Welcome to Bunker Hill Community College.

Our College is friendly, affordable and close to home. It is also one of the largest and most diverse institutions of higher education in Massachusetts. We enroll more than 8,500 students who attend classes on two campuses in Charlestown and Chelsea or at one of five neighborhood satellites - Cambridge, East Boston, Revere, Somerville and the South End. Our students come from all over the world - more than 94 different countries - and from all over the Boston area. They also come from every possible background. Sixty percent of BHCC students are people of color and more than half are women.

Bunker Hill Community College has something to offer everyone. Our tuition and fees are affordable – in-state tuition is just $106 per credit hour for the fall 2007 semester or $2,544 per academic year for full-time students. In fact, BHCC offers the lowest comprehensive tuition and fees of any higher education institution in the Commonwealth. We also offer a wide range of financial aid programs to help you pay for your education.

For many students, Bunker Hill’s degree and certificate programs in fields such as the healthcare professions, business, computers or culinary arts are the first step on the path to employment success. Others see BHCC as a good way to begin their careers in higher education. Bunker Hill Community College graduates seeking advanced degrees transfer to public and private institutions in Massachusetts, as well as colleges and universities around the country.

It is also important to us to address the issues that are central to our students as well as the communities that we serve. Keeping that in mind, we implemented six new goals that stem from polling the BHCC community and business leaders, community leaders and civic leaders who support us in addressing the needs of region that we serve. These goals: Support Each Student’s Goals for Success, Create Partnerships for Pathways to College, Prepare Students for 21st Century Careers, Demonstrate Strength through Diversity, Advance Immigrant Success, and Promote Civic Engagement and Leadership—will guide us through 2009.

At BHCC, we value learning - both in and out of the classroom. While our faculty focus is on teaching first, many of them are noted authors and experts in their fields. Extracurricular activities, clubs and organizations are as diverse as our students and keep students challenged outside the classroom as well as inside of it. Service-learning classes have helped our students become involved in volunteerism and motivated them to fundraise for causes they believe in.

Sports-minded students shine at BHCC as well. Our women’s basketball and men’s soccer teams, for example, have had several consecutive winning seasons despite the fact that we do not have a gym on campus. However, we are excited to share with you that the College is in the process of finalizing plans for a Health and Wellness Center on our Charlestown campus. This new state-of-the-art building will include a gymnasium and fitness facility.

This year it also gives me great pleasure to welcome Subrina Smith Taylor, Ph.D. to the College as the new Vice President of Student Services and Enrollment Management. We are enthused that Dr. Smith Taylor is joining our administration. She is knowledgeable, experienced and has a proven track record of putting in place what it takes to attract, support and retain students. I am confident that her presence here will positively impact all of our student body.

If you are reading this Catalog, you, most probably, are new to Bunker Hill Community College. As the new school year begins, we welcome you and look forward to having you join the College community.

Mary L. Fifield, Ph.D.
President
BHCC Goals 2006 - 2009

Support Each Student’s Goals for Success
Bunker Hill Community College will assist degree- and certificate-seeking students to complete programs while recognizing and supporting the many and varied learning goals of the College’s diverse student body.

Prepare Students for 21st Century Careers
Bunker Hill Community College will prepare students for 21st century careers by revising current academic programs and by establishing new degree and certificate programs.

Advance Immigrant Success
Bunker Hill Community College will expand and develop new programs for immigrant students to enable them to achieve academic and career goals.

Create Partnerships for Pathways to College
Bunker Hill Community College will create and sustain partnerships and pathways to promote student success.

Demonstrate Strength through Diversity
Bunker Hill Community College will leverage its reputation and visibility as a college community that recognizes that diversity adds value.

Promote Civic Engagement and Leadership
Bunker Hill Community College will encourage a climate of civic engagement to involve students fully in their communities and in the democratic process.
BHCC Board of Trustees

