunker Hill Community College to comply with the requirements of FERPA.

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

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

#### **Sexual Harassment Guidelines**

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

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

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

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

When a student, an employee or any other person in the College believes s/he has been the subject of sexual harassment, the complaint/grievance process is a mechanism for redress. Whether a complaint/grievance is formal or informal, the College will conduct a prompt, thorough, fair and objective investigation, and will take such corrective action as is appropriate under the circumstances. Reasonable efforts are made to maintain confidentiality during the grievance process.

No student or employee shall be retaliated against for filing a discrimination complaint/grievance or for cooperating with the College's investigation thereof. For more information, for a copy of the Affirmative Action Complaint/Grievance Procedure, or to file a complaint/grievance, contact the College's Affirmative Action Officer, at 250 New Rutherford Avenue, Room E236F, Boston, MA 02129 or by calling 617-228-3311.

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 Affirmative Action Plan available online.



#### **Guidelines Concerning Sexual Violence**

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

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

An employee or student who commits an act of sexual violence may be subject to criminal prosecution and will be subject to disciplinary action by the College, up to and including expulsion and/or termination of employment. Victims of sexual violence are encouraged to contact the College's Department of Public Safety at 617-228-2222 or 228-2053, or by reporting the matter at Room E127 as soon as is practicable under the circumstances. If a victim is more comfortable reporting the alleged sexual violence to a College employee with whom s/he is better acquainted, such as a Dean, administrator or faculty member, s/he may do so. Any employee to whom an incident of sexual violence is reported, however, is required to notify the College's Department of Public Safety and Campus Police and the Affirmative Action Officer and Title IX Coordinator forthwith. The Affirmative Action Officer and Title IX Coordinator may be contacted at Room E236F or by calling 617-228-3311.

If any student or employee believes that he or she has been the victim of sexual violence, the student or employee also has the right to file an Affirmative Action Discrimination Grievance with the College. For a copy of the Affirmative Action Grievance Procedure or assistance with filing a complaint, please contact the College's Affirmative Action Officer and Title IX Coordinator at 617-228-3311, or at Room E236F.

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

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

#### Student Right-to-Know Graduation Rate

Graduation Rates data are available online for all colleges that are required to report this information. This information is reported by colleges and published by the United States Government and available at http://ope.ed.gov/security/ index.aspx.



# **Chelsea Campus**



The Chelsea campus of Bunker Hill Community College is situated in the historic, former Post Office facility at 175 Hawthorne Street in Bellingham Square. Providing higher education and job training opportunities to residents of Chelsea, East Boston, Everett, Revere, Winthrop and other surrounding communities, the campus is actively involved in the community through partnerships with community based organizations, social service organizations, Chambers of Commerce, the City of Chelsea and the Chelsea Public Schools.

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. For directions and more detailed information about public transportation, please visit the College's website.

All Allied Health certificate programs, including Medical Assistant, Patient Care Technician, Central Processing, Surgical Technology, Emergency Medical Technician (EMT) and Pharmacy Technician are based in Chelsea. The Chelsea campus offers laboratory science in biology, offering multiple sections of Human Biology and Anatomy and Physiology I and II. Chelsea also houses a full array of foundation and elective courses leading to college degrees and certificates. Chelsea is also home to the College's Adult Basic Education (ABE) program which offers GED Spanish and Basic English for Speakers of Other Language (ESOL) classes. The program is funded by the Massachusetts Department of Elementary and Secondary Education.

#### Bookstore

The bookstore opens for select days during the first week of each fall and spring semester, offering textbooks for courses that are taught at the Chelsea campus. Specific days and times will be posted on the College website and around the 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 four 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.

#### Student Access and Success Center (SASC)

The Chelsea Campus Student Access and Success Center 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 assessment (Accuplacer), and access advising and academic support services. The Center offers tutoring in mathematics, psychology, sociology, English, reading, writing, biology and allied health content areas. The Center supports 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 617-228-2339.

American Student Assistance (ASA), located in the Center, 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 additional information on services provided by ASA, call 617-228-2339.

#### **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, for example, Health Occupations Students of America, (HOSA), and the Student Government Association (SGA).

#### Student Lounge

The 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 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. 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 and Emergency Medical Technician (EMT) programs learn and practice specific required 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.

#### Technology

The Chelsea campus offers wireless access through hotspots that are located throughout the building. The Chelsea campus computer facilities include two computer classrooms, several smart classrooms, and a computer lab that supports online tutoring and testing. 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 visually-impaired or who have reading and related learning disabilities, is available through the computer lab. For more information call 617-228-3355.

# **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 Admissions and Enrollment Services at 617-228-3398.

#### **East Boston Satellite**

Beginning in the fall of 2014, the East Boston Satellite will have two new locations: 250 Sumner Street and 20 Maverick Square, East Boston. This satellite opened in the spring of 2007 and offers introductory and allied health 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 advising, admissions and enrollment information, and information on federal financial aid. For more information call 617-228-3340 or email fdecristoforo@bhcc.mass. edu..



#### 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 over 60 introductory and college level

courses in the day and evening during the fall and spring semesters. Placement testing, advising and registration for these courses are conducted on the BHCC Charlestown campus. Refer to the current course schedule for a list of courses. Malden High School is accessible from the Orange Line, Malden Center transit station. For more information please call 617-228-3319.

#### South End Satellite – Pathway Technology Campus at Villa Victoria



Bunker Hill Community College maintains the Pathway Technology Campus (PTC) at Villa Victoria, a satellite campus that operates in partnership with IBA - Inquilinos Boricuas en Acción. PTC is located at 405 Shawmut Avenue in the South End of Boston. PTC is a nationally replicable model of a local community college (BHCC) working hand-in-hand with a communitybased organization (IBA) to establish a college campus directly in the heart

of an affordable-housing community. PTC provides residents of the South End and Lower Roxbury with the opportunity to complete their GED, 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 and throughout the year, the Satellite offers a range of student services including academic support, case management, financial aid assistance, academic advising, and admissions and enrollment information. The Satellite 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. For more information about this satellite, please call 617-413-3303.

# LifeMap

LifeMap re-imagines the student experience at Bunker Hill Community College by enabling students to develop an individualized pathway to meet their educational, career and personal goals. LifeMap combines technology with personal attention from faculty and staff to enable students to make informed decisions and become more self-sufficient.

LifeMap's many technological components include tools and resources for career planning, educational planning, financial planning and establishing an integrated support and social network. In addition, LifeMap provides the opportunity for students to design and showcase their work with an e-portfolio.

LifeMap's technological tools are integrated into the College's portal. The BHCC Student Portal will allow students to access important information online pertaining to their college experience. Students will be able to access their email, important information regarding college activities, LifeMap, as well as personal information relating to financial aid, student payment, advising and registration. It is advised that students log into their BHCC Portal on a daily basis to receive the most up to date information. It is important to note that the BHCC Portal will not substitute for the caring and personal attention faculty and staff provide to our students.

#### BHCC's LifeMap Mission Statement

Bunker Hill Community College is committed to supporting students in achieving their educational, career and life goals. LifeMap embodies this commitment by providing an integrated support system that resides in the BHCC Portal. In cooperation with faculty and staff, students use LifeMap tools to create educational, financial and career plans, connect with support services, participate in social networking and reflect on their learning. By centralizing resources and enlisting faculty and staff in their use in and beyond the classroom, LifeMap enables students to create a personalized plan for realizing their goals.

# The model for student progression through LifeMap is arranged in the following stages:

#### Introduction to College

Bunker Hill Community College believes in student success. During the first year, faculty, staff and student mentors partner together to help new students utilize the tools learned at Start Smart Orientation and in their Learning Community Seminar to create their foundation for success. In the classroom, students will be encouraged to embrace intellectual challenge, acquire a sense of place and develop an educational purpose.

# LifeMap Success Indicators for the Introduction to College:

- Identify your educational, career and life goals;
- Create your LifeMap E-Portfolio and from each class upload your best work;

- Create, save and follow your educational plan that will guide your course selection toward degree completion;
- Identify a potential career path by completing the Do What You Are and meet with a counselor/ advisor success coach in the LifeMap Commons;
- Utilize campus resources, TASC, Writing Place, Math Space, Steps to Success Workshops, Single Stop;
- Participate in Campus Activities and/or organization

#### **Progression Towards a Degree**

After the first year, students are implementing their educational and career plans, revisiting their goals and confirming their academic and career decisions. In their courses, they are not only learning about their program of study, but learning the life skills of teamwork, critical and analytical thinking, financial literacy, social networking, and oral presentations. Students are applying what they have learned in the classroom to their personal and professional lives. Students are beginning to connect the classroom and out of classroom experiences to the larger picture of their LifeMap. Students will benefit from exploring, adjusting and confirming their educational and career goals and connecting with faculty, staff and students to enhance their educational experience.

#### LifeMap Success Indicators for Progression Towards a Degree:

- Revise educational plan as needed;
- Develop a financial plan for continued education and/or life after graduation;
- Upload 2-3 papers or projects on your LifeMap E-Portfolio and reflect on what you have learned;
- Begin exploring transfer options. Attend a session on transferring, attend the College transfer fair and follow up with a transfer counselor;
- Explore chosen career field by learning about internships and the BHCC Learn and Earn program;
- Continue maintaining connections on campus utilizing resources and being involved with campus activities or organizations.



#### **Approaching Graduation**

As students begin to complete the last 12-24 credits at BHCC, plans are being made to either transfer to a bachelor granting institution or entering the workforce. The community college experience has prepared students with skills necessary to be successful in and out of the classroom. In a semester or two, students will have achieved the goal that was set up to do: graduate!

#### LifeMap Approaching Graduation Success Indicators

- Confirm graduation term and complete an application for graduation;
- Prepare a plan for continuing education or employment after graduation from BHCC;
- Complete the first step for your career/professional goal;
- Review resume that documents educational and workplace achievements and skills with Career Advisor or Counselor;
- Finalize your resume and upload it to your E-Portfolio and a networking website, (i.e. LinkedIn or Indeed.com);
- Gather recommendation letters from staff, advisors, and faculty.

#### Lifelong and Lifewide Learning

After student's transition into the workforce or a bachelor granting institution, students will be able to apply what they have learned at Bunker Hill Community College to not only their academic and professional lives but also their personal lives. It is important for students to continue to pursue knowledge whether it is for personal or professional reasons. Students may also discover the need for retooling of skills/knowledge and the need to learn new skills. Students will be able to utilize the online resources of setting goals, evaluating options, and identifying additional educational needs by accessing their BHCC LifeMap. To learn more about LifeMap, visit the LifeMap Commons, Room E235.

Adapted from Valencia College.

# Academic Advising

#### **Philosophy Statement**

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.

#### **Advising Mission Statement**

Advising is an ongoing teaching and learning process engaging the student with the entire college community, resulting in a plan for academic and career success as well as personal development.

#### 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 selection, registration related assistance and resource referral. Advisors also assist students with a variety of issues and concerns affecting their educational success.

Advisor assignments are found in the My Profile section of each student's WebAdvisor/Portal account. Degree seeking students will be assigned to a specific faculty member, their Learning Community Seminar Instructor, the Advising Center, ESL Advising in The Assessment Center, Room B118 or to the Department in which they are studying. Non-degreeseeking students are not assigned to an advisor for one-onone advising. Non-degree-seeking students may utilize online advising services and are encouraged to apply to the College.

Students assigned to their department will receive email information regarding scheduled group advising sessions and contact information for the departmental faculty. 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 Center may access assistance during posted walk-in hours. For more information, call 617-228-2230. Students assigned to ESL Advising may access assistance during posted walk-in hours at the Assessment Center, Room B118. For more information, call 617-228-2377. 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 located in the BHCC Portal. This account allows students to print a current course schedule or unofficial transcript, view placement test results and grades, search for course availability, access financial aid and student payment information, register for or drop courses (during the posted registration and add/drop periods), pay for courses, create a payment plan and waive health insurance. 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 log on to the BHCC Portal and access your WebAdvisor account, select the Portal link on the BHCC website www.bhcc. mass.edu. Directions can be found on the Portal Log on page. 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. Students requiring assistance can also visit the computer station in the main lobby of the B-Building or the LifeMap Commons, Room E235.

### 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/ assessment/cpt. 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.

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 70 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 the Assessment Center, Room B118, or call 617-228-2468.

# Library & Learning Commons

The BHCC Library & Learning Commons delivers services crucial for the completion of academic research and information activities, including resources and tools for effective research. BHCC librarians help support teaching and learning, and provide information literacy instruction, defined as "the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand." (The National Forum on Information Literacy and the Association of American Colleges and Universities)

In 2012-2013, the Library surveyed students about what you use the Library for and what kinds of space you wanted most. You told us you use the Library both to study alone and to do course work in small groups. The favored areas were the study areas, the reading and reflection areas, the writing areas, and the small computer area. You wanted more carrels and study tables for quieter quiet areas. We heard you, and we added new carrels, along with new tables and chairs. Many of you say you like these study space areas because they help you study and concentrate. We always welcome your comments about how we can improve even more.

Students told us how and why they use social media. We encourage you to use—and let us know how you like—the Library's website at www.bhcc.mass.edu/library as well as e-newsletters, Facebook, Twitter, and instruction videos to keep you involved in the Library and college community.

Library and Information Literacy instruction at BHCC is designed to make you more confident in your career or transition to fouryear and future graduate studies. Information Literacy includes the ability to

- Determine the extent of information needed;
- Access the needed information;
- Evaluate information and sources critically;
- Use information effectively to accomplish a specific purpose;
- Access and use information ethically and legally.

**Collection Development:** The Library subscribes to over 100 databases that provide articles and other types of information including, but not limited to e-books, e-journals, digitized collections, online maps and eBooks (electronic books). 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, WALDO, the Massachusetts Library System (MLS) and OCLC. Our science, technology, engineering, math, chemistry,

allied health, nursing, criminal justice, cultural heritage and global studies collections continue to grow.

**Distance Education and Online Teaching and Learning:** The needs of distance and non-traditional learners are addressed with carefully selected online resources that offer in-context instruction customized to the curriculum.

**Hours:** The BHCC ID card (the Higher One/OneCard) also serves as your library card. ID issuance hours are posted at www.bhcc.mass.edu/library/about/libraryhours. The Library's ID Station hours are posted on the Library's website. During the fall and spring semesters, the Library is open seven days a week with evening hours Monday through Friday. Visit the Library's website for scheduled hours. During summer sessions and between semesters, please call the Library's Lending Services Desk at 617-228-2213 for schedule updates. You can also reach us by email at BHCCLibrary@bhcc.mass.edu.

**Research and Subject Guides (LibGuides):** Our Survey of Information Seeking Behavior and Academic Information Searching indicated that you want interactive LibGuides and videos in the humanities, social sciences and natural sciences. You want to be able to ask a Reference or Circulation librarian about the Library's resources and services, and hope to receive instruction over mobile devices using apps, e-readers, smartphones, tablets and other academic technology tools. We heard you, and all are part of the Library's strategic plan 2014-2020.

# **Academic Support Services**

#### **College Connection**

College Connection is an academic and advising support service available to students enrolled in sections of RDG090, RDG095 and ENG090 at the Charlestown campus. At the individual professor's request, classes are assigned a dedicated Literacy Coach who visits the class on a regular basis, provides individualized 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.

#### Early Advantage

The mission of Early Advantage is to help students persist in college and achieve their goals by providing proactive, studentcentered interventions that connect students with campus resources and support services that help them overcome academic and personal barriers to success.

Faculty may make a referral to support staff at the College when they observe students struggling with writing, language or math skills, excessive absences or tardiness or incomplete work during the first eight weeks of the semester. The Early Advantage program provides essential notices by e-mail, so students should check their BHCC email account frequently.

If a student receives an Early Advantage referral, the Early Advantage staff working out of the LifeMap Commons will make every effort to speak with the student in person or via the phone. Early Advantage also coordinates a number of Steps to Success workshops designed to help students reduce stress and earn better grades. Schedules are mailed to all students at the start of the semester; or students may request a schedule by emailing earlyadvantage@bhcc.mass.edu.

#### Language Lab

The Language Lab provides students a high-tech learning environment along with a knowledgeable tutoring staff to guide them with any aspect of language learning, from speaking, listening, and pronunciation, to reading, writing, grammar, and punctuation. The Lab currently has eight language learning software programs, several support staff members, and 34 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, writing and technology workshops; ENG095 and ENG111 practice exit exams;
- ESL reading and writing practice exit exams;
- Individual tutoring sessions;
- ESL and English IP completion;
- TOEFL and IELTS practice and tutoring;
- Foreign language textbook software and tutoring;
- Online website services.

The Language Lab is located 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 www.bhcc.mass.edu/languagelab.



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#### MathSpace

The MathSpace is a newly renovated mathematics resource center that is available to all students enrolled in mathematics courses at BHCC (especially those in developmental mathematics classes MAT093, MAT097 and MAT099).

The primary goal of the MathSpace is to assist students to become independent learners and in achieving academic success in mathematics.

The MathSpace equipped with 60 internet enabled Windows 7 workstations as well as a smart board set up. There are also desks for group study and to work on projects. Many students use these computers with Firefox or Google Chrome to do their MyMathLab.

The Lab also has access to math software such as Mathtype, TI interactive, Sketchpad, Derive, and Mathematica. In addition to mathematical software the following are also available:

- 60 computers that can be used to complete math homework assignments and math projects.
- Tutoring with questions from MyMathLab.
- Provides developmental math review sessions.
- One-on-one training and support for MyMathLab.
- The MathSpace is located in M Building rooms M101, M102, M103 and M105.
- Some math faculty also have their offices in the Math Space
- The Math Space is open seven days a week.
- Fall and spring semester hours are: Monday Thursday: 8 a.m. to 8 p.m.; Friday: 8 a.m. to 5 p.m. Saturday and Sunday: 10 a.m. to 4 p.m.

Summer semester hours are: Monday – Thursday: 8 a.m. to 6 p.m.; Friday: 9 a.m. to 4 p.m.

For more information contact the coordinators: 617-228-2283, lgregoir@bhcc.mass.edu; 617-228-3286, kcsteinm@bhcc.mass.edu

- Remember to bring your calculator.
- Please do not bring food or drinks to the Math Space

#### 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 E222, 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.

#### Student Access and Success Center (SASC) Chelsea Campus

The Chelsea Campus Student Access and Success Center oversees student registration and payment, and houses student activities, academic support, advising, and assessment services delivered on the Chelsea campus. New and continuing students receive advising and course placement testing. Students may drop in for group and individual tutoring. The Center offers tutoring in mathematics, psychology, sociology, English, reading, writing, biology, and allied health content areas. Tutoring in other academic areas is also available by appointment, and as needed. The Center supports student achievement workshops in career exploration, goal setting, time management, learning styles, note-taking strategies, study skills, and test-taking skills. These student achievement workshops are available for small groups and for entire classes at the request of instructors. The Center is located on the second floor in Room 202. During the fall and spring semesters, the Center is open 9 a.m. to 7 p.m., Monday through Thursday, and from 9 a.m. to 4 p.m. on Fridays. The Center also maintains summer hours. Please contact us to obtain a current summer schedule. For additional information regarding student services and support at the Chelsea campus, contact the Associate Dean of the Chelsea Campus, at 617-228-2339.

# Tutoring and Academic Support Center (TASC)

The Tutoring and Academic Support Center (TASC) supports and enhances student learning and academic success by offering a variety of traditional and non-traditional services to all BHCC students. The TASC offers tutorial assistance, small group workshops, and academic support to students enrolled in credit-bearing courses. Students are offered a wide range of services to support their work in 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 (College level and higher), 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 18 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: Monday through Thursday, 8:30 a.m. to 8 p.m., and Friday through Sunday, 8:30 a.m. to 4 p.m. During the summer semester, the TASC is open Monday through Thursday, 10 a.m. to 6 p.m. The TASC is closed during semester breaks. For more information, contact the TASC at 617-228-3467 or email tasc@bhcc.mass.edu.

#### 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 Room E142, is open during the fall and spring semesters, Monday through Saturday. Hours may vary from semester to semester, depending on tutor availability. Students are encouraged to visit the Writing Place in Room E142 to schedule sessions with a tutor. Tutoring sessions can also be arranged by contacting the Writing Place at 617-936-1948.

# Admissions and Enrollment Services

#### Admissions

Bunker Hill Community College is committed to an open admission policy. This policy offers the opportunity to enroll 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

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. The policy is as follows: 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; Math: 34) will be admitted to BHCC and will be permitted to matriculate, but will not be eligible to apply for or receive financial aid. Students enrolled in an ESL or bilingual program at the time of high school graduation can take the COMPASS ESL exam to qualify for acceptance to the College through Ability to Benefit, but will not be eligible to apply for or receive financial aid.

#### **Credit Hour Policy**

In accordance with the United States Department of Education, Bunker Hill Community College uses the credit hour policy as 1 hour of classroom or direct faculty instruction and a minimum of 2 hours of out of class student work, each week, for approximately 15 weeks for 1 semester hour of credit.

#### Criminal Offender Record Information (CORI) and Sex Offender Registry Information (SORI) 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 background check which could include Criminal Offender Record Information (CORI) check and/or a Sex Offender Registry Information (SORI) check. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible to participate in such activities. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to



access CORI records. 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 Office of Public Safety and Campus Police, located in Room E127.

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

#### **Curriculum Year**

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.

#### 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.

#### Deferred Action for Childhood Arrivals Process

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

#### **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 5 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.

#### 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.

#### 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 Admissions and Enrollment Services, Room B203. Immunization forms become part of the student's permanent file and cannot be copied, transferred or returned.

#### **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 College 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.

#### **Non-Degree Students**

To enroll in classes as a non-degree student, students should refer to the appropriate course schedule booklet available in Admissions and Enrollment Services Room B203, or online at www.bhcc.mass.edu, 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.

#### Test of Essential Academic Skills (TEAS)

The Test of Essential Academic Skills (TEAS) measures basic essential skills in the academic content area domains of reading, mathematics, science and English and language usage. The

test is intended for use primarily with adult nursing program applicant populations. The objectives assessed on TEAS are those which nurse educators deemed most appropriate and relevant to measure entry level academic readiness of health care program applicants.

#### Valor Act Credit Evaluation Policy

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

#### 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 Admissions and Enrollment Services, Room B203. 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 Admissions and Enrollment Services, Room B203, complete all the withdrawal steps and submit the completed form to Admissions and Enrollment Services. 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 must submit a new application if they register for courses within two consecutive semesters of the date of withdrawal.

### Admissions and Enrollment Services -International Students

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.

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. Students can obtain more information by calling 617-228-2468.

Bunker Hill Community College is authorized under Federal law to enroll non-immigrant alien students. 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 (\$20,500).

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 51 for more information.

# Admissions and Enrollment Services - Online

Admissions and Enrollment Services, 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 Admissions and Enrollment Services, Room B203, or via the College website at www.bhcc.mass.edu. Admissions and Enrollment Services, also provides registration services for all new and currently enrolled students, degreeor non-degree-seeking and those taking noncredit courses. Registration services include course scheduling and schedule adjustment.

#### **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 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 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 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. International students also have the benefit of making payments in the currency of their choice through the International Payment Portal at onlineservices.bhcc.mass.edu.

**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 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 six digits of your Social Security Number if you have one or the last six 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.

# Admissions and Enrollment Services - Weekend College

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. For information, weekend students may call 617-228-2230 on Saturdays. All students should call Admissions and Enrollment Services 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) assesses 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. 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

# **Transfer Affairs**

Transfer Affairs offers services to students interested in transferring from BHCC to four-year institutions. Through information sessions, workshops, and various resources, students will understand the procedures to facilitate the transfer process. The College encourages students to plan early and research future colleges and universities to properly assess their requirements, minimums, and expectations, which will help students make the best curriculum choices at BHCC. Visit the College's website for upcoming information sessions at www.bhcc.mass.edu.

#### Early Childhood Education Transfer Compact

The statewide Education Transfer Compact enables students to transfer associate degree credit from A.A. Education programs to the same programs at specific four-year state colleges and the University of Massachusetts. Students seeking to complete Compact requirements should complete requirements as outlined in the Associate Arts Education Concentration. Students seeking additional Compact information should review the Additional Transfer Agreement section on the MassTransfer website at www.mass.edu/masstransfer/.

# Transfer and Articulation Information for Baccalaureate Programs

Bunker Hill Community College is dedicated to creating partnerships with four-year colleges and universities. An important way of doing this is by forming articulation agreements. Articulation agreements are partnerships between colleges that can help ensure that the classes a student takes at BHCC will transfer to four-year schools. These agreements are designed to help students make a smooth transition when transferring from BHCC to a four-year institution. Transfer Affairs offers services to students interested in transferring from BHCC to four-year institutions. Through information sessions, workshops, and various resources offered, students will understand the procedures to facilitate the transfer process. The College encourages students to plan early and research colleges and universities to properly assess their requirements, minimums, and expectations, which will help make the best curriculum choices at BHCC. Visit the College's website for upcoming information sessions at www.bhcc.mass.edu/transfer.

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

ASSOCIATE IN ARTS	
A.A. Business	Marion Court College-Business Administration; Suffolk University (Sawyer School of Management)-Accounting, Computer Information Systems, Entrepreneurship, Finance, Interdisciplinary Business Studies, Management and Marketing; Lesley College (Center for the Adult Learner)-Business Management; Westfield State University-Business Management/Management Concentration, Finance Concentration and Marketing Concentration;
A.A. Education	Wheelock College-Early Childhood Education
A.A. General Concentration	The Art Institute-General Education; Bridgewater State University- Liberal Arts/Elementary Education; Cambridge College (General Education Requirements); Framingham State University-Liberal Arts; Suffolk University (College of Liberal Arts and Sciences); University of Massachusetts at Boston (General Concentration Reverse Articulation)
A.A. History and Government Concentration	Westfield State University (Online)-History
A.A. Mathematics	Merrimack College-Mathematics
A.A. Physics	Merrimack College-Physics
A.A. Psychology	Lesley College (Center for the Adult Learner) - Psychology; Suffolk University (College of Liberal Arts and Sciences)-Psychology
A.A. Sociology	Suffolk University (College of Liberal Arts and Sciences)-Sociology; Westfield State University (Online)-Sociology

ASSOCIATE IN SCIENCE	
A.S. Biological Sciences	Merrimack College-Biology Transfer Option; University of Massachusetts at Amherst- Biology; University of Massachusetts at Boston-Biology; University of Massachusetts at Dartmouth – Biology; University of Massachusetts at Lowell-Biology Transfer Option;
A.S. Business	Bentley University-Business Concentration, Business Administration; Program Accounting Option, Finance Option, General Concentration (Course Equivalencies); Suffolk University (Sawyer School of Management)
A.S. Business Administration: Accounting Option	Northeastern University-Accounting; Suffolk University (Sawyer School of Management)- Accounting
A.S. Business Administration: Entrepreneurship Option	Suffolk University (Sawyer Business School)-Entrepreneurship
A.S. Business Administration: Finance Option	Northeastern University-Finance; Suffolk University (Sawyer School of Management) - Finance
A.S. Business Administration: International Business Option	Suffolk University (Sawyer School of Management)-International Business

### Articulation Agreements

A.S. Business Administration: Management Option	Bentley University-Management; Northeastern University-Management; Regis College-Management Suffolk University (Sawyer School of Management)- Management
A.S. Chemical Science Concentration	Merrimack College-Chemistry
A.S. Computer Information Technology: Computer Science Transfer Option	Merrimack College-Computer Science; Suffolk University (Sawyer School of Management)- Computer Information Systems; University of Massachusetts at Boston - Computer Science; University of Massachusetts at Boston (College of Management) Information Technology Program
A.S. Criminal Justice	Marion Court College-Criminal College; Springfield College-Criminal Justice; Suffolk University (College of Liberal Arts and Science) Sociology/Criminology and Law
A.S. Digital and Computer Forensics Investigation	Champlain College-Computer Forensics and Digital Investigations
A.S. Gaming/Computer Simulation	Becker College-Computer Game Development and Programming
A.S. Early Childhood Development	Marion Court College-Criminal Justice; Springfield College-Early Childhood Education and Wheelock College-Early Childhood Education
A.S. Engineering	University of Massachusetts at Amherst -Engineering; University of Massachusetts at Lowell - Civil and Mechanical Engineering: Wentworth Institute of Technology-Engineering
A.S. Human Services	Assumption College-Human Services and Rehabilitation Services; Springfield College (Boston Campus) Human Services; Wheelock College-Early Childhood Education
A.S. Medical Radiography	Regis College – Medical Radiography
A.S. Nursing	Emmanuel College-Nursing; Framingham State University-Nursing; Regis College-Nursing; University of Massachusetts at Boston (College of Nursing and Health Sciences) -Nursing
Certificate or Associates Degree (2+2 Option)	New England College of Business and Finance

#### **Transfer Applicants from Other Institutions**

Students who have attended another college may apply for transfer credit and advanced standing at Bunker Hill Community College. Official transcripts from all previous colleges should be sent directly to the Academic Records Office, Room B203 at the time the student applies to BHCC. Once the student is accepted and becomes a matriculated student, college transcripts will then be evaluated.

Credit may be awarded if:

- The courses are comparable to those offered at BHCC.
- A grade of C or better is earned from a regionally accredited college or university. A grade of P may be accepted as general elective credit only if it can be demonstrated that the P grade is equivalent to a grade of C or higher.
- Specific departmental requirements may apply to course eligibility for your program: Anatomy and Physiology I, II

and Microbiology for selective health programs may not be more than five years old, some programs require a C+ or higher. Detailed information can be found in the Degree and Certificate Program section of the catalog.

Credits earned at colleges which follow a quarter system will be converted to semester-hour equivalents resulting in an adjustment in the number of credits transferred. The college will accept a maximum of 45 transfer credits toward the BHCC associate degree and 75 percent of the total number of credits required for certificate programs.

# Suffolk University – Sawyer Business School

ASSOCIATE IN ARTS			
AA Degree Earned from BHCC	BA Degree Earned from Suffolk		
Business	Accounting, Entrepreneurship, Finance, Information Systems, Management, Marketing and Public Administration		
General Concentration	College of Liberal Arts and Sciences		
Psychology	Psychology		
Sociology	Sociology		
ASSOCIATE IN SCIENCE			
AS Degree Earned from BHCC	BS Degree Earned from Suffolk		
Business Administration	Entrepreneurship		
Business Administration (Accounting)	Accounting		
Business Administration (International Business)	Global Business		
Business Administration (Management)	Accounting, Entrepreneurship, Finance, Information Systems, Management, Marketing and Public Administration		
Business	Business Finance		
Criminal Justice	Sociology (Criminology and Law)		



#### MassTransfer

MassTransfer provides students with straightforward and understandable options regarding the completion of associate and baccalaureate degrees. 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

Students who choose to transfer before graduating, but who have completed the MassTransfer Block of 34 credits with a 2.0 or higher grade point average, will satisfy the core/distribution/ general education requirements at the receiving institution.

#### 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

The receiving institution is 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 GPA requirements.

Completion of the MassTransfer Block does not guarantee admission to the college or university. Students may review the MassTransfer chart on the previous 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/.

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 Massachusetts 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 Admissions and Enrollment Services.</li> <li>"Full transfer" ensures that a minimum of 60 credits must be transferred and applied to the linked baccalaureate program UNLESS: <ul> <li>O the student changes his or her major;</li> <li>O the linked baccalaureate program requires a higher grade point average;</li> <li>O 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:</li> <li>O the linked baccalaureate program requires a higher grade point average;</li> <li>O because of space or fiscal limitations the receiving institution does not admit all qualified applicants to a given major or program.</li> <li>Students must be in good academic, fiscal and disciplinary standing with all previous institutions.</li> </ul>
<ul> <li>C. Final Cumulative G.P.A. of 3.0 or Higher</li> <li>Grants all of the benefits outlined in both sections A and B.</li> <li>Guarantees a tuition waiver equal to 33 percent of the Massachusetts resident tuition rate at a state college or University campus for two years of undergraduate enrollment.</li> </ul>	<ul> <li>Enrollment must be continuous at the state college or University of Massachusetts 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 University of Massachusetts campus.</li> </ul>

# Partnerships with Secondary Schools

#### **Dual Enrollment Program**

The Dual Enrollment Program at Bunker Hill Community College enables high school students from Boston area schools to earn high school and college credits simultaneously while gaining familiarity with the college experience. The program staff provides students with advice on procedures for testing, enrollment and college expectations. The staff 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.

#### 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 75 comprehensive and technical high schools in Massachusetts. The organization serves about 4,500 high school members annually and prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management. Massachusetts DECA has been operating on a continuous basis at BHCC since September 1993, and has served approximately 61,000 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.

#### MCAS Preparation/ Pathways to Success Program

The MCAS Preparation/Pathways to Success Program at Bunker Hill Community College provides MCAS preparation and college transitional assistance annually to over 120 - 150 Boston area students who have failed the MCAS. Instruction is tailored to individual needs for MCAS mathematics, English and Biology 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 50 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.

#### Pathways to Prosperity

Pathways to Prosperity is a six-year pathway program for high school students; starting in grade 9, who have expressed an interest in healthcare professions, with an opportunity

to complete Bunker Hill Community College prerequisite coursework prior to enrolling at the College. By completing prerequisite coursework during high school, participants will begin accumulating credits to receive a degree or certificate in their chosen healthcare field from BHCC.

Students Taking Action for Nursing Diversity (STAND) is a component of Pathways to Prosperity for participants interested in the nursing field; specifically. The program serves students from participating Boston area schools. For more information, contact the STAND and Pathways to Prosperity Director at 617-228-2313.

#### Summer Bridge Program

Launched in 2012, the Summer Bridge Program enables entering students with assessed need for developmental (precollege) English and/or math coursework to receive intensive instruction and review to progress through developmental levels prior to fall entry. The program consists of:

**Boot Camps** are intensive three-week skills review camps in math and reading/writing, integrating technology and diagnostic assessment to accelerate students through developmental sequences. Boot Camps are targeted to student with Accuplacer results near a threshold score for college-level or upper developmental level English and/or math

**Bridge Classes** are eight-week classes in developmental reading/writing and math. Bridge classes are targeted to students needing more intensive instruction to progress to college-level or upper developmental level English and/or math.

Summer Bridge can serve as a critical vehicle for relieving the "bottleneck" of students mired in developmental classwork, many of whom leave the College due to lack of progress toward their goals. Since this need is more pronounced among entering students of color, Summer Bridge also has a critical role in narrowing achievement gaps.



# **Cost of Attendance**

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

Application Fee (non-refundable)

Massachusetts Residents	\$10.00
Non-Residents	\$35.00

Tuition and Fees (Fees are subject to change)

Massachusetts Residents (MA) .....\$141.00/credit per credit: \$24 tuition/\$112 course fees/\$5 technology fee

Non-Massachusetts Residents

and International Students ......\$347.00/credit per credit: \$230 tuition/\$112 course fees/\$5 technology fee

The New England Regional Student Program ... \$153.00/credit per credit: \$36 tuition/\$112 course fees/\$5 technology fee (Available to students from RI, CT, NH, ME and VT who are preapproved by the New England Board of Higher Education)

#### Other Charges (subject to change)

Special Cost Course Fee\$35.00/credit	
Health Insurance Fees:*	
Fall Semester \$1,603.00	
Spring Semester	
* Massachusetts state law requires that all students taking nine or more credits in the fall semester or nine or more credits in the spring semester have medical insurance. There are no exceptions.	
Liability Insurance Fee \$15.00	
Parking Permit Fee\$30.00	
Photo ID Replacement Fee \$20.00	
Returned Check Fee \$30.00	
Transcript Fee	
Refund Check Replacement Fee \$20.00	

#### 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, Room B219, for a refund of health insurance premiums. Registering for mini-semester, web courses, and Center for Self-Directed Learning courses later in the fall or spring semester may restore the student's obligation to carry health insurance.

#### **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. Bunker Hill Community College is responsible for making "diligent efforts" to collect amounts due to 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 Commonwealth and Federal payments that are due to them or scheduled to be paid to them including tax refund.

#### Payments

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 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 onlineservices.bhcc.mass.edu. For specific information about the payment plan, contact the Student Payment Office, Room B219 at 617-228-2150.

#### **Refund Policy**

Students dropping or withdrawing from classes must complete the appropriate form available at Admissions and Enrollment Services, Room B203. 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 non-refundable. Lack of attendance or course abandonment does not constitute a drop or withdrawal. For specific refund deadlines please refer to the course schedule for the semester or session.

#### **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. Special Cost Courses Students enrolled in health career program courses with prefixes AHE, CLS, CTC, DMS, EMT, MIG, MRC, NUR, RTH, SGT, SON, VSN, PNP 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 \$15.00 per academic year may apply for some health courses. For more information, students should go to the Student Payment Office, Room B219, or call 617-228-2150.

#### 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 commonwealthstudent.com. The College has set up dedicated computer stations in the Main Lobby of the Charlestown campus for students without Internet access.

MassHealth and enrollment in a subsidized Health Benefit Plan through the Connector, qualifies as comparable coverage. However, MassHealth Limited, the Health Safety Net and Children's Medical Security plan do not qualify and cannot be used to waive coverage. Free care that is provided by hospitals and community health is not insurance and cannot be used to waive coverage. In addition, coverage from insurance carriers outside the U.S. and coverage by foreign National Health Service programs travel, and accident insurance plans cannot be used to waive coverage. Therefore, all international students must participate in the Student Health Insurance Program (SHIP) or obtain coverage from a U.S. based carrier that meets state requirements.

All questions regarding Student Health Insurance Program (SHIP) should be directed to connector@state.ma.us

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 and students enrolled in all web classes are not required to purchase the College health insurance plan.

#### **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 or parts of course charges noted on your registration statement/ bill with the suffix NS, or with the codes such as GCFE, TECF, TUIL, HCCR will be restricted. Students eligible for waivers should obtain clarification from Admissions and Enrollment Services before making course selections.



# **Financial Aid**

#### **Alternative Financing**

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

#### 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.

### Financial Aid



Because it is difficult to define all the possible reasons that could lead to unsatisfactory academic progress, students should contact the Financial Aid Office, Room B213 for instructions on how to submit a written appeal.

#### **Appeals Process for Financial Reasons**

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

#### Federal Financial Aid Refund Policy

The calculation of the return of Title IV Funds is determined by the date that the student withdraws, 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, Room B213 if you have any questions about the policy.

#### **Financial Aid**

The Financial Aid Office at Bunker Hill Community College assists students and their families with meeting the costs of a college education. BHCC participates in a wide variety of federal, state and private financial aid programs. Students must be aware that all institutions, including Bunker Hill Community College, are subject to changes in funding allocations from both the Commonwealth of Massachusetts and the United States Department of Education. For more detailed information, go to the financial aid section of the College's website at www.bhcc.mass.edu/fa.

#### **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, or call 617-228-2275 if they have any questions about this process.



### **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, on page 48 listed under Academic Policies and Procedures), comply with Federal Selective Service Law and not be in default on any educational loans or owe a refund on any federal grants or loans to any institution. Students who have previously obtained a bachelor's degree or equivalent at any U.S. or foreign institution are not eligible for financial aid grants, but may be eligible for loans. It is important to know that students may lose their financial aid eligibility if they have attempted 150 percent of the credits needed for a certificate or a degree.

The College strongly advises students to consult with the Financial Aid Office if they are contemplating a change in enrollment status. For information go to the Financial Aid Office, Room B213, or call 617-228-2275.

### Grants

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

### **Priority Deadlines for Financial Aid**

Fall/Spring students.April 15Spring only studentsNovember 1

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

### Satisfactory Academic Progress for Financial Aid

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	
More than 30	2.00

### **Unofficial Withdrawals**

Per federal regulations, students who stop attending all of their classes without formally withdrawing from the College will be identified and may lose a percentage of or their entire financial aid award for that semester. If a student fails all of his or her attempted credits for a semester, the federal regulations require that the College assume the student stopped attending the College. If the Financial Aid Office cannot obtain proof that the student completed at least 60 percent of the semester, the Financial Aid Office will then prorate and recalculate the student's financial aid award, which may result in the student owing a balance to the College. For more details, see the Financial Aid Refund Policy on page 34.

### Workstudy 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 servicerelated work. Check with the Financial Aid Office, B213 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, Room B213.

### **Financial Support Services**

### **Scholarships and Awards**

Students applying for the following scholarships/awards for the 2015-2016 academic year must be enrolled in an Associate degree program at BHCC at the time of application; must be a full- or part- time student unless otherwise noted in the scholarship eligibility criteria; attend BHCC during the fall 2015 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. Please note, students may only accept and the College will only award one tuition and fees scholarship or award per academic year or semester. Students may obtain scholarship applications at the in Financial Aid Office, Room B213, Student Activities Office, Room D106, or at the Chelsea Campus at the Front Desk, and in the Main Lobby.

### Academic Excellence Award for Continuing Students

Maximum of five (5) awards for spring 2015 and a maximum of five (5) awards for fall 2015.

**Eligibility Criteria:** Awarded to continuing BHCC students who have earned at least 15 credits at BHCC; applicant must have 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 (for 12 credits) for one semester.

**Application Deadline:** October 3, 2014 for the spring 2015 semester; March 6, 2015 for the fall 2015 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 2014 semester. Preference will be given to students who entered BHCC with a GED, or to non-traditional or adult learners.