Jeanne-Marie Boylan
Chair

Ronald Bonney Jr.
First Vice Chair

Richard J. DeAgazio
Second Vice Chair

Giacomo Arrigo
Student Trustee

James T. Chadwick

Michael Charbonnier

Robert S. Miller ’84*

Gerardo Villacrés

Massachusetts Board of Higher Education*

Aaron D. Spencer
Chairman

G.L. Peter Alcock, Jr.
Vice Chairman, State College Representative

Jeanne-Marie Boylan
Community College Representative

John C. Brockelman
James Coyle
David P. Driscoll, Ed.D.
Ex Officio

Ann Reale
Ex Officio

Richard Taylor
Karl E. White
University of Massachusetts Representative

* BHCC ALUMNUS

* as of July 2007
# 2007 - 2008 Academic Calendar

## Fall Semester 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 3</td>
<td>Last day to register for credit courses by mail, phone, or fax</td>
</tr>
<tr>
<td>August 31</td>
<td>Last day to register for classes/deadline for submitting applications</td>
</tr>
<tr>
<td>August 31</td>
<td>Last day to fax online course registration</td>
</tr>
<tr>
<td>September 4</td>
<td>Classes begin</td>
</tr>
<tr>
<td>September 11</td>
<td>Schedule adjustment (add/drop) deadline</td>
</tr>
<tr>
<td>October 3</td>
<td>Graduation applications available</td>
</tr>
<tr>
<td>October 8</td>
<td>Columbus Day - no classes</td>
</tr>
<tr>
<td>October 18</td>
<td>Last day to register for CSDL/Home Studies courses</td>
</tr>
<tr>
<td>October 24</td>
<td>Graduation applications due</td>
</tr>
<tr>
<td>November 12</td>
<td>Veterans’ Day - no classes</td>
</tr>
<tr>
<td>November 14</td>
<td>Last day for course withdrawal</td>
</tr>
<tr>
<td>November 22</td>
<td>Thanksgiving Day recess - no classes</td>
</tr>
<tr>
<td>December 13</td>
<td>Last day to officially withdraw from the College</td>
</tr>
<tr>
<td>December 16</td>
<td>Classes end</td>
</tr>
<tr>
<td>December 17 - 20</td>
<td>Day/Evening final exams</td>
</tr>
<tr>
<td>December 21 - 23</td>
<td>Weekend College exams</td>
</tr>
</tbody>
</table>

### Fall Mini Session I

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 17</td>
<td>Classes begin</td>
</tr>
<tr>
<td>September 19</td>
<td>Schedule adjustment (add/drop) deadline</td>
</tr>
<tr>
<td>October 17</td>
<td>Last day for Mini Session I course withdrawal</td>
</tr>
<tr>
<td>November 4</td>
<td>Classes end</td>
</tr>
</tbody>
</table>

### Fall Mini Session II

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 5</td>
<td>Classes begin</td>
</tr>
<tr>
<td>November 7</td>
<td>Schedule adjustment (add/drop) deadline</td>
</tr>
<tr>
<td>December 5</td>
<td>Last day for Mini Session II course withdrawal</td>
</tr>
<tr>
<td>December 23</td>
<td>Classes end</td>
</tr>
</tbody>
</table>

## Spring Semester 2008

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 27</td>
<td>Last day to register for credit courses by mail or fax</td>
</tr>
<tr>
<td>January 2</td>
<td>Intersession classes begin</td>
</tr>
<tr>
<td>January 16</td>
<td>Intersession classes end</td>
</tr>
<tr>
<td>January 18</td>
<td>Last day to register for classes/deadline for submitting applications</td>
</tr>
<tr>
<td>January 22</td>
<td>Classes begin</td>
</tr>
<tr>
<td>January 29</td>
<td>Schedule adjustment (add/drop) deadline</td>
</tr>
<tr>
<td>February 5</td>
<td>Graduation applications available</td>
</tr>
<tr>
<td>February 18</td>
<td>Presidents’ Day - no classes</td>
</tr>
<tr>
<td>February 21</td>
<td>Graduation applications due</td>
</tr>
<tr>
<td>March 6</td>
<td>Last day to register for CSDL/Home Studies courses</td>
</tr>
<tr>
<td>March 17 - 23</td>
<td>Spring recess - no classes</td>
</tr>
<tr>
<td>April 9</td>
<td>Last day for course withdrawal</td>
</tr>
<tr>
<td>April 21</td>
<td>Patriots’ Day - no classes</td>
</tr>
<tr>
<td>May 8</td>
<td>Last day to officially withdraw from the College</td>
</tr>
<tr>
<td>May 11</td>
<td>Classes end</td>
</tr>
<tr>
<td>May 12 - 16</td>
<td>Day/Evening final exams</td>
</tr>
<tr>
<td>May 17 - 18</td>
<td>Weekend College final exams</td>
</tr>
<tr>
<td>May 29</td>
<td>Honors Ceremony</td>
</tr>
<tr>
<td>May 31</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

### Spring Mini Session I

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 4</td>
<td>Classes begin</td>
</tr>
<tr>
<td>February 6</td>
<td>Schedule adjustment (add/drop) deadline</td>
</tr>
<tr>
<td>March 5</td>
<td>Last day for Mini Session I course withdrawal</td>
</tr>
<tr>
<td>March 29</td>
<td>Classes end</td>
</tr>
</tbody>
</table>

### Spring Mini Session II

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 31</td>
<td>Classes begin</td>
</tr>
<tr>
<td>April 2</td>
<td>Schedule adjustment (add/drop) deadline</td>
</tr>
<tr>
<td>April 30</td>
<td>Last day for Mini Session II course withdrawal</td>
</tr>
<tr>
<td>May 17</td>
<td>Classes end</td>
</tr>
</tbody>
</table>

## Summer Semester 2008

### Summer Session I (6 weeks)

#### Bridge Session (8 weeks)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 15</td>
<td>Last day to register for credit courses by mail or fax</td>
</tr>
<tr>
<td>May 30</td>
<td>Last day to register for Session I, Bridge or Academic ESL credit courses</td>
</tr>
<tr>
<td>June 2</td>
<td>Classes begin</td>
</tr>
<tr>
<td>June 4</td>
<td>Schedule adjustment (add/drop) deadline</td>
</tr>
<tr>
<td>June 17</td>
<td>Bunker Hill Day observed - no classes</td>
</tr>
<tr>
<td>June 25</td>
<td>Last day for Session I course withdrawal</td>
</tr>
<tr>
<td>July 3</td>
<td>Last day for Bridge session course withdrawal</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day - no classes</td>
</tr>
<tr>
<td>July 9</td>
<td>Last day for Academic ESL session course withdrawal</td>
</tr>
<tr>
<td>July 10</td>
<td>Session I classes end</td>
</tr>
<tr>
<td>July 17</td>
<td>Last day to register for CSDL/Home Studies courses</td>
</tr>
<tr>
<td>July 24</td>
<td>Bridge Session classes end</td>
</tr>
<tr>
<td>July 31</td>
<td>Academic ESL Session classes end</td>
</tr>
</tbody>
</table>

### Summer Session II (6 weeks)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 26</td>
<td>Last day to register for credit courses by mail or fax</td>
</tr>
<tr>
<td>July 11</td>
<td>Last day to register for Summer Session II credit courses</td>
</tr>
<tr>
<td>July 14</td>
<td>Classes begin</td>
</tr>
<tr>
<td>July 16</td>
<td>Schedule adjustment (add/drop) deadline</td>
</tr>
<tr>
<td>July 30</td>
<td>Last day for LC/WB/ES credit course withdrawal</td>
</tr>
<tr>
<td>August 6</td>
<td>Last day for Session II credit course withdrawal</td>
</tr>
<tr>
<td>August 21</td>
<td>Session II classes end</td>
</tr>
</tbody>
</table>
# Table of Contents

- **Message from the President** ................................................................. 1
- **BHCC Goals** ....................................................................................... 2
- **BHCC Board of Trustees** ...................................................................... 3
- **Massachusetts Board of Higher Education** ........................................ 3
- **Academic Calendar** ............................................................................ 4
- **BHE and Massachusetts Community College Mission Statements** ........... 7
- **Mission of BHCC** ................................................................................ 7
- **BHCC Vision, Statement on Inclusion and Institutional Values** ............... 8
- **College Profile** ................................................................................... 9
- **Chelsea Campus** ................................................................................. 10
- **Satellite Locations** ............................................................................. 12

## Academic and Student Services

- **Enrollment Services** ........................................................................... 13
- **Joint Admissions Programs** ................................................................. 15
- **Steps for Enrollment** .......................................................................... 16
- **Commonwealth of Massachusetts Transfer Programs** ......................... 20
- **Cost of Attendance** ............................................................................ 22
- **Financial Aid** .................................................................................... 25
- **Scholarships and Awards** ................................................................. 28

## Academic Information

- **Academic Advising and Assessment** ..................................................... 32
- **Graduation, Transfer and Articulation Information** ............................... 33

## Academic Resources and Support

- **Academic Resources and Support** ....................................................... 35
- **Alternative Learning** .......................................................................... 37
- **Multi-Purpose, Multi-Media Language Lab** .......................................... 38
- **Distance Education/BHCConline** ....................................................... 38