**Amount:** \$350 for the fall 2014 semester. Scholarship is renewable for the spring 2015 semester if the student maintains eligibility requirements and a cumulative GPA of 2.00 or higher. The scholarship may be used to purchase the necessary books, supplies and/or uniforms required by a student in the program or for tuition and fees.

Application Deadline: October 3, 2014

### 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: \$500 for the fall 2015 semester.

Application Deadline: March 6, 2015

### 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; and 5) be a current or former tenant of the Somerville Housing Authority.

**Amount:** In-state tuition and fees (up to 12 credits) for the fall 2014 semester. The scholarship is renewable for the spring 2015 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 8, 2015.

### **Boston Sand & Gravel Company Scholarship**

**Eligibility Criteria:** Awarded to two (2) full-time, 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 (for 12 credits) for the fall 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

### BHCC/Charlestown Housing Development Award

**Eligibility Criteria:** New or continuing, full- or part-time, BHCC student who is a resident of the Boston Housing Authority in Charlestown, MA. Continuing students must have a cumulative GPA of 2.00 or higher.

**Amount:** \$500 for tuition and fees for the fall 2015 semester. The award is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

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

**Eligibility Criteria:** New or continuing, full- or part-time, 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 2.00 or higher.

**Amount:** In-state tuition and fees (6 - 12 credits) for the fall 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

### BHCC/Chelsea Families United in Educational Leadership (FUEL) Scholarship

**Eligibility Criteria:** Up to seven (7) new or continuing students, full- or part-time, who are participants in the Chelsea FUEL Program who meet the following criteria: 1) have earned a cumulative GPA of 2.5 or higher at the close of the high school academic year; 2) agree to participate in the BHCC Mentor Program.

**Amount:** In-state tuition and fees (6 or more credits) for the fall 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains a 2.50 average.

Application Deadline: June 26, 2015

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

**Eligibility Criteria:** Continuing BHCC student full- or part-time, 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 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

## BHCC Commonwealth Honors Program Scholarship for Continuing 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.

#### Amount per Scholarship: \$500

**Application Available:** Contact the Faculty Advisors of the Commonwealth Honors Program.

Application Deadline: April 10, 2015

# BHCC Commonwealth Honors Program Scholarship for Graduating 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 Advisors of the Commonwealth Honors Program.

Application Deadline: April 10, 2015

### **BHCC Foundation Grant**

**Eligibility Criteria:** The 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 2015 a letter and nomination form will be sent to the Executive Director of City Year 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 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Nomination Deadline: May 8, 2015

#### **BHCC Memorial Scholarship**

**Eligibility Criteria:** Continuing BHCC student who is enrolled part-time (6 - 11 credits) during spring 2015 and has completed at least 15 credits at BHCC with a cumulative GPA of 3.00 or higher, and who plans to be enrolled part-time (6 - 11 credits) for the fall 2015 semester.

**Amount:** The scholarship is for in-state tuition and fees (up to 11 credits) for the fall 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

### BHCC Student Government Association Leaders of Tomorrow Award

**Eligibility Criteria:** All applicants must be enrolled in 6 or more credits for the spring 2015 semester; must have a cumulative GPA of 2.30 or higher; current SGA members are not eligible to apply.

**Amount:** \$500 scholarship will be awarded to two returning students for fall 2015 and a \$1,000 scholarship will be awarded to one June 2015 graduating student, who will be transferring to a four-year institution in the fall 2015.

Application Deadline: March 6, 2015.

#### 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. Preference will be given to students of Columbian descent though other qualified students should apply as well.

**Amount:** \$200 towards books and supplies for fall 2015 and is renewable for spring 2016 if student maintains eligibility requirements.

Application Deadline: March 6, 2015

#### Ingalls Family Scholarship for Year Up Graduates

**Eligibility Criteria:** Awarded to a new or continuing BHCC student who is a graduate of and has an endorsement from the Year Up program in the Greater Boston area. The scholarship will be awarded for the fall 2015 semester and can be renewed for the spring 2016 semester, provided the student earns a cumulative 3.00 GPA and maintains the endorsement of Year Up.

**Amount:** \$500 per semester for in-state tuition and fees and other academic-related expenses.

Application Deadline: June 30, 2015

# English as a Second Language Award for Continuing Students

**Eligibility Criteria:** Awarded to one or more continuing BHCC English as a Second Language students who have completed at least 6 credits of ESL at BHCC with a cumulative GPA of 3.00 or higher and a demonstrated financial need. Must be enrolled for at least 6 credits in ESL for the spring 2015 semester and expect to be enrolled for at least 6 credits for the fall 2015 semester.

**Amount:** The scholarship is for in-state tuition and fees (up to 6 credits) for the fall 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

#### 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 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

#### Thomas A. Kershaw Scholarship

**Eligibility Criteria:** Continuing BHCC student enrolled in a course of study in Culinary Arts or the Hotel/Restaurant/Travel program with a cumulative GPA of 2.00 or higher.

Amount: \$350 or a chef's toolkit.

Application Deadline: March 6, 2015

### 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.A. degree program in accordance with MassTransfer guidelines.

**Amount:** \$250 for the fall 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

### Marguerite I. Munster Memorial Scholarship

**Eligibility Criteria:** Matriculated third semester nursing major who has demonstrated outstanding clinical competence and academic achievement (minimum 2.70 GPA) in courses completed at BHCC. Students must be enrolled in NUR211 at the time of application and intend to complete the A.S. degree in nursing during the next semester.

#### Amount: \$500

**Application Available:** Contact Mary Folan, Professor and Chairperson, Nursing Education Department, in Room G212.

**Application Deadline:** October 3, 2014 for the spring 2015 semester; March 6, 2015 for the fall 2015 semester.

### Sivarubini Murugaiah Memorial Scholarship

**Eligibility Criteria:** Awarded to a continuing BHCC student who meets the following criteria: 1) is the first person in his or her immediate family to attend college; 2) has completed at least 30 credits (including development credits) at BHCC; 3) has qualified for financial aid; 4) has a cumulative GPA of 2.50 or higher; 5) is enrolled for at least 6 credits for the fall 2014 semester; and 6) intends to complete either an A.S. or A.A. degree at BHCC.

**Amount:** \$1,000 for tuition and fees for the fall 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains the eligibility requirements.

Application Deadline: March 6, 2015

#### Nancy Myers Memorial Scholarship for New Students

Eligibility Criteria: For one or more new students who meets the following criteria: 1) be accepted into a BHCC degree program; 2) registered as a full-time student (12 credits or more); 3) have a 2.50 GPA or better at time of application deadline; 4) demonstrate involvement in both community and high school; 5) and agree to participate in the BHCC Mentor Program. Credits and GPA requirements include developmental courses or credits.

**Amount:** In-state tuition and fees up to 12 credits for fall 2015. Renewable for spring 2016; may re-apply for subsequent award years if eligibility criteria are maintained.

Application Deadline: April 3, 2015

### 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 2013 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 10) 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 2013 semester and is renewable for the spring 2014 semester if the student maintains eligibility requirements.

**Application Available:** Office of the Associate Vice President of Student Services, Room B308, and Student Activities, Room D106.

Application Deadline: March 25, 2015

### President's High School Scholarship

Participating High Schools: Boston Community Leadership Academy, Jeremiah E. Burke High School, Cambridge Rindge and Latin School, Charlestown High School, Chelsea High School, Dorchester Academy, East Boston High School, English High School, Everett High School, Fenway High School, The Engineering School, Madison Park Technical Vocational High School of Mathematics and Science, Malden High School, Medford High School, Monument High School, Parkway Academy of Technology and 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

### Scholarships and Awards

the high school and community. Amount: In-state tuition and fees (up to 12 credits) for the fall 2015 semester. Scholarship is renewable for the spring 2016 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 22, 2015.

### President's Leadership Award

**Eligibility Criteria:** December 2014 BHCC graduate or June 2014 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 2014 semester.

#### Amount: \$1,000

**Application Available:** Office of the Associate Vice President of Student Services, Room B308.

#### Application Deadline: May 4, 2015

### Stephen J. Perez Memorial Scholarship

**Eligibility Criteria:** Awarded to a continuing BHCC student majoring in Criminal Justice who has completed at least 20 credits (including development credits) at BHCC, has a cumulative GPA of 3.00 or higher, and intends to complete the A.S. degree in Criminal Justice at BHCC. Preference will be given to veterans and current military service members though other qualified Criminal Justice students should apply as well.

**Amount:** \$500 for tuition and fees for the fall 2015 semester. Scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

#### 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, 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 2015 semester

Application Deadline: March 6, 2015

# Refrigeration Service Engineers Society (RSES) Scholarship

**Eligibility Criteria:** Continuing BHCC student majoring in the mathematics, engineering, or physics programs who has satisfactorily completed at least 30 credits of college-level work and is entering the second year at BHCC with a cumulative GPA of 2.00 or higher.

**Amount:** \$250 for the fall 2015 semester. The scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015

#### Rosann Sperduto '88 Memorial Scholarship

**Eligibility Criteria:** A female December 2014 BHCC graduate, or a female graduating from BHCC in June 2015, 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 2015 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 3, 2015

### Study Abroad Scholarship

Scholarships will be awarded to support participation in selected study abroad programs in countries such as Argentina, Belize, Canada, China, Costa Rica, Czech Republic, Denmark, Dominican Republic, Ecuador, France, India, Ireland, Italy, Morocco, Peru, Spain, and Scotland.

**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: 80 percent of total program costs.

Application Available: International Center, Room E236.

Application Deadline: TBD

### Scholarships and Awards

### Jeffrey Thompson Memorial Scholarship

**Eligibility Criteria:** Awarded to one new or continuing fullor part-time student, who 1) has documented a permanent disability with the BHCC Office for Students with Disabilities, 2) has been accepted into a BHCC degree or certificate program, 3) has demonstrated financial need, and 4) intends to be enrolled in both fall and spring semesters. Preference will be given to students with permanent physical disabilities but other students with permanent disabilities will also be considered.

**Amount:** In-state tuition and fees for up to 12 credits, including developmental credits, for the fall 2015 semester, plus, a one-time additional amount of up to \$1,000 to be used for assistive technology or a laptop or books. This scholarship is renewable as to tuition and fees for spring 2016 and possibly additional semesters if the student maintains the eligibility requirements and has also achieved a cumulative GPA of 3.00 or higher.

Application Deadline: April 3, 2015

### **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 2015 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 10) 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 2015 semester and is renewable for the spring 2016 semester if the student maintains eligibility requirements.

**Application Available:** Office of the Associate Vice President of Student Services, Room B308, and Student Activities, Room D106.

Application Deadline: March 25, 2015

### James R. Ware Stop & Shop Scholarship

**Eligibility Criteria:** Awarded to two (2) continuing Business Administration students who have earned at least 30 credits at BHCC with a cumulative GPA of 2.00 or higher.

**Amount:** \$250 for the fall 2015 semester. Scholarship is renewable for the spring 2016 semester if the student maintains eligibility requirements.

Application Deadline: March 6, 2015



### Single Stop

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

Single Stop provides benefits screening for the Supplemental Nutrition Assistance Program (SNAP), offers consultation for those with housing issues, aids with health insurance applications and is able to advocate on behalf of students with the Department of Transitional Assistance. In conjunction with the nationally successful VITA program, free assistance in completing and filing Federal and State Income Taxes is available from February through mid-April. This year, Single Stop has partnered with the Greater Boston Food Bank in sponsoring several monthly Mobile Markets for the campus community. During the Spring semester, in association with the Humphrey Project at Boston University and The Federal Reserve Bank, free financial workshops will be offered. Additionally, Single Stop provides free financial counseling (and workshops) with financial advisors on a one-to-on basis. For more information, visit the Single Stop office in Room D206, or call 617-228-3330, and watch the Single Stop web-site for updates on new programs and resources: www.bhcc.mass.edu/ singlestop.

Single Stop at BHCC was the first New England site and is locally funded with primary support from the Boston Foundation and the nationally recognized GreenLight Fund which supports innovative, high performing nonprofits addressing issues affecting low-income families.

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

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

### **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.

### Adult Basic Education and Transitions to College Programs

The Adult Basic Education and Transitions to College programs are Massachusetts Department of Elementary and Secondary Education (MADESE) 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, and GED English. Classes are held in Chelsea and Revere.

The ABE courses are offered both day and evening either at the Chelsea campus or at program partner sites in the community. The program also offers a twelve-week Health Career Pathways program for students who are interested in careers in the health field. Three-day courses are offered: Health English, Health Math, and Student and College Success. These courses are held at the Chelsea campus each fall and spring semester. The ABE program collaborates with the following partners in the Chelsea community: Centro Latino, Inc. and LARE/American Training.

The Transitions to College Program offers courses for students who have attended MADESE grant funded ABE programs. Students must have either a high school diploma from their native country that has been certified by the Center for Educational Documentation, and have the English language proficiency skills to do pre-college level work, or a GED. The Transitions to College course is offered at the Charlestown campus in the evening. The program offers each fall and spring semester, a six-week day course Transition to College Boot Camp for students who are attending GED and ESOL classes to prepare them for enrollment into the Transitions to College program. This course is offered at the Chelsea campus. 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. For more information, call the ABE and Transitions to College Office at 617-228-2108.

### 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, email welcomeback@bhcc.mass.edu or call 617-228-ICAN



### Center for Self-Directed Learning (CSDL)

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

Students are always active participants in the learning process, solving problems, answering questions and developing skills.

In order to ensure that effective learning takes place, student progress is evaluated on a continuous basis. Courses can extend over the entire semester, or be completed in a few weeks, depending on the student's needs.

Course facilitators and tutors are available to guide and assist students at all times during scheduled hours of operation. 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. For more information, please e-mail CSDL@bhcc.mass.edu, call 617-228-2225, or visit H-Building, Room H165.

### **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 appropriate Academic Dean. For more information see the Academic Dean for the subject area of the appropriate proposed contract.

### **Midnight Courses**

To meet the needs of second-shift workers, parents and others who cannot attend college during day-time or evening hours, in certain semesters 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.

### Prior Learning Assessment (PLA)

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 Coordinator 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, please email pla@bhcc.mass.edu, call 617-228-2350, or visit the Prior Learning Assessment Office, H-Building, Room H165.

### Distance Education

**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, For more information, please email pla@bhcc.mass.edu, call 617-228-2350, or visit the Prior Learning Assessment Office, H-Building, Room H165.

**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.

For a list of accepted CLEP exams, please email pla@bhcc.mass. edu, call 617-228-2350, or visit the Prior Learning Assessment Office, H-Building, Room H165.

Military Evaluation. Bunker Hill Community College acknowledges service members' unique learning experiences acquired during military service. In congruence with the BHCC mission, our college recognizes the Valor Academic Credit Evaluation Policy for service members and student veterans that qualify them to receive academic credit for their military educational experiences and courses. The Prior Learning Assessment Program (PLA) will provide service members with information to assist them to obtain credit for their military training and experience and to achieve their educational goals. As a member of SOC (Service Members Opportunity Colleges), Bunker Hill Community College utilizes ACE (American Council on Education) guidelines, CLEP, Dantes, and/or thorough use of portfolio evaluation to assess aforementioned training and experience. Military course work, training, and experience shall be evaluated and awarded credit on a course-by-course basis. Up to 45 PLA credits can be awarded towards an Associate Degree. For more information, please email pla@bhcc.mass. edu, call 617-228-2350, or visit the Prior Learning Assessment Office, H-Building, Room H165.

### 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.

### **Distance Education**

Bunker Hill Community College offers several alternatives to classroom instruction that allow students to complete all or part of their course work online (or in other words, "at a distance"). These alternative modes of instruction include full asynchronous online courses, as well as hybrid courses that are part online and part in class. The College also offers an extensive program through the Weekend College.

### Massachusetts Colleges Online

Bunker Hill Community College 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 the Advising Office, Room E235 at onlineadvising@bhcc.mass.edu for verification.

### **Streaming Media Courses**

Streamed media courses (designated as "SM" in the Course Schedule) provide students with access to asynchronous media based courses available at http://mediaserver.bhcc.mass. edu:8080/. Students can view course content from any computer with Internet access and Quick Time. Students complete coursework at home using Moodle. Proctored exams may be are required. For more information on Virtual Course availability, please call 617-228-2466 or email onlinehelp@bhcc.mass.edu.

### Virtual Courses through the Web

Virtual classes, designated as "VC," are sometimes offered for students who are interested in online synchronous courses that meet at specified times. Classes are offered on the Web via a web conferencing tool such as Webex or GoToMeeting. 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 Moodle. For more information on Virtual Course availability, please call 617-228-2466 or email onlinehelp@bhcc.mass.edu.

### Web Courses through BHCConline

Bunker Hill Community College offers online courses 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.

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 Web or Hybrid courses, students must have a computer with broadband Internet access (e.g. DSL, Cable or FIOS). A multi-media laptop or desktop computer (PC or Mac) with at least a 1.5gHz processor, 4GB of RAM, microphone and camera, is recommended. Mozilla Firefox or Chrome are the preferred browsers for PC users; a recent version of Safari (or Firefox for Mac) for Mac users. Internet Explorer may also be used. A recent version of Microsoft Office (2007 or higher, with Word, PowerPoint and Excel) is required for completing assignments.

It is expected that students possess basic computer skills such as navigating the Internet, 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 online students are highly motivated, independent learners with excellent time management skills. Online 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 to 10 hours each week participating and completing coursework. Proctored exams at the Charlestown campus may be required for some online courses.

Students must begin their online coursework on the first day of the semester, and are expected to complete their course in a semester's time frame. Students have access to Moodle, the College's Learning Management System – and can preview their courses seven days prior to the start of the semester. To access their course(s), students use their WebAdvisor username and password to log into the BHCC Portal.

Additional information regarding web course offerings can be found either in WebAdvisor or at the BHCConline website at www.bhcc.mass.edu/bhcconline. Questions regarding access, technical requirements and related information may be emailed to helpdesk@bhcc.mass.edu. Students may also call 617-228-3441 for more information.

### Web Course Orientation

Students who are new to online courses are strongly urged to participate in one or more of the following Orientation options to learn about using Moodle. Although participation is not mandatory, taking part in one of these Orientation options will help you get a better grasp of the guidelines and expectations for successfully completing web courses at Bunker Hill Community College:

- Participate in either of the "live" virtual computer based orientations from home or work-Refer to the BHCConline section of the current course schedule or visit http://www. bhcc.mass.edu/bhcconline for more information about dates and times. Note: a microphone is required to speak, although questions can be asked through the session's Chat feature. Webcam is optional, but encouraged.
- 2. Listen to the two-part pre-recorded orientation any time by visiting the BHCConline site and clicking on the video links.
- 3. Join the Online Student Orientation course (highly recommended for students who are new to online learning), which begins one week prior to the start of each semester, and runs until the day before the start of the semester (about 6 days for this orientation course).

For information about orientations and general information about BHCConline, email onlinehelp@bhcc.mass.edu, call 617-228-2466, visit the BHCConline Room H134, or go to www.bhcc.mass.edu/bhcconline.

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



### Academic Policies and Procedures

### 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.

### Appeals Process for Probation and Suspension

Students placed on academic probation or suspension from the College for unsatisfactory academic progress have the right to appeal. 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 33 for information on the Financial Aid appeals process.

### 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 Associate Vice President of Student Services. The Associate Vice President will notify the course instructors of the absence. Upon returning to class, students are responsible for discussing completion of all course requirements with their course instructors. If the course instructor and student find it impossible to complete all assigned work, the student may need to withdraw from the course.

Students who do not attend classes during the first 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.

### Auditing a Course

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

### 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 responsible for their own transportation to and from the clinical sites. Students are accountable for their behavior and demeanor during all clinical experiences and must conduct themselves in a manner that is in keeping with the College Code of Conduct, all professional conduct and regulations outlined by the regulating body, all conduct and behavioral expectations set forth by the clinical site, and additional specific requirements as are outlined in the program specific student handbook.

Due to the competitive nature of placing students in clinical sites, students may have to travel long distances. It is important to note that some of the clinical sites are located in suburban or rural areas and are not accessible by public transportation. Therefore, students should consider this increase in time and cost in planning their transportation and finances for programs requiring clinical experiences.

The College reserves the right to suspend and/or remove students from the clinical experience whose behavior is considered inappropriate. Removal may adversely affect prospects for completing the requirements of these programs. Students so removed may appeal in writing to the Office of 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 22-23 of this catalog

### 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 Associate Vice President of Student Services for inappropriate behavior on college property. If necessary, the appropriate Dean will convene a disciplinary hearing committee. The members of the hearing committee make a recommendation to the Vice President of Academic Affairs and Student Services regarding the disposition of the case. The Vice President of Academic Affairs and Student Services'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.

### **Course Load**

Students who carry 12 or more credit hours in a fall or spring semester or 6 credit hours in a summer or mini session are fulltime 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 9 credits during a summer or mini session must obtain written permission from the appropriate 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**

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, NA, W, WA, and IP. For Dean's List computation, P is not considered a letter grade. Only courses numbered 100 or higher are considered in determining eligibility for the Dean's List.

Students who are enrolled in at least 6 but less than 12 credits in a given semester, but otherwise have met the same performance level as those on the Dean's List, are named to the Merit List. The Merit List has the same performance requirements as the 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. Refer to the College's course schedule 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 appropriate Academic Dean of their program area immediately, stating the reason. The individual faculty member makes the decision regarding makeup of final exams.

### 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 D106.

### Grading and Notation System (effective Jan., 1990)

Grades and Notation	ns Definitions of Grades and Notations	Quality points Per Credit Hour
А	Equivalent to a numerical grade of 94 - 100	4.00
A-	Equivalent to a numerical grade of 90 - 93	3.70
B+	Equivalent to a numerical grade of 87 - 89	3.30
В	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
С	Equivalent to a numerical grade of 70 - 76	2.00
D	Equivalent to a numerical grade of 60 - 69	1.00
F	Equivalent to a numerical grade of 0 - 59	none

P Indicates satisfactory completion of coursework where no letter grade is given, or award of credits for a course by special examination. It is equivalent to a grade of C or higher and carries no quality points. Credit hours will be given equivalent to the number of credit hours normally assigned to the course none

IP Required work in the course is in progress. The method and time for completion of work must be agreed upon in writing by student and instructor; no credit is earned until the course is completed. IPs not completed by the end of the following semester are automatically changed to a grade of F unless an IP extension is agreed upon in writing by student and instructor and submitted to the Registrar's Office none

- NA Students who register for a specific course and who have not attended class meetings during the first four weeks of the semester will be withdrawn from the course and receive the grade designation NA (non-attendance) which will appear on the transcript and be counted toward credits attempted but not computed in the grade point average. The NA grade designation is not used during the summer semester **none**
- W Official withdrawal from a course; no credit earned none

WA Administrative withdrawal from a course; no credit earned **none** 

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

**Program Changes:** Students wishing to change from one program of study to another should consult with their advisors. Students then must complete a change of program form, available at Admissions and Enrollment Services, Room B203. 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, N, NA, W or WA. 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. 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):  $30 \div 13 = 2.31$ 

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

### **Graduation with Honors**

none

**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

In order to continue at Bunker Hill Community College and/or receive financial aid, students must make satisfactory academic progress toward a degree or certificate. 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
Fewer than 12	no minimum
12-30	
More than 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 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.

AU Audit; no credit earned

### Career Services and Internships

### **Academic Suspension**

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

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

The College will also suspend students from attending the College who have remained on academic probation for three 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 readmission secured through Admissions and Enrollment Services, Room B203.

### Career Services and Internships

### **Career Center**

The Career Center offers 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 job market. Working closely with the academic programs, career counselors assist students in the process of career development, occupational research, resume preparation and job search. The Center houses career resources and resume writing software programs, and conducts numerous workshops throughout the year. The Career Center is located in the LifeMap Commons, Room E235 and can be reached at 617-228-2245, or visit www. bhcc.mass.edu/careercenter.

**Career and Life Planning.** The Career Center helps students with choosing a major or making wise career decisions. Students can identify their interests, skills and values by attending offered workshops or taking assessments, including the Self-Directed Search or the Myers-Briggs Type Indicator. 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 decision-making and career exploration, while helping them gain the skills necessary for success

Job Search Activities. Workshops or individual sessions designed to assist students in all aspects of finding and keeping employment are offered, including resume writing, interviewing skills, tips for second language job seekers, how to use online and social networking sites for job searches and more. Students and alumni can receive coaching and support while they conduct their job search. Enrolled students and alumni have around-the-clock web access to BHCC's eRecruiting (www.bhcc. experience.com) where they can search and apply for jobs and internships targeted for BHCC students. Employers are invited to recruit on campus throughout the year

Job Fairs. Job Fairs are held in the fall and spring semesters and provide students the opportunity to meet students. 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 Internship Programs office supports students in gaining valuable on-the-job experience related to their academic program of study. The office works closely with faculty, staff and local employers to support organized internship opportunities that help students develop practical skills necessary to be successful in their chosen careers. Field-based practicums or clinicals are not coordinated through this office. Students in the Human Services and Allied Health programs of study should consult their academic program coordinator for more information. Students should be advised that internship program employers may have minimum eligibility standards or require background screening including drug scans or CORI/SORI checks. For more information, visit the LifeMap Commons, Room E235, or the website www.bhcc.mass.edu/ internships4students.

Academic Program Internships. Academic internships combine relevant on-the-job experience with classroom learning in a 3-credit course as part of your program of study. Academic internship courses are offered for several majors in the Division of Professional Studies and the Division of Engineering and Health Sciences, including Computer Forensics, Computer Networking, Computer Support, Criminal Justice, Culinary Arts, Gaming, Graphic Design, Hospitality, Media Communications, Office Information Management, Paralegal Studies, Pharmacy Technician, Sustainability, and Web Development. Academic internships can be an elective course in many degree programs

### Student Life and Support

in the Humanities and Sciences. Students must complete specified pre-requisite courses for their major and obtain an approved internship site in order to qualify to register for an internship course. Planning is required one semester ahead of time and requires sign-off from the Faculty Coordinator or Internship Coordinator.

For more information and the internship application please visit www.bhcc.mass. edu/internships4students, or contact the Internship Coordinator at internships@bhcc. mass.edu or in the LifeMap Commons, Room E235.

**Learn and Earn,** a program sponsored by the Massachusetts Competitive Partnership (MACP), offers paid work experience at some of the top companies in Massachusetts, including Bank of America, Beth Israel Deaconess Medical Center, BJ's Wholesale Club, the Boston Foundation, Dovetail Healthcare, EMC, Fidelity Investments, Raytheon, Staples, State Street, Suffolk Construction, and Vertex Pharmaceuticals.

Students work 16-30 hours per week at \$15/hour, take a 3-credit internship course, and receive mentoring and support fo career goals. Many Learn and Earn students receive continued employment offers from their Learn and Earn employers.

Qualified Bunker Hill Community College students majoring in Biotech, Business Administration, Communications, Computer Technology, Engineering, Event Planning, Paralegal, Visual and Media Arts, and General Concentration may apply to the program.

Learn and Earn internships are offered on a semester cycle. Students should note that the recruitment, application, and interviewing cycle takes place a full semester in advance of the internship start date. For eligibility requirements and more information, please visit www.bhcc.mass.edu/learnandearn or contact the Learn and Earn Coordinator at 617-228-2006 or in the LifeMap Commons, Room E235.

STEM Internships. To support Science, Technology, Engineering, and Math students in obtaining paid research internship opportunities, the BHCC Internship Coordinator works in collaboration with STEM faculty and the STEM Club. A majority of research internships are offered in the summer, full-time, and qualifying students need to have completed a minimum of one year of coursework in their major. BHCC has relationships with a number of National Science Foundation (NSF) and National Institute of Health (NIH) funded programs, Community College programs at area institutions such as University of Massachusetts, Boston University, Tufts, Massachusetts Institute of Technology, Dana Farber, and Wellesley College, and private sector companies in connection with Massachusetts Clean Energy (MCE) or the Massachusetts Life Sciences Center (MLSC). Student planning and preparation for these programs begins early in the fall semester for spring application deadlines. For more information visit www.bhcc. mass.edu/internships4students, or contact the Internship Coordinator at internships@bhcc.mass.edu or in the LifeMap Commons, Room E235.

### **Student Life and Support**

### Athletics

Bunker Hill Community College's Athletic Department has developed a program of varsity, intramural and Health and Wellness program 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 level programs with other two year state institutions.

The Athletic Department sponsors varsity level sports programs in Men's and Women's Basketball, Soccer and Co-ed Golf. Collegiate League Memberships include NJCAA (National Junior College Athletic Association) Division III and the MCCAC (Massachusetts Community College Athletic Conference) Division III.

Intramural activities include 3-point Basketball Shooting Contests, Tennis, Bench Press Competitions, table Tennis, Chess and Checkers. Health and wellness offerings include free classes such as Cardio Kickboxing, ABS of Steel and Group Circuit Boot Camp.

The Athletic Department is located in Room G117. For more information, visit www.bhcc.mass.edu/athletics.

### **Student Activities**

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 Community College 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 Student Trustee and officers of the Student Government Association are the elected representatives of the student body; elected student officials are expected to be mature individuals who will responsibly fulfill the requirements of their position while maintaining a record of conduct and behavior that demonstrates integrity, civic responsibility, and service to others. The SGA develops a proposed annual budget with the Coordinator of Student Activities. The Associate Vice President of Student Services 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 below.

### 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 D106. 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.

### **Student Clubs and Organizations**

African-American Cultural Society African Students Club Alpha Kappa Mu Honor Society Arab Students Association Art and Design Club Asian Students Association **Behavioral Sciences Club** Brazilian Cultural Club **Business Law Club Criminal Justice Society** Drama Club Entrepreneur Club **Evening Students Association** Foreign Language Club Gospel Choir Haitian Club Hillel Club HOSA (Health Organizations Students of America) Hospitality Club Indie Game Developer's Club International Media Club Islamic Students Association Latinos Club Lesbian, Gay, Bisexual, Transgender, Queer and Allies Student Union MAES (Minority Association of Scientists and Engineers) Math Club Meditation and Wellness Club Multicultural Club Music Club

Nursing Club Parents Association Real Life Christian Fellowship S.H.O.C.W.A.V.E.S. (Students Helping Our Communities with Active Volunteer Experiences and Service) Student Government Association Student Success Club Student Veterans Organization Sustainability Club WBCC Radio Station Writer's Block

### **International Center**

The International Center provides programs, services and activities designed to advance the internationalization of the College community. Staff at the Center provide comprehensive programs and individual assistance to international students from more than 100 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 Argentina, Belize, Costa Rica, the Czech Republic, France, Italy, Spain and China. 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, and can be reached by calling 617-228-2460, by email at international@ bhcc.mass.edu or by visiting the website at www.bhcc.mass.edu/internationalcenter.

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

### Office of Community Engagement

Bunker Hill Community College's Office of Community Engagement provides multiple pathways for students to engage as active and responsible members of their communities. BHCC students work with community-based organizations as assigned through their courses, contemplate civic and ethical issues with each other on campus, or simply volunteer in their local communities. The College partners with a range of Greater Boston community-based organizations, including after-school programs, community centers, environmental advocacy groups, food pantries, and refugee and immigration centers. These partners serve as host sites for service learning and provide co-curricular opportunities for students. BHCC students are uniquely positioned to impact the community because they live and work in the neighborhoods they serve. In this spirit, the College seeks to develop reciprocal relationships with community partners.

The College has adopted the Carnegie Foundation's broad definition of Community Engagement, which describes Community Engagement as "a collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity."

The College's Office of Community Engagement supports faculty integration of community engagement projects into the curriculum, coordinates co-curricular volunteer programs, and provides a pathway for local community-based organizations to partner with the College. The Office employs a four-tier designation system that enables faculty to be creative and intentional in assignment design. The four designations are Action Research, Civic Activism, Service Learning and Volunteerism. Our Civic Activism designation specifies a community engagement project that makes an explicit connection to civic learning. While the four designations have distinct project criteria, all projects utilize the LEAP Essential Outcome for Civic Engagement to measure student learning outcomes.

In 2012-2013, 52 faculty members integrated service learning projects into 80 courses involving more than 2,500 students. An additional 600 plus students contributed direct service to Greater Boston through co-curricular activities, including themed "Service Months" that offer one-time volunteer opportunities to wet students' appetites for service. The bi-annual Get Involved! Volunteer Fair brought 30 nonprofits to campus to raise awareness of how to volunteer in Greater Boston. Finally, in 2012, the Office and Boy and Girls of Middlesex County (BGCMC) deepened their partnership in co-writing and co-hosting a Massachusetts Campus Compact AmeriCorps\*VISTA. The MACC AmeriCorps\*VISTA currently acts a liaison between the two organizations, recruiting, training, supervising, and sustaining BHCC Student Volunteers with the Clubs, 82 BHCC students have volunteered with the Clubs providing over 900 hours of service. Overall, BHCC students contributed 36,000 hours of service to the Greater Boston community in 2011-2012.

The Office of Community Engagement helps students act on their passions and realize their goals. The Office provides opportunities for students to reflect on their community engagement work and to recognize how service connects with their professional and personal development. For more information, visit the office in Room B211A or call 617-228-3485, or email the Office at engagement@bhcc.mass.edu.

### **Student Success Program**

The Student Success Program is a Transfer program. Students must apply and be selected to participate. Its goal is to assist students in transferring to a four-year university or college. It 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 their four-year school of choice. The program provides academic counseling, peer tutoring, a counseling/ mentor program, cultural enrichment events and college transfer information. It also provides workshops on a variety of topics focusing on learning strategies, financial literacy and life management skills, career planning skills, and the college transfer process. To qualify for these services, students must be full-time, enrolled in college-level courses with intent to graduate and transfer to a four-year school.

Students must demonstrate an academic need, meet Programmatic criteria and one or more of the following Federal criteria: first generation college student, meet Federal income guidelines, 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, or call 617-228-2303.

### Study Abroad

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, and students choose the program of greatest interest to them. The International Center provides scholarship opportunities to qualified students. For more information go to the International Center, Room E236, or visit the study abroad website at www. bhcc.mass.edu/studyabroad.

### **Veterans Center**

Bunker Hill Community College Veterans Center is committed to providing veterans, active duty military, Guard/Reservists, and their eligible dependents with a smooth transition to college and a successful educational experience. The Veterans Center staff provides specialized customer service for student veterans and serves as advocates within the college community as well as our community partners. The Veterans Center Staff would like to thank you for your military service and we are honored to assist you as you pursue your academic goals.

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

The Veterans Center staff provides services in the following areas:

- Support and advocacy for veteran students.
- Assistance in solving problems related to education.
- Advice regarding VA Educational Benefits.
- Certification to the VA for each semester of enrollment and any change of enrollment.
- Referrals to University resources and other agencies.
- Verification of pursuit of training.
- Assistance with credit for prior learning.

Please come and visit the Veterans Center located in Room B201. You may contact us by phone at 617-228-3213; email at veteranscenter@bhcc.mass.edu or fax at 617-228-3212.

### 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-tostudent mentoring, peer mentoring, and integrated support services.

BHCC Learning Communities promote active and engaged learning through such practices as collaborative and problembased 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.

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

# Learning Community 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 6 areas: reflection and career exploration; goal setting and problem solving; critical thinking and information literacy; communication skills; diversity and team work; and community engagement. 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.

Each Seminar section is supported by a designated Success Coach, who collaborates with Seminar instructors and assists students with setting short and long-term goals.

The Success Coach is someone with good, active listening skills who motivates students to do their best and empowers them to make decisions that will improve their lives. The Success Coach offers knowledge and skills, such as time management and study skills, provides new perspectives on problem-solving and strategies for success, and connects students with campus support services. The Success Coach is someone with whom students can connect throughout their time at BHCC

### 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.

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

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

The Commonwealth Honors Program (CHP) is a statewide program that offers students in the Massachusetts' public colleges and universities an intellectually stimulating educational foundation for becoming independent thinkers and lifelong learners.

# Mission of the Commonwealth Honors Program at Bunker Hill Community College

The Commonwealth Honors Program provides opportunities for students to excel academically in a rich and challenging environment and develops a community of scholars that is inclusive, building on the strengths of the college community's diversity.

### **Admission Requirements**

To enter the Honors Program you must first satisfy one of the following criteria:

- Be a current BHCC student with a minimum 3.3 cumulative GPA and at least 12 earned credits;
- Or a high school graduate with a B+ average or higher;
- Or a transfer student from another college with at least 12 earned credits and a 3.5 GPA.

Applications are available through Admissions and Enrollment Services, Room B203, and at the Commonwealth Honors Program, Room E145.

### Graduation as a Commonwealth Honors Scholar

The requirements for completion of the Commonwealth Honors Program are:

- Earn a minimum 3.5 cumulative GPA at Bunker Hill Community College.
- Satisfactory completion of the Honors Seminar course (HON200).
- Completion of 3 additional Honors options
  - Honors Courses (see Honors Center for an updated listing of Honors courses)
  - Honors Components (see description below)

An Honors Component is an additional part of a regular course in which a CHP student works with his or her 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. Service learning projects can also be structured for honors credit. Completion of an Honors component in a course will earn an Honors designation for that course on your transcript.

### Benefits

- Use the Commonwealth Honors Center, Room E145 for studying.
- Explore intriguing topics and create your own research project in the Honors Seminar.

- Present your research project by participating in the statewide Undergraduate Conference.
- Work with your professors on individual honors projects and receive Honors designation for those courses
- Enhance your transfer applications and scholarship opportunities.

### **Transfer Opportunities**

Commonwealth Honor scholars are guaranteed transfer to the Commonwealth College at University of Massachusetts at Amherst or Honors programs at any Massachusetts state college or university where you have been accepted. Students in the CHP can also participate in the Commonwealth Transfer Compact, Joint Admissions Program, and the Tuition Advantage Program for transfer to four-year public colleges and universities in Massachusetts. Participation in this program will also enhance applications to private four-year institutions.

Members of the Commonwealth Honors Program have transferred to such schools as Tufts University, Wellesley College, Massachusetts Institute of Technology, Smith College, Amherst College, The Commonwealth College, The University of Pennsylvania, Georgia Institute of Technology, Harvard University, Yale University, Cornell University, Boston University, Boston College, and Brandeis University.

For more information on CHP, contact the Commonwealth Honors Program Advisors at CHP@bhcc.mass.edu or stop by the Honors Center, Room E145.

### **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.

### Evening and Weekend Services

In order to address evening students' needs, the College offers support services Monday through Thursday evenings. Admissions and Enrollment Services, 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 their schedules.

A Dean is available on the Charlestown campus Monday through Thursday evenings until 7 p.m. in Admissions and Enrollment Services, Room B203 during the fall and spring semesters and summer sessions. Students may consult the deans to seek information regarding their programs of study, specific courses or for other academic and student services issues. BHCConline, Academic Computing Center, Audio-Visual Center, Center for Self-Directed Learning, Library and Learning Commons, Language Lab, Math Space and the Tutoring and Academic Support Center are open evenings and weekends on the Charlestown campus including the H-Building 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.

Admissions and Enrollment Services are located in the Main Lobby of both campuses and 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, 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.

# **General Services**

**Bookstore.** The college bookstore is operated by Barnes and Noble College Booksellers as a service to the students, faculty, and staff. The bookstore is located on the fourth floor, E-Building, and operates all year round. The bookstore offers a large selection of textbooks in a wide variety of formats: Rental, Digital, Used, and New to save students money and give them choice. In addition to the bookstore's multiple textbook options, it has everything from school supplies and reference materials to backpacks, college apparel, and snacks to go. During finals of each semester, the bookstore offers a Cash for Books Program to offer students up to 50 percent cash back on textbooks. Students can order textbooks and college apparel online at bhcc.bncollege.com to have them shipped or for easy in-store pick up. Stay connected to the BHCC Bookstore by becoming a Facebook fan at facebook.com/BHCCbookstore. For store hours and inquiries, visit the bookstore's website at bhcc.bncollege. com or contact the bookstore at 617-241-5161, through fax at 617-241-5190, or through email, bksbunkerhill@bncollege.com.

**Food Services.** Fame Food. Service operates a full-service cafeteria on the fourth floor, E-Building. During the fall and spring semesters, the cafeteria is open Monday through Thursday, 8 a.m. to 2:30 p.m., and Friday, 8 a.m. to 2 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. to 9 p.m., Friday, 7 a.m. to 2 p.m., Saturday, 8 a.m. to 3 p.m., and Sunday, 9 a.m. to 2 p.m. During the summer sessions, the Fame Café is open Monday through Thursday, 8 a.m. to 3 p.m. and Friday, 8 a.m. to 2 p.m.

**Child Care.** The Child Focus Early Learning Centers, located on both the Charlestown and Chelsea campuses, are early learning centers 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 five years of students, faculty and staff of Bunker Hill Community College. The Centers are open daily, Monday through Friday, on both campuses from 7:30 a.m. to 5:30 p.m. For more information, call 617-228-2474.

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

**Parking.** Parking on the Charlestown campus is restricted to permit holders. 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 only. Charlestown campus Lot 4, adjacent to B-Building, provides designated one-hour visitor parking spaces as well as spaces for persons with disabilities. There is no student parking permitted on the Chelsea campus. However, there is metered parking available by the City of Chelsea around the Campus.