## Programs of Study

- **BHCC Learning Communities** ........................................................... 52
- **BHCC Commonwealth Honors Program** ........................................... 53
- **Programs of Study** ............................................................................ 54
- **Associate Degree and Certificate Programs** ....................................... 55
- **Course Descriptions** ......................................................................... 138

## Community and College Resources

- **Boston Welcome Back Center** ............................................................ 183
- **Workforce Development Center** ......................................................... 184
- **ACT Center** ..................................................................................... 184
- **Community Education** ...................................................................... 184
- **Bunker Hill Community College Alumni Association** ......................... 185
- **Bunker Hill Community College Foundation, Inc.** ............................... 185
- **Bunker Hill Community College Art Gallery** ....................................... 186
- **Facilities Rental and Conference Planning** ......................................... 186
- **Administration, Faculty, and Staff** ................................................... 187
- **Program Advisory Committees** ......................................................... 202
- **Directions to BHCC Campuses and Satellite Locations** ....................... 205
- **MBTA Subway Map** ........................................................................... 208
- **Charlestown Campus Map** ................................................................. 209
- **Glossary of Academic Terms** ............................................................. 210
- **Index** ............................................................................................... 211

---

**General Education Requirements/Electives FOLD-OUT SECTION**

**CHARLESTOWN CAMPUS** ........................................................................ 259 New Rutherford Ave., Boston, MA 02129 • Telephone: 617-228-2000
**CHELSEA CAMPUS** ........................................................................ 175 Hawthorne Street, Bellingham Sq., Chelsea, MA 02150 • Telephone: 617-228-2101
**CAMBRIDGE SATELLITE** ................................................................. Cambridge Rindge & Latin School, 458 Broadway, Cambridge, MA 02138 • Telephone: 617-228-2420
**EAST BOSTON SATELLITE** .............................................................. East Boston Neighborhood Health Center, 155 Addison Street, East Boston, MA 02128 • Telephone: 617-228-2420
**REVERE SATELLITE** ........................................................................ Revere High School, 101 School Street, Revere, MA 02151 • Telephone: 617-228-2420
**SOMERVILLE SATELLITE** ................................................................. Mystic Activity Center, 530 Mystic Ave., Somerville, MA 02145 • Telephone: 617-228-2420
**SOUTH END SATELLITE** ................................................................. I.B.A./Villa Victoria, 405 Shawmut Avenue, Boston, MA 02118 • Telephone: 617-228-2420

---

**www.bhcc.mass.edu**
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 which identifies Bunker Hill Community College’s distinctive characteristics and priorities.

**Mission of the Public Higher Education System (BHE)**
The public college and university System in the Commonwealth of Massachusetts is comprised of 15 community colleges, nine state colleges and the five campuses of the University of Massachusetts. The System exists to provide accessible, affordable, relevant, and rigorous academic programs that adapt to meet changing individual and societal needs for education and employment. All campuses are committed to operating effectively and efficiently in order to maintain tuition at a level as low as possible, while providing a high quality education to every student who qualifies for admission. The public System is committed to continuous improvement and accountability in all aspects of teaching and learning. The Board of Higher Education and institutional Boards of Trustees recognize their responsibilities to the taxpayers and residents of Massachusetts and expect all students, faculty, and staff to be held to exacting high standards in the performance of their roles and responsibilities. Massachusetts public higher education is a System with a distinguished past, increasing pride, and unlimited potential.

**Mission of Massachusetts Community Colleges**
Within the system of Massachusetts public higher education, the community colleges provide open pathways to baccalaureate education and to career advancement. The 15 community colleges offer developmental, certificate, and associate degree programs as well as opportunities for workforce development and lifelong learning. The community colleges support the public system of higher education by:

- developing partnerships with business and industry to provide job training, retraining, and skills improvement to ensure a workforce equipped to meet the needs of a changing economy; and
- managing their resources in an efficient and responsible manner.

By actively contributing to their region’s intellectual, cultural, environmental, and economic development, community colleges serve as leaders and resources for their communities. Differentiation in mission among the colleges is defined primarily by the needs of the communities they serve.

The community colleges offer a campus climate that respects ideas, values, and contributions of a culturally diverse community. They are committed to excellence in instruction and offer responsive and innovative programs that develop students’ oral, written, critical thinking, technological, and quantitative skills, and their appreciation of the arts, sciences, and humanities.

**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.
Mission Statements

Vision of Bunker Hill Community College
Bunker Hill Community College is a comprehensive, multi-campus urban community college that serves diverse educational needs and is enriched by our global community. We are dedicated to a dynamic educational environment that is accessible to all and to a college that is invested in the social and economic well-being of its communities. We believe in student-centered learning that draws upon the rich diversity of our students’ life experiences and that uses strategies and technologies to maximize opportunities for reaching educational goals. We respect and value what each student brings to the College and celebrate learning as an interactive and reciprocal process.

Approved by the Board of Trustees, September 2000.

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

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

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

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

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

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

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

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

Respect
• Value differences.
• Treat everyone fairly.
• Give everyone an equal opportunity to be a participant.

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

Bunker Hill Community College (BHCC) is a multi-campus urban institution. The main campus is situated on 42 acres in the historic Charlestown section of Boston, Massachusetts. The College has a campus in Chelsea, Massachusetts, in what was once the historic Old Post Office Building in Bellingham Square. The College operates satellite campuses at the Cambridge Rindge and Latin School in Cambridge, MA; the Education and Training Institute of the East Boston Neighborhood Health Center in East Boston, MA; Revere High School in Revere, MA; the Mystic Activity Center in Somerville, MA; and at Inquilinos Boricuas en Acción (I.B.A.)/Villa Victoria in Boston’s South End.

Founded in 1973, BHCC enrolls more than 8,500 students in day, evening, weekend, web-based and distance-learning courses and programs each semester. The College is internationally recognized for development of individualized and alternative methods of instruction. The College is a leader in the application of distance-learning technologies and computer-based methodologies that enhance and strengthen the learning environment. In fall 2006, BHCC was the largest community college in Massachusetts. The average age of students is 28. Approximately 60 percent are women and 60 percent are persons of color. The majority work full or part time while attending college. Approximately 37 percent of BHCC’s students reside in the city of Boston and 84 percent live within 10 miles of the College campuses.

Bunker Hill Community College incorporates multi-cultural and international perspectives in its courses, programs and institutional climate. With students from more than 94 countries and students of color comprising more than half of the student population, BHCC is one of the most diverse and cosmopolitan colleges in New England. The College offers one of the state’s largest course offerings in English as a Second Language. A representative list of the native languages spoken by students includes Russian, Vietnamese, Haitian Creole, Spanish, Portuguese, Chinese, Arabic and Italian.

The College offers associate degree programs as well as certificate programs in a wide variety of technical fields. The academic and technical programs reflect the workforce of the local and regional economy. BHCC’s degree and certificate programs prepare students for job placement, career advancement and/or transfer to four-year colleges and universities.
The Bunker Hill Community College Chelsea Campus was established in 1987 and plays a key role in the social and economic development of the greater Chelsea area. The campus provides opportunities for higher education and job training to residents of Chelsea, Revere, Everett, East Boston, Malden and Winthrop. In January 1998, the Chelsea Campus moved to its new location in Bellingham Square. This state-of-the-art, three-story facility allows the College to expand its courses and program offerings. Students who enroll at the Chelsea Campus receive comprehensive student services. Prospective students may come directly to the Chelsea Campus to apply to the College and register for classes.

The Chelsea Campus, located at 175 Hawthorne Street, Bellingham Square, is easily accessible. Students will find a bus stop directly outside the campus. Additionally, the College provides free shuttle service from the Charlestown Campus to the Chelsea Campus for the convenience of students enrolled in classes at both campuses. In addition to on-street parking around Bellingham Square, the Chelsea Campus offers students free parking on the corner of 5th Street and Chestnut Street beginning at 5:30 p.m. daily. See page 206 for directions to the Chelsea Campus and detailed public transportation information.

Academic Affairs
The Chelsea Campus offers day, evening and weekend classes, in programs ranging from general education, early childhood development, computer technology, accounting and English as a Second Language to programs in Allied Health and Surgical Technology, Central Processing, Medical Coding, Weekend Nursing, EMT and CPR. The Chelsea Campus also offers noncredit courses, including extensive Adult Basic Education classes.