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

### **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 healthcare providers and health screening. For more information, visit the Health Services Office, Room E154, or call 617-228-2274. Bunker Hill Community College is a smokefree environment. Smoking is not allowed in any building on any campus.

### Workforce Development Center and Community Education

Through the Workforce Development Division, Bunker Hill Community College directly addresses the diverse workforce and economic development needs of the community by developing and offering a wide variety of flexible yet specific non-traditional programs designed for employees within their local organizations as well as for individuals seeking to improve their workplace skills or even to create their own start-up companies.

### Workforce Development Center (WDC)

The Workforce Development Center of Bunker Hill Community College 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, sales skills, workplace English as a Second Language, computer skills, and allied health. The Center provides training at the worksite or at the College, scheduled at the convenience of the organization. Visit us in the H-Building, or call 617-228-2021.

### **Community Education (CE)**

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. The continuing education arm of Bunker Hill Community College provides innovative learning programs to adult learners in Massachusetts, across the U.S. and throughout the world. By offering accessible and relevant courses, CE programs provide knowledge and connections for people to achieve their personal and professional goals. CE also directly impacts businesses and communities, helping citizens become more skilled and committed to making Massachusetts and the world a better place in which to live and work. Current class listings are available online at www.bhcc.mass.edu/CE. Visit us in the H-Building, or call 617-228-2462

### Community Center for Entrepreneurship (CCE)

The BHCC Community Center for Entrepreneurship is dedicated to helping students; faculty, alumni and their surrounding communities create start-up companies and also assist with the growth of existing businesses. This one-stop resource center's services are tailored to the needs of each individual. Each client receives one-on-one counseling with a member of the CCE staff and/or a Massachusetts Small Business Development Center (MSBDC) Advisor. The CCE crafts an action plan for each viable business idea; the plan may include credit and non-credit courses, certificate programs, referrals, educational workshops, custom training programs and business plan development. The CCE also provides access to accelerator programs, the BHCC Entrepreneurship Club, as well as other City and State Agencies who share our mission. Visit us in the H-Building, or call 617-228-3224.

### 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 nonprofit 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 of students.

### The Mary L. Fifield Art Gallery at Bunker Hill Community College

The Bunker Hill Community College Art Gallery provides the College and the local community opportunities to view highcaliber 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, 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.

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

Information about Transfer Programs are offered through information sessions 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.

### **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: ENG111 and ENG112 (6 credits) to fulfill General Education

- 1. ENG111 and ENG112 (6 credits) to fulfill General Education requirement 1 and
- 2. 16 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 6 General Education menu areas listed in 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 source 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. [Area 2]
- Students are able to apply their understanding of diverse world perspectives and past historical event in order to critically evaluate potential resolutions to conflicts in our multicultural world. [Area 3]
- Students are able to apply computational methods, generate problem-solving strategies, and construct mathematical models necessary in a technologically sophisticated society. [Area 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. [Area 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. [Area 6]

### Student Learning Outcomes Assessment Program (SLOAP)

The Student Learning Outcomes Assessment Program (SLOAP) was designed and implemented by full-time faculty during the 2003-2004 academic year. The SLOAP Taskforce, composed of faculty representatives from each academic department, oversees ongoing assessment of student learning outcomes on the course, program and institutional levels. Faculty submit assessment proposals to the Taskforce for approval and, once the proposed project is complete, submit a report of their findings to the Taskforce. Faculty use data from SLOAP projects to improve learning where assessment projects indicate improvement is needed. All SLOAP data is stored in the SLOAP database which is available on the BHCC Portal.

### Sustainability

Bunker Hill Community College is committed to integrating sustainability within curriculum throughout the institution. Courses listed in the College's course schedule booklet marked with a leaf symbol (\*) are part of the College's ongoing efforts to promote sustainability. These courses emphasize environmentally responsible awareness and learning and contribute significantly to students' understanding and practice of sustainability.



The table of contents below lists the academic programs offered by BHCC in alphabetical order. A comprehensive overview of academic programs begins after this table and is organized alphabetically. Refer to the page numbers listed below for the program of interest.

	OPTION/PROGRAM	DEGREE/ PROGRAM	PAGE
Α	Accounting Information	СТ	61
	Accounting Option	AS	62
	Administrative Information Management Option	AS	64
В	Baking and Pastry Arts Option	AS	66
	Biology Transfer Option	AS	68
	Biomedical Engineering Option	AS	70
	Biotechnology Option	AS	71
	Business Concentration	AA	73
С	Cardiac Sonography Option	AS	77
	Central Processing	СТ	79
	Chemical Science Concentration	AS	80
	Cisco Systems CCNA (Fast-Track)	СТ	82
	Communication Concentration	AS	83
	Community Health Worker	СТ	84
	Computed Tomography	СТ	85
	Computer Forensics (Fast-Track)	СТ	86
	Computer Forensics	СТ	87
	Computer Information Systems Concentration	AA	88
	Computer Science Concentration	AA	89
	Computer Science Transfer Option	AS	90
	Computer Support Specialist	СТ	92
	Computer Support Specialist Option	AS	93
	Craft Entrepreneurship	СТ	95
	Craft Entrepreneurship Option	AS	96
	Criminal Justice Program	AS	98
	Culinary Arts	СТ	99
	Culinary Arts Option	AS	100
D	Database Programming and Administration Option	AS	101
	Database Support Specialist (Fast-Track)	СТ	103
	Database Support Specialist	СТ	104
	Digital and Computer Forensics and Investigations Option	AS	105
E	Early Childhood Development	СТ	107
	Early Childhood Development Program	AS	108
	Education Concentration	AA	110
	Electric Power Utility Program	AS	113
	Energy and Sustainability Management	СТ	114
	Engineering Transfer Option	AS	115
	English Concentration	AA	116
	Entrepreneurship	ст	117
	Entrepreneurship Option	AS	118

	OPTION/PROGRAM	DEGREE/ PROGRAM	PAGE
	Excel Applications Support Specialist	ст	120
F	Finance Option	AS	121
	Fine Arts Concentration	AA	122
	Fine Arts Option	AS	123
	Fire Protection and Safety	ст	124
	Fire Protection and Safety Program	AS	125
	Foreign Language Concentration	AA	126
G	Gaming/Computer Simulation in Entrepreneurship	СТ	128
	Gaming/Computer Simulation Option	AS	129
	General Concentration	AA	130
	General Sonography Option	AS	131
	Graphic Design Option	AS	133
Н	Health Information Networking	ст	134
	History and Government Concentration	AA	135
	Hotel/Restaurant Management	ст	137
	Hotel/Restaurant Management Option	AS	138
	Human Services Program	AS	140
1	Imaging Informatics	ст	142
	Information Management Specialist	СТ	143
	Information Technology Security (Fast-Track)	ст	144
	Information Technology Security	СТ	145
	Information Technology Security Option	AS	146
	Information Technology Transfer Option	AS	148
	Interactive Design Option	AS	150
	International Business	СТ	151
	International Business Option	AS	152
L	Law Enforcement	СТ	154
М	Magnetic Resonance (MR)	ст	155
	Mammography	ст	156
	Management of Assisted Living and Institutional Facilities Option	AS	157
	Management Option	AS	159
	Mathematics Concentration	AA	161
	Media Communication Option	AS	162
	Medical Assistant	ст	164
	Medical Information Management Assistant	ст	165
	Medical Information Management Option	AS	166
	Medical Interpreting	ст	168
	Medical Laboratory Technician Program	AS	169

	OPTION/PROGRAM	DEGREE/ PROGRAM	PAGE	
	Medical Office Information Specialist ( <i>Fast-Track</i> )	ст	171	PROGRAMS OF STUDY
	Medical Radiography Full-time Option	AS	172	RAMS
	Medical Radiography Part-time Evening Option	AS	174	Р Р
	Meeting and Event Planning	СТ	176	Ĩ
	Meeting and Event Planning Option	AS	177	ΡY
	Microsoft Applications Support Specialist	ст	179	
	Music Concentration	AA	180	
N	Network Technology and Administration	ст	181	
	Network Technology and Administration Option	AS	182	
0	Object Oriented Computer Programming and Design	ст	183	
Р	Paralegal	СТ	184	
	Paralegal Studies Program	AS	185	
	Pastry Arts	СТ	187	
	Patient Care Technician	ст	188	
	PC Hardware Support Specialist	СТ	189	
	Pharmacy Technician	ст	190	
	Phlebotomy Technician	ст	191	
	Physics Concentration	AA	192	
	Practical Nursing	ст	193	
	Professional Human Services Work	ст	194	
	Psychiatric Rehabilitation	ст	195	
	Psychology Concentration	AA	196	
R	Registered Nursing Program: Day/Evening/Hybrid/Weekend Options	AS	200	
	Respiratory Therapy Program	AS	203	
S	Sociology Concentration	AA	205	
	Substance Abuse Services	СТ	206	
	Surgical Technology	СТ	207	
т	Taxation	СТ	208	
	Taxation Option	AS	209	
	Technical Business Option	AS	211	
	Theatre Concentration	AA	213	
w	Web Development	СТ	214	
	Web Development in Entrepreneurship	ст	215	
	Web Development Option	AS	216	
	World Studies Emphasis Certification Students enrolling in any A.A. degree program can earn World Studies Emphasis Certificatiom simultaneously	ст	218	

AA - Denotes Associate in Arts

AS - Denotes Associate in Science

CT – Denotes Certificate Program

### **Elective Courses**

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

**CAREER ELECTIVES** are courses in the student's major field or related field approved by the department chair or program coordinator.

LIBERAL ARTS ELECTIVES
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ELECTIVE	DEPARTMENT
VMA Art	Communication
VMA Photography	Communication
FLM Film	English
HUM Humanities	English
LIT Literature	English
ENG English	English
FRE French	Foreign Language and Humanities
GER German	Foreign Language and Humanities
ITL Italian	Foreign Language and Humanities
MUS Music	Foreign Language and Humanities
POR Portuguese	Foreign Language and Humanities
SPN Spanish	Foreign Language and Humanities
THE Theatre	Foreign Language and Humanities
HIS101	History/Government
HIS102	History/Government
PHL Philosophy	History/Government
HON Honors	Interdisciplinary
MAT Mathematics	Mathematics and Physics
INT110	American Culture

LAB	SCIENCE	E ELECTIVES

ELECTIVE	DEPARTMENT
PHY Physics	Mathematics and Physics
AST Astronomy	Science
BIO Biology*	Science
CHM Chemistry	Science
ENV Enviro. Science	Science

\* BIO111 does not qualify as a Lab Science Elective

SOCIAL SCIENCE ELECTIVES		
ELECTIVE	DEPARTMENT	
ECO Economics	Business	
GOV Gov't/Politics	History/Government	
HIS History	History/Government	
PHL Philosophy	History/Government	

GEO Geography History/Government

### BEHAVIORAL SCIENCE ELECTIVES

ELECTIVE	DEPARTMENT				
PSY Psychology	Behavioral Science				
SOC Sociology	Behavioral Science				

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

### Accounting Information Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
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 or CIT113 or CIT120 or Chair approval
Statistics I	MAT181		3	MAT097
Concentration Electives			6	
CONCENTRATION ELECTIVES (CHOO	DSE 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,or CIT113, or CIT120 or Chair approval
TOTAL CREDITS			27	

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 entrylevel 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 entrylevel 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

- Describe and demonstrate an understanding of cash vs. accrual accounting.
- Compare and contrast different concepts of depreciation of property, plant and equipment assets.

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

### Associate in Science Business Administration Program: Accounting Option

		5		<u> </u>
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
Organizational Behavior/Design	MAN112 satisfies Area 2 requirement		3	ENG095 or placement and ESL098 or RDG095 or placement
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES			•	<u>^</u>
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and 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
Principles of Marketing	MAN105		3	ESL098 and ESL099 or RDG095 and ENG090 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
Federal Income Tax I	ACC203	Fall	3	ACC102
Cost Accounting I	ACC207	Fall	3	ACC102
Intermediate Accounting II	ACC202	Spring	3	ACC201
Volunteer Income Tax Assistance	ACC205	Spring	3	ACC203
Managerial Accounting I or Business Internship	ACC216 or MAN299	Spring	3	ACC207 Chair approval
TOTAL CREDITS			61	

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 fouryear academic institutions. Students qualify for entry-level positions within their areas of concentration.

### 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 CONCENTRATION 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.

### 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 chair for more information. See pages 64 and 166.

# 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. See pages 143 and 165.

# Prerequisite or co-requisite 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 40 words per minute should take OIM101 in the first semester. Students who type 40 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 the H-Building.



### Associate in Science Office and Information Management Program: 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
Group Dynamics	PSY107 satisfies Area 2 requirement		3	co-req OIM199
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Office and Information Management: Technology on the Move	OIM199 satisfies LCS requirement		3	co-req PSY107 must be taken with OIM199; ENG095 or placement and ESL098 or RDG095 or placement pre/ co-req OIM101
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Introduction to Business	BUS101		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Records and Information Management	OIM106		3	pre/co-reqs OIM101 and CIT110
Documentation Generation II	OIM110		3	OIM101 and CIT110 or Chair approval
Business Correspondence and Editing	OIM130		3	ENG095; pre/co-req OIM101
Admin Tech and Procedures	OIM115		3	pre/co-reqs OIM101 and CIT110
Principles of Internet and Information Security	CIT118		3	CIT110,or CIT113,or CIT120 or Chair approval
Admin Business Communication	OIM230-see note*	Fall	3	pre/co-reqs OIM106, OIM110, OIM115, and OIM130
Database Design with MS Access	CIT128		3	CIT110, or CIT113, or CIT120 or Chair approval
Design Support Using MS Excel	CIT234		3	CIT110, or CIT113, or CIT120 or Chair approval
Collaboration, Communication and Integration in MS Office	CIT250		3	CIT110, or CIT113, or Chair approval
Office and Information Management Internship	OIM299	Spring	3	pre/co-req all core courses or Chair approval
TOTAL CREDITS			61	

OIM101 is a prerequisite or co-requisite 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 the H-Building for students who type 40 words per minute or more with accuracy and know MS Word and document format.

\*Note: Administrative Business Communication (OIM230) must be taken during the fall semester prior to enrolling in OIM299.

# BUNKER HILL COMMUNITY COLLEGE IS CURRENTLY NOT ACCEPTING STUDENTS INTO THIS PROGRAM AS OF THE 2014-2015 ACADEMIC YEAR.

Continued on following page

### Associate in Science Office and Information Management Program: Administrative Information Management Option

Continued from previous page

### OPTION OVERVIEW

The Office and Information Management Department's mission is to provide industryidentified 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 CONCENTRATION 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.

### Associate in Science Culinary Arts Program: Baking and Pastry Arts Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College Writing I	ENG111		3	ENG095 and ESL098 or RDG095 or placement
College Writing II	ENG112		3	ENG111
Individual and Society	Area 2		3	
World View	Area 3- satisfied by program			
Topics in Career Mathematics	MAT100-see note**		3	MAT093
Nutrition Science/Lab	BIO115-satisfies Area 5 requirement		4	ENG095 and MAT093 and ESL098 or RDG095 or placement
Humanities	From Area 6- satisfied by program			
CONCENTRATION COURSES				
Culinary Arts Seminar	CUL101 satisfies LCS requirement		3	
Food Service and Sanitation Skills	CUL111		3	
How Baking Works: The Science of Baking	CUL113	Fall	3	
Introduction to Culinary Arts	CUL115	Fall	4	CUL125
Principles of Baking	CUL125	Fall	4	co-req CUL115
Cafe and Bistro Cuisine	CUL135	Spring	4	CUL115 and CUL125
Advanced Desserts and Pastries	CUL145	Spring	4	CUL115 and CUL125
Cake Decorating	CUL119		3	
Classical and International Pastries	CUL217	Spring	4	CUL145
Pastry Arts Internship	CUL299P		3	
Advanced Classical Desserts and Showpiece Cakes	CUL247	Spring	4	CUL145
Baking for Health	CUL249	Fall	3	CUL145
Chocolate and Sugar Artistry	CUL241	Fall	3	CUL145
Hot and Cold Desserts	CUL243	Fall	4	CUL145
TOTAL CREDITS			65	

\*\* Note: This course satisfies "Quantitative Thought" General Education Requirement Area 4 for Culinary Arts and Pastry Arts students only

Continued on following page

### Associate in Science Culinary Arts Program: Baking and Pastry Arts Option

Continued from previous page

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.

#### OPTION OVERVIEW

The Baking and Pastry Arts Option prepares students with an intensive, practical application of skills and decision making demanded by the baking and pastry arts profession. The program provides hands on curriculum interwoven with operational procedures found in most pastry production facilities and 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 entry level positions in retail bakeries, pastry shops and related pastry production facilities. An A.S. degree will position the student for entry level management positions, as well as the opportunity to transfer to a four year institution for further studies

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

- Demonstrate an acquired technical skill in the usage of tools, equipment and machinery found in typical bakeries and commercial pastry production facilities.
- 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.
- Demonstrate the ability to apply advanced decorating techniques in cake and pastry design.
- Demonstrate knowledge of advanced chocolate and sugar design.
- Demonstrate a skill in working with the design and implementation of healthy alternatives to recipes.

### Associate in Science Biological Sciences Program: Biology Transfer 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
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Calculus I	MAT281 satisfies Area 4 requirement		4	MAT196 or MAT197 or placement
General Biology I/Lab	BIO195 satisfies Area 5 requirement		4	ENG095 and RDG095 and MAT194 or placement-see note
Humanities	From Area 6		3	
CONCENTRATION COURSES				
General Biology II/Lab	BIO196		4	BIO195; see note*
Cell Biology/Lab	BIO207		4	BIO195 and CHM201 or Chair approval; see note*
Genetics and Lab	BIO208		4	BIO196 or Chair approval; see note*
General Chemistry I/Lab	CHM201		4	MAT197 and ENG111; 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/co-req MAT282; see note*
OPTION ELECTIVES (CHOOSE 3)	•	·		•
Organic Chemistry/Lab I	CHM251		4	CHM202 and ENG112; see note*
Organic Chemistry/Lab II	CHM252		4	CHM251; see note*
Statistics I/	MAT181		3	MAT097
Calculus II	MAT282		4	MAT281
Intro to Biotechnology	BIO120		4	ENG095 and MAT093 or placement and ESL098 or RDG095 or placement; see note*
Molecular Biotechnology and Lab	BIO260		5	BIO120, BIO207, and BIO208 or Chair approval; see note*
Honors Seminar	HON200		3	
Population Ecology	BIO210		4	BIO196 or chair approval
Interpretation and Presentation of Scientific Research	SCI221		3	Complete Two: BIO195, CHM201, PHY201, and/or ENR101 or Chair approva
TOTAL CREDITS			62-64	

\*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.

Continued on following page

### Associate in Science Biological Sciences Program: Biology Transfer Option

Continued from previous page

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.

#### **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, pre-veterinary, predental, pharmacy or chiropractic degree program should enroll in this program.

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

- Use currently accepted biological, chemical, and physical concepts to investigate problems and ideas presented in advanced 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.

### Associate in Science Engineering Program: Biomedical Engineering 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
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Calculus I	MAT281 satisfies Area 4 requirement		4	MAT196 or MAT197 or placement
General Biology I/Lab	BIO 195 satisfies Area 5 requirement		4	ENG095 and MAT194 or placement; see note*
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Intro to Engineering /Lab	ENR101		4	MAT194; see note*
Biomedical Engineering/Lab	BME100		4	MAT281 and CHM201 co-req MAT282; see note*
Biomedical Engineering II	BME200		3	BME100 and MAT282; co-req MAT283; see note*
Biomedical Engineering III	BME250		3	BME200; co-req MAT285; see note*
Calculus II	MAT282		4	MAT281; see note*
Calculus III	MAT283		4	MAT282; see note*
Ordinary Differential Equations	MAT285		4	MAT282; see note*
College Physics I/Lab	PHY251		4	MAT281; see note*
College Physics II/Lab	PHY252		4	PHY251; pre/co-req MAT282; see note*
General Chemistry I/Lab	CHM201		4	MAT197 and ENG111; see note*
General Chemistry II/Lab	CHM202		4	CHM201; see note*
General Biology II/Lab	BIO196		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.

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 and Engineering 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.

#### **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.

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

- Design and conduct experiments.
- Analyze and interpret data.
- Apply computational tools and scientific concepts to biomedical engineering problems.
- Design systems, components, or processes for solving biomedical engineering problems.
- Function as part of a biomedical engineering team.
- Articulate the professional and ethical responsibilities required of engineers.

## Associate in Science Biological Sciences Program: Biotechnology 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
Individual/Society	From Area 2		3	
World View	From Area 3		3	
Precalculus	MAT197 satisfies Area 4 requirement		4	MAT194
General Biology I/Lab	BIO195 satisfies Area 5 requirement		4	ENG095 or placement; ESL098 or RDG095 and MAT194; or placement; see note*
Humanities	From Area 6		3	
CONCENTRATION COURSES				
General Biology II/Lab	BIO196		4	BIO195; see note*
Introduction to Biotechnology/Lab	BIO120		4	ENG095 and MAT093 or placement; ESL098 or RDG095 or placement
General Chemistry I/Lab	CHM201		4	MAT197 and ENG111; see note*
General Chemistry II/Lab	CHM202		4	CHM201; see note*
Cell Biology/Lab	BIO207		4	BIO195 and CHM201 or Departmental approval; see note*
Genetics and Lab	BIO208		4	BIO196 or Department approval; see note*
Molecular Biotechnology and Lab	BIO260		5	BIO120, BIO207, and BIO208 or Departmental approval; see note*
OPTION ELECTIVES (CHOOSE 3)				
Microbiology/Lab	BIO205		4	BIO195 or BIO203; see note*
Principles of Organic Biochemistry/Lab	CHM121		4	CHM120; see note*
Statistics I	MAT181		3	MAT097
Calculus I	MAT281		4	MAT196 or MAT197
Honors Seminar	HON200	İ	3	
Interpretation and Presentation of Scientific Research	SCI221		3	Complete Two: BIO195, CHM201, PHY201, and/or ENR101 or Chair approva
TOTAL CREDITS			63-64	

\*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.

## Associate in Science Biological Sciences Program: Biotechnology Option

Continued from previous page

PROGRAMS OF STUDY

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.

#### 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.

- Use currently accepted biological, chemical, and physical concepts to investigate problems and ideas presented in advanced biological study.
- Use biological concepts to evaluate their own science related concerns such as personal health or careers.
- Use laboratory technology, equipment and techniques to investigate scientific problems critically and safely using proper scientific methods.
- Use molecular and cellular laboratory techniques that are commonly used in Biotechnology.
- Explain the major concepts of cell structure, function and cellular processes that are key to life.
- Explain current models, concepts and principles of genetics and inheritance.
- Explain and apply the underlying concepts of current topics and experimental models in molecular biology and Biotechnology.
- Use industry skills and work practices of the biotechnology industry for direct employment.

## Associate in Arts: 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
Principles of Psychology or Organizational Behavior/Design	PSY101 or MAN112 satisfies Area 2 requirement		3	ESL098 or RDG095 or placement ESL098 and ESL099 or RDG095 and ENG090 or placement
Macroeconomics	ECO201satisfies Area 3 requirement		3	MAT097 and ESL098 or RDG095 or placement
College Algebra for STEM	MAT194 satisfies Area 4 requirement		4	MAT099 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	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	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting II	ACC102		3	ACC101
Microeconomics	ECO202		3	MAT097 and ESL098 or RDG095or placement
Calculus for Management Science	MAT231		4	MAT194
Behavioral Science Elective			3	
Lab Science Elective			4	
Literature Elective			3	pre/co-req ENG111
Literature Elective			3	pre/co-req ENG111
Statistics I	MAT181		3	MAT097
TOTAL CREDITS			64	

## Associate in Arts: Business Concentration

Continued from previous page

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in a global business environment.

#### 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 businessrelated 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 218.

# 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. See page 77. The full-time General Sonography Option – 24 months in duration. See page 131. The full-time Medical Radiography Option – 21 months in duration. See page 172. The part-time Medical Radiography Option – 35 months in duration. See page 174.

## Program accreditations are as follows:

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

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

Readmission is considered on a case-by-case basis. All medical imaging students must undergo a physical examination, complete the necessary immunization forms, including the three (3) dose Hepatitis B immunization series, have CPR certification, carry malpractice and health insurance, and undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. The application process for the Medical Imaging Program is highly competitive and selective. Potential applicants are ranked based on prerequisite grades, Test of Essential Academic Skills V (TEAS V) results in Reading, Math and English/Language, as well as grades earned in any program required non-core courses. Applicants must achieve a CPT reading level of 10th grade or higher, or a LOEP score of 98 or higher for ESL applicants, to proceed to take the TEAS V Test. The highest ranked students for each A.S. Program will be invited to complete the TEAS V test. Qualified applicants will be able to take the TEAS test free-of-charge at BHCC a maximum of three (3) times. Job shadows will be recommended to those applicants upon invitation. Standby lists will be generated annually for each A.S. Degree option. Standby students not obtaining a seat in that year will be required to reapply for future admission to any Medical Imaging Program.

## PREREQUISITES FOR ALL MEDICAL IMAGING OPTIONS:

- Attend one MANDATORY information session within one year of application. (Refer to BHCC website for dates).
- Possess a high school diploma or GED certificate.
- Achieve a reading level of 10th grade or higher on the College Placement Test (CPT) or a numerical score of 98 or above on the LOEP reading test for ESL students
- Complete the following courses with a grade of C or better:
- One semester of College Algebra (MAT194, MAT520) or equivalent;
- One semester of college level Anatomy/Physiology I/Lab (must be completed within five years of application unless currently working in related healthcare position).
- One semester of College Writing I (ENG111) or equivalent with a grade of C or better.

## AFTER ALL PREREQUISITES ARE COMPLETED:

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

## Tuition and Fees for Medical Imaging Students\*\*\*:

Massachusetts Residents	\$11,100.00 for 2 years
Non-Massachusetts Residents	\$25,300.00 for 2 years
Uniforms	\$200.00
Malpractice/Liability Insurance	\$15.00 annually
Books/Software	\$900.00 annually
Medical Imaging Pin	\$10.00
Certification Exam Fees	\$200.00 Radiography
\$250.00 - \$500.00 Sonography	

\*\*\* Costs are estimated and subject to change. Please refer to Admissions and Enrollment Services for exact cost.

Note: A college physics course, with a grade of C or better, is required for accepted General Sonography or Cardiac Sonography Students. For accepted Sonography students, MIG111, Imaging Technology I (web-based), will be offered in the summer prior to the start of the program.

# Associate in Science Medical Imaging Program: Cardiac Sonography Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES				·
College Writing I	ENG111		3	ENG095 and ESL098 or RDG095 or placement
Anatomy/Physiology I/Lab	BIO203		4	BIO105 or BIO108 or BIO195
College Algebra for STEM	MAT194		4	MAT099 or placement
PROGRAM CURRICULUM				
Imaging Technology I or General Physics/Lab	MIG111-see note* or PHY201-see note*		3 4	MAT197
Patient Care in Medical Imaging	MIG109	Fall	4	co-req MIG101
Intro to Ultrasound	MIG101	Fall	2	acceptance into Cardiac Sonography Program.
Ultrasound Physics and Instrumentation	MIG105	Fall	3	acceptance into Cardiac Sonography Program.
Anatomy/Physiology II/Lab	BIO204	Fall	4	BIO203
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; co-req MIG201
Cardiac Sonography Clinical II	MIG213	Spring	4	MIG211; co-req MIG215
Echo IV/Interpretation	MIG215	Spring	4	MIG203
Advanced Interpretation Seminar	MIG216	Spring	2	MIG211 and MIG203; co-req MIG215
Applications/Concepts	CIT110	Spring	3	ESL098 or RDG095 or placement
Cardiac Sonography Clinical III	MIG217	Summer	4	MIG213
TOTAL PROGRAM CREDITS			66-67	

\*Note: Imaging Technology I (MIG111 web-based) or General Physics I/Lab (PHY201) must be completed, with a grade of C or better, in the summer prior to the start of the program.

## Associate in Science Medical Imaging Program: Cardiac Sonography Option

Continued from previous page

### 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.

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

As a prerequisite for a clinical placement in the Cardiac Sonography Option, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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.

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

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Central Processing I	SGT109	Fall	2	
Central Processing I Clinical	SGT109A	Fall	2	
Medical Terminology	NHP180-see note*		3	
Central Processing II	SGT110	Spring	2	SGT109 and SGT109A and ENG090 and MAT093 and RDG090 or placement
Central Processing II Clinical	SGT110A	Spring	2	SGT109 and SGT109A
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Central Processing Clinical	SGT111	Spring	2	SGT109 and SGT109A
Communication Skills for Health Care	AHE117		3	
TOTAL CREDITS			19	

## **Central Processing Certificate Program**

\*Note: NHP180 course description is found under the Allied Health heading.

This program is offered on the Chelsea Campus as a part-time evening program.

Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. Admission to the central processing program does not guarantee clinical placement. The outcome of the CORI/SORI check may impact the student's ability to participate in the clinical experience. For further information, see the Department Chair.

## ADMISSION REQUIREMENTS:

- Students must apply to the program through Admissions and Enrollment Services and:
- Possess a high school diploma or GED certificate.
- Attend an information session.
- Complete the college placement tests in reading, math, and English (may be taken during the first semester in the program).

## 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. As a prerequisite for a clinical placement in the Central Processing Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

## 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.

For more information about our graduation rates, the median debt of students who

completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

- 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.

# Associate in Arts: 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	
Calculus I	MAT281		4	MAT196 or MAT197 or placement
General Chemistry I/Lab	CHM201		4	MAT197 and ENG111; see note*
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Calculus II	MAT282		4	MAT281
General Chemistry II/Lab	CHM202		4	CHM201; see note*
Organic Chemistry I/Lab	CHM251		4	CHM202 and ENG112; 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/co-req MAT282; see note*
Social Science Elective			3	
Behavioral Science Elective			3	
Literature Elective			3	pre/co-req ENG111
Literature Elective			3	pre/co-req ENG111
CONCENTRATION ELECTIVES (CH	IOOSE 1)			
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Statistics I	MAT181		3	MAT097 or placement
Calculus III	MAT283		4	MAT282
Honors Seminar	HON200		3	Instructor permission
TOTAL CREDITS			62-63	

\*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.

## Associate in Arts: Chemical Science Concentration

Continued from previous page

### 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 fouryear 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 218.

## Cisco Systems CCNA (Fast-Track) Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or Info Technology Fundamentals or PC Hardware and Software	CIT110 or CIT112 or CIT182		3	ESLO98 or RDG095 or placement
Introduction to Networking	CIT162		3	CIT110 or CIT112 orCIT113 or CIT120
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	

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.

### CAREER OUTLOOK

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

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

## Associate in Arts: 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	MAT097 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	MAT097 or placement
Lab Science Elective			4	
Behavioral Science Elective			3	
Social Science Elective			3	
LCS or Elective	see note*		3	
Elective			3	
Literature Elective			3	pre/co-req ENG111
Literature Elective			3	pre/co-req ENG111
CONCENTRATION ELECTIVES (CHC	OOSE 4)			
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Film as Art	FLM101		3	
Oral Communication	ENG171		3	ENG095 and MAT093 or placement
Digital Publishing with InDesign	VMA131		3	ENG095 and MAT093 or placement
Introduction to Mass Media	VMA111		3	ENG095 and MAT093 or placement
Journalism II	ENG242	Spring	3	ENG095 or placement
TOTAL CREDITS			62	

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

\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year.

## 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 entrylevel 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 218.

## **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 course description for prerequsities
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.

\*Note: A placement experience in a human service agency is required by the course following a C.O.R.I. background check.

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.

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

As a prerequisite for a clinical placement in the Community Health Worker Certificate Program , all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

#### UPON COMPLETION OF THIS CONCENTRATION 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 decisionmaking skills.
- Communicate effectively and establish collaborative relationships to allow planning, implementation of support services, and interventions with participants, agency supports, and other community resources.
- Demonstrate knowledge of supports available, while understanding the challenges facing participants, assist in gaining resources for aid, advocate by overcoming challenges and providing supports through community and educational resources.

- Demonstrate skill in handling crisis prevention, intervention, and resolution techniques to solve problems and keep detailed documentation of the process and outcome of each situation.
- Participate in the life of a human services agency, being familiar with the mission and "best" practices of human services organizations, demonstrating these skills in professional activities.

PROGRAMS OF STUDY

# **Computed Tomography Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Computed Tomography I	CTC111	Fall	3	Acceptance into CT Program
Computed Tomography II	CTC211	Spring	3	CTC111; co-req CTC299
Computed Tomography Internship	CTC299	Spring	3	Chair approval; pre/co-req CTC211
TOTAL CREDITS			9	

This Computed Tomography Certificate Program is designed for experienced medical imaging professionals 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 and Sex Offender Registry Information (SORI) check.

## ADMISSION REQUIREMENTS:

- Student must apply to the program through Admissions and Enrollment Services and:
- Present a completed application with fee.
- Submit a copy of the current ARRT or NMTCB card.
- 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.

### 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.

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

As a prerequisite for a clinical placement in the Computed Tomography Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

## 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

- 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.

## Computer Forensics (Fast-Track) Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Computer Forensics	CIT121		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
PC Hardware and Software	CIT182		3	
Windows Operating Systems	CIT268		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Advanced Computer Forensics	CIT221		3	CIT121 and CIT268
Cyber Crime in Today's Society	CRJ245		3	ENG111, CRJ101, and CRJ103 or Instructor permission
Keyboarding Techniques	OIM100		1	
TOTAL CREDITS			16	

## PROGRAM OVERVIEW

Computer Forensics is the name for a field of study and practice that incorporates many areas of expertise including but not limited to hard drive and mobile device analysis, and computer crime investigation.

This certificate provides to the Information Technology and Criminal Justice professionals, the opportunity to obtain basic knowledge, training and skills in Computer Forensics.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Image and analyze the evidence found on a hard drive including file system analysis.
- Analyze digital evidence including evidence found in the seizure of cell phones, PDA's and other mobile devices.

# **Computer Forensics Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Internet and Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Introduction to Computer Forensics	CIT121		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Information Security and Assurance	CIT219		3	CIT268
Advanced Computer Forensics	CIT221		3	CIT121 and CIT268
Criminal Law	CRJ103		3	ENG095 or placement and ESL098 or RDG095 or placement
Evidence and Court Procedures	CRJ202		3	CRJ101, CRJ103, CRJ208, and ENG111 or Instructor permission
Criminal Justice Elective			3	
Computer Elective			3	
Computer or Criminal Justice Elective			3	
TOTAL CREDITS			27	

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 Forensics is the name for a field of study and practice that incorporates many areas of expertise including but not limited to hard drive and mobile device analysis, and computer crime investigation.

This certificate provides to the Information Technology and Criminal Justice professionals the opportunity to obtain basic knowledge, training and skills in Computer Forensics.

## 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Image and analyze the evidence found on a hard drive including file system analysis.
- Analyze digital evidence including evidence found in the seizure of cell phones, PDA's and other mobile devices.

## Associate in Arts: 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	
Microeconomics	ECO202 satisfies Area 3 requirement		3	MAT097 and RDG095 or placement
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	ESL098 or RDG095 or placement
Intermediate Visual Basic	CIT218		3	CIT216 or Instructor permission or Chair approval
Visual Basic	CIT216		3	CIT110 or CIT113 or CIT120 or Chair approval
Principles of Accounting II	ACC102		3	ACC101
Behavioral Science Elective			3	
Lab Science Elective			4	
Literature Elective			3	pre/co-req ENG111
Literature Elective			3	pre/co-req ENG111
Computer Elective	see note*		3	
Computer Elective	see note*		3	
Mathematics Elective			3-4	MAT097 or placement
Mathematics Elective			3-4	MAT097 or placement
TOTAL CREDITS			64-66	

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

## CONCENTRATION OVERVIEW

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entrylevel 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 fouryear 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. 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 218.

## Associate in Arts: 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	
Precalculus	MAT197** see note satisfies Area 4 requirement		4	MAT194 or placement
College Physics I/Lab	PHY251 satisfies Area 5 requirement		4	MAT281
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Intro to Computer Science and Object Oriented Programming	CIT120 satisfies LCS requirement-see note*		4	ENG095 and MAT099 and RDG095 or placement; pre/co-req MAT194
Introduction to Java	CIT239		4	ENG095 and MAT194 or placement and CIT120
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 and CIT120 and ENG095 or placement
Calculus I	MAT281		4	MAT197
Calculus II	MAT282		4	MAT281
College Physics II/Lab	PHY252		4	PHY251; pre/co-req MAT282
Behavioral Science Elective			3	
Social Science Elective			3	
Literature Elective			3	pre/co-re ENG111
Literature Elective			3	pre/co-re ENG111
TOTAL CREDITS			65	

For waiver of computer course prerequisite(s) see the Computer Science Advisor.

\*Note: The Department recommends that a college-level math course be taken before CIT120.

\*\*Note: For students placing above MAT197, Choose from one of the following program electives:CIT243, CIT287, MAT283 or MAT285.

## CONCENTRATION OVERVIEW

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entrylevel 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. 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 218.

## Associate in Science Computer Information Technology Program: Computer Science Transfer 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
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Precalculus	MAT197-see note* satisfies Area 4 requirement		4	MAT194 or placement
College Physics I/Lab	PHY251 satisfies Area 5 requirement		4	MAT281
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Intro to Computer Science and Object Oriented Programming	CIT120 satisfies LCS requirement		4	ENG095 and MAT099 and RDG095 or placement; pre/co-req MAT194
C++ Programming	CIT237		4	MAT194 or placement and CIT120
Java Programming	CIT239		4	MAT194 or placement and CIT120
Advanced Java	CIT285		3	CIT239 and MAT197
Data Structures	CIT242		3	CIT239 and MAT197
Calculus	MAT281		4	MAT197
Calculus II	MAT282		4	MAT281
College Physics II/Lab	PHY252		4	PHY251; pre/co-req MAT282
ELECTIVES (CHOOSE 4 OF 6)** SEE NO	DTE			
Android Development for Java Programmers	CIT243		3	CIT239; pre or co-req CIT285
Survey of New Popular OOPL for Programmers	CIT287		3	CIT284 or CIT285 and MAT197
Advanced C++/OOP	CIT284		3	CIT237 and MAT194
Linear Algebra	MAT291		4	MAT281
Calculus III	MAT283		4	MAT282
Differential Equations	MAT285		4	MAT282
TOTAL CREDITS			66-68	

Note: Advising Tips - students transferring to UMB should take CS240 Programming in C and UNIX at UMB and transfer the course back to BHCC for one of the electives; students transferring to UML and UMA are recommended to take MAT291 as one of the electives; and students transferring to Tufts are recommended to take MAT283 as one of the electives. It is always best practice to check the current requirements of the transfer institution before selecting computer electives at BHCC. Check with the Computer Science Advisor. \*Note: MAT197 waived for students placing higher on Accuplacer test.

\*\*For assistance in choosing electives and waiver of computer course prerequisite(s) see the Computer Science Advisor.

## Associate in Science Computer Information Technology Program: Computer Science Transfer Option

Continued from previous page

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 offers many courses that apply to other options to afford 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.

### OPTION OVERVIEW

The Computer Information Technology Department (CIT) has a clear, wellarticulated, 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.

## **Computer Support Specialist Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or InfoTechnology Fundamentals	CIT110 or CIT112		3	ESLO98 or RDG095 or placement
Principles of Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Introduction to MS Office	CIT133		3	
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
PC Hardware and Software	CIT182		3	
Help Desk Techniques	CIT230		3	CIT110 or CIT113 or CIT120; one additional CIT course; ENG095 and RDG095 or ESL098 or placement
Keyboarding Techniques	OIM100		1	
Advanced MS Office	CIT233		3	CIT133 or CIT110 or CIT113 or Chair approval
Window Operating Systems	CIT268		3	CIT110 or CIT112 or CIT113 or CIT120 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 entrylevel support positions in hardware support and troubleshooting, help desk, and other Internet support positions.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www. bhcc.mass.edu/certificateprograms.

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

## Associate in Science Computer Information Technology Program: Computer Support Specialist 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
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES	• •			·
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
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 CIT112 or CIT113 or CIT120 or Chair approval
Visual Basic	CIT216		3	CIT110 or CIT113 or CIT120 or Chair approval
Windows Operating Systems	CIT268		3	CIT110 or CIT113 or CIT120 or Chair approval
PC Hardware & Software	CIT182		3	
PC Keyboarding Techniques	OIM100		1	
Principles of Internet and Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Introduction to MS Office	CIT133		3	
Advanced MS Office	CIT233		3	CIT110 or CIT113 or CIT133 or Chair approval
Collaboration, Communication and Integration in MS Office Applications	CIT250		3	CIT110 or CIT113 or Chair approval
Help Desk Techniques	CIT230		3	CIT110 or CIT113 or CIT120 and one additional CIT course; ENG095 and RDG095 or placement
Internship			3	Chair approval
TOTAL CREDITS			62	

## Associate in Science Computer Information Technology Program: Computer Support Specialist Option

Continued from previous page

PROGRAMS OF STUDY

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 offers many courses that apply to other options to afford 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.

### OPTION OVERVIEW

This option is designed for full-time or parttime 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.