Student Affairs
Students may apply to the College; receive assistance completing financial aid applications; complete placement testing; receive academic, career and personal counseling; register for classes and make tuition and fee payments at the Chelsea Campus. The Chelsea Campus offers student achievement workshops throughout the year in areas such as career exploration, goal setting, time management, learning styles, note-taking strategies, study skills and test-taking skills.
Child Care
The Chelsea Campus provides toddler and preschool childcare to students, faculty and staff on-site from 8 a.m. - 4 p.m. Children from 15 months to 5 years old qualify and both part-time and full-time programs are available. The Child Focus Center, a Massachusetts Office of Child Care Services licensed care provider, provides this service. For more information, call 617-228-3374.

Student Activities
The rich cultural diversity of the student population is celebrated by a variety of activities that are held throughout the year. Students participate in College committees, student clubs, the Student Government Association and a student/faculty/staff campus-wide committee that plans and implements social and cultural events.

Chelsea Campus Facilities
The Bookstore is open on a limited basis at the beginning of each semester in order for students to purchase textbooks and related materials for courses offered at the Chelsea Campus. Students may also purchase general supplies such as notebooks, pens, pencils and computer disks at the Chelsea Campus Bookstore.

The Student Lounge provides a warm, bright and friendly social atmosphere for students to relax between classes and meet other students who attend classes on the Chelsea Campus. The Lounge includes vending machines, a microwave oven and cable television.

The Multi-Purpose or Community Room comfortably accommodates up to 100 people. The room provides space for Student Activities’ programs, faculty and staff development workshops, conferences and meetings. Guest speakers, artists and performers are featured in the Community Room.

Computer Facilities include two computerized classrooms, six Smart Classrooms, a state-of-the-art Academic Computing Center and online tutoring. The computers in these classrooms support students enrolled in computer-intensive courses and provide supplemental support to students enrolled in other courses.

The Health Skills Laboratory offers a simulated setting in which students enrolled in the Patient Care Assistant Certificate program, the Surgical Technology and Central Processing programs, the Medical Coding program and the Weekend Nursing program learn necessary clinical skills.

The Chelsea Campus has two new Science Laboratories that are equipped with state-of-the-art materials for students enrolled in science courses including biology, chemistry, anatomy and physiology.

Assistive Technology includes a Kurzweil Reading System that assists students who are vision-impaired or who have reading and/or learning disabilities.

The Adult Basic Education Program is funded by the Massachusetts Department of Education and is located at the Chelsea Campus. For more information, see page 37.

The Chelsea Campus Library has established a partnership with the Chelsea Public Library. The Library collaboration serves as a link between Bunker Hill Community College’s Chelsea Campus and the Chelsea community. With a valid student ID, students can access all of the Library’s services. The Chelsea Public Library is located in historic Bellingham Square at 569 Broadway, Chelsea. For hours of operation, call 617-228-2101 or 617-466-4350.

The Tutoring Center is located on the second floor of the Chelsea Campus and offers tutoring in all levels of mathematics, English, biology, chemistry and medical terminology. For additional information regarding these services, call 617-228-3356.
Satellite Locations

Bunker Hill Community College offers a range of educational opportunities at satellite campuses, 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 an associate degree or certificate. Courses 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 the College website at www.bhcc.mass.edu or call 617-228-2422. See pages 205-207 for directions to all satellite locations.

Cambridge Satellite
The Cambridge Satellite offers evening classes during the fall and spring semesters at the Cambridge Rindge and Latin High School, 459 Broadway, Cambridge, Massachusetts. The College offers courses in computers, accounting, mathematics and English. The satellite campus offers advising services and enrollment information.

East Boston Satellite
The East Boston Satellite is located at the Education and Training Institute of the East Boston Neighborhood Health Center, 155 Addison Street, East Boston, MA 02128. Opened in the fall of 2006, the college offers introductory courses in the evening during the fall, spring and summer semesters. The satellite campus offers a range of student services prior to each semester, including on-site registration & payment, placement testing, academic advising and information on federal financial aid. For more information please call 617-568-6444 or email training@ebnhc.org.

Revere Satellite
The Revere Satellite is located at Revere High School, 101 School Street, Revere, Massachusetts. Opened in the fall of 2001, the Revere Satellite offers introductory courses in the evening during the fall and spring semesters. The satellite campus offers a range of student services including on-site registration and academic advising.

Somerville Satellite
The Somerville Satellite is located at the Mystic Activity Center, 530 Mystic Avenue, Somerville, Massachusetts and offers introductory general education courses and computer courses in the evening during the fall and spring semesters. The satellite campus offers a range of student services including on-site registration.