# 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	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
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	ENG095 or placement and ESL098 or RDG095 or placement
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 permission MAT097; CIT110: MAN111; MAN105 MAN111; MAT173 or MAT181 or MAT183; and CIT110 or CIT133
TOTAL CREDITS			27	

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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

## Associate in Science Business Administration Program: Craft Entrepreneurship Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL CONCENTRATION COURSES				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095
College Writing II	ENG112		3	ENG111
Organizational Behavior/Design	MAN112 satisfies Area 2 requirement		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Macroeconomics or Microeconomics	ECO201 or ECO202 satisfies Area 3 requirement		3	MAT097 and ESL098 or RDG095 or placement
Statistics I	MAT181 satisfies Area 4 requirement		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
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	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
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	ENG095 or placement and ESL098 or RDG095 or placement
Small Business Management	MAN207		3	ACC102 or ACC105; MAN111; MAN105 or Instructor permission
Entrepreneurship & Innovation or Project Management or Operations Management or eCommerce Marketing	MAN204 or MAN215 or MAN212 or MAN217		3	MAN107 or Instructor permission MAT097; CIT110; MAN111
				MAN111; MAT173 or MAT181 or MAT183; CIT110 or CIT133 MAN105
North Bennet Street School			18	Chair approval
TOTAL CREDITS			67-68	

## Associate in Science Business Administration Program: Craft Entrepreneurship Option

Continued from previous page

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 fouryear academic institutions. Students qualify for entry-level positions within their areas of concentration.

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in a global business environment.

### **OPTION OVERVIEW**

This option allows students and graduates of North Bennet Street School's two and three-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 C309, Charlestown Campus.

### CAREER OUTLOOK

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

- 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.

## Associate in Science Criminal Justice Program

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
Principles of Sociology	SOC101 satisfies Area 2 requirement		3	ESL098 or RDG095 or placement
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4-see note**		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
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	CRJ208		3	ENG111, CRJ101, CRJ103 or Instructor permission
Management for Criminal Justice	CRJ201		3	ENG111, CRJ101, CRJ103 or Instructor permission
Evidence and Court Procedure	CRJ202		3	ENG111, CRJ101, CRJ103 and CRJ208 or Instructor permission
Principles of Psychology	PSY101		3	ESL098 or RDG095 or placement
Criminology	SOC207		3	PSY101 or SOC101
State/Local Politics	GOV103		3	ESL098 or RDG095 and ENG095 or placement
Oral Communication	ENG171		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.

\*\*Note: The Department strongly recommends Statistics I (MAT181) for students planning to earn a bachelors degree in Criminal Justice.

### 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 entrylevel positions in security, law enforcement, and corrections in local, state, and some federal law enforcement agencies.

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

• 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.

# **Culinary Arts Certificate Program**

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

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

## Associate in Science Culinary Arts Program: Culinary Arts 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
Individual and Society	From Area 2		3	
World View	Area 3 satisfied by program			
Topics in Career Math	MAT100 satisfies Area 4 requirement		3	MAT093 or placement and ESL098 or RDG095 or placement
Nutrition Science/Lab	BIO115 satisfies Area 5 requirement		4	ENG095 and MAT093 or placement and ESL098 or RDG095 or placement
Humanities	Area 6 satisfied by program			
Culinary Arts Seminar	CUL101 satisfies LCS requirements		3	
CONCENTRATION COURSES				
Food Service Sanitation and Skills	CUL111		3	
Introduction to Culinary Arts	CUL115	Fall	4	co-req CUL125
Principles of Baking	CUL125	Fall	4	co-req CUL115
Café and Bistro Cuisine	CUL135	Spring	4	CUL115 and CUL125;co-req CUL145
Advanced Desserts and Pastries	CUL145	Spring	4	CUL115 and Cul125
Menu Design and Purchasing	CUL211		3	CUL135 and CUL145
Essentials of Food Production	CUL215	Fall	4	CUL135 and CUL145; co-req CUL225
Essentials of Dining Service	CUL225	Fall	4	CUL135 and CUL145; co-req CUL215
Advanced and Ethnic Food Production	CUL235	Spring	4	CUL215 and CUL225
Food and Beverage Operations	CUL245	Spring	4	CUL215 and CUL225
Culinary Arts Internship	CUL299	Summer	3	Chair approval
Hospitality Law	HRT117		3	
TOTAL CREDITS			63	

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.

## OPTION OVERVIEW

The Culinary Arts Option 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.

- 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.

## Associate in Science Computer Information Technology Program: Database Programming and Administration 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
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES		-		
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
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 CIT112 or CIT113 or CIT120 or Chair approval
Visual Basic	CIT216		3	CIT110 or CIT113 or CIT120 or Chair approval
Windows Operating Systems	CIT268		3	CIT110 or CIT113 or CIT120 or Chair approval
PC Keyboarding Techniques	OIM100		1	
Principles of Internet and Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Database Design with MS Access	CIT128		3	CIT110 or CIT113 or CIT120 or Chair approval
Intermediate Visual Basic	CIT218		3	CIT216 or Instructor permission or Chair approval
Information Security & Assurance	CIT219		3	CIT268
SQL Programming	CIT236		3	CIT110 or 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	

## Associate in Science Computer Information Technology Program: Database Programming and Administration Option

Continued from previous page

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 offers many courses that apply to other options to afford 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.

### **OPTION OVERVIEW**

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

- Write programs to support database applications.
- Design and code complex queries.
- Use a database procedural language to design and code database functions, triggers and collections.
- Qualify with the skill set necessary to take the first level of Oracle Database Certification.

# Database Support Specialist (Fast-Track) Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or Info Technology Problem Solving or PC Hardware and Software	CIT110 or CIT113 or CIT182		3	ESL098 or RDG095 ENG090 and RDG090
Principles of Internet and Info Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Database Design with MS Access	CIT128		3	CIT110 or CIT113 or CIT120 or Chair approval
SQL Programming	CIT236		3	CIT110 or CIT113 or CIT120 or Chair approval
Decision Support Using MS Excel	CIT234		3	CIT110 or CIT113 or CIT120 or Chair approval
Keyboarding Techniques	OIM100		1	
TOTAL CREDITS			16	

## PROGRAM OVERVIEW

This program prepares students to become database and spreadsheet support technicians who work with users to identify their needs and design and program reports and forms to meet those needs.

## CAREER OUTLOOK

Graduates of this program qualify for entrylevel database and spreadsheet support positions in a wide range of organizations.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Design and code complex queries.
- Support desktop security functions.
- Support Excel and Access functions.

## Database Support Specialist Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or Info Technology Fundamentals	CIT110 or CIT112		3	ESL098 or RDG095 or placement
Principles of Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Introduction to MS Office	CIT133		3	
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
PC Hardware and Software	CIT182		3	
Help Desk Techniques	CIT230		3	CIT110 or CIT113 or CIT120; one additional CIT course; ENG095 and RDG095 or ESL098 or placement
PC Keyboarding Techniques	OIM100		1	
Database Design with MS Access	CIT128		3	CIT110 or CIT113 or CIT120 or Chair approval
Visual Basic	CIT216		3	CIT110 or CIT113 or CIT120 or Chair approval
SQL Programming	CIT236		3	CIT110 or CIT113 or 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 entrylevel database programming and support positions in a wide range of organizations.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Design and code complex queries.
- Support desktop security functions.
- Support Excel and Access functions.

## Associate in Science Computer Information Technology Program: 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
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	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES			<u>^</u>	^ 
Principles of Internet and Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Introduction to Computer Forensics	CIT121		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Windows Operating Systems	CIT268		3	CIT110 or CIT113 or CIT120 or Chair approval
Visual Basic	CIT216		3	CIT110 or CIT113 or CIT120 or Chair approval
Advanced Computer Forensics	CIT221		3	CIT121 and CIT268
Information Security and Assurance	CIT219		3	CIT268
Batch File Programming	CIT271		1	CIT270 and pre/co-req CIT268
Special Topics in Digital and Computer Forensics	CIT223		3	pre/co-req 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	ENG111, CRJ101, CRJ103 and CRJ208
Cyber Crime in Today's Society	CRJ245		3	ENG111, CRJ101, CRJ103 or Instructor permission
Career Elective	see note*		3-4	
Career Elective	see note*		3-4	
Career Elective	see note*		3-4	
TOTAL CREDITS			66-69	

## Associate in Science Computer Information Technology Program: Digital and Computer Forensics and Investigations Option

Continued from previous page

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

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 offers many courses that apply to other options to afford 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.

### 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.

- 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, PDAs and other mobile devices.

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	

# Early Childhood Development Certificate 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.

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

As a prerequisite for a clinical placement in the Childhood Development Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, to access 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.

## CAREER OUTLOOK

Graduates of this program qualify as teacher's aides in the State of Massachusetts. For more information on minimal requirements for employment, contact the Department chair.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

- 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.

PROGRAMS OF STUDY

## Associate in Science Early Childhood Development Program

	-	-		
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
Principles of Psychology	PSY101 satisfies Area 2 requirement		3	ESL098 or RDG095 or placement
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Children's Literature I	LIT217 satisfies Area 6 requirement		3	Pre/co-req ENG111
CONCENTRATION COURSES				
Child Growth/Development	ECE103		3	ESL098 or RDG095 and ENG095 or placement
Program Environments	ECE106		3	ESL098 or RDG095 and ENG095 or placement
Issues in Early Childhood Education	ECE102		3	ESL098 or RDG095 and ENG095 or placement
Guidance/Discipline	ECE101		3	ECE103
Curriculum in Early Childhood Education	ECE104		3	ECE103
Observation/Recording Behavior	ECE117		3	ECE103
Families/Community in Early Childhood Education	ECE112		3	ECE103 plus additional 3 courses in ECE or EDU
Practicum in Early Childhood Education I	ECE120	Fall	3	Chair approval
Young Children with Special Needs	ECE111		3	ECE103 plus additional 3 courses in ECE or EDU
Practicum in Early Childhood Education II	ECE121	Spring	3	Chair approval
LCS or Career Elective	see note**		3	
Career Elective	see note*		3	
Career Elective	see note*		3	
TOTAL CREDITS			61	

\* Note: Career electives: ECE107, ECE108, ECE109, ECE110, EDU102 or

\*\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year. Students with credentials from the Council for Early Childhood Professional Recognition as a Child Development Associate (CDA) may apply for 6 credits in the associate degree program through the Prior Learning Assessment Program (PLAP). See Department Chair for details.

# Associate in Science Early Childhood Development Program

Continued from previous page

## 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.

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

As a prerequisite for a clinical placement in the Early Childhood Development program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

## 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.

- 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.

# Associate in Arts: 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		3	MAT097 or placement
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 or RDG095 and ENG095 or placement
CIT Elective	CIT		3	ESL098 or RDG095 or placement
Oral Communication	ENG171		3	
World Civilization to 1500	HIS111		3	ESL098 and ESL099 or RDG095 and ENG095 or placement
US History: Colonization thru Civil War or US History: Reconstruction to Present	HIS151 or HIS152		3	ESL098 or RDG095 and ENG095 or placement
Children's Literature	LIT217		3	pre/co-req ENG111
Contemporary Math I	MAT172		3	MAT097 or placement
Introduction to Biology/Lab or Human Biology/Lab	BIO105 or BIO108		4	ENG095, MAT093, RDG095 or ESL098 or placement
Environmental Science I	ENV105		4	MAT093, ENG095, RDG095 or ESL098 or placement
Intro and Foundations of Education	EDU101		3	ENG095 and RDG095 or ESL098 or placement
Young Children with Special Needs	ECE111		3	ECE103 plus three ECE or EDU courses or equivalent
Practicum in Instruction	EDU140		3	EDU101
Fine Arts Elective	see note*		3	
Literature Elective	LIT		3	pre/co-req ENG111
LCS or Career Elective	see note**		3	
Career Elective	see Note**		3	
TOTAL CREDITS			62	

\*Note Fine Arts Electives: VMA104, VMA122, VMA123, VMA124, or VMA161

\*\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year. Career Electives: ECE107, ECE109, ECE110, ECE112.

## Associate in Arts: Education Concentration

Continued from previous page

### 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 knowledgebase 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 fouryear colleges or universities. 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 A.A. Education Concentration is not to be followed by those seeking certification by the Massachusetts Department of Early Education and Care. If work in child care is desired, a student should enroll in the A.S. degree Early Childhood Development. For more information, contact the Department chair.

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

As a prerequisite for a clinical placement in this concentration, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, to access 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.

### CAREER OUTLOOK

Graduates of this concentration may qualify to transfer to four-year 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 218.

# 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. Students receive continuous handson training at NSTAR labs and during required internships.

## 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.

- 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.

## ADMISSIONS REQUIREMENTS:

Students must apply to the program through Admissions and Enrollment Services and:

- Complete the NSTAR application.
- Possess a high school diploma or GED certificate.
- Complete Foundations of Algebra (MAT097) or place into Intermediate Algebra (MAT099).
- 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.

# Associate in Science Electric Power Utility Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES			·	·
Writing Skills II	ENG095		3	ENG090
Foundations of Algebra	MAT097		3	MAT093 or placement
GENERAL EDUCATION COURSES				
College Writing I	ENG111	Semester I	3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing II	ENG112	Semester II	3	ENG111
Group Dynamics	PSY107 satisfies Area 2 requirement	Semester II	3	
Intro to Mass Media	VMA111 satisfies Area 3 requirement	Semester III	3	ENG095 and MAT093 or placement
Topics in Algebra and Trigonometry	MAT193 satisfies Area 4 requirement	Semester I	3	MAT097 or placement
Intro to Physics	PHY191 satisfies Area 5 requirement	Semester IV	4	MAT193
Humanities	From Area 6	Semester IV	3	
CONCENTRATION COURSES				
DC Circuit Theory/Lab	EPU101	Semester I	4	pre/co-req MAT193
Fundamentals of Single Phase and Polyphase Metering	EPU151	Semester I	4	Acceptance in Program
Applications/Concepts	CIT110	Semester I	3	ESL098 or RDG095 or placement
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 and ENG111
Principles of Management	MAN111	Semester III	3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Intro to Substation Operations	EPU205	Semester III	4	Acceptance in Program
Power and Distribution Systems	EPU257	Semester III	3	EPU104
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 hourly wage is \$20-30 per hour and overtime is also compensated. NSTAR offers a competitive and comprehensive benefits package including health and dental care, life insurance, 401K plan (including company matching program), as well as continuing education reimbursement.

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

- Demonstrate practiced and acquired skills while working at NSTAR in a variety of electrical and gas 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 30 Certification.
- First Aid/CPR.
- CDL Pre-trip Training.
- DL Class A Drivers License.
- D.O.T. Medical Certification.
- Certification in Natural Gas Technology.
- NSTAR Hoisting License.

# Energy and Sustainability Management Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Survey of Renewable Energy/Lab	ENV111	Semester I	4	ENG095 and ESL098 or RDG095 and MAT093 or placements
Green Buildings	ESM105	Semester I	3	ENG095 and ESL098 or RDG095 and MAT093 or placements
Sustainable Resource Conversation/Lab	ENV110		4	ENG095 and ESL098 or RDG095 and MAT093 or placements
Sustainable Facilities Management	ESM115		3	ENG095 and ESL098 or RDG095 and MAT097 or placements
Project Management and Finance for Energy	ESM211	Semester II	3	ENV111
Greening Existing Buildings: Operation and Maintenance or Internship	ESM205, ESM299- see note*	Semester II	3	ESM105; Director approval
OPTION ELECTIVES (CHOOSE 2)				
Introduction to Geospatial Technology	CIT123		3	CIT110 or CIT113
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
College Writing I	ENG111		3	ENG095 and ESL098 or RDG095 or placement
Environmental Science I/Lab	ENV105		4	ENG095 and ESL098 or RDG095 and MAT093 or placement
Environmental Science II/Lab	ENV106		4	ENG095 and ESL098 or RDG095 and MAT093 or placement
Tropical Field Studies	ENV120		4	Director approval
Greening Existing Buildings: Operation and Maintenance	ESM205	Semester II	3	ESM105
Energy, Life and Sustainability	LCS101	Semester I	3	First semester students
Introduction to Entrepreneurship	MAN107		3	ENG095 and ESL098 or RDG095 or placement
Principles of Management	MAN111-see note**		3	ESL098 or RDG095 and ESL099 or ENG090 or placement
Project Management	MAN215		3	CIT110, MAN111, and MAT097 or placement
TOTAL CREDITS			26-28	

\*Note: Students must be enrolled in the Energy and Sustainability Management Program, have completed a minimum of ten credits in ESM courses with a B average or higher or approval of Program Directors.

\*\*Note: Declared majors in Business Concentration, Management, and Finance options must take BUS101 as a prerequisite. Non-majors are eligible to take MAN111 without BUS101 as a prerequisite, but must meet other course prerequisites listed in the College catalog.

## PROGRAM OVERVIEW

The design of the program is interdisciplinary, combining coursework in project management and finance for renewable and efficient energy projects with training in operating and maintaining environmentally friendly, healthy, and efficient buildings.

## CAREER OUTLOOK

Graduates of the ESM program may seek employment in a variety of entry-level positions such as technicians, coordinators, administrators, sales representatives, or specialists in a wide range of industries including renewable energy, construction, facilities management, environmental protection services, energy efficient services, utilities, and industrial operations. In addition to earning BHCC's ESM Certificate, graduates will qualify to sit for the LEED Green Associate (LEED GA) exam, a nationally recognized certification administered by the US Green Building Council.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

 Identify and implement environmental sustainability or energy efficiency strategies within their workplace, home, or community taking into consideration factors such as project impact, cost effectiveness, and technical feasibility.

• Establish competencies to sit for the Leadership in Environmental and Energy Design (LEED) Green Associate exam, a nationally recognized certification.

This program is supported by the Massachusetts Community Colleges & Workforce Development Transformation Agenda, which is 100 percent funded through a \$20 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT. Grant Agreement #TC-22505-11-60-A-25.

# Associate in Science Engineering Program: Engineering Transfer 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
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	
CONCENTRATION COURSES				
Intro to Engineering /Lab	ENR101		4	MAT194; see note
Engineering Statics	ENR260		3	PHY251; pre/co-req MAT282; see note
Ordinary Differential Equations	MAT285		4	MAT282
Engineering Dynamics	ENR265		3	ENR260; co-req MAT285; see note
Strength of Materials	ENR270		3	ENR260; co-req 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/co-req MAT282; see note
General Chemistry I/Lab	CHM201		4	MAT197 and ENG 111; see note
General Chemistry II/Lab	CHM202		4	CHM201; see note
Interpretation and Presentation of Scientific Research	see note*		3	Complete two: BIO195, CHM201, PHY201 and/or ENR101 or Chair approval
Career Elective	see note*		3-4	Departmental approval
TOTAL CREDITS			66-67	

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

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 and Engineering 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.

## 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.

## Associate in Arts English Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSE	S			
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	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	Area 6 satisfied by program			
CONCENTRATION COURSES				
Writing Tutor Seminar I	ENG115		3	Instructor permission
Literature Course			3	pre/co-req ENG111
Literature Course			3	pre/co-req ENG111
Literature Course			3	pre/co-req ENG111
Literature Course			3	pre/co-req ENG111
English Elective			3	
Foreign Language Elective			3	
Foreign Language Elective			3	
Behavioral Science Elective			3	
Social Science Elective			3	
Mathematics Elective			3	MAT097 or placement
Lab Science Elective			4	
LCS or Elective	see note*		3	
Elective			3	
TOTAL CREDITS			62	

\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year.

## 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 fouryear 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 fouryear 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 218.

# 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	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
Accounting Information Systems	ACC105		3	ACC101; ENG095 or placement and ESL098 or RDG095 or placement
Introduction to Entrepreneurship	MAN107		3	ENG095 or placement and ESL098 or RDG095 or placement
Entrepreneurship and Innovation	MAN204	Spring	3	MAN107 or Instructor permission
Small Business Management or Project Management	MAN207 or MAN215		3	ACC102 or ACC105; MAN111; MAN105 or Instructor permission MAT097; 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

# Associate in Science Business Administration Program: Entrepreneurship 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
Organizational Behavior/Design	MAN112 satisfies Area 2 requirement		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Macroeconomics or Microeconomics	ECO201 or ECO202 satisfies Area 3 requirement		3	MAT097 and ESL098 or RDG095 or placement
Contemporary Math II or Statistics I or Calculus for Management Science	MAT173 or MAT181 or MAT231 satisfies Area 4		3 4	MAT097 or placement; MAT097 or placement; MAT194 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Globalization	BUS111 satisfies Learning Communities requirement. see note.*		3	ENG090 and RGD095 or ESL098 and ESL099 or placement.
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Computer Elective	see note**		3	
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and RDG095 or placement
Principles of Marketing	MAN105		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
Principles of Accounting II or Accounting Information Systems	ACC102 or ACC105		3	ACC101
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Introduction to Entrepreneurship	MAN107		3	ENG095 or placement and ESL098 or RDG095 or placement
Entrepreneurship and Innovation	MAN204	Spring	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, MAT097 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	MAT097; CIT110; MAN111 MAN111; MAT173 or MAT181 or MAT183; MAT097 and CIT110; pre/co-req MAN105
Business Internship or Management Seminar	MAN299 or MAN201		3	Chair approval MAN105 and MAN111; should be taken in final semester
TOTAL CREDITS			64-65	

\*Note: Students who have already taken an LCS course should consult Department Chair or Division Dean. \*\*Note: Recommended electives: CIT128, 133, 162, 233, 234.

# Associate in Science Business Administration Program: Entrepreneurship Option

Continued from previous page

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 fouryear academic institutions. Students qualify for entry-level positions within their areas of concentration.

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in a global business environment.

## 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.

- 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.

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

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or InfoTechnology Fundamentals	CIT110 or CIT112		3	ESLO98 or RDG095 or placement
Principles of Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Introduction to MS Office	CIT133		3	
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
PC Hardware and Software	CIT182		3	
Help Desk Techniques	CIT230		3	CIT110 or CIT113 or CIT120; one additional CIT course; ENG095 and RDG095 or ESL098 or placement
Keyboarding Techniques	OIM100		1	
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
Decision Support Using MS Excel	CIT234		3	CIT110 or 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	

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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

# Associate in Science Business Administration Program: Finance 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
Organizational Behavior/Design	MAN112 satisfies Area 2 requirement		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Macroeconomics	ECO201 satisfies Area 3 requirement		3	MAT097 and ESL098 or RDG095 or placement
Quantitative Thought	From Area 4		3	MAT097 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	ESL098 or RDG095 or placement
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Principles of Management	MAN111		3	BUS101; ESL098 and ESL099 or ENG090 and RDG095 or placement
Real Estate or Wills, Estates, and Trusts or Business Internship	PLG203 or PLG204 or MAN299		3	ENG095 or placement and ESL098 or RDG095 or placement; Chair approval
Principles of Accounting II	ACC102		3	ENG111
Professional Communication	BUS207		3	ENG111
Investments	ACC111		3	ACC102
Personal Finance	ACC112		3	
Microeconomics	ECO202		3	MAT097 and ESL098 or RDG095 or placement
Financial Management	ACC210	Spring	3	ACC102
Money and Banking	ACC211		3	ECO201 and ECO202
Mutual Funds Industry	MAN213		3	ACC102 and ACC111
TOTAL CREDITS			61	

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 fouryear academic institutions. Students qualify for entry-level positions within their areas of concentration.

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, andrelevant education in business disciplines to a diverse studentpopulation. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in a global business environment.

## 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.

- 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.

## Associate in Arts 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	MAT097 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		3	ENG095 and MAT093
Two-Dimensional Design	VMA102		3	ENG095 and MAT093
Drawing I	VMA104		3	ENG095
Figure Drawing	VMA204**		3	VMA104
Introduction to Mass Media	VMA111		3	ENG095 and MAT093
Art History Prehistoric to Medieval or Art History Renaissance to Contemporary	VMA112 or VMA113		3	ENG095 and MAT093
Three-Dimensional Design	VMA103		3	VMA102
Painting I	VMA122		3	ENG095 and MAT093
Painting II	VMA222**		3	VMA122
Career Elective	see note*		3	
Behavioral Science Elective			3	
Social Science Elective			3	
Lab Science Elective			4	
Literature Elective			3	pre/co-req ENG111
Literature Elective			3	pre/co-req ENG111
Mathematics Elective			3	MAT097 or placement
TOTAL CREDITS			65	

\*Note: Select the career elective from VMA courses. \*\*Note: See Department Chair for course waiver.

### 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 218.

# Associate in Science Visual and Media Arts Program: Fine Arts Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				
College writing I	ENG 111		3	ENG095 and ESL098 or RDG095 or placement.
College Writing II	ENG 112		3	ENG 111
Individual / Society	From Area 2		3	
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3	
Scientific View of the World	From Area 5		4	
Humanities	Area 6 satisfied by program			
CONCENTRATION COURSES				
VMA Freshman Seminar	VMA 100 satisfies LCS requirement		3	ENG095 and MAT093
Two-Dimensional Design	VMA 102		3	ENG095 and MAT093
Drawing I	VMA 104 satisfies Area 6		3	ENG095
Figure Drawing	VMA 207		3	VMA 104
Introduction to Mass Media	VMA 111 satisfies Area 3		3	ENG095 and MAT093
Arts History Prehistoric to Medieval	VMA 112		3	ENG095 and MAT093
Arts History Renaissance to Contemporary	VMA 113		3	ENG095 and MAT093
Three-Dimensional Design	VMA 103		3	VMA 102
Painting I for Fine Arts	VMA 221		3	VMA 104
Painting II for Fine Arts	VMA 225		3	VMA 221
Observational Drawing	VMA 226		3	VMA 204
Digital Photography Techniques	VMA 261		3	VMA 102
Ideas in Art: Fine Arts Studio	VMA 227	Fall	3	VMA 204 or VMA 222
Multilevel Studio	VMA 228	Spring	3	VMA 227
Career Elective (2)			6	
TOTAL CREDITS			64	

## PROGRAM DESCRIPTION

This program prepares students for transfer into a four-year studio intensive program in Fine Arts. A fine arts education provides students with a highly versatile skill set that can be translated into successful careers within and outside of the arts. Gaining technical mastery over the foundational basic elements of art and principles of design provides them the flexibility to produce compelling artwork in any medium; skills with obvious, translatable commercial value.

## CAREER OUTLOOK

Career tracks include: Fine Arts, Commercial Arts, Graphic Design, Photography, Sculpture/3-D Designer, Illustration, Animation, Filmmaker, Videography, Architecture/Interior Architecture, Fashion Designer, Art Therapy, Art Education, Art Criticism and Theory, Art Historian, Art Critic, Curator, Gallerist/Art Dealer, Video Game Designer, Audio/Visual Artist, Audio Technician, Web Designer, Display Designer, Product Designer and the list can go on. Students of all these tracks receive the same foundational curriculum within a typical Four-Year Art College.

## PROGRAM OBJECTIVES

Building foundational skills such as: observational drawing, principles of design, color theory, concept development. production of a portfolio for acceptance/ advanced placement into a four-year studio intensive B.F.A. program

## 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 Electives	see note*		3	
TOTAL CREDITS			27	

\*Note: Choose one career elective if FPS 111 has been completed. If FPS 111 has been waived, choose two career electives from the following career electives: FPS121, FPS125, FPS127, FPS137, FPS221, FPS225 and FPS227.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

# Associate in Science Fire Protection and Safety Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES				4
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 requirement		3	ESL098 or RDG095 or placement
World View	From Area 3		3	
Quantitative Thought	Area 4		3	MAT097 or placement
Principles of Inorganic Chemistry and Lab	CHM120 satisfies Area 5 requirement		4	ENG095, RDG095, MAT097 or placement
Humanities	From Area 6		3	
CONCENTRATION COURSES		•		·
Fire Company Officership	FPS107		3	ENG095 and ESL098 or RDG095 or placement
The Fire Service, This Century and the Next, What Should We Expect	FPS111 satisfies LCS requirement		3	
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	1	3	FPS123
Oral Communication	ENG171	1	3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Behavioral Science Elective			3	
Career Elective	see note*		3	
Career Elective	see note*		3	
TOTAL CREDITS			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, FPS221, FPS225, and FPS227.

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 Arts 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	MAT097 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	
Western Civilization to the Renaissance	HIS101		3	ESL098 or RDG095 or placement and ENG095 or placement
Western Civilization from the Renaissance	HIS102		3	ESL098 or RDG095 or placement and ENG095 or placement
Masterpieces of World Literature I	LIT211		3	pre/co-req ENG111
Masterpieces of World Literature II	LIT212		3	pre/co-req ENG111
Lab Science Elective			4	
Behavioral Science Elective			3	
Mathematics Elective			3	MAT097 or placement
LCS or Elective	see note*		3	
Elective			3	
Elective			3	
Elective			3	
TOTAL CREDITS			62	

Note: Students must enter with elementary level proficiency.

Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year. \*Note: Students are encouraged not to take elementarty foreign language courses in their native language.

## Associate in Arts Foreign Language Concentration

Continued from previous page

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 fouryear 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 218.

## Gaming/Computer Simulation in Entrepreneurship Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Maya Foundations	CMT121		3	ENG095 or placement and RDG095 or ESL098 or placement
Maya Character Molding	CMT123		3	CMT121
Maya Character Animation	CMT223	Fall	3	CMT123
Creating 3-D Special Effects	CMT229	Fall	3	CMT121
Game Engines	CMT127	Spring	3	CMT231 or chair approval
Introduction to Entrepreneurship	MAN107	Fall	3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Marketing	MAN105		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Entrepreneurship & Innovation	MAN204	Spring	3	MAN107
TOTAL CREDITS			24	

## PROGRAM OVERVIEW

The Gaming/Computer Simulation in Entrepreneurship Certificate will prepare students in the fundamentals of game/simulation design, development and production and in tandem, will allow individuals to acquire practical entrepreneurial skills. Students will learn the techniques and tools of game program management and will learn to combine these skills with business skills to create opportunities for selfemployment potentially leading to starting a gaming company, or the certificate will better prepare them for further career advancement and mobility within the gaming industry.

### CAREER OUTLOOK

Students completing this certificate can expect to be qualified for positions in gaming companies or further, be positioned to explore the option of starting their own gaming company. The computer gaming/ simulation industry is rapidly growing providing ample opportunities for the gaming professional.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Analyze viability of business opportunities in the gaming industry from various points of view.
- Create game characters, 3D objects as game constructs, and animate the game scene.
- Develop and implement a business plan designed to manage a game development venture.
- Evaluate the feasibility of gaming ideas and identify the industry factors leading to business opportunity.

# Associate in Science Computer Media Technology Program: Gaming/Computer Simulation 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
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Contemporary Math I	MAT172 satisfies Area 4 requirement		3	MAT097 or placement
General Physics I	PHY201 satisfies Area 5 requirement- see note*		4	MAT197
Humanities	From Area 6		3	
CONCENTRATION COURSES				·
Oral Communication	ENG171		3	
Game Development Essentials	CMT101 satisfies LCS requirement		3	ENG095 or placement and ESL098 or RDG095 or placement
Maya Foundations	CMT121		3	ENG095 or placement and ESL098 or RDG095 or placement
Maya Character Modeling	CMT123		3	CMT121
Maya Character Animation	CMT223		3	CMT123
Creating 3-D Special Effects	CMT229		3	CMT121
MEL Scripting in Maya	CMT231	Spring	3	CMT229
The Human Character	CMT119	Fall	3	CMT101
Managing Game Development	CMT103		3	ENG095 and RDG095 or ESL098 or placement
Career Elective	see note**		3	Department approval
Career Elective	see note**		3	Department approval
Digital Imaging with Photoshop	VMA105		3	ENG095 and MAT093 or placement
Introduction to Audio Technology	VMA151		3	ENG095 and MAT093 or placement
TOTAL CREDITS			61	

\*Note: BIO108 may replace PHY201 with a waiver from the Department Chair.

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

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.

## OPTION OVERVIEW

This program prepares students in the fundamentals of 3D Game/ Simulation design, development and production. Students learn how to utilize state-ofthe-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.

## Associate in Arts General Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES	5		'	
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	MAT097 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	MAT097 or placement
Lab Science Elective			4	
Literature Elective			3	pre/co-req ENG111
Literature Elective			3	pre/co-req ENG111
LCS or Elective	see note*		3	
Elective			3	
TOTAL CREDITS			62	

\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year.

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 218.

# Associate in Science Medical Imaging Program: General Sonography Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES				
College Writing I	ENG111		3	ENG095 and ESL098 or RDG095 or placement
Anatomy/Physiology I/Lab	BIO203		4	BIO105 or BIO108 or BIO195
College Algebra for STEM	MAT194		4	MAT099 or placement
PROGRAM CURRICULUM			,	
Imaging Technology I or General Physics/ Lab	MIG111-see note* or PHY201-see note*		3 4	MAT197
Patient Care in Medical Imaging	MIG109	Fall	4	co-req MIG101
Introduction to Ultrasound	MIG101	Fall	2	acceptance to General Sonography Program
Ultrasound Physics and Instrumentation	MIG105	Fall	3	
Cross Sectional Anatomy	SON113	Fall	4	co-req BIO204
Anatomy/Physiology II/Lab	BIO204	Fall	4	BIO203
Abdominal Ultrasound	SON115	Spring	3	co-req SON121
Applications/Concepts	CIT110	Spring	3	ESL098 and RDG095 or placement
Ultrasound Scanning Protocols and Pathology	SON117	Spring	4	SON113 and co-req SON121
Subspeciality Sonography and Neurosonography	SON119	Spring	3	SON113 and co-req SON121
General Sonography Clinical I	SON121	Spring	3	SON113 and co-reqs SON115 and SON117
Vascular Ultrasound	MIG205	Summer I	3	co-req SON123
General Sonography Clinical II	SON123	Summer	3	SON121 and co-req MIG205
College Writing II	ENG112	Fall	3	ENG111
Ultrasound Physics and Instrumentation for the General Sonographer	SON213	Fall	2	MIG105 and co-req SON223
Advanced General Sonography Seminar I	SON215	Fall	2	SON115 and co-req SON223
Obstetrical/Gynecological	SON219	Fall	3	SON123 and co-req SON223
General Sonography Clinical III	SON223	Fall	3	SON123 and co-req SON219, SON213, SON215
Principles of Sociology	SOC101	Spring	3	ESL098 or RDG095 or placement
Advanced General Sonography Seminar II	SON217	Spring	2	SON215 and co-req SON225
Obstetrical/Gynecological Sonography II	SON221	Spring	3	SON219 and co-req SON225
General Sonography Clinical IV	SON225	Spring	3	SON223 and co-reqs SON217 and SON221
General Sonography Clinical V	SON227	Summer	3	SON225
TOTAL PROGRAM CREDITS			69-70	

\*Note: Imaging Technology I (MIG111 web-based) or General Physics I/Lab (PHY201) must be completed, with a grade of C or better, in the summer prior to the start of the program.

PROGRAMS OF STUDY

## Associate in Science Medical Imaging Program: General Sonography Option

Continued from previous page

### **OPTION OVERVIEW**

This program prepares students to pursue careers and registrystatus 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.

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

As a prerequisite for a clinical placement in the General Sonography Option, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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 CONCENTRATION 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).

For important information regarding this option, please see pages 75-76

# Associate in Science Visual and Media Arts Program: Graphic Design 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
Individual/Society	From Area 2		3	
Introduction to Mass Media	VMA111 satisfies Area 3 requirement		3	ENG095 and MAT093
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Drawing I	VMA104 satisfies Area 6 requirement		3	ENG095
CONCENTRATION COURSES				
VMA Freshman Seminar	VMA100 satisfies LCS requirement		3	ENG095 and MAT093
Two-Dimensional Design	VMA102		3	ENG095 and MAT093
Digital Imaging w/Photoshop	VMA105		3	ENG095 and MAT093
Three-Dimensional Design	VMA103		3	VMA102
History of Graphic Design	VMA114	Spring	3	ENG095 and MAT093
Digital Publishing with InDesign	VMA131		3	ENG095 and MAT093
Typography	VMA132	Fall	3	ENG095 and MAT093
Drawing II or Graphic Design Internship	VMA204 or VMA299G-see note*		3	VMA104, VMA232
Digital Illustration with Illustrator	VMA231		3	VMA131
Design Communication I	VMA232	Fall	3	VMA131
Design Communication II	VMA233	Spring	3	VMA232
Publication Design	VMA234	Spring	3	VMA232 or Chair approval
Career Elective	see note*		3	
Career Elective	see note*		3	
TOTAL CREDITS			64	

\*Note: Transfer track students must take VMA204. Career track students must take VMA299G. Select the career elective from VMA courses.

## OPTION 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.

- 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.

## Health Information Networking Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or PC Hardware and Software	CIT110 or CIT182*		3	ESL098 or RDG095
Introduction to Networking	CIT162**		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Routers and Routing Basics	CIT167***		3	CIT162
Switching Basics & Intermediate Routing	CIT267****		3	CIT167
WAN Technologies	CIT274****		3	CIT167
Health Information Networking	CIT277*****		3	CIT167
CISCO CCNA Security	CIT279*****		3	CIT167
TOTAL CREDITS			21	

\*Note: CIT182 is the equivalent to Cisco's IT Essentials - A+ \*\*Note: CIT162 is the equivalent to Cisco's CCNA R and S Semester 1 \*\*\*Note: CIT167 is the equivalent to Cisco's CCNA R and S Semester 2 \*\*\*\*Note: CIT267 is the equivalent to Cisco's CCNA R and S Semester 3 \*\*\*\*Note: CIT274 is the equivalent to Cisco's CCNA R and S Semester 4 \*\*\*\*\*Note: CIT277 is the equivalent to Cisco's Health information Networking \*\*\*\*\*Note: CIT279 is the equivalent to Cisco's CCNA Security

### PROGRAM OVERVIEW

In addition to the BHCC CCNA R and S (Cisco Certified networking Associate -Routing and Switching) certificate courses, students earn an advanced BHCC Cisco networking certificate. Students will enhance their core routing and switching skills and gain the networking and security skills needed to work in industry and the health care fields. The Health Information Networking certificate program is designed for students who hope to expand their networking skills with healthcare information and communication technology (ICT) and for students seeking career-oriented, entrylevel networking and security specialist skills.

### CAREER OUTLOOK

The Health Information Networking Program helps students prepare for entrylevel specialized ICT and networking careers in the healthcare industry, including network administrator and health network technician, careers in physician offices and hospitals, and with third-party contractors and healthcare providers. Students also gain the knowledge and skills needed to prepare for entry-level security specialist careers and networking careers in industry and will be prepared to take multiple industry certificate exams.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

- Apply for entry-level networking positions.
- Apply for entry-level network security specialist careers.
- Apply for entry-level network and network security positions in the healthcare industry.
- Prepare to take the Cisco CCNA R and S Certification Examination(s).
- Prepare to take the Comp TIA A+ Certification Examination(s).
- Prepare to take the Cisco IOS® Network Security (IINS) Certification Examination.

This program is supported by the Massachusetts Community Colleges & Workforce Development Transformation Agenda, which is 100 percent funded through a \$20 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT. Grant Agreement #TC-22505-11-60-A-25.

# Associate in Arts 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	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES		·		
Western Civilization to the Renaissance or World Civilization to 1500	HIS101 or HIS111		3	ESL098 or RDG095 and ENG095 or placement
Western Civilization from the Renaissance or World Civilization from 1500	HIS102 or HIS112	Choose Sequential Course	3	ESL098 or RDG095 or placement and ENG 095 or placement
State/Local Politics	GOV103		3	ESL098 or RDG095 and ENG095 or placement
Government/Politics in US	GOV101		3	ESL098 or RDG095 and ENG095 or placement
US History: Colonization through the Civil War	HIS151		3	ESL098 or RDG095 and ENG095 or placement
US History: Reconstruction to the Present	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/co-req ENG111
Literature in America II or Masterpieces of World Lit II	LIT204 or LIT212	Choose Sequential Course	3	pre/co-req ENG111
Behavioral Science Elective			3	
Mathematics Elective			3	MAT097 or placement
Lab Science Elective			4	
LCS or Elective	see note*		3	
Elective	see note**		3	
TOTAL CREDITS			62	

\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year.

\*\*Note: ECO201 and GOV111 strongly recommended; ECO202, GEO101, and PHL111 recommended.

## Associate in Arts History and Government Concentration

Continued from previous page

### 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 218.

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Management and Service in Hospitality	HRT121		3	
Front Office Operations w/ Technology Component	HRT131	Fall	3	
Principles of Accounting I	ACC101		3	ENG095 or placement and ESL098 or RDG095 or placement
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
PC Keyboarding Techniques	OIM100		1	
Food and Beverage Operations for Hospitality Professionals	HRT112		3	
Culinary Theory in Hospitality	HRT133		3	HRT121
Advanced Lodging Operations	HRT231	Spring	3	HRT131
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Food Service Sanitation and Skills	CUL111		3	
TOTAL CREDITS			28	

# Hotel and Restaurant Management Certificate Program

## 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 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

## Associate in Science Hotel/Restaurant Program: Hotel/Restaurant 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
Individual and Society	PSY101 or SOC101 satisfies Area 2 requirement		3	ESL098 or RDG095 or placement
World View	From Area 3-see note*		3	
Quantitative Thought	Area 4		3	MAT097 or placement
Nutrition Science w/Lab	BIO115 satisfies Area 5 requirement		4	ENG095 and MAT093 or placement; and ESL098 or RDG095 or placement
Humanities	From Area 6		3	
CONCENTRATION COURSES			·	
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	ESL098 or RDG095 or placement
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	Fall	3	
Advanced Lodging Operations	HRT231	Spring	3	HRT131
Food and Beverage Operations for Hospitality Professionals	HRT112		3	
Hospitality Law	HRT117		3	
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.