South End Satellite
Bunker Hill Community College has established a satellite located at 405 Shawmut Avenue in the South End of Boston in partnership with Inquilinos Boricuas en Acción/Villa Victoria. The South End Satellite offers introductory general education courses, English as a Second Language and introductory courses in computer technology and Early Childhood Education. The Satellite offers a range of student services prior to the beginning of each semester including assistance in completing financial aid applications, admissions and enrollment information, academic advising and on-site registration. This satellite location is home to the BHCC Pathway Technology Campus, developed under a grant from the Fund for the Improvement of Postsecondary Education (FIPSE), U.S. Department of Education.
Enrollment Services

**Admission**
Bunker Hill Community College is committed to an open admission policy. This policy offers the opportunity to enroll to those who have earned a high school diploma, a GED or an associate degree or higher and who express a desire to pursue a college education. To enroll in a degree or certificate program, students must apply for admission and be accepted to the College. Students choosing this option are referred to as “degree-seeking students.” Students who do not choose this option are referred to as “non-degree-seeking students.” Applicants 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. All documents submitted to the College become the property of Bunker Hill Community College and will not be returned to students.

**Ability to Benefit Policy Statement**
Students who supply the College with documentation of successful completion of their high school course requirements for the Commonwealth of Massachusetts, but who have not passed the MCAS test nor received a GED, may apply for admission to a BHCC degree-granting program (matriculation) through the Ability to Benefit policy, 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; Arithmetic: 34) will be admitted to BHCC and will be permitted to matriculate and apply for financial aid. Students enrolled in an ESL or Bilingual program at the time of graduation may take the ESL CELSA test for Ability to Benefit. Students passing the CELSA are eligible to matriculate, apply for financial aid and enroll in ESL classes.

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

**Homeschooling Policy**
Homeschooled students without a high school diploma or GED are eligible to apply for admission to a degree or certificate program, provided they have successfully completed an approved homeschool program in accordance with Massachusetts General Laws or the laws of their home state. If a homeschooled student has not completed an approved homeschool program, then the student will not be eligible to enroll in a degree or certificate program until he/she has taken and passed an Ability to Benefit assessment test.

Homeschooled students who wish to apply for admission to a degree or certificate program must submit with their admissions application evidence that their homeschool program was approved by their school district’s superintendent or school committee. Additionally, if the homeschooled student is under the age of compulsory attendance, which is 16 years old in Massachusetts, a letter from the student’s school district’s superintendent or school committee is required stating that the student is not considered truant and would not be required to attend further schooling or continue to be homeschooled if the student has completed his/her homeschool program before the age of 16.

The College reserves the right to limit or deny enrollment of any student under the age of 16 in a course or program based on a case-by-case consideration of a variety of factors, including but not limited to: the student’s maturity, life experience, placement test scores, prior education, course content, instructional methodology and potential risks associated with participation in a particular course or program.
Non-Degree Students
To enroll in classes as a non-degree student, students should refer to the appropriate master schedule of courses or call the Enrollment Services Center 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.

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

However, students who meet any of the following conditions must submit a new application form and a copy of their high school diploma or GED certificate for readmission to the College:
1. A degree-seeking (matriculated) student who has been academically suspended from the College.
2. A degree-seeking (matriculated) student who has graduated from a degree or certificate program.

Midyear Admission
Bunker Hill Community College admits students to most programs at midyear on a space-available basis. Students can begin courses in the spring semester; however, some courses listed in the catalog may not be available to midyear entrants. The College cannot assure the availability of specific courses. Many programs contain courses that have prerequisites. Because prerequisites are not waived for students admitted at midyear, the number of semesters necessary to complete degree requirements may increase.

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

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

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

International Student Admissions Process
International students who wish to attend Bunker Hill Community College on a student (F-1) visa must have completed their secondary education and must demonstrate proficiency in English, if English is not their first language. Students on F-1 visas must enroll full time in a degree program and must take a minimum of 12 credits each semester. For a description of the application process, see “Steps for Enrollment” on page 16. 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 a student’s first language is not English and they are applying from overseas, they must take the Test of English as a Foreign Language (TOEFL). Test scores more than two years old are not accepted. Information and application forms can be obtained by visiting the Toefl website at http://www.toefl.org.