## Associate in Science Hotel/Restaurant Program: Hotel/Restaurant Management Option

Continued from previous page

This program prepares students in three options: Hotel and Restaurant Management, Management of Assisted Living and Institutional Facilities and Meeting and Event Planning. 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.

### 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 and Food Service 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.

- 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.

PROGRAMS OF STUDY

## Associate in Science Human Services Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION				
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 requirement		3	ESL098 or RDG095 or placement
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Intro to Human Services Profession w/ Field Practice	HSV101		3	ESL098 or RDG095 and ENG095 or placement
Case Management in Human Services	HSV118		3	PSY215 and ESL098 or RDG095 and ENG095 or placement
Child Growth/Development	ECE103		3	ESL098 or RDG095 and ENG095 or placement
Adolescent/Adult Development	PSY224		3	PSY101
Addiction	HSV112		3	PSY101 and ESL098 or RDG095 and ENG095 or placement
Counseling	PSY215		3	PSY101
Human Services Practicum I	HSV120		3	Chair approval
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	Spring	3	see note**
Computer Elective			3	
Career Elective	see note*		3	
LCS or Career Elective	see note*		3	
TOTAL CREDITS			61	

\*Note: New students enrolled in nine credits or more must take a Learning Community Seminar within their first year. Career Electives: HSV115, HSV119, PSY233, AHE104, PSY227 or

\*\*Note: A placement experience in a human service agency is required by the course following a C.O.R.I. background check. The pre requisite for Associate degree students is a grade of C or better in College Writing II 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.

# Associate in Science Human Services Program

Continued from previous page

## PROGRAM OVERVIEW

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

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

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.

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

As a prerequisite for a clinical placement in the Human Services Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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.

- 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.

## **Imaging Informatics Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Diagnostic Imaging and PACS	MIG161	Fall	3	Admission to Imaging Informatics Certificate Program
Applications/Concepts	CIT110	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	CIT110 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 Imaging Informatics Certificate Program
TOTAL CREDITS			24	

Imaging Informatics, or Picture Archival and Communication Systems, is designed for experienced computer science or medical imaging professionals seeking to enter the field of Imaging Informatics 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 Imaging Informatics 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 and a Sex Offender Registry Information (SORI) check.

### ADMISSION REQUIREMENTS:

- Students may apply to the program through Admissions and Enrollment Services 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.
- Submit an application with high school and college transcripts.
- Submit a letter of interest with professional resume and references.
- 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 and July for a September start.

## CAREER OUTLOOK

Hospitals across the country are in the process of migrating their medical imaging department to a filmless state due to digital technology. Imaging Informatics technology is growing laterally. Every hospital will need at least one Imaging Informatics administrator, and many will need more than one.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

As a prerequisite for a clinical placement in the Imaging Informatics Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

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

- 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 Imaging Informatics Administrator.

BUNKER HILL COMMUNITY COLLEGE IS CURRENTLY NOT ACCEPTING STUDENTS INTO THIS PROGRAM AS OF THE 2013-2014 ACADEMIC YEAR.

# Information Management Specialist Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Office and Information Management	OIM199		3	co-req PSY107 must be taken with OIM199; ENG095 or placement or ESL098 or RDG095 or placement Pre/co-req OIM101
Group Dynamics	PSY107		3	co-req OIM199
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Records and Information Management	OIM106		3	pre/co-reqs OIM101 and CIT110
Business Correspondence and Editing	OIM130		3	ENG095; pre/co-req OIM101
Documentation Generation II	OIM110		3	OIM101 and CIT110 or Chair approval
Admin Tech and Procedures	OIM115		3	pre/co-reqs OIM101 and CIT110
Principles of Internet and Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Database Design with MS Access or Design Support Using MS Excel	CIT128 or CIT234		3	CIT110 or CIT113 or CIT120 or Chair approval
TOTAL CREDITS			27	

OIM101 is a prerequisite or co-requisite 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 the H-Building, Charlestown Campus, for students who type 40 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

#### UPON COMPLETION OF THIS CONCENTRATION 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.

BUNKER HILL COMMUNITY COLLEGE IS CURRENTLY NOT ACCEPTING STUDENTS INTO THIS PROGRAM FOR THE 2014-2015 ACADEMIC YEAR.

For important information regarding this option, please see page 63.

Information Technology Security	(Fast-Track) Certificate Program
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COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or Info Technology Problem Solving or PC Hardware and Software	CIT110 or CIT113 or CIT182		3	ESL098 or RDG095 ENG090 and RDG090
Principles of Internet & Info Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Networking Security	CIT264		3	CIT162
Information Security and Assurance	CIT219		3	CIT268
Keyboarding Techniques	OIM100		1	
TOTAL CREDITS			16	

### PROGRAM OVERVIEW

Designed for the IT technician or professional seeking new and updated skills in the area of information security and assurance, this basic level certificate will enhance existing knowledge for increased job opportunities and employment growth. The Information Technology Security + Essentials Certificate aligns with the COMPTIA National Standards for Security + Certification. It will prepare students to be responsible for desktop security support contained within a networked environment.

### CAREER OUTLOOK

This entry level certificate provides the skills necessary to provide basic security support for networked computers. It is an entry point into the field of Information Security. This option is designed to provide alignment with the entry level National Institute of Technology and Standards' (NITS) National Initiative for Cybersecurity Education and Workforce Framework to ensure consistent, current, and flexible training in the growing technology field of Information Security. Graduates of this option will qualify for positions as entry level information security desktop support technicians.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Secure a desktop computer connected to a network.
- Install and configure security software.
- Analyze potential security threats.
- Delineate differences between various operating system security issues.
- Define the types of malicious software found.

# Information Technology Security Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts or Info Technology Problem Solving or PC Hardware and Software	CIT110 or CIT113 or CIT182		3	ESL098 or RDG095 ENG090 and RDG090
Principles of Internet and Info Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Introduction to Computer Forensics	CIT121		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Windows Operating Systems	CIT268		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Networking Security	CIT264		3	CIT162
Information Security and Assurance	CIT219		3	CIT268
Batch File Programming	CIT271		1	CIT270; pre/co-req CIT268
Ethical Hacking	CIT273		4	CIT268 or CIT270 or Chair approval
TOTAL CREDITS			26	

## OPTION OVERVIEW

This option prepares students to support the security of networks, systems located on these networks, and the data/information contained within those systems; identifying, developing, implementing and maintaining security processes throughout organizations to reduce risks, respond to incidents and limit exposure and liability; identifying, notifying, and responding to security threats to networks.

## CAREER OUTLOOK

This option is designed to align with the National Institute of Technology and Standards' (NITS) National Initiative for Cybersecurity Education Cybersecurity Workforce Framework to ensure consistent, current, and flexible training in the growing technology field of Information Security. Graduates of this option will qualify for positions as entry level information security professionals.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Understand network protocols and routing.
- Understand commonly used network services - DNS, mail, web, etc. as well as less common network services.
- Perform packet analysis and be able to identify malformed packets.
- Understand differences between various operating systems which OS an event came from and which OS is vulnerable to a certain attack.
- Define the types of malicious software found in modern networks.
- Explain the threats and countermeasures for physical security and social engineering.
- Perform footprinting, port scans, and enumeration on a network.
- Perform very simple programming in C, HTML, and Perl, specifically oriented towards the needs of network security professionals.
- Identify Microsoft Windows vulnerabilities and to harden systems.
- Identify Linux vulnerabilities and to protect servers.
- Describe and deploy security devices, including routers, firewalls, Intrusion Detection Systems, and honeypots.
- Describe the ethics associated with the use of hacking or penetration testing tools and techniques.

# Associate in Science Computer Information Technology Program: Information Technology Security 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
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES	·	-		
Application/Concepts or Information Technology Problem Solving	CIT110 or CIT113 satisfies LCS requirement		3	ESL098 or RDG095 or placement
Principles of Internet and Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
PC Hardware and Software	CIT182		3	
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 o Chair approval
Introduction to Computer Forensics	CIT121		3	CIT110 or CIT112 or CIT113 or CIT120 o Chair approval
Windows Operating Systems	CIT268		3	CIT110 or CIT112 or CIT113 or CIT120 o Chair approval
Networking Security	CIT264		3	CIT162
Routers and Routing Basics	CIT167		3	CIT162
Information Security and Assurance	CIT219		3	CIT268
Batch File Processing	CIT271		1	CIT270; pre/co-req CIT268
Ethical Hacking	CIT273		4	CIT268 or CIT270 or Chair approval
Information Security Seminar	CIT275		3	pre/co-req CIT273
OPTION ELECTIVES (CHOOSE 2)	·	-		
Advanced Computer Forensics	CIT221		3	CIT121 and CIT268
Wireless Technology	CIT262		3	CIT162
Switching Basics and Intermediate Routing	CIT267		3	CIT167
Linux Administration/Lab	CIT270		4	CIT162
WAN Technologies	CIT274		3	CIT267
MS Windows Administration/Lab	CIT282		4	CIT162; pre/co-req CIT268
Computer Internship	CIT299C or CIT299N		3	Chair approval
Cyber Crime in Today's Society	CRJ245		3	ENG111, CRJ101, and CRJ103 or Instructor permission
TOTAL CREDITS			62-65	

# Associate in Science Computer Information Technology Program: Information Technology Security Option

Continued from previous page

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 offers many courses that apply to other options to afford 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.

### OPTION OVERVIEW

This option prepares students to support the security of networks, systems located on these networks, and the data/information contained within those systems; identifying, developing, implementing and maintaining security processes throughout organizations to reduce risks, respond to incidents and limit exposure and liability; identifying, notifying, and responding to security threats to networks.

### CAREER OUTLOOK

The option is designed to align with the National Institute of Technology and Standards' (NITS) National Initiative for Cybersecurity Education Cybersecurity Workforce Framework to ensure consistent, current, and flexible training in the growing technology field of Information Security. Graduates of this option will qualify for positions as entry-level information security professionals.

- Understand network protocols and routing.
- Understand commonly used network services DNS, mail, web, etc. as well as less common network services.
- Perform packet analysis and be able to identify malformed packets.
- Understand differences between various operating systems which OS an event came from and which OS is vulnerable to a certain attack.
- Define the types of malicious software found in modern networks.
- Explain the threats and countermeasures for physical security and social engineering.
- Perform footprinting, port scans, and enumeration on a network.
- Perform very simple programming in C, HTML, and Perl, specifically oriented towards the needs of network security professionals.
- Identify Microsoft Windows vulnerabilities and to harden systems.
- Identify Linux vulnerabilities and to protect servers.
- Describe and deploy security devices, including routers, firewalls, Intrusion Detection Systems, and honeypots.
- Describe the ethics associated with the use of hacking or penetration testing tools and techniques.

# Associate in Science Computer Information Technology Program: Information Technology Transfer 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
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	
CONCENTRATION COURSES				
Applications/Concepts or IT Problem Solving	CIT110 or CIT113 satisfies LCS requirement		3	ESL098 or RDG095 or placement; ESL098 and ESL099 or RDG095 and ENG090 or placement
Visual Basic	CIT216		3	CIT110 or CIT113 or CIT120 or Chair approval
Intermediate Visual Basic	CIT218		3	CIT216 or Instructor permission or Chair approval
HTML/Dreamweaver	CMT111		3	
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
SQL Programming	CIT236		3	CIT110 or CIT113 or CIT120 or Chair approval
Windows Operating Systems or Linux Administration/Lab	CIT268 or CIT270		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval CIT162
Statistics I	MAT181		3	MAT097 or placement
College Algebra for STEM	MAT194-see note*		4	MAT099 or placement
Calculus for Management Sciences or Elective	MAT231-see note**		4	MAT194
Elective	see note***		3-4	
Elective	see note***		3-4	
Elective	see note***		3-4	
Elective	see note***		3-4	
TOTAL CREDITS			63-67	

\* Note: Students testing out of College Algebra for STEM (MAT194) will be required to take an additional elective.

\*\* Note: 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.

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

# Associate in Science Computer Information Technology Program: Information Technology Transfer Option

Continued from previous page

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 offers many courses that apply to other options to afford 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.

### 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.

- 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.

# Associate in Science Visual and Media Arts Program: Interactive Design 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
Individual/Society	From Area 2		3	
Introduction to Mass Media	VMA111 satisfies Area 3 requirement		3	ENG095 and MAT093
Quantitative Thought	From Area 4		3	MAT097 or placement
Scientific View of the World	From Area 5		4	
Drawing I	VMA104 satisfies Area 6 requirement		3	ENG095
CONCENTRATION COURSES				
VMA Freshman Seminar	VMA100 satisfies LCS requirement		3	ENG095 and MAT093
Two-Dimensional Design	VMA102		3	ENG095 and MAT093
Digital Publishing with InDesign	VMA131		3	ENG095 and MAT093
Typography	VMA132	Fall	3	ENG095 and MAT093
Digital Imaging w/Photoshop	VMA105		3	ENG095 and MAT093
Three-Dimensional Design	VMA103	Spring	3	VMA102
History of Graphic Design	VMA114	Spring	3	ENG095 and MAT093
Drawing II or Graphic Design Internship	VMA204 or VMA299G-see note*		3	VMA104, VMA232
Digital Illustration with Illustrator	VMA231		3	VMA131
Design Communication I	VMA232	Fall	3	VMA131
Interactive Design I	VMA275	Spring	3	VMA105
Interactive Design II	VMA276	Spring	3	VMA275
Career Elective	see note**		3	
Career Elective	see note**		3	
TOTAL CREDITS			64	

\*Note: Transfer track students must take VMA204. Career track students must take VMA299G. \*\*Note: Select the career elective from VMA courses.

## OPTION OVERVIEW

This program introduces students to the aesthetics, materials, interactive applications and platforms, and methods of effective visual communication for commercial art and design. The program combines theoretical elements with practical experience, up-todate 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 graphic design for online and interactive media, advertising, communications, marketing, packaging, publishing, and in companies using printed, online, interactive media, and electronic materials in their product or in the promotion of that product.

- Demonstrate proficiency in basic visual design skill 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 online and interactive media graphic formats, creation and optimization graphic images for those applications, and the distribution or delivery process.
- Demonstrate an ability to use design processes and principles to create visual products that convey a specific message to a targeted audience.
- Demonstrate an awareness of the varied career paths within the graphics industry including, but not limited to, art direction, illustration, project design, production art, gaming, interactive development, graphic design and media direction.

# International Business Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES		
International Business	BUS106	Fall	3	ECO201 or ECO202		
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 (CHOOSE	CONCENTRATION ELECTIVES (CHOOSE 4)					
Export/Import Process	BUS108	Spring	3	BUS106		
Money and Banking	ACC211	Spring	3	ECO201 and ECO202		
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.

## 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

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

# Associate in Science Business Administration Program: International Business 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
Cultural Anthropology	SOC109 satisfies Area 2 requirement		3	ESL098 or RDG095 or placement
Macroeconomics	ECO201 satisfies Area 3 requirement		3	MAT097 and ESL098 or RDG095 or placement
Quantitative Thought	MAT181 satisfies Area 4 requirement		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Globalization	BUS111 satisfies LCS requirement-see note*		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Principles of Marketing	MAN105		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Management	MAN111		3	ESL098 and ESL099 or ENG090 and RDG095 or placement
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Microeconomics	ECO202		3	MAT097 and ESL098 or RDG095 or placement
Principles of Accounting II	ACC102		3	ACC101
International Business	BUS106	Fall	3	ECO201 or ECO202
International Marketing	MAN106	Spring	3	MAN105
Money and Banking	ACC211	Spring	3	ECO201 and ECO202
Exporting/Importing or International Logistics	BUS108 or BUS112	Spring	3	BUS106
Career Elective or Business Internship	see note** or MAN299		3	Chair approval
TOTAL CREDITS			61	

\*Note: Students who have already taken an LCS course should consult Department Chair or Division Dean. \*\*Note: Select the career elective from ACC, BUS or MAN courses

# Associate in Science Business Administration Program: International Business Option

Continued from previous page

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 fouryear academic institutions. Students qualify for entry-level positions within their areas of concentration.

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in a global business environment.

## 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 chair 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.

- 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.

# Law Enforcement Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Criminal Justice	CRJ101		3	ENG095 and RDG095, or ESL098
Criminal Law	CRJ103		3	ENG095 and RDG095, or ESL098
Evidence and Court Procedure	CRJ202		3	ENG111, CRJ101, CRJ103, and CRJ208 or Instructor permission
Policing in a Democratic Society	CRJ220		3	ENG111, CRJ101, CRJ103, or Instructor permission
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	SOC207		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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Demonstrate enhanced cultural awareness and interpersonal communication skills.
- Demonstrate specific content knowledge of criminal justice and criminal law.

# Magnetic Resonance (MR) Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
MR Concepts I	MRC111	Fall	3	acceptance into MR Program
MR Concepts II	MRC211	Spring	3	MRC111; co-req MRC299
MR Clinical Internship	MRC299	Spring	3	Chair approval; pre/co-req MRC211
TOTAL CREDITS			9	

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 and a Sex Offender Registry Information (SORI) check.

## ADMISSION REQUIREMENTS:

Student must apply to the program through Admissions and Enrollment Services and:

- Present a completed application with fee.
- Submit a copy of the current ARRT card.
- 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.

## 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.

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

As a prerequisite for a clinical placement in the Magnetic Resonance Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

## 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

- 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

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Mammography I	MAC111	Fall	3	Acceptance into Mammography Program
Mammography Principles II	MAC211	Spring	3	MAC111; co-req MAC299
Mammography Clinical Internship	MAC299	Spring	3	Chair approval; pre/co-req MAC211
TOTAL CREDITS			9	

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) Postprimary 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 and a Sex Offender Registry Information (SORI) check.

### ADMISSION REQUIREMENTS:

Student must apply to the program through Admissions and Enrollment Services and:

- Present a completed application with fee.
- Submit a copy of the current ARRT card.
- 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.

### PROGRAM OVERVIEW

This certificate helps to prepare students for the American Registry of Radiologic Technologists' (ARRT) Post-primary Registry Examination in Mammography, as well as for entry-level Mammography positions. It is intended for ARRT registered imaging professionals.

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

As a prerequisite for a clinical placement in the Mammography Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

# Associate in Science Hotel/Restaurant Program: Management of Assisted Living and Institutional Facilities 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
Principles of Psychology or Principles of Sociology	PSY101 or SOC101-satisfies Area 2 requirement		3	
Social Aspects of Aging	PSY141 satisfies Area 3 requirement	Spring	3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Nutrition Science w/Lab	BIO115 satisfies Area 5 requirement		4	ENG095 and MAT093 or placement; and ESL098 or RDG095 or placement
Humanities Elective	From Area 6		3	
CONCENTRATION COURSES				
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	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
Front Office Operations	HRT131	Fall	3	
Advanced Lodging Operations	HRT231	Spring	3	HRT131
Food and Beverage Operations for Hospitality	HRT112		3	
Marketing and Managing Institutional Facilities	HRT135	Spring	3	HRT109
Assisted Living Internship	HRT299	Summer	3	HRT121, HLT111, PSY141, CUL111, and HRT135
Food Service Sanitation and Skills	CUL111		3	
Health Aspects of Aging	HLT111	Spring	3	
TOTAL CREDITS			64	

# Associate in Science Hotel/Restaurant Program: Management of Assisted Living and Institutional Facilities Option

Continued from previous page

This program prepares students in three options: Hotel and Restaurant Management, Management of Assisted Living and Institutional Facilities and Meeting and Event Planning. 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.

### 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 longterm care option for seniors.

The career outlook is very good in the underserved, almost non-existent 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.

# Associate in Science Business Administration: 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	
Organizational Behavior/Design	MAN112 satisfies Area 2 requirement		3	ESL098 and ESL099 or RDG095 and ENG090 or placement	
Macroeconomics	ECO201 satisfies Area 3 requirement		3	MAT097 and ESL098 or RDG095 or placement	
Quantitative Thought	From Area 4		3	MAT097 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	ESL098 or RDG095 or placement	
Principles of Marketing	MAN105		3	ESL098 and ESL099 or RDG095 and ENG090 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	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement	
Financial Management	ACC210	Spring	3	ACC102	
Management Seminar or Business Internship	MAN201 or MAN299	Spring	3	MAN105 and MAN111; should be taken in the final semester Chair approval	
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.

## Associate in Science Business Administration: Management Option

Continued from previous page

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 fouryear academic institutions. Students qualify for entry-level positions within their areas of concentration.

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in a global business environment.

The Management Seminar in this program is a Capstone course. It should be taken 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 chair for specific transfer information.

#### CAREER OUTLOOK

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

- 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.

# Associate in Arts Mathematics Concentration

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	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
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/co-req MAT282; see note*
Computer Elective			3	
Behavioral Science Elective			3	
Literature Elective			3	pre/co-req ENG111
Literature Elective			3	pre/co-req ENG111
Social Science Elective			3	
LCS or Elective	see note**		3	
TOTAL CREDITS			60	

\*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.

\*\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year.

### CONCENTRATION OVERVIEW

This concentration prepares students to transfer to fouryear 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 fouryear 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 218.

# Associate in Science Visual and Media Arts Program: Media Communication 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
Individual and Society	From Area 2		3	
Introduction to Mass Media	VMA111 satisfies Area 3 requirement		3	ENG095 and MAT093
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Drawing I	VMA104 satisfies Area 6 requirement		3	ENG095
CONCENTRATION COURSES				
VMA Freshman Seminar	VMA100 satisfies LCS requirement		3	ENG095 and MAT093
Two-Dimensional Design	VMA102		3	ENG095 and MAT093
Elements of Video Production	VMA141		3	ENG095 and MAT093
Digital Imaging w/Photoshop	VMA105		3	ENG095 and MAT093
History of Moving Image	VMA115	Spring	3	ENG095 and MAT093
Introduction to Audio Tech	VMA151		3	ENG095 and MAT093
Advanced Video Production	VMA241	Fall	3	VMA141 or Instructor permission; co-req VMA242
Video Post-Production	VMA242	Fall	3	VMA141 or Instructor permission; co-req VMA241
Projects in Video Production	VMA243	Spring	3	VMA241 and VMA242 or Instructor permission
DVD Authoring	VMA274	Spring	3	VMA105 and VMA141
Media Project Planning	VMA244	Fall	3	VMA141
Media Communications Internship	VMA299M		3	VMA241 or Chair approval
Career Elective	see note*		3	
TOTAL CREDITS			61	

\*Note: Select the career elective from VMA courses.

# Associate in Science Visual and Media Arts Program: Media Communication Option

Continued from previous page

## OPTION OVERVIEW

The Media Communication Program provides a well-integrated learning environment to prepare students for careers as professional digital media producers and well-informed 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 fastchanging 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.

- 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.

# Medical Assistant Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Clinical Practice	AHE110		3	
Medical Assistant Skills	AHE112		3	co-req AHE110
Health Employment Issues or Human Growth/Development	AHE104; PSY113		3	PSY101
Advanced Clinical Skills	AHE201		3	AHE111 or AHE112
Practicum/Medical Assistant	AHE205		3	AHE112; co-req AHE201
Practicum Seminar Allied Health	AHE209		1	co-req AHE205
Computer or Office Adm. Course			3	
Procedures for the Medical Office	OIM170		3	
Elective			3	
TOTAL CREDITS			25	

This program is offered on the Chelsea Campus.

Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. Admission to an Allied Health program does not guarantee clinical placement. The outcome of the CORI/SORI check may impact the student's ability to participate in the clinical experience. For further information, see the Department Chair. 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 Admissions and Enrollment Services and:

- Possess a high school diploma or GED certification.
- Attend an information session.
- Provide evidence of health insurance and complete a health form.

### 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.

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

As a prerequisite for a clinical placement in the Medical Assistant Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, to access 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.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Office and Information Management	OIM199		3	co-req PSY107 must be taken with OIM199; ENG095 or placement and ESL098 or RDG095 or placement; pre/co-req OIM101
Group Dynamics	PSY107		3	co-req OIM199
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Medical Terminology	NHP180-see note*		3	
Medical Information Management	OIM190		3	pre/co-req OIM101
Records and Information Management	OIM106		3	pre/co-reqs OIM101 and CIT110
Documentation Generation II	OIM110		3	OIM101 and CIT110 or Chair approval
Business Correspondence and Editing	OIM130		3	ENG095; pre/co-req OIM101
Introduction to Physicians' Billing	OIM200		3	pre/co-req NHP180 see note*
TOTAL CREDITS			27	

# Medical Information Management Assistant Certificate Program

OIM101 is a prerequisite or co-requisite 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 (H165) for students who type 40 words per minute or more with accuracy and know MS Word and document format.

\*Note: NHP180 course description is found under the Allied Health heading.

## 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 on-site 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

- 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.

For important information regarding this option, please see page 63.

**PROGRAMS OF STUDY** 

# Associate in Science Office and Information Management Program: 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
Group Dynamics	PSY107 satisfies Area 2 requirement		3	co-req OIM199
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Humanities	From Area 6		3	
CONCENTRATION COURSES	·			^
Office and Information Management: Technology on the Move	OIM199 satisfies LCS requirement		3	ENG095 or placement and ESL098 or RDG095 or placement; co-req PSY107 and pre/co-req OIM101;
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Medical Terminology	NHP180-see note*		3	
Medical Information Management	OIM190		3	pre/co-req OIM101
Records and Information Management	OIM106		3	pre/co-reqs OIM101 and CIT110
Documentation Generation II	OIM110		3	OIM101 and CIT110 or Chair approval
Business Correspondence and Editing	OIM130		3	ENG095; pre/co-req OIM101
Intro to Physicians' Billing	OIM200		3	pre/co-req NHP180-see note*
Administrative Technology and Procedures	OIM115		3	pre/co-reqs OIM101 and CIT110
Principles of Internet and Information Security	CIT118		3	CIT110 or CIT113 or CIT120 or Chair approval
Database Design with MS Access or Collaboration, Communication, and Integrating	CIT128 or CIT250		3	CIT110 or CIT113 or CIT120 or Chair approval;
Admin Business Communication	OIM230-see note**	Fall	3	pre/co-reqs OIM106 or OIM110 or OIM115 and OIM130
Introduction to Biology /Lab or Nutrition Science/Lab	BIO105 or BIO115 satisfies Area 5 requirement		4	ENG095 and MAT093 or placement and ESL098 or RDG095 or placement
Office and Information Management Internship	OIM299	Spring	3	pre/co-req all core courses or Chair approval
TOTAL CREDITS			61	

Note: OIM101 is a prerequisite or co-requisite 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 (H-165) for students who type 40 words per minute or more with accuracy and know MS Word and document format.

\*Note: NHP180 course description is found under the Allied Health heading.

\*\*Note: Administrative Business Communication must be taken during the fall semester prior to enrolling in OIM299.

# Associate in Science Office and Information Management Program: Medical Information Management Option

Continued from previous page

## OPTION OVERVIEW

The Office and Information Management Department's mission is to provide industryidentified 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.

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

As a prerequisite for a clinical placement in the Medical Information Management Option, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

## 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 CONCENTRATION 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.

For important information regarding this option, please see page 63.

# Medical Interpreting Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Medical Interpreting I	AHE101-see note*	Fall	3	ESL099 or ENG090 and ESL099 or RDG095 or placement
Health Employment Issues	AHE104	Fall	3	
Medical Terminology	NHP180-see note**	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. \*\*Note: NHP180 course description is found under the Allied Health heading.

This program is offered on 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. Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. The outcome of the CORI/ SORI check may impact the student's ability to participate in the clinical experience. Students must maintain a grade of B- or better in all required courses.

### ADMISSION REQUIREMENTS:

Students must apply to the program through Admissions and Enrollment Services and:

- Possess a High School Diploma or GED Certification.
- Complete college placement tests in English and reading.
- Place out of, or complete ESL level 3 courses with grades of B or better.
- Place out of, or complete, ENG 095 and RDG 095.
- Be literate in their native language.
- Be fluent in English.
- 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.

#### PROGRAM OVERVIEW

This program prepares students, through lectures and hospital-based clinical experience, to be medical interpreters in a variety of health care settings.

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

As a prerequisite for a clinical placement in the Medical Interpreting Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, to access 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.

### CAREER OUTLOOK

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

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

- 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.

# Associate in Science Medical Laboratory Technician Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES:				
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Statistics	MAT181 satisfies Area 4 requirement		3	MAT097
Anatomy and Physiology I/Lab	BIO203		4	BIO105, BIO108 or BIO195
PROGRAM CURRICULUM:				
College Writing II	ENG112	Semester II	3	ENG111
Principles of Psychology	PSY101 satisfies Area 2 requirement	Summer	3	ESL098 or RDG095 or placement
World View	From Area 3	Semester I	3	
Anatomy and Physiology II/Lab	BIO204	Summer	4	BIO203
Microbiology	BIO205	Summer	4	BIO195 or BIO203
Principles of Inorganic Chemistry	CHM120	Semester I	4	ENG095, RDG095, or ESL 098 and MAT097 or placement
Principles of Organic and Biochemistry	CHM121	Semester II	4	CHM120
Intro to Clinical Laboratory Science I	MLT111	Semester I	2	Admission to program
Urinalysis	MLT112	Semester I	2	Admission to program
Hematology and Hemostasis	MLT211	Semester III	4	MLT111
Medical Microbiology and Lab	MLT212	Semester III	4	MLT111 and BIO205
Immunology and Serology	MLT213	Semester II	4	MLT111
Immunohematology	MLT241	Semester III	4	MLT111 and MLT213
Clinical Chemistry	MLT242	Semester III	4	CHM120 and MLT213
Clinical Laboratory Science Practicum	MLT251	Semester IV	12	All MLT coursework
TOTAL PROGRAM CREDITS			61	

# Associate in Science Medical Laboratory Technician Program

Continued from previous page

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 and a Sex Offender Registry Information (SORI) check.

#### PREREQUISITES FOR THE MEDICAL LABORATORY TECHNICIAN PROGRAM

- Attend a mandatory information session.
- Possess a high school diploma or GED certificate.
- Achieve a reading level of 10.0 or higher on the College Placement Test (CPT).
- Complete the following courses with a C or better:
  - Statistics (MAT181)
  - College Writing (ENG111)
  - Anatomy/Physiology I & Lab (BIO 203) (credits for Anatomy and Physiology I/ Lab that were earned more than five (5) years prior to enrollment in the medical laboratory technician program are not accepted).

After all prerequisites are completed, students must apply through Admissions and Enrollment Services.

### PROGRAM OVERVIEW

This program prepares students through lectures, laboratory activities and hospitalbased 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.

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

As a prerequisite for a clinical placement in the Medical Laboratory Technician program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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 accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS), 5600 North River Rd. Suite 720, Rosemont, IL 60018, telephone 773-714-8880. Graduates of the Program are eligible to take national certification exams.

- 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.

# Medical Office Information Specialist (Fast-Track) Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Medical Terminology	NHP180-see note*		3	
PC Keyboarding Techniques	OIM100		1	
Medical Information Management	OIM190		3	pre/co-req OIM101
Introduction to Microsoft Office	CIT133		3	
Advanced Microsoft Office	CIT233		3	CIT110 or CIT113 or CIT133 or Chair approval
Collaboration, Communication and Integration in MS Office Applications	CIT250		3	CIT110 or CIT113 or Chair approval
TOTAL CREDITS			16	

\*Note: NHP180 course description is found under the Allied Health heading.

## 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. Students may also qualify for at-home opportunities as medical transcriptionists.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

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

- 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.

PROGRAMS OF STUDY

# Associate in Science Medical Imaging Program: Medical Radiography Full-time Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES				
College Writing I	ENG111		3	ENG095 and ESL098 or RDG095 or placement
Anatomy/Physiology I/Lab	BIO203		4	BIO105 or BIO108 or BIO195
College Algebra for STEM	MAT194		4	MAT099 or placement
PROGRAM CURRICULUM			·	
Patient Care in Medical Imaging	MIG109	Fall	4	co-req MIG107
Intro to Medical Radiography	MIG107	Fall	2	acceptance to Medical Radiography Program
Positioning I	MIG122	Fall	3	co-req MIG124F
F.T. Medical Radiography Clinical I	MIG124F	Fall	2	
Anatomy/Physiology II/Lab	BIO204	Spring	4	BIO203
Radiologic Imaging I	MIG120	Spring	3	MIG107
Imaging Technology I	MIG111	Spring	3	
Positioning II	MIG126	Spring	3	MIG122; co-req MIG128F
F.T. Medical Radiography Clinical II	MIG128F	Spring	2	MIG124F
F.T. Medical Radiography Clinical III	MIG222F	Summer	3	MIG128F
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 web-based	Spring	2	BIO204
Applications/Concepts	CIT110	Spring	3	ESL098 or RDG095 or placement
Advanced Medical Radiography Seminar	MIG238	Spring	2	MIG224 and MIG226
TOTAL PROGRAM CREDITS			63	

# Associate in Science Medical Imaging Program: Medical Radiography Full-time Option

Continued from previous page

## 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.

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

As a prerequisite for a clinical placement in Medical Radiography, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

## For important information regarding this option, please see pages 75-76

## 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.

- Demonstrate clinical competence.
- Apply critical thinking skills.
- Demonstrate communication skills.
- Model professionalism.

# Associate in Science Medical Imaging Program: Medical Radiography Part-time Evening Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES		1		
College Writing I	ENG111		3	ENG095 and ESL098 or RDG095 or placement
Anatomy/Physiology I/Lab	BIO203		4	BIO105 or BIO108 or BIO195
College Algebra for STEM	College Algebra for STEM		4	MAT099 or placement
PROGRAM CURRICULUM				
Patient Care in Medical Imaging	MIG109	Fall	4	co-req MIG107
Intro to Medical Radiography	MIG107	Fall	2	acceptance to Medical Radiography Program
Imaging Technology I	MIG111	Spring	3	
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	co-req MIG226
Positioning I	MIG122	Spring	3	co-req MIG124P
Anatomy/Physiology II/Lab	BIO204	Spring	4	BIO203
P.T. Medical Radiography Clinical I	MIG124P	Spring	1	
Positioning II	MIG126	Summer	3	MIG122; co-req 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 web-based	Fall	2	BIO204
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 PROGRAM CREDITS			63	

# Associate in Science Medical Imaging Program: Medical Radiography Part-time Evening Option

Continued from previous page

## 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.

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

As a prerequisite for a clinical placement in Medical Radiography program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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 CONCENTRATION GRADUATES WILL BE ABLE TO:

- Demonstrate clinical competence.
- Apply critical thinking skills.
- Demonstrate communication skills.
- Model professionalism.

For important information regarding this option, please see pages 75-76

# 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		3	
Principles of Management and Service in Hospitality	HRT121		3	
Corporate Travel Management	HRT229	Spring	3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Managing Groups	HRT122	Fall	3	HRT119
Event Planning	HRT223	Spring	3	HRT119
Culinary Theory in Hospitality	HRT133		3	HRT121
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
PC Keyboarding Techniques	OIM100		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 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

# Associate in Science Hotel/Restaurant Program: Meeting and Event Planning 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		
Individual and Society	From Area 2		3			
World View	From Area 3		3			
Quantitative Thought	From Area 4		3	MAT097 or placement		
Nutrition Science w/Lab	BIO115 satisfies Area 5 requirement		4	ENG095 and MAT093 or placement; and ESL098 or RDG095 or placement		
Humanities	From Area 6		3			
CONCENTRATION COURSES						
Principles of Management and Service in Hospitality	HRT121		3			
Basics of Meeting Management	HRT119		3			
PC Keyboarding Techniques	OIM100		1			
Hospitality Marketing Mgt.	HRT109		3	HRT121		
Hospitality Seminar	HRT105 satisfies LCS requirement		3			
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement		
Hospitality Internship	HRT210	Summer	3	HRT121		
Principles of Hospitality Finance and Accounting	HRT125		3	ACC101		
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement		
Event Planning	HRT223	Spring	3	HRT119		
Hospitality Law	HRT117		3			
Managing Groups	HRT112	Fall	3	HRT119		
Culinary Theory in Hospitality	HRT133		3	HRT121		
Corporate Travel Management	HRT229	Spring	3			
Career Elective	see note*		3			
TOTAL CREDITS			65			

\*Note: Select the career elective from HRT112, 131; CUL111.

# Associate in Science Hotel/Restaurant Program: Meeting and Event Planning Option

Continued from previous page

This program prepares students in three options: Hotel and Restaurant Management, Management of Assisted Living and Institutional Facilities and Meeting and Event Planning. 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.

### **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, 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.

- 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.

# Microsoft Applications Support Specialist Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Introduction to Microsoft Office	CIT133		3	
Advanced Microsoft Office	CIT233		3	CIT110 or CIT113 or CIT133 or Chair approval
Collaboration, Communication and Integration in MS Office Applications	CIT250		3	CIT110 or CIT113 or Chair approval
Help Desk Techniques	CIT230		3	CIT110 or CIT113 or CIT120; ENG095 and RDG095 or ESL098 and one CIT course
Keyboarding Techniques	OM100		1	
TOTAL CREDITS			16	

# PROGRAM OVERVIEW

This certificate prepares students for entry level positions in Microsoft personal computer desktop applications support. recommended non-credit industry certification courses offered through the College's Community Education Office are optional, but will greatly enhance employment prospects. The CIT internship and entrepreneurship courses are also optional.

# CAREER OUTLOOK

Graduates completing this certificate may find employment in information support services departments in organizations large and small as applications support and/or "Help Desk"specialists.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Understand in-depth and support the most common desktop Office Applications.
- Understand and support the Integration features among all Microsoft Office applications.
- Set-up, support and conduct on-line meetings.
- Troubleshoot end-user Office application problems.
- Demonstrate good communication skills and professional behavior while working with customers.
- Qualify to take the Microsoft Office Word, Excel & Outlook Certification Examinations.

# Associate in Arts 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	MAT097 or placement		
Science and Technology	From Area 5		3	MAT097 or placement		
Humanities	Area 6 satisfied by program					
CONCENTRATION COURSES						
Music Appreciation I	MUS118		3			
Music Appreciation II	MUS119		3	MUS118 or Chair approval		
Foundations of Music	MUS122		3			
Counterpoint and Harmonization	MUS135	Spring	3	MUS122		
Electronic Music I	see note*		3			
Music in the United States			3			
Behavior Science Elective			3			
Social Science Elective			3			
Mathematics Elective			3	MAT097 or placment		
Lab Science Elective			4			
Literature Elective			3	pre/co-req ENG111		
Literature Elective			3	pre/co-req ENG111		
LCS or Music Elective	see note**		3			
Music Elective			3			
TOTAL CREDITS			61			

\*Note: See the Department Chair for substitute course.

\*\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year.

### 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 fouryear 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 218.

Network Technology and Administration Certificate	Program
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COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
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/co-req 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

# Associate in Science Computer Information Technology Program: Network Technology and Administration 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
Individual and Society	From Area 2		3	
World View	From Area 3		3	
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	ESL098 or RDG095 or placement
CONCENTRATION COURSES				
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 CIT112 or CIT113 or CIT120 or Chair approval
Windows Operating Systems	CIT268		3	CIT110 or CIT113 or CIT120 or Chair approval
PC Hardware and Software	CIT182		3	
PC Keyboarding Techniques	OIM100		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/co-req CIT268
Linux Administration/Lab	CIT270		4	CIT162
TOTAL CREDITS			60	

The Computer Information Technology Department (CIT) has a clear, wellarticulated, 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 offers many courses that apply to other options to afford 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.

## 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 entrylevel 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.

# **Object Oriented Computer Programming and Design Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Intro to Computer Science and Object Oriented Programming	CIT120		4	ENG095 and MAT099 and RDG095 or ESL098 or placement; pre/co-req MAT194
C++ Programming	CIT237		4	ENG095 and MAT194 or placement and CIT120
Advanced C++/OOP	CIT284		3	CIT237 and MAT194
Java Programming	CIT239		4	ENG095 and MAT194 or placement and CIT120
Data Structures	CIT242		3	CIT239 and MAT197
Advanced Java	CIT285		3	CIT239 and MAT197
Android Development for Java Programming	CIT243		3	CIT239 and MAT197; pre/co-req CIT285
Survey New Popular OOPL for Programmers	CIT287		3	CIT284 or CIT285 and MAT197
TOTAL CREDITS			27	

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

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

- 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.

Note: For waiver of computer course prerequisite(s) see the Computer Science Advisor.

# Paralegal Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Introduction to Law	PLG101		3	ENG095 or placement and ESL098 or RDG095 or placement
Legal Research/Writing	PLG102		3	PLG101
Litigation	PLG103		3	PLG101
Legal Ethics	PLG104		3	PLG101
Business Organizations	PLG202		3	PLG101
OPEN ELECTIVES (CHOOSE 4)				
Family Law	PLG201		3	PLG101
Real Estate	PLG203		3	ENG095 or placement and ESL098 or RDG095 or placement
Criminal Law	CRJ103		3	ENG095 or placement and ESL098 or RDG095 or placement
Willis, Estates, and Trusts	PLG204		3	ENG095 or placement and ESL098 or RDG095 or placement
Practical Legal Writing	PLG105		3	PLG101 and PLG102 and ENG111
Paralegal Internship	PLG299		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.

## 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

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

- Understand the legal process and the nature of law practice.
- Construct and evaluate logical arguments in support of specific positions.
- Conduct effective legal research and oversee legal projects.
- Understand, identify and resolve legal and ethical issues associated with the paralegal profession.

### UNAUTHORIZED PRACTICE OF LAW STATEMENT:

A Legal Studies graduate may work as a paralegal only under the supervision of an attorney and is not authorized to engage in the practice of law. The ABA (American Bar Association) defines a paralegal or legal assistant as "a person, qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.

# Associate in Science Criminal Justice Program: Paralegal Studies Program

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	ENG095 and MAT093
Quantitative Thought	From Area 4		3-4	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Introduction to Law	PLG101 satisfies LCS requirement		3	ENG095 or placement and ESL098 or RDG095 or placement
Legal Research and Writing	PLG102		3	PLG101
Litigation	PLG103		3	PLG101
Legal Ethics	PLG104		3	PLG101
Business Organizations	PLG202		3	PLG101
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)				
Criminal Law	CRJ103		3	ENG095 or placement and ESL098 or RDG095 or placement
Practical Legal Writing	PLG105		3	PLG101, PLG102 and ENG111
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			65-66	

\*Note: This course may be waived on the basis of previous coursework or experience. Please see the Dean of Professional Studies.

Continued on following page

# Associate in Science Criminal Justice Program: Paralegal Studies Program

Continued from previous page

### 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.

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

- Understand the legal process and the nature of law practice.
- Construct and evaluate logical arguments in support of specific positions.
- Conduct effective legal research and oversee legal projects.
- Understand, identify and resolve legal and ethical issues associated with the paralegal profession.

# UNAUTHORIZED PRACTICE OF LAW STATEMENT:

A Legal Studies graduate may work as a paralegal only under the supervision of an attorney and is not authorized to engage in the practice of law. The ABA (American Bar Association) defines a paralegal or legal assistant as "a person, qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.

# Pastry Arts Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Food Service Sanitation and Skills	CUL111		3	
Introduction to Culinary Arts	CUL115	Fall	4	co-req CUL125
Principles of Baking	CUL125	Fall	4	co-req 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		3	ENG095 or placement and ESL098 or RDG095 or placement
Cake Decorating	CUL119		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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

# Patient Care Technician Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Principles of Clinical Practice	AHE110		3	
Patient Care Skills	AHE111		3	co-reqs AHE106 and AHE110
CNA Practicum	AHE106		1	co-reqs AHE110 and AHE111
Health Employment Issues or Human Growth/Development	AHE104; PSY113		3	PSY101
Advanced Clinical Skills	AHE201		3	AHE11 or AHE112
Practicum/Patient Care Technician	AHE204		3	AHE111; co-req AHE201
Practicum Seminar/Allied Health	AHE209		1	co-req AHE204
Applications/Concepts or Medical Computer Applications	CIT110 or OIM102		3	RDG095 or ESL098
Elective			3	
Elective			3	
TOTAL CREDITS			26	

This program is offered on the Chelsea Campus.

Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. The outcome of the CORI/SORI check may impact the student's ability to participate in the clinical experience. Admission to an Allied Health program does not guarantee clinical placement. For further information, see the Department Chair. 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 Admissions and Enrollment Services 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.

### 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.

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

As a prerequisite for a clinical placement in the Patient Care Technician Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, to access 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.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

- Perform direct patient care competently.
- Perform basic computer skills.

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
PC Hardware and Software	CIT182		3	
Introduction to Networking	CIT162		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair Approval
Windows Operating Systems	CIT268		3	CIT110 or CIT112 or CIT113 or CIT120 or Chair approval
Help Desk Techniques	CIT230		3	CIT110 or CIT113, or CIT120 and ENG095 and ESL098 or RDG095 and one CIT course
Keyboarding Techniques	OIM100		1	
TOTAL CREDITS			16	

# PC Hardware Support Specialist Certificate Program

## PROGRAM OVERVIEW

This certificate prepares students for entry level positions in personal computer hardware support. Recommended noncredit industry certification courses offered through the College's Community Education Office are optional, but will greatly enhance employment prospects. The CIT internship and entrepreneurship courses are also optional.

## CAREER OUTLOOK

Graduates completing this certificate may find employment in information support services departments in firms large and small as well as other companies specializing in personal computer maintenance support.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- Describe, remove, and replace select components of desktop and laptop personal computers; upgrade components based on customer needs and perform preventive maintenance and troubleshooting.
- Understand the basics of the most common desktop Office applications.
- Explain, install, and navigate the most common personal computer operating systems; upgrade components based on customer needs and perform preventive maintenance and troubleshooting.
- Demonstrate good communication skills and professional behavior while working with customers.
- Qualify to take the COMPTIA A+ Essentials Certification Examination.
- Qualify to take the NETWORK+ Certification Examination.

# Pharmacy Technician Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Pharmacy Practice for Pharmacy Technicians I	PMT111		3	ENG095 placement
Pharmacy Practice for Pharmacy Technicians II	PMT112		3	PMT111
Pharmacy Practice for Pharmacy Technicians III	PMT113		3	PMT112
Pharmaceutical Calculations	PMT101		3	
Practicum and Seminar for the Pharmacy Technician	PMT299		4	ENG095 or placement
TOTAL CREDITS			16	

Through classroom teaching and practical experience in one or more pharmacy settings, the student will be prepared to work in teams supervised by a pharmacist to prepare prescriptions; provide customer service, perform inventory control, record keeping and the packaging of drugs. Courses in this 16-credit program include the following topics: Pharmacy Operations, Pharmaceutical Calculations, Pharmacology and Pharmacy Law. Students also participate in a 150 hour Internship in a pharmacy.

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

As a prerequisite for placement in a clerkship site, to take the PTCB examination, and for registration as a technician with the Board of Pharmacy, all students must undergo a Criminal Offender Record Information (CORI) check. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services pursuant to Massachusetts General Laws, Chapter 6 Sections 167 – 178B, to access CORI records. For more information regarding the College's CORI check process, please contact the College CORI Officer at 617-228-2193.

## CAREER OUTLOOK

According to the Bureau of Labor and Statistics (BLS), employment of pharmacy technicians is expected to increase by more than 30 percent by 2018.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

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

- Graduates apply to sit for the National Pharmacy Technician Certification Board.
- Upon passing the National PTCB Exam graduates will be able to be registered as a Pharmacy Technician in Massachusetts.

This program is supported by the Massachusetts Community Colleges & Workforce Development Transformation Agenda, which is 100 percent funded through a \$20 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT. Grant Agreement #TC-22505-11-60-A-25.

# Phlebotomy Technician Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Phlebotomy Theory/Lab	AHE115	Semester I	3	ENG090 and MAT093 and RDG090 or placement
Communication Skills for Health Care	AHE117	Semester I	3	
Office Administration Course			3	
Medical Terminology	NHP180-see note*	Semester I	3	
Practicum/Phlebotomy Tech	AHE206	Semester II	3	AHE110 and AHE115
Practicum Seminar/Allied Health	AHE209	Semester II	1	co-req AHE206
TOTAL CREDITS			16	

\*Note: NHP180 course description is found under the Allied Health heading.

This program is offered on the Chelsea Campus.

Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. Admission to an Allied Health program does not guarantee clinical placement. The outcome of the CORI/SORI check may impact the student's ability to participate in the clinical experience. For further information, see the Department Chair.

# ADMISSION REQUIREMENTS:

To be admitted to this program, students must apply to the program through Admissions and Enrollment Services 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.

#### PROGRAM OVERVIEW

This program prepares students to perform blood collection by venipuncture.

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

As a prerequisite for a clinical placement in the Phlebotomy Technician Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### CAREER OUTLOOK

Graduates of this program qualify for employment in hospitals, clinics, chronic care facilities, health maintenance organizations, and physicians' offices as phlebotomy technicians.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

- Perform blood collection by venipuncture.
- Perform basic computer skills.

BUNKER HILL COMMUNITY COLLEGE WILL NO LONGER BE ACCEPTING STUDENTS INTO THIS PROGRAM AS OF THE 2013-2014 ACADEMIC YEAR.

# Associate in Arts 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/co-req 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		4	MAT281
General Chemistry I/Lab	CHM201		4	MAT197 and ENG111; 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/co-req ENG111
Literature Elective			3	pre/co-req ENG111
Social Science Elective			3	
TOTAL CREDITS			66	

\*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.

## 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. See page 218.

# Practical Nursing Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Practical Nursing I	PNP111	Semester I	10	MAT097 or placement and ENG111 and BIO203 and BIO204
Drug Calculation	NUR100	Semester I	1	MAT097 or placement
Principles of Psychology	PSY101	Semester I	3	ESL098 or RDG095 or placement
Practical Nursing II	PNP112	Semester II	12	PNP111 and NUR100
Human Growth and Development	PSY213	Semester II	3	PSY101
Practical Nursing III	PNP113	Semester III	10	PNP112 and PSY213
TOTAL CREDITS			39	

### PROGRAM OVERVIEW

This program includes 33 credits of practical nursing theory and clinical practice in health care facilities. PNP111 (Fundamentals), requires clinical practice six (6) hours per week. PNP112 (Medical Surgical) and PNP 113 (Geriatrics, Pediatrics, Maternal/ Child Health) both require clinical practice eighteen (18) hours per week. Students must earn a numerical grade of 78 or higher in all PNP courses with the exception of NUR100, in which students must earn a numerical grade of 80 or higher. Students who fail to meet either the clinical objective or the grade requirement of a PNP course fail that course. To ensure currency, credits for BIO203 and BIO204 earned more than five years prior to enrollment in the practical nursing clinical sequence are not accepted. Note that there are many prerequisites that must be met for acceptance into the Practical Nursing Certificate Program.

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

As a prerequisite for a clinical placement in the Nursing program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, to access 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.

# CAREER OUTLOOK

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

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

- Demonstrate successful completion of course work and to prepare for licensure exam and entry level employment.
- Apply the nursing process in the delivery of holistic nursing care within the scope of practice of the practical nurse.
- Apply scientific knowledge and technology in the delivery of holistic nursing care.

- Integrate the roles of the practical nurse in health settings where predictable outcomes are expected.
- 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 standards within the scope of practice of the practical nurse.
- Demonstrate accountability in delegation and leadership within the scope of practice of the practical nurse.
- Demonstrates responsibility for selfimprovement and uses resources for lifelong learning.
- Integrates public policy that promotes and protects the healthcare system

This program is supported by the Massachusetts Community Colleges & Workforce Development Transformation Agenda, which is 100 percent funded through a \$20 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT. Grant Agreement #TC-22505-11-60-A-25.

# 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
Pre-Practicum Prep w/Field Experience	HSV116	Spring	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 nine credits completed toward the certificate option including, at a minimum, PSY215 and HSV112.

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.

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

As a prerequisite for a clinical placement in the Professional Human Services Work Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

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	Spring	3	see note*
Case Management in Human Services	HSV118		3	PSY215
Abnormal Psychology	PSY227		3	PSY101
TOTAL CREDITS			24	

# Psychiatric Rehabilitation Certificate Program

\*Note: The prerequisite for certificate students is ENG111 with a grade of C or better and a minimum of nine credits completed toward the certificate option including, at a minimum, PSY215 and HSV112.

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.

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

As a prerequisite for a clinical placement in the Psychiatric Rehabilitation Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

# Associate in Arts Psychology Concentration

		SEMESTER	CREDITS	PREREQUISITES
		TAKEN	CREDITS	
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-see note*		3	
Statistics I	MAT181 satisfies Area 4 requirement		3	MAT097 or placement
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
Child Psychology or Adolescent & Adult Development	PSY209 or PSY224- see note**		3	PSY101****
Psychology of Personal Adjustment	PSY203		3	PSY101*****
Intro to Behavioral Research	PSY235		3	PSY101*****
Mathematics Elective			3	MAT097 or placement
Lab Science Elective			4	
Social Psychology	PSY219		3	PSY101*****
Literature Elective			3	Pre-co/req ENG111
Literature Elective			3	Pre-co/req ENG111
PSY Elective: Choose any 200-level PSY Course			3	PSY101****
LCS or Elective	see note***		3	
Liberal Arts Elective	see note****		3	
Liberal Arts Elective	see note****		3	
TOTAL CREDITS	1		62	
	1	1		A

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.

\*Note: A Social Science elective is highly recommended in order to comply with MassTransfer guidelines.

\*\*Note: Human Growth and Development (PSY213) does not satisfy the A.A. Psychology concentration requirements. It is offered only to non-Psychology majors.

\*\*\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year.

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

\*\*\*\*\*Note: PSY101 must be completed with a C or better.

**PROGRAMS OF STUDY** 

Continued on following page

# Associate in Arts Psychology Concentration

Continued from previous page

# 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 218. PROGRAMS OF STUDY

# 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 (NLNAC) 3343 Peachtree Road NE, Suite 850, 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 and a Sex Offender Registry Information (SORI) check. 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:

- 1. 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 Chair.

This is a full-time two and one half-year program. Students may select either day, evening, hybrid 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 with a grade of C or better.
  - MAT097 Fundamentals of Algebra or placement above MAT097.
  - BIO203 Anatomy and Physiology I/Lab with a grade of C or better. (credits for Anatomy and Physiology/Lab that were earned more than five (5) years prior to enrollment in the nursing program are not accepted).
  - BIO204 Anatomy and Physiology II/Lab with a grade of C or better. (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 with a grade of B- or better.
  - 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.

Continued on following page

# Associate in Science Degree: Nursing Program

Continued from previous page

# AFTER ALL PREREQUISITES ARE COMPLETED:

- 1. Prospective students must apply through Admissions and Enrollment Services during enrollment periods. Approximate dates are Fall Program: September- December; Spring Program: May - August. Check with this office for exact dates.
- 2. After applying, qualified applicants will be invited to take the Nursing admissions test: Test of Essential Academic Skills V (TEAS V).
- 3. Applicants must score at least 47.6 percent in reading, 46.7 percent in math and 37.5 percent in science on the 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 their 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\$1	I5.00 yearly
Books/ ATI Materials	. \$1,500.00
Nursing Pin	\$60.00
Licensure Application/Exam Fees	\$430.00

NOTE : Costs are estimates and may change

# Associate in Science Registered Nursing Program: Day/Evening/Weekend/Hybrid Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES				l
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
Anatomy/Physiology/Lab I	BIO203		4	BIO105 or BIO108 or BIO195
Drug Calculation	NUR100		1	MAT097 or placement
Anatomy/Physiology/Lab II	BIO204		4	BIO203
PROGRAM CURRICULUM				
College Writing II	ENG112		3	ENG111
Principles of Sociology	SOC101 satisfies Area 2 requirement		3	ESL098 or RDG095 or placement
World View	Area 3 satisfied by program			
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	Area 5 satisfied by program			
Humanities	Area 6 satisfied by program			
Principles of Psychology	PSY101-see note*		3	ESL098 or RDG095 or placement
Physical Assessment/Basic Skills	NUR101	Semester I	2	BIO203 and ENG111 and NUR100
Nursing I	NUR111	Semester I	7	BIO203 and ENG111 and NUR100
Human Growth/Development	PSY213-see note*		3	PSY101
Nursing II	NUR112	Semester II	10	BIO204 and NUR101 and NUR111 and PSY101
Microbiology/Lab	BIO205	Semester II	4	BIO203 or BIO195
Nursing III	NUR211	Semester III	9	BIO205 and NUR112 and PSY213
Nursing IV	NUR212	Semester IV	9	NUR211
Nursing Seminar	NUR213	Semester IV	1	NUR211
TOTAL PROGRAM CREDITS			57	

\*Note: PSY101 and PSY213 must be completed prior to NUR211.

Continued on following page

# Associate in Science Registered Nursing Program: Day/Evening/Weekend/Hybrid Option

Continued from previous page

# 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.

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

As a prerequisite for a clinical placement in the Nursing program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, to access 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.

# 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.

# 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 and a Sex Offender Registry Information (SORI) check.

# 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 prior to applying to the program:
  - One semester of College Algebra (MAT194) or equivalent;
  - One semester of college level Anatomy/Physiology I/Lab (BIO203) (must be completed within five years of application unless currently working in related healthcare position).
  - One semester of college level Anatomy/Physiology II/Lab (BIO204) (must be completed within five years of application unless currently working in related healthcare position).
  - One semester of college level Microbiology (BIO205) or equivalent.
  - One semester of college level writing (ENG111) or equivalent.

# AFTER ALL PREREQUISITES ARE COMPLETED:

- 1. Prospective students must apply through Admissions and Enrollment Services during the enrollment period. Check with this office for exact dates.
- 2. After applying qualified applicants will be invited to take the Test of Essential Academic Skills (TEAS).
- 3. Applicants must score at least 47.6 percent in reading, 46.7 percent in math, 37.5 percent in science on the Test of Essential Academic Skills V (TEAS V) to be considered for the program.
- 4. Admission to the Respiratory Therapy Program will be based upon a ranking system that includes student performance on the TEAS V as well as performance in the prerequisite courses.

# Associate in Arts Respiratory Therapy Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
PREREQUISITE COURSES				·
Anatomy/Physiology I/Lab	BIO203 satisfies Area 5 requirement		4	BIO105 or BIO108 or BIO195
Anatomy/Physiology II/Lab	BIO204		4	BIO203
Microbiology/Lab	BIO205		4	BIO195 or BIO203
College Algebra for STEM	MAT194		4	MAT099 or placement
College Writing I	ENG111		3	ENG095 or placement and ESL098 or RDG095 or placement
PROGRAM CURRICULUM				
Principles of Respiratory Therapy I	RTH101	Fall, Year 1	4	co-reqs RTH111 and RTH121
Modalities of Respiratory Therapy I	RTH111	Fall, Year 1	2	co-reqs RTH101 and RTH121
Clinical Practice in Respiratory Therapy I	RTH121	Fall, Year 1	2	co-reqs RTH101 and RTH111
Respiratory Therapy Pharmacology	RTH132	Fall, Year 1	1	
Principles of Inorganic Chemistry/Lab	СНМ120	Fall, Year 1	4	ENG095 and MAT097 and RDG095 or placement
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 II	ENG112	Spring, Year 1	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	2	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 PROGRAM CREDITS			51	

# BUNKER HILL COMMUNITY COLLEGE WILL NO LONGER BE ACCEPTING STUDENTS INTO THIS PROGRAM AS OF THE 2013-2014 ACADEMIC YEAR.

Continued on following page

# Associate in Arts Respiratory Therapy Program

Continued from previous page

### 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.

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

As a prerequisite for a clinical placement in the Respiratory Therapy program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, to access 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.

### 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 advancedlevel NBRC Registry examinations to earn the RRT credential. Respiratory care practitioners are licensed in the state of Massachusetts.

- 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.

# Associate in Arts 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	MAT181		3	MAT097 or placement		
Cultural Anthropology	SOC109		3	ESL098 or RDG095 or placement		
Mathematics Elective			3	MAT097 or placement		
Lab Science Elective			4			
Urban Sociology	SOC205		3	SOC101		
Literature Elective			3	pre/co-req ENG111		
Literature Elective			3	pre/co-req ENG111		
Behavioral Science Elective			3			
Computer Essentials or Applications/ Concepts	CIT101 or CIT110		3	ESL098 or RDG095 or placement		
The Family	SOC111		3			
Intro to Behavioral Research	PSY235		3	PSY101**		
LCS or Elective	see note*		3			
Elective			3			
TOTAL CREDITS			62			

\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year. \*\*Note: PSY101 must be completed with a C or better.

### 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 fouryear 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 huntergathers 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 218.

Substance Abuse Service	es Certificate Program
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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
Case Management in Human Services	HSV118		3	PSY215
Intro to Substance Abuse Counseling	HSV115		3	HSV112 and PSY215
Pre-Practicum Prep w/Field Experience	HSV116	Spring	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 nine credits completed toward the certificate option including, at a minimum, PSY215 and HSV112..

### 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.

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

As a prerequisite for a clinical placement in the Substance Abuse Services Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

### 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/certificateprograms.

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

PROGRAMS OF STUDY

# 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	BIO108	Fall	4	ENG095 and MAT093 and RDG095 or placement
Surgical Technology I	SGT105	Fall	5	ENG095 and MAT093 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	

This program is offered on the Chelsea Campus.

Students must maintain a grade of C or better in all surgical technology courses. Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check.

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 chair.

## ADMISSION REQUIREMENTS:

- Students must apply to the program through Admissions and Enrollment Services and:
- Possess a high school diploma or GED certificate.
- Attend an information session.
- Complete Writing Skills II (ENG095) with a grade of C or better or place into College Writing I (ENG111).
- Complete Foundations of Mathematics (MAT093) with a grade of C or better or place above Fundamentals of Mathematics (MAT093) on the college placement test.
- 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.

### 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.

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

As a prerequisite for a clinical placement in the Surgical Technology Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access 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.

## 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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass. edu/certificateprograms.

- 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.

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Decision Support using MS Excel	CIT234		3	CIT110 or CIT113 or CIT120 or equivalent experience or Chair approval
Accounting Forensics	ACC107		3	ACC102
Accounting Information Systems	ACC105		3	ACC101; ENG095 or placement and ESL098 or RDG095 or placement
Federal Income Tax I	ACC203	Fall	3	ACC102
Federal Income Tax II	ACC204	Spring	3	ACC203 and Permission of Dean or Chair approval
Mass Tax Law I	ACC217		3	ACC204
Internship at DOR/Mass Tax Law II	ACC299		3	ACC217 and Permission of Dean or Chair approval
Elective - Select one:				MAT097 or placement
Intermediate Accounting I or Intermediate Accounting II or Professional Communication or Volunteer Income Tax Assistance	ACC201 ACC202 BUS207 ACC205		3	ACC102 ACC201 ENG111 ACC203
TOTAL CREDITS			27	

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in today's global business environment.

# **OPTION OVERVIEW**

The Taxation Certificate Program prepares students with an intensive, practical application of skills and decision making demanded by the taxation and auditing profession. Students will develop technical, communications, critical thinking, quantitative, and human relation skills needed to be competitive in this field.

This option provides students with the skills needed for entry level positions found in in the taxation and auditing field. Students will participate in a hands-on internship experience at the Massachusetts Department of Revenue, affording them a first-hand look at the inner workings of the taxation and auditing profession.

The program is intended for students with an associate or bachelor's degree.

## CAREER OUTLOOK

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

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

- Build an understanding of steps required to perform both internal and independent audits;
- Understand the workings and concepts of tax law as it pertains to the business transactions of varied business entities;
- Identify the conditions that lead to the detection of fraud;
- Demonstrate competencies regarding the auditor's objectives and procedures in selected areas of the audit, emphasizing the business cycles;
- Recognize and apply the general rules of accounting related to taxation and auditing;
- Demonstrate a mastery of design of audit programs for financial statement audits:
- Demonstrate conceptual and analytical ٠ skills acquired through course work and relate to thoughtful analysis of financial and non-financial data:
- Understand the legal and ethical challenges faced by auditors and remedies for these situations.

# Associate in Science Business Administration Program: Taxation Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES	L			I
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 requirement		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
World View	Area 3		3	
Quantitative Thought	Area 4		3	MAT097 or placement
Science and Technology	Area 5		4	
Humanities	Area 6		3	
CONCENTRATION COURSES				
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
Principles of Accounting II	ACC102		3	ACC101
Business Law I	BUS201		3	ENG095 or placement and ESL098 or RDG095 or placement
Decision Support using MS Excel	CIT234		3	CIT110 or CIT113 or CIT120 or equivalent experience or permission of Department Chair
Accounting Information Systems	ACC105		3	ACC101; ENG095 or placement and ESL098 or RDG095 or placement
Accounting Forensics	ACC107		3	ACC102
Intermediate Accounting I	ACC201	Fall	3	ACC102
Intermediate Accounting II	ACC202	Spring	3	ACC201
Federal Income Tax I	ACC203	Fall	3	ACC102
Federal Income Tax II	ACC204	Spring	3	ACC203
Volunteer Income Tax Assistance or Accounting Elective (200+)	ACC205	Spring	3	ACC203
Mass Tax Law I	ACC217		3	ACC204
Internship at DOR/Mass Tax Law II	ACC299		3	ACC217
Professional Communication	BUS207		3	ENG111
TOTAL CREDITS			67	

Continued on following page

# Associate in Science Business Administration Program: Taxation Option

Continued from previous page

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibility and successfully in today's global business environment.

### OPTION OVERVIEW

The Associate in Science Degree: Business Administration Program, Taxation Option prepares students with an intensive, practical application of skills and decision making demanded by the taxation and auditing profession/. Students will develop technical, communications, critical thinking, quantitative, and human relation skills needed to be competitive in this field.

This option provides students with the skills needed for entry-level positions found in the taxation and auditing field and will also position them to transfer to a four-year degree program. Students will participate in a hands-on internship experience at the Massachusetts Department of Revenue, affording them a first-hand look at the innerworkings of the taxation and auditing profession.

### CAREER OUTLOOK

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

- Build an understanding of steps required to perform both internal and independent audits;
- Understand the workings and concepts of tax law as it pertains to the business transactions of varied business entities;
- Understand the legal and ethical challenges faced by auditors and the resolution approaches for these situations;
- Demonstrate competencies regarding the auditor's objectives and procedures in selected areas of the audit, emphasizing the business cycles;
- Recognize and apply the general rules of accounting related to taxation and auditing;
- Demonstrate a mastery of design of audit programs for financial statement audits;
- Demonstrate conceptual and analytical skills acquired through course work and relate to thoughtful analysis of financial and non-financial data.

# Associate in Science Business Administration Program: Technical Business 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
Organizational Behavior/Design	MAN112 satisfies Area 2 requirement		3	
Macroeconomics or Microeconomics	ECO201 or ECO202 satisfies Area 3 requirement		3	MAT097 and ESL098 or RDG095 or placement
Contemporary Math II or Statistics I or Calculus for Management Science	MAT173 or MAT181 or MAT231 satisfies Area 4 requirement		3 4	MAT097 or placement MAT194 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
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 permission
Principles of Marketing	MAN105		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Principles of Accounting I	ACC101		3	ESL098 or RDG095 or placement
Principles of Accounting II or Accounting Information Systems	ACC102 or ACC105		3	ACC101 ENG095 or placement and ESL098 or RDG095 or placement and ACC101
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	

Continued on following page

# Associate in Science Business Administration Program: **Technical Business Option**

Continued from previous page

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 fouryear academic institutions. Students qualify for entry-level positions within their areas of

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in a global business environment.

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 CONCENTRATION 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.

concentration.

PROGRAMS OF STUDY

# Associate in Arts Theatre Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES		
GENERAL EDUCATION COURSE	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	MAT097 or placement		
Science and Technology	From Area 5		4			
Humanities	Area 6 satisfied by program					
CONCENTRATION COURSES						
Acting I	THE107		3			
Play Production Workshop	see note*		3			
Oral Communication	ENG171		3			
Social Science Elective			3			
Mathematics Elective			3	MAT097 or placement		
Humanities Elective			3			
Humanities Elective			3			
Theatre Elective			3			
Theatre Elective			3			
Lab Science Elective			4			
Literature Elective			3	pre/co-req ENG111		
Literature Elective			3	pre/co-req ENG111		
LCS or Elective	see note**		3			
Elective			3			
TOTAL CREDITS			62			

\*Note: See the Department Chair for substitute course.

\*\*Note: New students enrolled in 9 credits or more must take a Learning Community Seminar within their first year.

# 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 218.

# 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	Fall	3	CIT113
XML	CMT117	Spring	3	CMT111
XSL	CMT211		3	CMT111 and CMT117
ASP.NET	CMT215	Fall	3	CMT113
Windows Operating Systems	CIT268		3	CIT110 or CIT112 or CIT113 or CIT120 or Instructor permission or Chair approval
Database Design with MS Access	CIT128		3	CIT110 or CIT113 or CIT120 or Chair approval
Digital Imaging with Photoshop	VMA105		3	ENG095 and MAT093 or placement
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.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

- 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.

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	CREDITS	PREREQUISITES
HTML and Dreamweaver	CMT111		3	
Javascript	CMT113		3	CMT110 and CMT111
Flash	CMT115	Fall	3	CMT113
XML	CMT117	Spring	3	CMT111
ASP.NET	CMT215	Fall	3	CMT113
Introduction to Entrepreneurship	MAN107		3	ENG095 or placement and ESL098 or RDG095 or placement
Principles of Marketing	MAN105		3	ESL098 and ESL099 or RDG095 and ENG090 or placement
Entrepreneurship and Innovation	MAN204		3	MAN107
TOTAL CREDITS			24	

# Web Development in Entrepreneurship Certificate Program

## PROGRAM OVERVIEW

The Web Development In Entrepreneurship Certificate will provide students with a sound basis of knowledge of web-based delivery and development of products, services and web technologies and will allow individuals to acquire practical entrepreneurial skills. Students will learn leading edge web delivery mechanisms and will learn to incorporate these skills with practical business skills to create opportunities for self-employment potentially leading to starting their own business, or will better prepare them for further career advancement and mobility.

# CAREER OUTLOOK

Students completing this certificate can expect to be qualified for positions as web developers and also be positioned to explore the option of starting their own web design company. Students will be prepared to utilize their knowledge towards the pursuit of eventualWebmaster certification and ultimately, their own web development consulting business.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.bhcc.mass.edu/ certificateprograms.

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

- Design implement, publish and maintain websites in support of creating a web presence for businesses and organizations.
- Develop and implement a business plan designed to create a web development venture.
- Evaluate the feasibility of web development ideas and identify the industry factors leading to business opportunity.

# Associate in Science Computer Media Technology Program: Web Development 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
Individual and Society	From Area 2		3	
Intro to Mass Media	VMA111 satisfies Area 3 requirement		3	ENG095 and MAT093
Quantitative Thought	From Area 4		3	MAT097 or placement
Science and Technology	From Area 5		4	
Humanities	From Area 6		3	
CONCENTRATION COURSES				
Oral Communication	ENG171		3	
Applications/Concepts	CIT110		3	ESL098 or RDG095 or placement
SQL Programming	CIT236		3	CIT110 or CIT113 or CIT120 or Chair approval
HTML and Dreamweaver	CMT111		3	pre/co-req CMT125
Javascript	CMT113	Fall	3	CIT110 and CMT111
Flash	CMT115	Fall	3	CMT113
XML	CMT117	Fall	3	CMT111
Cascading Style Sheets	CMT125		3	pre/co-req CMT111
XSL	CMT211-see note*	Spring	3	CMT111 and CMT117
ASP.NET	CMT215		3	CIT128 or CIT236
PHP/MySQL	CMT241		3	CMT111 and CIT236
Windows Operating Systems	CIT268		3	CIT110 or CIT112 or CIT113 or CIT120 or Instructor permission or Chair approval
Digital Imaging with Photoshop	VMA105		3	ENG095 and MAT093 or placement
Web Development Internship	CMT299		3	Chair approval
TOTAL CREDITS			64	

\*Note: Prior to enrolling in course, student must see Department Chair

Continued on following page

# Associate in Science Computer Media Technology Program: Web Development Option

Continued from previous page

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.

## OPTION OVERVIEW

This program prepares students for entrylevel 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 realtime content presentation. The program also provides students with a sound basis to enter the ever-growing 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.

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

- Design, implement, publish, and maintain websites in support of creating a web presence for businesses and organizations.
- Create animated, event driven multimedia content for web delivery.
- Construct, extract, transform, and present database resident content directly into a web delivery mechanism.
- Construct event driven action scripts within a web page to respond to user stimulations and provide dynamic results in a real time environment.

# World Studies Emphasis Certification

CHOOSE FIVE COURSES FROM ONLY THE FOLLOWING AREAS:	COURSE TITLE	COUSE NUMBER	CREDITS	PREREQUISITES
	Arabic	ARB	3	
	French	FRE	3	
	Spanish	SPN	3	
	Portuguese	POR	3	
	Mandarin	CHN	3	
	Japanese	JPN	3	
	Literature in America I	LIT203	3	pre/co-req ENG111
	Literature in America II	LIT204	3	pre/co-req ENG111
	Masterpieces of World Literature I	LIT211	3	pre/co-req ENG111
	Masterpieces of World Literature II	LIT212	3	pre/co-req ENG111
	African Literature	LIT219	3	pre/co-req ENG111
	Latin American Literature	LIT221	3	pre/co-req ENG111
	Immigrant Experience in Literature	LIT223	3	pre/co-req ENG111
	Middle East Literature	LIT224	3	pre/co-req ENG111
	Western Civilization to the Renaissance	HIS101	3	ESL098 or RDG095
	Western Civilization from the Renaissance	HIS102	3	ESL098 or RDG095 and ENG095 or placement
	World Civilization to 1500	HIS111	3	ESL098 or RDG095 and ENG095 or placement
	World Civilization from 1500	HIS112	3	ESL098 or RDG095 and ENG095 or placement
	US History: Colonization through the Civil War	HIS151	3	ESL098 or RDG095 and ENG095 or placement
	US History: Reconstruction to the Present	HIS152	3	ESL098 or RDG095 or placement
	Cultural Anthropology	SOC109	3	ESL098 or RDG095 or placement
	World Regional Geography	GEO101	3	
	World Religions	PHL111	3	
	Environmental Science I/Lab	ENV105	4	ENG095 and MAT093 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 standalone program. Students must choose five courses from only three of the seven areas listed in the grid.

# CREDENTIAL OVERVIEW

This emphasis certification 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 CONCENTRATION 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, political 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

# 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. Prerequisites: Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

# 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 decisionmaking 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-107 Accounting Forensics 3 Credits

This course introduces students to the auditing process and prepares them to perform forensic audit and examination in conformity with pertinent industry standards. Students will learn comprehensive perspectives and skills in regards to occupational fraud and the technicality of fraud examination including searching accounting information, obtaining documentary evidence, interviewing witnesses and potential suspects, and conducting forensic document examination. This course will also provide electronic techniques required to audit. Prerequisite: Principles of Accounting II (ACC102).

# 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 Credits

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

# ACC-203

## Federal Income Tax I

Accounting I (ACC201).

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 go to Room C309 for more information. 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 decisionmaking 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).

## ACC-217

Mass Tax Law I

3 Credits

Starting with an introduction to Massachusetts General Laws relating to taxation and the organization and role of the Massachusetts Department of Revenue, this survey course will focus on the Massachusetts statutory provisions relating to miscellaneous excises, the taxation of individuals and corporations, including the administration and enforcement of these provisions by the Massachusetts Department of Revenue. Other areas of study covered in this course include: filing requirements for major tax types; assessment and collection of taxes; examination and abatement. This course gives students an understanding of specific taxation laws that pertain to the Commonwealth of Massachusetts. Prerequisite: Federal Income Tax II (ACC204).

# **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 wills and designed pathops. 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. Ćo-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 3 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), Foundations of Math (MAT093), 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 Credit

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).

# NHP-180 Medical Terminology

3 Credits

This course provides instruction in the development of basic medical terminology. Competency in medical terminology promotes effective communication among members of the healthcare team.

# 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 4 Credits

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 Foundations of Algebra (MAT097) or placement equivalency.

# Biology

### BIO-105 Introduction to Biology/Lab

4 Credits

This course will investigate the major biological concepts that connect all forms of life and is designed for students with little or no background in science. Topics will include the process of scientific inquiry, the cell as the basic unit of life, metabolism, cellular reproduction, genetics, evolutionary theory and principles of ecology. Laboratory work will introduce students to the basic investigative techniques used to study life's processes. There will be no animal dissection in this course. This course will satisfy the General Education area five requirement (Science and Technology) for all programs and may be used to satisfy the biology prerequisite for Anatomy and Physiology I (BIO203). The course will not satisfy the general biology requirement of the Associate in Science: Biological Science Program. Course meets: 3 hrs lecture; 3 hrs. lab. Prerequisites: Writing Skills II (ENG095), a

grade of C or better in Foundations of Mathematics (MAT093), and Reading Skills II (RDG095) or placement equivalence.

#### BIO-108 Human Biology/Lab 4 Credits

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 and Physiology I/Lab (BIO203). Prerequisites: Writing Skills II (ENG095), a grade of C or better in Foundations of Mathematics (MAT093), 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 and 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 Foundations of Mathematics (MAT093), Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement equivalency.

#### BIO-120

# Introduction to Biotechnology and 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 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), Foundations of Mathematics (MAT093), and Reading Skills (RDG095) or placement equivalency.

### BIO-195 🍁

#### General Biology I and 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 Introduction to Biology /Lab (BIO105) 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 and 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 and 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 Introduction to Biology /Lab (BIO105), Human Biology (BIO108) or General Biology I/Lab (BIO195).

#### BIO-204

# Anatomy/Physiology II and 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 and 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 cultivation and 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 and 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 Chair approval.

# 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 Chair approval.

## BIO-210 🍁 Population Ecology/Lab

#### 4 Credits

This course is designed to give students an overview of the science of population biology. The course covers topics related to: distribution and abundance of species; mathematical models of logistic and exponential growth; the application of the Hardy-Weinberg principle to describe changes in gene frequencies via natural selection or other processes on populations; life-history strategies, interspecific interactions; population regulation and sustainabile ecosystems; and human impact on the sustainability of wild populations. Laboratory activities include basic field techniques for collection and estimation of populations, basic statistical analysis, computer simulation, and formal lab exercises. Lab experiments are designed to facilitate an understanding of basic scientific field research and principles of population ecology. This course is designed for advanced science students and may be taken as an elective for the general biology transfer program. Prerequisites: General Biology II/ Lab (BIO196) or Chair approval.

## 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 Chair 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 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 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 III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (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 (MAT097) 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).

# Chemistry

#### 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-111 Globalization 3 Credits

#### 3 Credits

This course is an exploration of the nature, reasons for and consequences of globalization. Topics include global economic integration, cultural convergence, global institutions, multinational corporations and global business. Students acquire an understanding of globalization's role in history, geography, politics, culture, and technology, as well as its impact on labor, standards of living and the environment. This course enables students to explore career options in international business, define a career path, and make connections between classroom learning and the larger business community. This course fulfills the Learning Community Seminar requirement for first year college students to assist the student in making a successful transition into the college environment. Students develop 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 III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or placement equivalents.

#### 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 gives students a comprehensive understanding of the use and importance of effective communication in business. Students study types of written, oral, and electronic communication and develop a variety of professional communication skills essential to success in business. The course also addresses ethical and cultural issues associated with business communications. Prerequisite: 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 (MAT097) or placement and Academic Reading III (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 and 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 Foundations of Algebra (MAT097) or placement equivalencies.

## CHM-121 Principles of Organic and Biochemistry and 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 Principles of Inorganic Chemistry and 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 Foundations of Algebra (MAT097).

# CHM-201

# General Chemistry I and Lab 4 Credits

This course is a rigorous introductory course as part of a two-semester sequence that studies chemical principles. Topics include atomic structure, reaction types and equations, stoichiometry, gas laws, thermochemistry and bonding theory. Students are required to purchase approved safety goggles. Course meets: 3 hours lecture; 3 hours lab. Prerequisites: Grade of C+ or better in Precalculus (MAT197) or exemption by placement testing and a grade of C or better in College Writing I (ENG111). Note: This course is intended for students planning to major or transfer as science or engineering majors. Pre-allied health students or students requiring a one semester overview of chemistry should enroll in Principles of Inorganic Chemistry and Lab (CHM120).

#### CHM-202

# General Chemistry II and Lab 4 Credits

This course is a continuation of General Chemistry I and Lab (CHM201). Topics include solids, solutions, kinetics, equilibrium, acid-base and solubility equilibrium, thermodynamics and electrochemistry. Students are required to purchase approved safety goggles. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in General Chemistry I and Lab (CHM201).

#### CHM-251

#### Organic Chemistry I and Lab 4 Credits

This course studies the chemistry of carbon compounds including nomenclature, molecular structure, and functional groups. Topics include the reactivity and properties of saturated and unsaturated hydrocarbons, stereochemical relationships and nucleophilic substitution and elimination reactions. Mechanisms are presented as a unifying principle for these reactions. Students are required to purchase approved safety goggles. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisites: Grade of C or better in General Chemistry II and Lab (CHM202) and a grade of C or better in College Writing II (ENG112).

#### CHM-252 Organic Chemistry II and Lab

### 4 Credits

This course is a continuation of Organic Chemistry I and Lab (CHM251). Topics include aromatic substitution reactions, carbonyl addition reactions, acid derivatives, amines and carbohydrates. Both the laboratory and lectures use instrumental methods for the structural analysis of organic compounds. Students are required to purchase approved safety goggles. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in Organic Chemistry I and 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 reducting integer quarty, at the coordinate 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. Pediation sofety, designation 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: Chair approval, 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 firsttime, 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 and 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 and 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 and OOP (CIT120), equivalent experience or Chair approval. For additional information and/ or a course syllabus contact CITDepartment@bhcc. mass.edu.

#### CIT-120 Intro to Computer Science and Object Oriented Programming 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 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: Intermediate Algebra (MAT099), Writing Skills II (ENG095), and Reading Skills II (RDG095) or placement. Pre/ co-requisite: College Algebra-STEM (MAT194). 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 and Concepts (CIT110) or Information Technology Fundamentals (CIT112) or IT Problem Solving (CIT113) or Intro to Computer Science and Object Oriented Programming (CIT120) or Chair approval.

#### CIT-123

#### Introduction to Geospatial Technology 3 Credits

Introduction to the fundamentals of Geospatial Technology, including Geographic Information Systems (GIS), Global Positioning Systems (GPS), cartography, remote sensing, and spatial analysis through a series of hands-on computer-based exercises. Participants will learn how to utilize geospatial technology to address social and environmental issues. This course is designed to be used as a stand-alone course to complement other disciplines or as an entry level course into a geospatial program. Course content is based upon the United States Department of Labor's Geospatial Technology Competency Model for entry level geospatial occupations including Geospatial or GIS Technicians and Technologists. Prerequisite: Applications/Concepts (CIT110) or IT Problem Solving (CIT113) or Chair approval.

#### CIT-125 Python Programming 3 Credits

This is an introductory course designed for any student interested in learning computer programming concepts and hands-on computational thinking, all in the context of the Python programming language. No prior experience in programming is necessary. Students will use their own problem solving abilities to implement programs in Python. This course will show the student how to create basic programming structures including decisions and loops. Further, students will explore unique Python data structures such as tuples and dictionaries. Students will also learn to perform basic debugging techniques. At the end of this course, the student will have learned enough concepts in computer science and programming to be able to write Python programs to solve problems on their own. This course will prepare the student to move on to the advanced Python Programming course. Prerequisite: Applications and Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science and Object Oriented Programming (CIT120) or Maya Foundations (CMT121) or permission of the Department Chair. For additional information and/ or a course syllabus contact CITDepartment@bhcc. mass.edu. All prerequisites must be completed with a C or better.

#### CIT-127 Game Engines 3 Credits

This course will present the concepts and methods associated with utilizing Game Engines as the finished product tool for creating and delivering computer-based games and simulations. Game engines bring together the ability to deliver realtime rendering with the added flexibility to control the game/simulation lighting ambience, terrains, physics, audio integration, programming, and realtime networking. Prerequisite: Mel Scripting in Maya (CMT 231) or Chair approval.

#### 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 and OOP (CIT120), equivalent experience or Chair approval. For additional information and/ or a course syllabus contact CITDepartment@bhcc. mass.edu.

# CIT-133

#### Introduction to Microsoft Office 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 and 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 and 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 III (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 and 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 (CIT112), equivalent course, equivalent experience or Chair approval. Pre/co-requisite: Introduction to Diagnostic Imaging and 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 and Object Oriented Programming (CIT120) or Chair approval. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-167 **Routers and Routing Basics** 3 Credits

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 and Software 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 and 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

This course covers an introduction to computer programming using Visual Basic. The course provides students with "hands-on" exposure to object-oriented programming techniques and emphasizes programming logic, using the eventdriven components of Visual Basic. Using laboratory case assignments, students plan, design, and create their own Windows applications. They learn how to create a user interface, set control properties, design the logic structures of the project and write the associated Visual Basic code. Topics covered include variables and mathematical operations, decision and looping structures, procedures and functions and single level arrays. Prerequisite: Applications/Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science and OOP (CIT120) or equivalent experience or Chair approval. For additional information and/ or a course syllabus contact CITDepartment@bhcc. mass.edu.

#### CIT-218

#### Intermediate Visual Basic 3 Credits

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 Instructor permission and/or Chair approval. For

additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-219

#### Information Security and 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: Windows Operating Systems (CIT268), equivalent experience or Chair approval. For additional information and/or a course syllabus contact CIT Department@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) and Windows Operating Systems (CIT268).

#### 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-225

#### **Advanced Python Programming** 3 Credits

This advanced course is designed for any student interested in learning advanced computer programming concepts in the context of the

Python programming language. In this course students will explore classes, object oriented programming, plotting, sampling, and statistical thinking, using randomness to solve non-random problems, statistical thinking, graphs and dynamic programming. Students will complete hands-on individual projects, individual assessments, group projects and exams to assess student success at achieving the course outcomes. Prerequisite: Python Programming (CIT125) or equivalent experience with Chair approval. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu. Prerequisite must be completed with a C or better.

#### 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 Chair approval. For additional information and/or a course syllabus contact CITDepartment@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 and Concepts (CIT110) or IT Problem Solving (CIT113), or equivalent experience or Chair approval. 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 "whatif" 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 EXČEL Certification Examination upon completion of this course. Prerequisite: Computer Applications/ Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science and OOP

(CIT120), equivalent experience or Chair approval. 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 Chair approval For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

#### CIT-237 C++ Programming 4 Credits

In this course, students who already have been In unis 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 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 (ENGO95), College Algebra-STEM (MAT194) and Introduction to Computer Science and Object Oriented Programming (CIT120) or equivalent experience with Chair approval. For addition information and/or a course syllabus contact CITDepartment@bhcc.mass. edu. All prerequisites must be completed with a C or better.

# CIT-239 JAVA 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 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 and Object Oriented Programming (CIT120) or equivalent experience with Chair approval. 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 Chair approval. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

## CIT-241 PACS Administration II

3 Credits

This course covers the more complex aspects of Picture Archiving and 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-243

#### Android Development for Java Programmers 3 Credits

This course is for students who are already experienced Java programmers. It discusses not only the intricacies of Android app development, but publishing in the Market place and monetizing the apps through fee, in-app advertising or in-app billing of selling virtual goods. Topics include but are not limited to: mobile game design principles, tools and terminology, AndEngine framework, Java/Dalvik and Android SDK, rendering images, using sprite sheets, creating animations, sound, creating an effective game interface, resource files, working with maps, notifications, building custom UI elements. APIs (Application Programming Interfaces) and SDK (Software Development Kits) for phones and tablets will be used. Prerequisites: Grade C or better in Java Programming (CIT239) and Precalculus (MAT197). Pre or co-requisite: Advanced Java programming (CIT285).

#### CIT-245 Database Administration 3 Credits

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 #120-031. Students will also be provided with the personal edition of the Oracle software. Prerequisite: SQL Programming (CIT236), equivalent experience or Chair approval. For additional information and/or a course syllabus contact CITDepartment@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 Chair approval.

#### CIT-250 🍁

#### Collaboration, Communication and 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 and 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 Chair approval. 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 and 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 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 and Concepts (CIT110) or Information Technology Fundamentals (CIT112) or IT Problem Solving (CIT113) or Intro to Computer Science and Object Oriented Programming (CIT120) or Chair approval. For additional information and/or a course syllabus contact CITDepartment@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 CITDepartment@bhcc.mass.edu.

#### CIT-271

#### Batch File Processing 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-273

## Ethical Hacking

#### 4 Credits

This course introduces the network security specialist to the various methodologies for attacking a network. The student will be introduced to the concepts, principles and techniques, supplemented by hands-on exercises, for attacking and disabling a network. These methodologies are presented within the context of properly securing the network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools and appropriate defenses and countermeasures. Students will receive course content information through a variety of methods: lecture and demonstration of hacking tools will be used in addition to an virtual environment. Students will receive a hands-on practical approach in penetration testing measures and ethical hacking. There is an ethics requirement for this course, and students will be required to sign the White Hat Oath. Students are expected to have access to a computer with internet access outside of class as there is a major web component to the course. Prerequisite: Windows Operating Systems (CIT268) or Linux Operating System (CIT270) or Chair approval.

# 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 and Intermediate Routing (CIT267). For additional information and/ or a course syllabus contact CITDepartment@bhcc. mass.edu.

# CIT-277

#### Health Information Networking 3 Credits

The Cisco® Health Information Networking course, offered through the BHCC Cisco Networking Academy®, is a technology-focused curriculum primarily designed for students who are looking for career-oriented, entry-level healthcare focused skills that can be applied toward entry-level specialist careers in healthcare networking. Health Information Networking is a blended curriculum with both online and classroom learning. The program aims to develop an in-depth understanding of principles and practicalities needed for information technology professionals wishing to specialize in healthcare network implementations. Topics include: Basic information on healthcare settings, Principles of Security and Privacy in Healthcare, Fundamentals of Information Technology in healthcare, Fundamentals of Electronic Health Records systems, Basic information on medical practice workflows, how to adjust workflows for Electronic Medical Record Implementations, and Designing, Securing and Troubleshooting a network to support a medical group. Prerequisite: CCNA Exploration Cisco 3: LAN Switching and Wireless (CIT267) or equivalent CCNA experience or Cisco CCNA certification or CIT Chair approval.

#### CIT-279 CISCO CCNA Security 3 Credits

#### Cisco CCNA Security equips students with the knowledge and skills needed to prepare for entrylevel security specialist careers and prepare for the CCNA Security certification. This course is a hands-on, career-oriented e-learning solution that emphasizes practical experience. CCNA Security aims to develop an in-depth understanding of network security principles as well as the tools and configurations available. The following tools are covered: Protocol sniffers/analyzers; TCP/IP and common desktop utilities; Cisco IOS Software; Cisco VPN client; Packet Tracer (PT); Web-based resources. CCNA Security has the following features: A hands-on, career-oriented approach to learning networking that emphasizes practical experience; CCNA-level knowledge and skills; Activities that emphasize networking implementation. Prerequisite: Switching Basics and Intermediate Routing (CIT267) or CCNA Certification, Equivalent Experience or Chair approval. 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 CITDepartment@bhcc. mass.edu.

#### CIT-282 MS Windows

#### 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 CITDepartment@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 Chair approval. 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-287

# Survey of New Popular OOPL for Programmers

3 Credits

This course is for students who are already have deep knowledge of an Object Oriented Language (Advanced Java or Advance C++). This course will cover in depth three of the most commonly requested OOPL in the job market, like C#, Visual Basic .NET and Python (languages covered may change depending on the current job market needs). The course will focus on the idiosyncrasies of the different new languages. Knowledge of programming structures and ability to implement lengthy and complex programming solutions, use of the debuggers and ease to adapt in deferent IDEs is assumed. Long capstone-like projects will be required for each language examined and students will be responsible to analyze and solve the problems by applying the good programming practices and styles already learned in prior semesters. Prerequisites: Grade C or better in Advanced Java Programming (CIT285) or Advanced C++ (CIT284), and Precalculus (MAT197).

#### 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 on-campus seminar. Students must comply with the Internship requirements, as stated in the "Internship Handbook," before registering for the course. In all cases, students need Chair approval 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: Chair approval.

# 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 computerbased 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 and Dreamweaver

3 Credits

The purpose of this course is to teach 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 and Dreamweaver (CMT111). For additional information and/or a course syllabus contact CITDepartment@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

#### 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: Co-requisite HTML and 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 and 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).

COURSE DESCRIPTIONS

#### 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 and 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).

## CMT-232 Game Engines

3 Credits This course w

This course will present the concepts and methods associated with utilizing Game Engines as the finished product tool for creating and delivering computer-based games and simulations. Game Engines bring together the ability to deliver realtime rendering with the added flexibility to control the game/simulation lighting ambience, terrains, physics, audio integration, programming and realtime networking. Prerequisite: Mel Scripting in Maya (CMT231) or Department Chair approval.

#### CMT-233 Game Programming I 3 Credits

The course will cover the beginning phases of programming game content and movement as a component of the entire game development and managed code process. The course will be taught using the C++ programming language and will be developed in the Microsoft Visual Studio. Net code development environment. The student will learn the fundamentals of C++ programming as they are applied to the creation and control of computer games. Prerequisite: Mel Scripting in Maya (CMT231). This course is for Gaming/Computer Simulation majors only.

#### CMT-241 PHP/MySQL 3 Credits

PHP/MySql is a web development programming language that is used to provide dynamic interaction between web content pages and databases. PHP technology permits web developers to retrieve and maintain real-time information for presentation across the web delivery medium. The objectives of this course are to teach the student the skills required to effectively construct real-time web sites for the purposes of e-commerce and real-time information delivery. The student will learn how to design and publish web pages that interact with push/pull actions that interact directly with on-line databases. Prerequisites: HTML and Dreamweaver (CMT111) and SQL Programming (CIT236).

# **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

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

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-117

#### Street Law: An Overview of the American Legal System 3 Credits

3 Credits

This is an introductory course in American law. The course will examine the origins of the American Legal System through an analysis of its function, sources and its varied aspect. This course introduces students to fundamental criminal law and constitutional law principles and provides a platform for guided discussions of important public policy issues concerning, crime, discrimination, healthcare, and immigration. The course uses the latest instructional technology including e-portfolios, case studies, simulated legal exercises, small group exercises and analytical thought problems to develop higher level thinking skills that prepare students for other course work in criminal justice, law, sociology and history and government.

#### 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

# CRJ-202

#### Evidence/Court Procedures 3 Credits

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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) and Criminal Investigation I (CRJ208) or Instructor permission.

# 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

# CRJ-208 Criminal Investigation I

#### 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: College Writing I (ENG111), Introduction to Criminal Justice (CRJ101), and Criminal Law (CRJ103) or Instructor permission.

# CRJ-209 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: College Writing I (ENG111), Introduction to Criminal Justice (CR.1101), and Criminal Law (CR.1103) or Instructor permission.

#### CRJ-210

#### 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 crosscultural interaction within the system and the history and institutional attitudes concerning multicultural issues. Prerequisites: College Writing I (ENG111), Introduction to Criminal Justice (CRJ101), and Criminal Law (CRJ103) or Instructor permission.

#### CRJ-211 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: College Writing I (ENG111), Introduction to Criminal Justice (CRJ101), and Criminal Law (CRJ103) or Instructor permission.

#### 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

#### 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

### CRJ-215 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: College Writing I (ENG111), Introduction to Criminal Justice (CRJ101), and Criminal Law (CRJ103) or Instructor permission

#### 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) and Criminal Investigations I (CRJ208) or Instructor permission.

## CRJ-217

#### White Collar and Organized Crime 3 Credits

This survey course covers the nature and extent of white-collar and organized crime, the socialpsychological 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: College Writing I (ENG111), Introduction to Criminal Justice (CRJ101), and Criminal Law (CRJ103) or Instructor permission.

## CRJ-218

#### Information and 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

#### 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

### 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) and Criminal Investigations I (CRJ208) or Instructor permission.

#### 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

#### CRJ-232 Civil Rights and 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 ever-changing concept of civil rights and liberties as they conflict with "homeland security" and the "war against terrorism." Prerequisites: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

## 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

#### CRJ-245 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: College Writing I (ENG111), Introduction to Criminal Justice (CRJ101), and Criminal Law (CRJ103) or Instructor permission.

#### 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: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or Instructor permission.

# **Culinary Arts**

#### CUL-101 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-113 How Baking Works: The Science of Baking 3 Credits

This course explores the theory and science of baking. Students will learn how different ingredients affect a baked product. Students will explore the changes that take place during the baking process, using recipes and formulas as experiments, and will discuss these outcomes. This course is taught in the bakeshop. Additional expenses may include supplies, equipment, and /or uniforms.

#### CUL-115 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

4 Credits

This 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 and 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 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 Chair approval. Prerequisite: Cafe and Bistro Cuisine (CUL135) and Advanced Desserts and Pastries (CUL145). Co-requisite: Essentials of Food Production (CUL215).

#### CUL-235 Advanced and 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-241

#### Chocolate and Sugar Artistry 3 Credits

This course is designed to familiarize students with how to work with chocolate and sugar using various techniques. Students will practice these techniques in the production of chocolate confections, such as truffles and molded chocolates. Sugar artistry, such as poured, pulled and blown sugar will be demonstrated and applied. Students will also work with pastillage, marzipan and gum paste. Additional expenses may include supplies, equipment, and / or uniforms. Prerequisite: Advanced Desserts and Pastries (CUL145).

#### CUL-243 Hot and Cold Desserts 3 Credits

This course is designed to introduce students to the production of chilled and frozen desserts. Students will also be introduced to the production of hot desserts, as well as to the production of desserts using both hot and cold components. Students will design menus for a bakeshop or pastry operation and develop an understanding of the various management tools required for the operation. Students will learn to analyze and forecast sales. An emphasis is placed on plating and garnishing techniques of dessert production. Students will also be introduced to molecular cooking techniques. Additional expenses may include supplies, equipment, and /or uniforms. Prerequisite: Advanced Desserts and Pastries (CUL145).

## 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-247

# Advanced Classical Desserts and Showpiece Cakes

4 Credits

This course takes the student to an advanced level of pastry expertise. The students will continue to refine their cake decorating skills and learn advanced pastry production. The course introduces the students to the techniques used to assemble tiered cakes, as well as the proper cutting and service of tiered cakes. Students will learn costing techniques and conversion formulas. Students will analyze costing formulas and pricing criteria for wedding and special occasion cakes. Emphasis is placed on design, construction and preparation of showpieces using sweet and savory ingredients. Prerequisite: Advanced Desserts and Pastries (CUL145).

#### CUL-249 Baking for Health

3 Credits

This course will explore the options available for meeting the needs of the customer with dietary restrictions. The student will be introduced to lactose- free, gluten- free, dairy- free, and sugarfree baking. Students will also work with vegan recipes, as well as honey- free and egg- free recipes. Students will also be introduced to the production of pastries using substitute ingredients for health purposes. Healthy and low fat dessert alternatives will be introduced. Additional expenses may include supplies, equipment, and /or uniforms. Prerequisite: Advanced Desserts and Pastries (CUL145).

## 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 150 hours of work experience in an approved foodservice facility.

# CUL-299P Pastry Arts Internship

3 Credits

The internship allows students the opportunity to gain practical experience in the field of baking and pastry arts. The internship begins after completion of the first academic year and consists of 150 hours of work experience in a bakery or pastry shop approved by your instructor. Prerequisite: Chair Approval.

# **Early Childhood 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 Department of Early Education and Care 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 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 literacy development for young children. Prerequisites: Child Growth and Development (ECE103) (or its equivalent) and Curriculum in Early Childhood Education (ECE104) or Child Growth and 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 Department of Early Education and Care 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

and Development (ECE103) (or its equivalent) and Curriculum in Early Childhood Education (ECE104) or Child Growth and Development (ECE103) and Introduction and Foundations of Education (EDU101).

# ECE-110

# Science 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 science for young children. Prerequisites: Child Growth and Development (ECE103) and Curriculum in Early Childhood Education (ECE104) or Child Growth and Development (ECE103) and Introduction and Foundations of Education (EDU101).

# ECE-111

### Young Children with Special Needs 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 Early Education and Care and Certification requirement. Prerequisite: Lead teacher qualifications or Chair approval prior to enrollment.

# ECE-115

### Supervision in Early Childhood Education 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 Department of Early Education and Care Director II certification requirements. Prerequisite: Lead teacher qualifications or Chair approval 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: Chair approval.

#### 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: Chair approval.

# **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: Foundations of Algebra (MAT097) 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: Foundations of Algebra (MAT097) and Reading Skills II (RDG095) or placement.

# Education

#### EDU-101 Introduction and 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 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.

# EDU102 Becoming a Teacher: A Learning Community Seminar

3 Credits

This learning community seminar is designed for education majors who are interested in making a difference in today's public schools. The seminar will focus on the pressing issues in today's public schools: overcrowding, lack of funding, outdated curriculum, classroom chaos, shortage of good teachers, and many others. The Learning Community Seminars enable first-year students to make successful transitions to college while developing their abilities to reflect and assess; discover their strengths; explore career interests; set goals and problem solve with critical thinking, information literacy and communication skills; and connect with peers, faculty and staff in a diverse learning environment. This seminar will focus on education as students grow in their understanding of themselves and the world of education. (Requirement: Student must be in the first two semesters of study at BHCC with 16 college credits or less completed. While recommended for Education majors, those in Early Childhood Development and Human Services will find the material useful. Students from other majors are welcome to enroll if interested in pursuing teaching as a career in the future.

# 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 and Foundations of Education (EDU101) with a grade of C or better.

# **Electric Power Utility**

# EPU-101

#### DC Circuit Theory and 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 j-operator is employed. Course meets 3 hrs. lecture/3 hrs. lab. Prerequisite: DC Circuit Theory/ Lab (ETT101).

#### EPU-151

# Fund of Single Phase and Polyphase Metering

4 Credits

This course introduces students to the fundamentals of Single Phase and 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 and 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: Acceptance 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 multicultural 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 and 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).

# **Emergency Medical Technician**

#### 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. Prerequistes: Fundamentals of Overhead Linework I (EPU253) and Fundamentals of Overhead Linework I (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 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/co-requisite: 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/co-requisite: 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 workenergy and impulse. The course enables students to distinguish statics problems from dynamics problems and to identify inertial effects. The course also enables students who are interested in Engineering Mechanics or related disciplines to comprehend the vast applications of the principles of dynamics ranging from structural design of vehicles, electro-mechanical devices such as 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).

# Energy and Sustainability Management

#### ESM-105 \* Green Buildings

#### 3 Credits

This course provides a framework for making practical design and construction decisions that are environmentally responsible by focusing LEED (Leadership in Energy and Environmental Design) building standards. After completing the course, students will have the ability to sit for the LEED Green Associate Exam. Topics include trends in green building, costs and benefits of green buildings, third party certifications and rating systems, site selection and orientation, sustainable landscapes, storm water management, water efficiency, energy demand, energy efficiency renewable energy in buildings, ongoing building performance, waste management, building materials, and indoor air quality. Prerequisites: Foundations of Mathematics (MAT093), Writing Skills II (ENG095), and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

#### ESM-115 🏶

#### Sustainable Facilities Management 3 Credits

This course highlights the responsibilities, policies, and practices involved with managing the built environment to achieve sustainable goals. Students will gain an understanding of facilities operation, maintenance, architectural blueprint interpretation, health and safety awareness, and occupant engagement. Students will learn how to select and assess energy usage of HVAC systems, electrical systems, lighting systems, and heating systems. Course content will center on facilities management as a process, and its relationship to other functions within an organizational setting. Students will explore the most current strategies and issues in the industry today, including sustainability, productivity, green buildings, as well as human and environmental factors. This course will utilize a combination of classroom techniques (presentation, discussion, team projects, case studies, and guest speakers) to give the students a full understanding of the issues and complexities of sustainable facilities management. Prerequisites: Foundations of Mathematics (MAT093), Writing Skills II (ENG095), and Academic Writing III (ESL098) or Reading Skills II (RDG095) or placement.

#### ESM-205 \* Greening Existing Buildings: Operation and Maintenance 3 Credits

#### This course is designed for ESM students and professionals who are looking to gain project experience on existing Leadership in Energy and Environmental Design (LEED) projects. This course is for students interested in enhancing operations and maintenance in existing buildings. Students will learn the requirements and calculations required for the following LEED credits: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. Students may accrue continuing education units that are required to advance to the LEED AP level, or maintain their accreditation by achieving mandatory Credentialing Maintenance Program hours by using BHCC's Health and Wellness Center, which earned LEED Gold certification under version 2.2 of the United States Green Building Council's green building program. Students may learn to manage LEED project details, complete documentation requirements for LEED credits and prerequisites, upload supporting files, submit applications for review, receive reviewer feedback, and track their certification process using LEED-Online, a primary resource for managing the LEED documentation process. This course will help prepare students to sit for the LEED AP Existing Building Operations and Maintenance exam. This course is an elective course in the Energy and Sustainability Management Certificate. This course is also ideal for developers, contractors, architects, lawyers, builders, engineers, product representatives, real estate brokers, and anyone interested in understanding green building principles. Prerequisite: Green Buildings (ESM105), or possession of LEED GA accreditation with Chair approval.

#### ESM-211 \* Project Management and Finance for Energy 3 Credits

This course examines the theory and practice of Project Management as applied to renewable energy and energy efficiency projects. The course also explores financial considerations for sustainable energy projects, as well as a variety of funding mechanisms. Special focus will be applied to project life-cycles, planning, controlling, and coordinating efforts of multiple individuals and/or working groups. Students will gain an understanding of financial measures of project performance, budgeting, feasibility, and explore various funding mechanisms including government incentives, specialized loans, and performance contracts through case studies. Prerequisite: Survey of Renewable Energy (ENV11).

#### ESM-299 🍁

#### Energy and Sustainability Internship 3 Credits

This course provides relevant field and/or research experience integrating theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the clean energy and sustainability management fields. Prerequisites: Students must be enrolled in the Energy and Sustainability Management Program, have completed a minimum of ten credits in ESM courses with a B average or higher, or Chair approval. Students who do not meet attendance standards for the ESM program may not be eligible to participate in the internship.

# 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: Instructor permission.

# ENG-171

#### **Oral Communication**

#### 3 Credits

This course develops students' poise and selfconfidence 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

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.

#### Listening Comprehension and Discussions 3 Credits

In this low-intermediate course, students develop academic listening skills and participate in small group and whole class discussions based on articles, lectures and multi-media sources. Students will learn grammar in the context of the materials used for listening speaking, reading, and writing activities. Students must earn a C or better in order to pass the course. Prerequisite: Placement into ESL Level I.

# ESL-075

#### Grammar Structures and Editing 3 Credits

This low-intermediate course focuses on improving grammar and editing skills through weekly grammar lessons, writing assignments, class discussions and assessments. Students will develop their ability to compose grammatically correct and comprehensible sentences and short writings. Students receive individual feedback that targets their needs. Students must earn a C or better in order to pass the course. Prerequisite: Placement in ESL I.

#### ESL-078 Academic Reading I 3 Credits

In this low-intermediate course, students learn pre-reading skills, organizational styles, academic vocabulary, dictionary use, referents, critical reading, basic verb tenses and parts of speech, and how to summarize, paraphrase, and identify main ideas and supporting details. Students will learn to complete homework assignments in basic MLA format. . Students must earn a C or better in order to pass the course. Prerequisite: Placement into ESL Level I.

#### ESL-079 Academic Writing I 3 Credits

#### 3 Credit

In this low-intermediate course, students learn to write paragraphs and short essays through an academic writing process in a variety of rhetorical styles using basic MLA format. Students will write from personal experience and respond to readings by paraphrasing and quoting. Students will learn to write different sentence types, using coordinators and subordinators. Punctuation and grammar will be taught, and students will apply their knowledge by revising and editing their papers. Students must pass the ESL 079 Writing Competency Exam and earn a C or better in order to pass the course. Prerequisite: Placement into ESL Level I.

#### ESL-083 Pronuncia

#### 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 an integrated skills course for intermediate ESL students and focuses on improving grammar and editing skills. Instruction focuses on clauses and sentence variety in paragraphs and essays. Students receive individual feedback that targets their needs. Students must earn a C or better in order to pass the course. Prerequisite: Grade of C or better in ESL 075 or placement.

#### ESL-086 Academic Listening and Note-Taking 3 Credits

This high-intermediate course focuses on listening and note-taking skills. Students develop a system for note-taking and learn how to use their notes to answer comprehension questions as well as to complete assignments. All listening and note-taking activities include reading and writing exercises. Students learn grammar in the context of the materials used for listening activities and student generated writing. Students must earn a grade of C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.

# ESL-087

# **Contemporary Issues and Conversations** 3 Credits

In this high-intermediate course, students practice and demonstrate effective speaking functions in small-group and whole-class discussions of academic reading material. Students develop a method for delivering an oral presentation to a large group. All speaking activities are organized around reading and writing exercises. Students learn grammar and build their level-appropriate academic vocabulary in the context of speaking, in the context of the reading materials, and in the context of student generated writing. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.

#### ESL-088 Academic Reading II 3 Credits

In this high-intermediate course, students increase their level-appropriate vocabulary and develop their reading skills and strategies as they analyze, discuss, and write about longer readings. Students are also introduced to critical thinking skills such as drawing inferences, understanding idioms and figures of speech, and recognizing purpose and perspective. Students learn grammar in the context of the reading materials and in student generated writing. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.

# ESL-089

#### Academic Writing II 3 Credits

In this high-intermediate course, students develop their writing skills with a focus on the process of college writing from planning and drafting to revising and editing. Students demonstrate their critical thinking skills by writing paragraphs and essays from their personal experience and from readings of moderate complexity. Students practice correct grammar and mechanics in the context of readings and their own writing. Students must pass the ESL 089 Writing Competency Exam and earn a grade of C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement

#### ESL-095

#### Advanced Grammar and Editing 3 Credits

This course is for advanced ESL students and focuses on improving and refining grammar and editing skills. Students review points covered in lower-level grammar courses and further develop their ability to compose grammatically correct and comprehensible sentences, paragraphs, and essays. Topics include various clause types, conditionals, indirect speech, passive voice, and perfect modals. Students receive individual feedback that targets their needs. Students must earn a C or better in order to pass the course. Prerequisite: Grade of C or better in ESL 085 or placement.

# ESL-096

# Lecture Comprehension and Academic Vocabulary

#### 3 Credits

In this advanced course, students develop an academic note-taking system as they listen to lectures and authentic sources. Students practice using their notes to answer comprehension questions, write summaries of sources, and compose responses to critical thinking questions. Students learn advanced academic vocabulary and grammar in the context of advanced level readings, websites, and lectures. Students must earn a grade of C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089, or placement.

#### ESL-097

### Academic Discussions and Presentations 3 Credits

This advanced course focuses on the communication skills necessary in an academic setting. Students develop and improve a method for delivering an oral presentation to a large group using effective delivery, visual aids, secondary sources, and level-appropriate academic vocabulary. Students practice comprehensible pronunciation along with stress and intonation patterns. All speaking activities are organized around academic reading materials which students will write about and discuss in small groups. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089, or placement.

# ESL-098 Academic Reading III

## 3 Credits

This advanced course focuses on the critical and analytical reading skills necessary for success with college level materials. Students demonstrate comprehension of level-appropriate reading through class discussions, writing assignments, and other assessments. Students also develop critical (higher order) thinking skills by interacting with the readings and by summarizing, paraphrasing, quoting, responding to, and evaluating readings. Students must earn a or C better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089, or placement.

# ESL-099 Academic Writing III

#### 3 Credits

This advanced course focuses on the academic writing skills necessary for success in content courses. Develop their abilities with sentence structure, paragraph writing, and essay writing through extensive practice with multiple drafting, revising, editing and proofreading. Students write from personal experiences, answer essay questions from readings of substantial complexity, and write essays using research sources. Students learn grammar in the context of the readings and student generated writing. Students must pass the ESL099Writing Competency Exam and earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089, or placement.

# **Environmental 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 (RDG095), a grade of C or better in Foundations of Mathematics (MAT093), 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 Foundations of Math (MAT093) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095), or placement.

#### ENV-110 \* Sustainability and Resource Conservation/Lab

#### 4 Credits

This course is an introduction to fundamental concepts of sustainability and resource conservation as related to the human environment. Through lectures, laboratories and dialogue, students develop literacy in sustainability topics found in local, regional and global spheres and study a collaborative approach to reducing ecological impact of individuals and organizations. The course provides an opportunity for in-depth exploration of three topics related to sustainability: energy and conservation, renewable energy sources and climate action planning. Assigned readings illustrate the impact of resource conservation on quality of life. Laboratory work demonstrates concepts such as heat transfer principles and technologies such as solar, wind and fuel cells. Assignments support the College's pursuit of climate neutrality. This course meets the General Education Requirement Area 5 Course meets 3 hours lecture; 1.5 hours lab. Prerequisites: Foundations of Algebra (MAT097) Writing Skills II (ENG095), Reading Skills II (RDG095) or placement equivalency.

#### ENV-111 \* Survey of Renewable Energy/Lab 4 Credits

This course investigates the potential of renewable energy technologies to help solve environmental and economic problems within society. Areas of investigation include solar energy, wind power, hydropower, geothermal, fuel cells, biomass, ocean wave power, and alternative transportation options. Also addressed are conventional energy sources including oil, coal, natural gas, and nuclear energy. Consideration will be given to related issues such as costs, externalities, system efficiencies, emissions and other environmental impacts, financing incentives, and the regulatory and market forces impacting the alternative energy industry. Students will learn how to assess the viability of incorporating renewable technology, such as solar or wind power, for residential and commercial applications. Course meets 3 hours lecture; 1.5 hours lab. Prerequisites: Foundations of Mathematics (MAT093), Writing Skills II (ENG095), and Academic Writing 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 selfdesigned 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-107

#### Fire Company Officership 3 Credits

This course examines the scope and functions of the fire company officer. Topics include the role of the fire service, departmental organization, administrative and management procedures, training, public relations, tactics and strategy, and fire prevention. Prerequisites: Grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.

#### **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.

#### FPS-121

#### **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 and 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

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 Foundations of Algebra (MAT097) or 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** 3 Credits

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 permission.

# **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 permission, 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 Ăcademic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.

# French

#### FRE-101

#### 3 Credits

Elementary French I This course introduces students to the sounds and structures of French with emphasis on the acquisition of a limited but useful vocabulary and is offered for students with little or no previous knowledge of French. The course is not intended for native speakers or for students who have studied this language within the last three years.

## FRE-102

#### Elementary French II 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

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.

# 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<sup>I</sup> (GER101) by advancing the language structures, word forms, and vocabulary. 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 Western Civilization** to the Renaissance 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** from the Renaissance 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 to 1500 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 from 1500 3 Credits

This course examines similarities and differences among the major world civilizations in the modern among the major world civilizations in the integration 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 General Education Corde of Corr botter in Academic 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:** Colonization through the Civil War 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.

## HIS-152

#### **United States History:** Reconstruction to the Present 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 Instructor permission. The course meets General Education "Humanities" Requirement Area 6.

# Hospitality

# HLT-111 Health Aspects of Aging

3 Credits

This course provides students with the initial skills and medical terminology needed to effectively manage the health care staff of an Assisted Living Facility. Emphasis is placed on the physiological process of aging and managing chronic diseases of the elderly.

### 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.

#### HRT-109 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.

#### 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.

#### HRT-121 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.

#### HRT-122 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-125 Principles of Hospitality Finance and Accounting

# 3 Credits

This course encompasses basic accounting principles within the unique context of the hotel industry and financial management strategies of tourism based businesses. Emphasis is placed on how to administer accounting procedures to minimize cost and maintain a full range of customer services. Topics include: cash flow cycle, accounting principles and procedures, elements of financial statements, maintaining financial statements, and analysis of financial records. Prerequisite: Principles of Accounting I (ACC101).

## HRT-131 Front 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-223 Event Planning

#### 3 Credits

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).

### 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 Credits

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 and 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 strengths-based model in working with different populations. Through an integration of classroom lecture and discussion with experiential learning activities, key issues will be explored and examined in-depth. Prerequisite: Counseling (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 and Human Services. Course is graded on a pass/fail scale. HSV120 and 121 are to be taken in sequence beginning in the fall semester and concluding in the spring semester. Prerequisite: Chair approval.

# 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 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 (ČORI) is required of all practicum students. For complete course requirements and application procedures, contact the Department Chair of Early Childhood, Education and Human Services. Course is graded on a pass/fail scale. HSV120 and 121 are to be taken in sequence beginning in the fall semester and concluding in the spring semester. Prerequisite: Practicum in Human Services I (HSV120).

# **Interdisciplinary Studies**

#### 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.

# INT-101

#### Introduction to Yoga Studies 3 Credits

This course explores yoga, a diverse form of artistic human expression through an interdisciplinary perspective-from its origins to present day therapeutic applications for the mind, body, and spirit. Students will also examine multi-cultural beliefs on healing and healing traditions. Through writing assignments students will reflect critically

on their own practice and on topics introduced in the readings/discussions. The course will include an in-class yoga practice that will allow students to integrate course concepts with their yoga practice "on and off the mat" as students will apply yogic principles to their lives through self-reflection, civic engagement and service. This course is geared to students with no

prior yoga experience. Students need to wear clothing that allows for freedom of movement as there will be a physical practice in each class meeting. Prerequisites: Grade of C or better in Academic Reading III (ESL 098) or Reading Skills II (RDG095) and Writing Skills II (ENG 095) or exemption by placement testing.

#### INT-123

#### **Parenting Across Cultures** 3 Credits

Parenting Across Cultures is an interdisciplinary course that compares various parenting methodologies as they express a culture's underlying values and system of beliefs. We will look at the effects of parenting styles on child development, and the parent-child relationship. Students will examine the way in which they were parented and will reflect on how they intend to parent their own children. Cross-cultural comparisons will be made with classmates from other cultures and backgrounds. Special attention will be given to parenting in bi-cultural families, and the issues that ensure when there are contrasting styles within one family. Competing parenting styles in non-traditional cultures will also be examined. 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.

## 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.

# ITI -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.

#### JPN-202

# Intermediate Japanese II

3 Credits

This course turns to the basics of Japanese syntax in order to lead the student to the acquisition of increased proficiency in the modern Japanese language. The course is designed to help learners consolidate their understanding of syntactical structures through lessons that focus on how to talk about topics relevant to daily life. This will increase students' comprehension skills, and it will lead to stronger skills in reading and writing. Students at this stage are expected to become familiar with different forms of verbs (tense and aspect, etc.), time expression, conditional clauses and other topics that prepare them to have a solid grasp of context and speaker intent. Students also learn more Kanji. Prerequisite: Intermediate Japanese I (JPN201) 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/co-requisite: 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 bi-cultural 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

#### 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 cortification. The course meats General Education

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

# LIT-229

Writing I (ENG111).

#### Sophocles and Shakespeare 3 Credits

Through an exploration of plays by Sophocles and Shakespeare and critical readings based on the plays the course will focus on themes that include free will, speaking the truth to power; defining evil; and finally, confronting evil. This is an Honors course, which counts as an Honors requirement for students in the Commonwealth Honors Program. Prerequisites: College Writing I (ENG111) with a grade of B or better or Instructor permission.

# LIT-231

#### The Art of Mystery and Detective Fiction 3 Credits

This course will introduce students to the art of mystery and detective fiction, surveying the short story and novel form from its Edgar Allen Poe through contemporary developments in the genre. It will include works by well-known mystery writers such as Arthur Conan Doyle, Raymond Chandler, Agatha Christie, Sara Paretsky and Walter Mosely as well as literary authors whose work shares elements of the mystery genre. The course meets General Education "Humanities" Requirement Area 6. Prerequisite/co-requisite: College Writing I (ENG111).

# Magnetic Resonance

#### 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 Chair approval.

# 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 Principles II 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: Chair approval. Prerequisite/co-requisite: Mammography Principles II (MAC211).

# 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. Prerequisites: Writing Skills II (ENG095), Academic Reading III (ESL098) or Reading Skills II (RDG095) or placements.

#### **MAN-111**

#### **Principles of Management** 3 Credits

The skills and functions, theories and principles of management are studied in respect to the sociocultural environment within which a firm operates. An emphasis on decision-making, organizational strategy, planning and system design provides a framework for examining the application of management concepts in the modern business world and the evaluation of organization problems and issues. Prerequisites: Introduction to Business (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

In this course, students develop skills and creativity to cultivate and market innovative ventures. This course uses an experimental approach to provide students with a foundation for innovative thinking and to prepare them for entrepreneurial projects. The class examines entrepreneurial theories, practices and thought processes. In critical thinking exercises, students examine the difference between entrepreneurship and innovation. Through case study reviews and other activities, the class evaluates the viability of new business enterprises and develops strategies to market them successfully. Prerequisite: Introduction to Entrepreneurship (MAN107) or Instructor permission.

#### **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 Instructor permission.

#### **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; SIZE, IOCATION, and Iayout; demand rotecasting, 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 (MAN122) or Statistics I/ (MAN121) or Statistics I/ ab (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), Foundations of Algebra (MAT097), 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 pre-approved sites. Students engage in activities that improve knowledge of the practical world of work and help them gain professional experience. The internship experience applies resources gained from students" study to improve the quality of their contributions to the employer. A faculty coordinator supervises and grades all courses. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisite: Chair approval.

# **Mathematics**

#### MAT-093 🍁 **Foundations of Mathematics** 3 Credits

Topics include solving applied problems with whole numbers, decimals and fractions; ratios and proportions; rates; percentages and applications in sales tax, interest, commissions, and discounts; determining numerical averages; exponents and square roots; measurement; and geometry. Technology is incorporated to facilitate problem solving. This course does not satisfy degree requirements. Course requires an additional lab hour. Upon completion of this course with a grade of C or better, students enroll in Foundations of Algebra (MAT097).

# MAT-097 🍁

# Foundations of Algebra

3 Credits

This course is a continuation of MAT093 Foundations of Mathematics. Topics include signed numbers, determining numerical averages and medians; algebraic expressions, solving and graphing linear equations and inequalities, exponents and scientific notation, introduction to polynomials, and systems of linear equations and their graphs. Technology is incorporated to facilitate problem solving. This course does not satisfy degree requirements. Prerequisite: Grade of C or better in Foundations of Algebra (MAT093) or placement. Course may require an additional lab hour.

#### **MAT-099** Intermediate Algebra 3 Credits

# This course is a continuation of MAT097, Foundations of Algebra. Topics in this course include polynomial arithmetic, introduction to functions, factoring, roots and radicals, rational expressions, absolute value inequalities, quadratic equations and the quadratic formula, and solving applied problems. This course does not satisfy degree requirements. Prerequisite: Grade of C or better in Foundations of Algebra (MAT097) or bacement. Course may require an additional lab

placement. Course may require an additional lab

**MAT-100 Topics in Career Math** 

#### 3 Credits

hour.

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 Foundations of Mathematics (MAT093) 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 Foundations of Algebra (MAT097).

# 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 Foundations of Algebra (MAT097) 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 Foundations of Algebra (MAT097) 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 Foundations of Algebra (MAT097) or placement.

#### **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-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 Foundations of Algebra (MAT097).

# **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, guadratic 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 Intermediate Algebra (a grade of B or better is recommended) (MAT099) 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 trigonometry, 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 better or College Algebra-STEM (MAT194).

**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).

COURSE DESCRIPTIONS

# Medical Imaging

# 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 on mathematical 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. Co-requisite: 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

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.

#### 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 4 Credits

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. Co-requisite: 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 Credits

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 and 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 4 Credits

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 (MIG213). 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

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: Fulltime 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: Parttime 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, waveparticle 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 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 entrylevel 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 and Physiology I (BIO203), Anatomy and 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 pre-approved sites. The course allows students to apply learned skills in the actual medical environment. Students must complete weekly didactic work in addition to the clinical hours. Students must comply with the Internship requirements, as stated in the "Internship Handbook", before registering for the course. Criminal Offender Record Information (CORI) checks will be conducted on all students 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-111 Introduction to Clinical

Laboratory Science

2 Credits

This course explores the nature and scope of clinical laboratory work. The primary focus will be on the role of the laboratory in delivery of health care in various settings, emphasizing historical background, types of health care facilities, regulatory agencies affecting laboratory operations, responsibilities, duties and professional conduct expected of clinical laboratory technicians, safety in the laboratory, laboratory mathematics and quality control. A phlebotomy workshop will develop the fundamental skills required to procure and prepare blood specimens for testing. If time permits, a field trip will be scheduled to an area hospital laboratory. Prerequisite: Admission to CLS Program.

## MLT-112 Urinalysis

2 Credits

This course explores the principles and procedures of the routine urinalysis as well as the normal and abnormal physiological functions of the renal system. The course consists of didactic sessions and laboratory sessions where normal and abnormal cellular constituents will be reviewed. Co-requisite: Introduction to Clinical Laboratory Science (MLT111).

#### MLT-211 Hematology and Hemostasis 4 Credits

This course consists exploring the theory and practice of routine hematology. Topics include the collection and handling of clinical specimens, the origin, development, and function of human blood cells in health and disease, hemostasis, and coagulation, automation, and quality control. Routine hematology and coagulation testing will be emphasized. Prerequisite: Introduction to Clinical Laboratory Science (MLT111).

## MLT-212 Medical Microbiology and Lab

4 Credits

This course is a comprehensive study of both theory and practical aspects of clinical microbiology. Emphasis will be placed on the collection and handling of clinical specimens as well as the primary isolation and identification of the most frequently encountered bacterial, pathogenic to humans. Other topics discussed include antimicrobial chemotherapy and host resistance. Other organisms examined include fungi and parasites. Prerequisites: Introduction to Clinical Laboratory Science (MLT111) and Microbiology/Lab (BIO 205).

## MLT-213 Immunology and Serology

## 4 Credits

This course introduces the theoretical principles of immunology which involve the structure, function, and interactions of the immune system. The serological techniques useful in the diagnosis of many diseases will be reviewed and performed. Prerequisites: Introduction to Clinical Laboratory Science (MLT111).

## MLT-241 Immunohematology 4 Credits

This course consists of the study of the genetic basis and immunological interaction of the mayor blood group antigens and antibodies. Topics will include compatibility testing, antibody screening and identification techniques, blood donation, transfusion therapy, record keeping, and quality control techniques. Prerequisite: Introduction to Clinical Laboratory Science (MLT111) and Immunology and Serology (MLT213).

## MLT-242 Clinical Chemistry

4 Credits

The primary focus of the course is the biochemical analysis of blood and body fluids in health and disease. Topics include routine manual and automated testing methods, electrophoresis, molecular techniques, safety practices and quality control. Prerequisites: Principles of Inorganic Chemistry/Lab (CHM120) and Immunology and Serology (MLT213).

#### MLT-251 Clinical La

#### Clinical Laboratory Sciences Practicum 12 Credits

This course consists of Practicum experiences at one of the College's clinical affiliates in which the student acquires knowledge and experiences in laboratory practices and procedures. Prerequisite: Successful completion of Clinical Laboratory Sciences coursework.

# Music

## 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 one credit for each repetition.

#### MUS-118 Music Appreciation I 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 Chair approval.

## 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 and 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).

## 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 testtaking 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-099 Nursing Pathways

#### 2 Credits

This course is designed for students who are seeking readmission to the nursing program. This course will assist students in analyzing their study skills, and designing a path for successful completion of the nursing program. Topics include time management, stress reduction, adapting study skills, and test-taking techniques and practice. Students are encouraged to use introspection and critical thinking as they formulate a plan that will enable them to complete the nursing program and take the licensure exam after graduation. Computer software and small group work for problem solving in answering multiple-choice questions will be utilized.

#### NUR-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: Foundations of Algebra (MAT097) or placement.

## NUR-101 Health Assessment and 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).

## 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 words per minute 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 2013. 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 (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 Chair approval.

## 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

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

## 3 Credits

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

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. Handson 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 Department Chair. Prerequisite: Keyboarding: Document Generation I (OIM101) or Medical Computer Application (OIM102; formerly OIM142) or any computer applications course or by Chair approval.

#### OIM-190 Medical I

#### 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/co-requisite: 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 III (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 Group Dynamics (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, notetaking, 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 (OIM115), 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 Chair approval. 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 American legal system and the paralegal profession. 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, legal research and writing, litigation, and legal ethics. Prerequisites: Writing Skills II (ENG095), Reading Skills II (RDG095) or Academic Reading III (ESL098) or placement.

#### PLG-102 Legal Research and 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-105

#### Practical Legal Writing

3 Credits

This course is intended to be a continuation of PLG102 (Legal Research and Writing). The course provides students the opportunities to improve their writing skills for all aspects of working in legal environment including legal correspondence, legal memorandums, case briefs and a variety of Court documents. The course covers the structure and jurisdiction of the Federal and Massachusetts Court Systems. Prerequisites: Introduction to Law (PLG101), Legal Research and Writing (PLG102) and College Writing I (ENG111).

## 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: Introduction to Law (PLG101).

## 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. Students meet bi-weekly with their advisor to prepare papers, work on related projects, and share experiences with other students. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisites: Completion of all PLG required courses, Practical Legal Writing (PLG105); pre/co-requisite: a cumulative grade point average of at least 3.0 in the program and approval of the Paralegal Faculty Internship Coordinator.

## **Pharmacy Technician**

#### PMT-101 Pharmaceutical Calculations

#### 3 Credits

This course develops a solid base in the principles of Ratio and Proportion Dosage Calculation. It includes operations and applications of ratios, proportions, fractions and decimals, percent in community pharmacy (compound preparation, dosage, refill, dispensing fee, co-pay, discount, gross and net profit, pricing, inventory control) and institutional pharmacy (parenteral doses, powdered drug preparation, dosage calculations based on weight and surface area, infusion and drip rates, dilutions, allegation, medical label).

#### PMT-111 Pharmacy Practice for Pharmacy Technicians I 3 Credits

This course provides the student with a perspective on the role of the pharmacy technician, the genesis of the regulations governing the pharmaceutical

# Pharmacy Technician

industry and the current status of federal and state laws which must be followed. Emphasis will be placed on handling controlled substances and related record keeping. The roles of the FDA in the drug approval process and post-marketing surveillance, and the DEA in the daily operation of the pharmacy will be discussed. Students will be introduced to common medical terminology and weights and measures used routinely in the practice of pharmacy. Prerequisite: Writing Skills II (ENG095).

## PMT-112 Pharmacy Practice for Pharmacy Technicians II

3 Credits

This course provides the student with the knowledge to be able to begin participation in prescription/order processing in a pharmacy. The course includes an introduction to drug formulation, pharmacy operations, third party billing and inventory control that are essential to working in a pharmacy. A general introduction to biopharmaceutics and drug action will be provided. Prerequisite: Pharmacy Practice for Pharmacy Technicians I (PMT111).

#### PMT-113 Pharmacy Practice for Pharmacy Technicians III 3 Credits

This course provides the student with a basic introduction to the pharmacology of drugs in common use. The course will be taught by examining body systems, e.g. gastrointestinal, and will include discussion of the drugs commonly used in treating diseases affecting the system. Drugs will be discussed by grouping them into general classes and with important differences among group members being highlighted. The dosage, routes of administration, generic and trade names, common adverse reactions and important drug interactions will be emphasized. Calculation of patient dosage and patient days-supply that will be used, stressed when appropriate. Prerequisite: Pharmacy Practice for Pharmacy Technicians II (PMT112).

#### PMT-299 Practicum and Seminar for the Pharmacy Technician 4 Credits

This course combines group discussion in a seminar setting with an internship program based in a live pharmacy setting. The practicum and seminar are designed to give the student practical experience in the basic roles the technician fulfills in the pharmacy and to complete their preparation for transition to the workplace. The experience component encompasses the steps from customer service to prescription processing and prescription production. The shared learning experience in the weekly seminar will be used as a problem solving group discussion and to prepare the student to apply and compete for work. Prerequisite: Writing Skills II (ENG095) or placement.

## 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.

# Physics

## 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 by 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 AA 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.

## 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.

## **Practical Nursing**

## **PNP-111**

#### Practical Nursing I 10 Credits

This course provides the foundation for the theory and practice of the practical nursing profession. The concepts of optimal health, individual, nurse, environment, and holistic nursing are introduced within the framework of health promotion, health restoration and health maintenance. The student is introduced to critical thinking skills required for the practical nurse. The student learns and begins to apply the nursing process in the promotion of health for adult clients using functional health patterns categories. The student is introduced to vocational trends and issues in the practical nursing field. Additional expenses may include supplies, equipment and uniforms. Course meets 6 hours of lecture/lab

1-2 days per week, and 6 hours of clinical practice at the college or at selected health care facilities. Prerequisite: acceptance into the practical nursing program, Foundations of Algebra (MAT097), College Writing I (ENG111), Anatomy and Physiology I/Lab (BIO203), and Anatomy and Physiology II/Lab (BIO204).

## **PNP-112**

#### Practical Nursing II 12 Credits

This course builds upon the concepts introduced in Practical Nursing I. Students apply the nursing process within the framework of health promotion, health restoration and health maintenance in the care of adults with stable medical surgical health care needs. This course builds upon the vocational trends of the practical nurse. Additional expenses may include supplies, equipment and uniforms. Course meets 6 hours of lecture/ lab one-two days per week, and 18 hours of clinical practice at the college or in selected health care facilities. Prerequisites: Practical Nursing I (PNP111) and Drug Calculation (NUR100).

## **PNP-113**

## Practical Nursing III 10 Credits

This course builds upon the concepts introduced in Practical Nursing II. Students use critical thinking skills in the application of the nursing process. Students provide nursing care to the geriatric patient, the childbearing family and pediatric patients. Additional expenses may include supplies, equipment and uniforms. Course meets 6 hours of lecture / lab, 1-2 days per week and 18 hours of clinical practice at the college or in selected health care facilities. Prerequisites: Practical Nursing II (PNP112) and Human Growth and Development (PSY 213).

## 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 and 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, man-machine 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, crosscultural 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, standup comedy, advertising, and the internet. This course meets General Education "Individual and Society" Requirement Area 2.

## **PSY-141**

## Social Aspects of Aging

## 3 Credits

This course will provide a survey of major topics in the psychology of aging. Students will investigate the domains of memory, cognition and intelligence, the social and cultural environment, sensation and perception, language, emotion, spirituality, personality, health behavior, and the living environment. Students will look for common themes across domains, such as change and maintenance of identity with age. Students will learn research methods for studies of aging and will have an understanding of the aging brain.

## **PSY-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: Grade of C or better in Principles of Psychology (PSY101).

#### PSY-209 **Child Psychology** 3 Credits

This course examines the normal physical, cognitive and socio-emotional development of children from conception to age twelve. This course is to be used for meeting the requirements of the A.A. Psychology Concentration or for elective credit in other programs. However, this course may not be used to meet program requirements for degrees or certificates in the ECDev, EDU, or HSV programs. Students may not receive credit for both PSY209 and ECE103 to meet requirements for degrees or certificates for college graduation. Prerequisite: Grade of C or better in Principles of Psychology (PSY101).

## PSY-213

#### 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. This course may be taken either as a prerequisite course for the pre-nursing program, or as an elective by non-Psychology majors. The course does not satisfy the requirements of the A.A. Psychology Concentration program. Prerequisite: Grade of C or better in 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 Chair approval. Prerequisite: Prerequisite: Grade of C or better in Principles of Psychology (PSY101).

#### PSY-219 Social Psychology 3 Credits

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: Prerequisite: Grade of C or better in 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: Prerequisite: Grade of C or better in Principles of Psychology (PSY101).

#### PSY-224

#### Adolescent and 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: Prerequisite: Grade of C or better in 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: Grade of C or better in Principles of Psychology (PSY101).

## 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 rehabilitation planning and intervention, practitioner competencies, different program settings; and the role of the family in psychosocial rehabilitation. Prerequisite: Prerequisite: Grade of C or better in Principles of 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: Prerequisite: Grade of C or better in 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 implications 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 (RTH11) 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 (RTH112).

## 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 I (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, acidbase balance, and hemodynamic measurements. Course meets: 2 hours lecture Prerequisite: Anatomy/Physiology I/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 (RTH12), Clinical Practice in Respiratory Therapy II (RTH122). Co-requisites: Modalities of Respiratory Therapy III (RTH211), Clinical Practice in Respiratory Therapy III (RTH221) 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 (RTH211), and Clinical Practice in Respiratory Therapy IV (RTH212) and Clinical Practice of Respiratory Therapy IV (RTH222).

## RTH-211

#### Modalities of Respiratory Therapy III 2 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: 1 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 noninvasive 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 Il (RTH122). Co-requisites: Principles of Respiratory Therapy III (RTH201), Modalities of Respiratory Therapy III (RTH201), Modalities of Respiratory Therapy III (RTH201), 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). Co-requisites: 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.

## Science

#### SCI-221

# Interpretation and Presentation of Scientific Research

3 Credits

This course will introduce students to the major aspects of formal scientific communication. Students will learn how to read scientific papers or posters, listen to conference presentations, search primary sources, write lab reports in the style of a scientific paper, and to present experimental results in both poster and oral presentation formats. Students will use assignments from previous science courses as the foundation for their own paper, poster and oral presentations. This course is recommended for all STEM majors and will provide students with the communication skills required for research internships. This course may be used as a career elective for all science and engineering programs. Course meets: 3 hour lecture. Prerequisites: Completion of at least

two college-level science or engineering courses: General Biology I/Lab (BIO195), General Chemistry I/Lab (CHM 201), General Physics I/Lab (PHY201), Introduction to Engineering/Lab (ENR101) or Chair approval.

## Sociology

#### SOC-101 Principles of Sociology 3 Credits

#### 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 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

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.

## 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

# Spanish

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

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

#### 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: 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 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 I (SON121). 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 instrumentation used in the general sonographic practice. A review of the basic laws and instruments are also discussed as they relate to the specific topics of the Doppler effect, 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). Co-requisite: 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 Credits

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

## **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 (SON223).

#### 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.

# Surgical Technology

## SPN-102 Elementary Spanish II

3 Credits

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 Instructor permission.

#### 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 Instructor permission.

## **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 Foundations of Mathematics (MAT093).

## 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), Foundations of Mathematics (MAT093) 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.

## 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.

## THE-115

## Playwriting

3 Credits

This course introduces students to various approaches to writing for the stage. Components of playwriting, which include narrative, structure, plot, character, dialogue, and setting, as well as the concept of "theatre," will be explored. Through reading and discussion of short works by a selection of playwrights, students will garner a sense of the development of playwriting while also being exposed to various playwriting genres. During the semester, students will create short works for the stage. Weekly writing exercises will be shared and discussed in class. Prerequisite: Writing Skills II (ENG095) or placement.

## **Visual and 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 Foundations of Mathematics (MAT093).

#### VMA-102 Two-Dime

#### **Two-Dimensional Design** 3 Credits

3 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 Foundations of Mathematics (MAT093).

## VMA-103 Three-Dimensional Design

## 3 Credits

This course introduces the student to the elements, principles, terminology and materials of Three-Dimensional 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 freestanding. 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 Foundations of Mathematics (MAT093).

#### 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 Foundations of Mathematics (MAT093).

#### VMA-112 Art History: Prehistoric 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. Perequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).

#### 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 Foundations of Mathematics (MAT093).

#### 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 and Media Arts Department. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).

#### 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 and Media Arts Department. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).

## 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 Foundations of Mathematics (MAT093).

## 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 Foundations of Mathematics (MAT093).

# 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 Foundations of Mathematics (MAT093).

## VMA-131

#### Digital Publishing with InDesign 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 digital publishing. Through the introduction to the word processing program Microsoft Word and the page layout program InDesign, students are directed in the production of documents that require the application of those principles. Students are also exposed to Adobe Illustrator and Adobe Photoshop as they are used in conjunction with Adobe InDesign. Students without previous computer experience are encouraged to take Applications/Concepts (CIT110). Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).

## Visual and Media Arts

## 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 Foundations of Mathematics (MAT093).

#### 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 postproduction. 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 Foundations of Mathematics (MAT093).

## 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 Foundations of Mathematics (MAT093).

#### 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 Foundations of Mathematics (MAT093).

#### 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

#### VMA-207 **Figure Drawing** 3 Credits

Students draw from the model as a means of understanding form, shape, and line gaining experience with a variety of drawing Medias. Figure Drawing emphasizes shorter poses as training in immediate response to gesture and form. This course serves as a requirement and preparation for intermediate level and concept-based studio courses such as Ideas in Art: Fine Arts Studio, Observational Drawing and Multi-Level Studio classes. Prerequisite: Drawing I (VMA104).

## VMA-221 Painting I for Fine Arts 3 Credits

Painting I for Fine Arts introduces students to the fundamentals of painting with heavy body paints and mediums. Working from observation students will gain the basic skills necessary to control the value, color, texture and composition of the paintings they create. They will develop visual problem solving skills and critical vocabulary through group critiques and individual meetings. This course will leave them with a basic understanding of how to build a personalized, sustainable painting practice. Prerequisite: Drawing I (VMA104).

#### 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-onone instruction and group critiques. Prerequisite: Painting I (VMA122) or Instructor permission.

## 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 Instructor permission.

#### 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-onone instruction and group critiques. Prerequisite: Printmaking I (VMA124) or Instructor permission.

## VMA-231

#### **Digital Illustration with Illustrator** 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: Digital Publishing with InDesign (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: Digital Publishing with InDesign (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 Chair approval.

## VMA-225 Painting II for Fine Arts

3 Credits

This studio course provides intermediate instruction to students that possess the basic painting skill set framed by Painting I. Through observational painting students will continue to increase their facility with the heavy body paints while learning more advanced techniques. This course also serves as an introduction to portraiture and figure painting while providing them with a framework to begin experimenting with personal aesthetics (style). They will exercise their visual problem solving skills and increase their critical vocabulary through group critiques and individual meetings. This course will

help them begin building their own sustainable painting practice. Prerequisite: Painting I for Fine Arts (VMA222)

#### VMA-226 Observational Drawing 3 Credits

This course provides students with intermediate to advanced instruction in drawing from direct observation. Working from life, students will master the relationship between value, form, and space while experimenting with various drawing materials, implements, techniques and strategies. Through group critiques and individual meetings they will exercise their visual problem solving skills and increase their vocabulary. This course will provide the necessary foundation upon which to build a sustainable drawing practice. Prerequisite: Figure Drawing (VMA207)

## VMA-227

#### Ideas in Art: Fine Arts Studio 3 Credits

What topic should my artwork discuss? How should this project manifest? Why am I making this? These questions comprise the three basic considerations that inform an artwork's concept; the Subject ("the what" or the topic), Form ("the how" or the format) and the Content ("the why" or the artist's intention). Ideas in Art students will explore how to successfully apply these essential conceptual considerations to a creative practice. Students will examine their own motives while investigating broader topics introduced through readings, writings and workshops. Studio art projects encourage the evolution of personal style as students gain exposure to an array of contemporary and historical conceptual frameworks. Students will exercise conceptual and visual problem solving skills through group critiques and individual meetings. This course will help students begin building a visually and conceptually enriched art practice. Prerequisite: Figure Drawing (VMA207) or Painting II for Fine Arts (VMA225).

## VMA-228 Multi-Level Art Studio

3 Credits

The Multi – Level Studio is designed to accommodate above beginning level fine arts students as they hone their creative practice within a skill-based curriculum. The emphasis of this course is to provide students with the space and guidance to develop projects of their own design. Applicable formal and conceptual considerations will be explored by investigating contemporary and historical practices. Students will exercise their conceptual and visual problem solving skills through group meetings. This course will conclude the presentation of aesthetically and conceptually original art portfolio from each student. Prerequisite: Ideas in Art: Fine Arts Studio (VMA227)

#### 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 nonfiction 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 Instructor permission. 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 Instructor permission. 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 Instructor permission.

#### 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 Instructor permission.

## VMA-271

## Interactive Design I

3 Credits

Learn digital application interactive design from the ground up in this comprehensive, practical class. Students start by clarifying the goals for the digital application and target audience, then learn common design processes including basic design elements; page layouts; project site plan; visual design in Photoshop and optimized graphic generation (e.g., optimized images, buttons, and titles). Students will learn to research and develop the visual design for user interface and interaction for digital applications. Prerequisite: Photoshop (VMA105) or Instructor permission.

## 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 and 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

This course provides students the technical and aesthetic skills needed to design and author professional DVDs. Through lectures and handson exercises, students will learn the stages of the DVD authoring process, including initial planning and storyboarding, menus and buttons, design and navigation, and burning and replication. Prerequisites: Digital Imaging with Photoshop (VMA105) and Elements of Video Production (VMA141). Recommended prerequisite: Advanced Video Production (VMA241) and Video Post-Production (VMA242)

## VMA-275 Interactive Design II

## 3 Credits

This is a practical class teaching interactive visual design from conception to completion. Students start by coming up with an idea for and examining the needs of their design projects, then define the target audience and behavior, page layouts, project planning/site maps, and techniques to smooth their workflow. Students will choose their digital application(s) (e.g. website, Apple iPhone) for their projects. The final visual designs are ready to be delivered for development and implementation. Prerequisites: Interactive Design I (VMA271) or Instructor permission.

## 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 Chair approval.

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Mathematics

Nursing

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Usha Sharma, Ph.D.

Mark A. Sheehan, M.I.M

# **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:

GOV101	Gov. and Politics in US	PSY131	Psychology of
GOV103	State and Local Politics		Popular Culture
PSY101	Principles of Psychology	SOC101	Principles of Sociology
PSY107	Group Dynamics	SOC109	Cultural Anthropology

## **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 multi-cultural world.

## Area 3:

20020.	Macroeconomics Microeconomics	HIS112	World Civilization from 1500
GEO101	World Regional Geography	HIS151	US History: Colonization through Civil War
HIS101	Western Civilization to the Renaissance	HIS152	US History: Reconstruction
HIS102	Western Civilization from the Renaissance	VMA111	to the Present Introduction to Mass Media
HIS111 World Civilization to 1500	PHL111	World Religions	

## **REQUIREMENT 4: QUANTITATIVE THOUGHT**

In this requirement area, students will apply computational methods, generate problem-solving 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:

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MAT171	Finite Math	MAT194	College Algebra
MAT172	Contemporary Math I	MAT181	Statistics I
MAT173	Contemporary Math II		

## **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:

	Astronomy/Lab Introduction to	ENV105	Environmental Science I/Lab
210100	Biology /Lab	ENV110	Sustainability and
BIO108	Human Biology/Lab		Resource Conservation
BIO115	Nutrition Science/Lab	ENV111	Survery of
BIO120	Intro to Biotechnology		Renewable Energy
BIO195	General Biology I/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	THE107	Acting I
FLM102	American Cinema	VMA104	Drawing I
HON200	Honors Seminar	VMA112	Art History I
INT110	American Culture	VMA113	Art History II
LIT	All Literature Courses	VMA122	Painting I
MUS118	Music Appreciation I	VMA123	Watercolor I
MUS119	Music Appreciation II	VMA124	Printmaking I
MUS129	Rock and Roll History	VMA161	Intro to Digital
PHL101	Introduction to		Photography
	Philosophy	All 102	Level Language Courses

# 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 COURSE LOAD The number of credit hours in which a student is enrolled during the semester.
- ACADEMIC PLANNING The outlining of a course of action to help the student to achieve their personal and career goals.
- 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.
- **ACCREDITATION** Certification by an independent educational board that colleges or university's practices and policies meet or exceed official standards.
- ACE MENTOR PROGRAM The ACE Mentor program provides students enrolled in Learning Community courses assistance in making a successful transition to college by focusing on academic achievement, engagement, and cultural competency.
- ADD A COURSE To enroll in additional courses after registration is complete, accomplished through Admissions and Enrollment Services.
- **ADMINISTRATION** College staff members responsible for management and supervision.
- 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.
- **BOARD OF TRUSTEES** An appointed board that oversees and is responsible for the policies and fiscal affairs of a college.
- **BOOT CAMP** A free special college program designed for students to complete pre-college courses before officially beginning their first semester.
- **BRIDGE SESSION** An eight week semester that runs during the summer for a few three-credit courses and all four-credit courses.
- **BURSAR –** College official responsible for the billing and collecting of tuition and fees.

- **CAREER PLANNING** Prepares students for employment that matches their interests and professional goals.
- **CAREER PROGRAM** A specialized degree designed to equip a student with the skills and educational background needed for employment in a specific field, such as business administration, criminal justice, etc...
- **CERTIFICATE PROGRAM** An academic program of study in a specific field intended for occupational training, upgrading, or retraining, generally 30 credits or less in duration. A certificate is awarded upon successful completion of the program.
- **COMMENCEMENT –** Graduation.
- **COMMUNITY EDUCATION** Courses offered by this department are non-credit and taken by students for personal enrichment.
- **CO-REQUISITE** A course requirement that is taken concurrently with another course.
- **COURSE CLUSTER** Two or more courses grouped together around a common academic theme. Instructors teaching in a cluster situation work as a team to ensure cluster objectives are met.
- **CREDIT COURSE** An academic course numbered 100 or above in the college catalog which may be applied toward completion of a degree or certificate. (See also Developmental Course).
- **CREDIT HOUR** A standard measure of the amount of instructional time required to successfully complete a course. For example, ENG111, College Writing I, is a 3 credit hour course, which means that it meets for 3 hours each week for one semester.
- **CSDL** An academic center at which students can register for a wide range of courses. Students can learn at their own pace through a variety of instructional media/materials.
- **CURRICULUM** A set of courses focused in a particular field, e.g. accounting, criminal justice, early childhood.
- **DEAN** A member of the administrative staff responsible for supervision and management of a particular division of the college.
- DEGREE PROGRAM At Bunker Hill Community College, an Associate in Arts or Associate in Science program of study requiring 60 credits or more for completion.
- **DEVELOPMENTAL COURSE** A basic skill development course numbered below 100 in the college catalog which carries college credit but does not count toward the requirements for graduation.
- **DROP A COURSE** To cancel registration in a course. It may be accomplished only during the schedule adjustment period as specified on the academic calendar and is processed through Admissions and Enrollment Services.
- **EARLY ADVANTAGE** An early intervention program designed to identify students who are experiencing difficulty in a course(s) early in the semester and to provide guidance and assistance that will help them have a successfully complete the course(s).
- **EDUCATION PLAN** A student's map or guide that delineates the courses they need to take to earn their degree or certificate and when those courses will be taken and in what format.

Continued on following page

- **EDUCATIONAL PLANNING** The planning process in which both staff and student create an educational pathway to facilitate persistence and success.
- **ELECTIVE** A course in a program of study which may be selected from a variety of courses in the designated discipline and is numbered above 100.
- ePORTFOLIO This is a vehicle for students to track their academic journeys through college by sharing their accomplishments and reflecting on their learning in ways that are both personally and publicly meaningful.
- **FACULTY** An employee of the College who delivers academic instruction.
- FEES Charges by the College for specific services to students.
- FINANCIAL AID Funding from various sources provided to students to assist in defraying expenses of college (See Financial Aid section of this catalog).
- FINANCIAL PLANNING A set of resources and tools designed to help students make sound financial decisions that are in line with their personalized plan.
- FREE APPLICATION FOR FEDERAL STUDENT AID (FAFSA) A required standardized application that includes detailed financial data and is used to determine eligibility for all financial aid programs.
- **FULL-TIME (STUDENT)** Student registered for 12 or more credits in the fall or spring semester or six (6) credits in the summer.
- **GED** General Educational Development (high school equivalency diploma).
- **GENERAL EDUCATION** A common core of courses required of all students that provides for the acquisition of core skills and knowledge necessary in a literate citizenry.
- **GOOD ACADEMIC STANDING** A student is considered making satisfactory process and in good academic standing if G.P.A. is 2.0 or higher and has completed 66 percent of his/her credits attempted.
- **G.P.A. (CUMULATIVE G.P.A.)** Grade Point Average, used to compute student academic standing.
- **HYBRID COURSE** Courses that combine traditional classroom instruction with online learning to deliver academic content that is the same as received in a pure classroom setting.
- **INSTRUCTIONAL DELIVERY** The modality used to impart course content.
- **INTERNSHIP** A program designed to give a student real work place experience in their intended career before graduation.
- INTERGRATED SUPPORT NETWORK Identifies and directs students to people, resources, and services that meet their unique needs to promote success and individual growth.
- IP GRADE (In Progress) A grade conferred by a faculty member giving a student a period of time after the end of the semester to complete all of the required coursework to earn a passing grade.

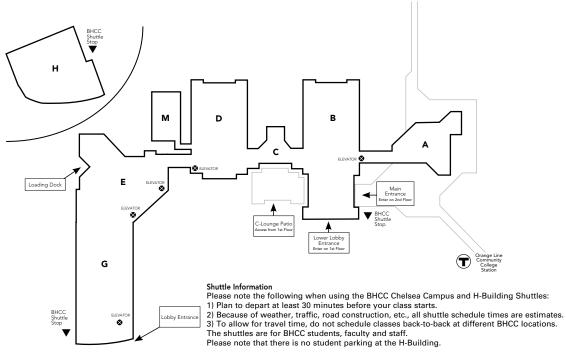
- **LEARN AND EARN PROGRAM** Paid internships at companies located in the greater Boston area.
- **LEARNING COMMUNITY CLUSTER –** Enrolls the same group of students in two or more courses centered on common academic themes enabling students to learn and study together.
- **LEARNING COMMUNITY SEMINAR –** A course designed to assist first time students make a successful transition to college.
- **LEARNING CONTRACT** An independent learning agreement between a student and a faculty member under the auspices of a Dean that allows a student to enroll in and complete a course that is not offered in any other format in a semester.
- **LIFEMAP** A system of shared responsibility between students and the college, as students navigate their personalized plan for identifying and achieving their academic, career, and personal goals.
- **MAJOR/PROGRAM OF STUDY** The degree or certificate program a student is officially enrolled in.
- **MATRICULATION** Formal application to and acceptance in a degree or certificate program.
- MIDNIGHT COURSES College courses starting at 11:45 p.m. and ending at 2:30 a.m. to accommodate the learning needs second shift workers and other students whose schedules are very tight or just prefer to learn during that time period.
- MID-SEMESTER WARNING GRADE Official notice to a student by faculty that at the half-way point of the semester a student is in danger of not passing a course(s) with a grade of C or better.
- $\ensuremath{\textbf{MID-TERM}}$  The point midway through an academic term.
- NA GRADE (Never Attended) An administrative withdrawal designation conferred by faculty to students enrolled in a course(s) and who do not attend one class during the first four weeks of the semester.
- **NON-CREDIT COURSE** A course that is non-credit bearing and cannot be used to satisfy an academic requirement for any degree or certificate program.
- **NON-MATRICULATED STUDENT** A student taking college courses without being enrolled in a degree or certificate program.
- **ONLINE DEGREE PROGRAM** Degree programs that allow students the ability to fulfill all of the requirements by completing online courses.
- **OPEN ADMISSION** A students' automatic acceptance into a non – selective degree or certificate program with a High School diploma or GED.
- **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.

# Glossary of Academic Terms

- **PLANNED COURSES** The formal process of determining the order and semester courses have to be taken in to earn a degree or certificate.
- **PORTAL** The computerized entryway to the student information system.
- PREREQUISITE Skill or course required for entry into a course or program of study.
- **PROBATION** Formal notice that a student is not in good academic standing and imposes limits on the number of credits a student may register for in a semester.
- **RE-ADMISSION –** The process by which students who return to the College to re-enroll in a degree or certificate program after an absence of at least one semester.
- **SATELLITE CAMPUS** Location besides a college's main or branch campus where classes are held and courses are facilitated.
- SATISTFACTORY ACADEMIC PROGRESS (S.A.P.) Minimum grade point average and course completion rate that must be earned by a student to be considered in good academic standing.
- SCHEDULE ADJUSTMENT (ADD/DROP) A short period of time after a semester begins that allows students to change their course enrollment and/or course schedules.
- SELECTIVE PROGRAM ADMISSION Some programs are competitive and have specific requirements that must be met before a student may submit an application for admission. These programs are competitive and acceptance is not guaranteed.
- **SELF-DIRECTED LEARNING** An approach to learning that requires students to take the lead in determining how they will learn subject matter and work to autonomously to acquire that knowledge.
- **SOCIAL NETWORKING** Connects students to other students, faculty, staff, and the larger community to assist them in achieving their educational, career, and financial goals.
- **STAFF** An employee of the College who does not teach or facilitate academic instruction.
- **START SMART ORIENTATION –** The formal process of welcoming new students to the college and providing them with information on the resources, services, and departments they may access to assist them to be academically successful.
- **STEM** Stands for Science, Technology, Engineering, and Mathematics.
- **STOP-IN** A student who takes a course during the summer session while on their semester break from their four-year college or university.
- **STREAMING MEDIA** Online courses providing students with access to asynchronous instruction.
- SUCCESS COACH A Success Coach is assigned to a Learning Communities course to assist students. Success coaches collaborate with faculty and ACE mentors to engage students in academic content and to work with students to identify pathways that encompass academic, career, and personal goals.

- **SUSPENSION** Students on probation who after taking a reduced course load, continue to not meet the grade and completion rate threshold to be in good academic standing. These students may be required to take a semester off.
- **TO BE ANNOUNCED (TBA)** An instructor and/or a room has yet to be assigned for a course.
- **TRANSFER GUIDELINES** Informal documents suggesting courses to be taken at Bunker Hill Community College for most effective transfer to a four-year college or university.
- **TRANSFER PROGRAM** A degree program designed for students who plan to continue their academic careers beyond the associate degree level through transfer to a four-year college or university.
- **TRANSCRIPT** Permanent record of students' academic grades; available through Admissions and Enrollment Services.
- **TUITION** Charges by the College to a student for registration in credit courses.
- VIRTUAL COURSES Online synchronous learning.
- WEB COURSE A course that is completely online and provides the same academic content that is delivered in a traditional classroom course.
- WITHDRAWAL FROM COLLEGE The formal process of notifying the College of the decision to discontinue attending all classes.
- WITHDRAWAL FROM A COURSE The formal process of notifying the college of the decision to discontinue attending a Course.

**INFORMATION** 



#### ALL BUILDINGS (WITH THE EXCEPTION OF H-BUILDING) MAY BE ACCESSED VIA THE 2ND FLOOR WHICH IS THE COLLEGE'S MAIN FLOOR.

## 

A-BUILD	DING		I	D106	Student Trustee		E421	Kershaw Culinary Arts
3rd Floor	A300 Lobby	Lounge		D106	Textbook Assistance Program			Dining Room
	A300	Auditorium		D111	Academic Computer Center	G-BUILD		
	A300 Lobby	Art Gallery	2nd Floor		D-Lounge	1st Floor		c ·
	A310	Human Resources		D206	Single Stop	Ist Floor		Gymnasium
				D206	Volunteer Income Tax		Lobby	Security Desk
B-BUILD	DING				Assistance (VITA)		Lobby	BHCC Shuttles– Chelsea, H-Building
1st Floor	,	Security Desk	3rd Floor		Classrooms			-Drop Off/Pick Up
	Lower Lobby	BHCC Shuttles-Chelsea, H-Building	M-(MOE	OULAR) BU	ILDING		G102	Fitness Center
		Drop Off/Pick Up		M103	MathSpace		G113A	Team Room 2/Lockers
	B101B	Dreamkeepers		M104	MathSpace		G113B	Officals Lockers
	B101D B118	Assessment Center			·		G113C	Team Room 1/Lockers
2nd Floor			E-BUILD	ING			G115	Trainers/Exam Room
2nd Floor	Lobby B201	Online Registration Veterans Center	1st Floor	E120	Facilities Management		G117	Athletic Offices Suite
	B201 B203	Admissions and		E127	Campus Police/Office of		G130	Faculty Offices Suite
	B203	Enrollment Services			Public Safety	2nd Floor		Health Center Lobby/Lounge
	B204	Registrar		E138	Central Services		G201-G215	Faculty Offices Suite
	B204 B206	Welcome Back Center		E142	The Writing Place		G218-G225	Medical Imaging Labs
	B200 B211A-B	Office of Community		E144	Audio Visual		G231	Dean's Office Suite
	D2TIA-D	Engagement		E145	Commonwealth Honors Center		G240	Acute Critical Skill Unit
	B213	Financial Aid		E154	Health Services		G243	Basic Skills Unit
	B219	Student Payment		E157	Visual and Media Arts Dept			
3rd Floor		Administrative Offices		E174	Tutoring & Academic Support Center TASC)	H-BUILD	Lobby	Security Desk
	B325	Business Office		E175	Edward L. Kerr Conference Room		Lobby	BHCC H-Building Shuttle-
	B331	Student Success Program	2nd Floor	E226	Multi-Media Language Lab		LODDy	Drop Off/Pick Up
	B336	Adjunct Faculty Center	2110 1 1001	E230	Teaching Learning and		H103	Workforce Development
C-BUILD				2230	Instructional Technology			Center
					Center (TLiTC)		H103	Community Education
1st Floor	C-Lounge	Student Lounge		E232	Quiet/Silent Room		H116	Basic English as a Second
	C-Lounge	Vending Machines/Games		E235	LifeMap Commons			Language BESL)
	C-Lounge	WBCC Radio Station			Advising		H134	BHCConline/Weekend
2nd Floor	C202	Lecture Hall			<ul> <li>LifeMap Lab</li> <li>Early Advantage</li> </ul>		1112.4	College
3rd Floor		Deans' Offices			Career Planning		H134 H165	Distance Learning Center for Self-Directed
D-BUILD	DING				<ul> <li>Internships, Learn and Earn</li> <li>E-portfolio</li> </ul>		HIOD	Learning (CSDL)
1st Floor	D106	Student Disability Services		E236	International Center			<ul> <li>Testing Room</li> </ul>
	D106	Student Activities	3rd Floor	E300	Library & Learning Commons			
	D106	Student Government		E300	Library Classroom			
		Association	4th Floor	E317 E400	Cafeteria			
	D106	Student Activities		E400 E418	Bookstore			
				L+10	DOOKSTOLG			

For Directions to Bunker Hill Community College's two campuses, three satellites and the H-Building by car and public transportation, please refer to the following information and links below.

## **Charlestown Campus**

250 New Rutherford Avenue Boston, Massachusetts 02129-2995 Telephone: 617-228-2000/ TTY: 617-228-2051 www.bhcc.mass.edu/charlestowndirections/

## H-Building – Charlestown Campus

570 New Rutherford Avenue Boston, Massachusetts 02129-2994 Telephone: 617-228-2000/ TTY: 617-228-2051 www.bhcc.mass.edu/hbuilding/

## **Chelsea Campus**

175 Hawthorne Street, Bellingham Square Chelsea, Massachusetts 02150-2917 Telephone: 617-228-2101/ TTY: 617-228-3377 www.bhcc.mass.edu/chelseadirections/

## East Boston Satellite (current location)

East Boston Neighborhood Health Center 155 Addison Street East Boston, Massachusetts 02128 Telephone: 617-568-6444/ TTY: 617-228-2051 www.bhcc.mass.edu/satellites/eastbostonsatellite/directions/

## (new locations as of fall 2014)

250 Sumner Street East Boston, Massachusetts 02128

20 Maverick Square East Boston, Massachusetts 02128

\*Please note, beginning in the Fall 2014 semester, the East Boston Satellite will have two new locations and telephone numbers. Please refer to the College's website at www.bhcc.mass.edu for updated information.

## **Malden Satellite**

Malden High School 77 Salem Street Malden, Massachusetts 02148 Telephone: 617-228-2403/ TTY: 617-228-2051 www.bhcc.mass.edu/satellites/maldensatellite/directions/

## South End Satellite

Inquilinos Boricuas en Accion (IBa) Villa Victoria 405 Shawmut Avenue Boston, Massachusetts 02118 Telephone: 617-927-1707/ TTY: 617-228-2051 www.bhcc.mass.edu/satellites/southendsatellite/directions/

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