If applying to Bunker Hill Community College from within the United States, applicants who are unable to provide TOEFL scores must schedule an appointment for assessment at the College Assessment Center, room B109, Charlestown Campus. Students can make appointments by calling 617-228-2468.

The Immigration and Naturalization Service authorizes Bunker Hill Community College to provide I-20 forms, which are needed to apply for student (F-1) visas, to international students who are admitted to the College. In addition to satisfying admission requirements, students must provide evidence of their financial ability to support their educational and living expenses while in the United States. Specifically, students must provide a completed affidavit of support and an official bank statement that shows evidence of sufficient funds to cover educational and living expenses for the first year ($18,600).
International applicants may obtain more detailed information concerning the admission process by contacting the International Center at 617-228-2460 or via e-mail 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 48 for more information.

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

Students who fail to present the required information within 30 days of the date of registration are not allowed to register for subsequent semesters or receive final grades until the immunization form is received by the Enrollment Services Center. Immunization forms become part of the student’s permanent file and cannot be copied, transferred or returned.

Curriculum Year/Program Requirements
The term “curriculum year” refers to the academic year in which students are admitted to the College. Students must fulfill the program requirements listed in the College Catalog in effect for their curriculum year. When students change their program or 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 readmission.

Criminal Offender Record Information and Sex Offender Registry Information Checks
In order for a student to be eligible to participate in an academic, community or clinical program that involves potential unsupervised contact with children, the disabled or the elderly, the student may be required to undergo a Criminal Offender Record Information (CORI) check and/or a Sex Offender Registry Information (SORI) check. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible to participate in such activities. The College is authorized by the Commonwealth’s Criminal History Systems Board, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access CORI records. The College shall refer to regulations issued by the Commonwealth’s Executive Office of Health and Human Services, 101 Code of Massachusetts Regulations 15.00-15.16, as guidance when assessing student CORI records. Sex offender checks shall be performed pursuant to Massachusetts General Laws, Chapter 6, Sections 178C-178P.

For more information regarding the College’s CORI/SORI check process, please contact the College CORI/SORI Officer, Richard Boulware, at 617-228-2193.

In accordance with federal law, the College is required to advise the campus community where information concerning registered sex offenders may be obtained. Accordingly, in order to access public information pertaining to registered sex offenders enrolled or employed at the College, please contact the Commonwealth of Massachusetts Sex Offender Registry Board, located at P.O. Box 4547, Salem, MA 01970-4647, 978-740-6400, or the BHCC Campus Police Department, located in room E127 on the Charlestown Campus.

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

Massachusetts Joint Admissions Programs
Bunker Hill Community College, along with the five campuses of the University of Massachusetts and the nine Massachusetts state colleges, participates in the Joint Admissions Programs of the Massachusetts community colleges. These programs guarantee students admission to the state college or university of their choice, provided they meet specific requirements. Students must enroll in an approved Bunker Hill Community College academic program and graduate with a cumulative grade point average of 2.50 or higher. In addition to guaranteed admission, students who participate in the Joint Admissions Program receive a number of benefits that help them make the transition to a four-year institution. These benefits include specialized academic advising, a short, no-cost application form and eligibility for the Tuition Advantage Program. For more information, see Joint Admissions Program grids on pages 18 and 19.

Tuition Advantage Program for Commonwealth of Massachusetts Joint Admissions Programs
In support of the Joint Admissions Programs with the University of Massachusetts and the Massachusetts state colleges, the Commonwealth of Massachusetts established the Tuition Advantage Program (TAP). Students who meet the requirements of Joint Admissions and graduate with a cumulative grade point average of 3.00 or higher receive a 33 percent tuition reduction of in-state tuition charges at the Joint Admission college or university of their choice. The University of Massachusetts at Amherst now gives a 100 percent tuition reduction. Eligible students continue to receive this reduction for a maximum of two years, as long as they maintain a minimum 3.00 cumulative grade point average during the first two semesters after transfer. For more information, see the Transfer Program grid on page 20.
Steps for Enrollment

“I am a new student and want to enroll in a degree or certificate program.”
FOLLOW STEPS a f g h i

“I want to transfer to BHCC from another college.”
FOLLOW STEPS a b f g h i

“I am an international student and I want to attend BHCC.”
FOLLOW STEPS c e g h i l

“I used to be a student at BHCC and I want to reapply.”
FOLLOW STEPS d f g h i

“I am not seeking a degree – I just want to take classes.”
FOLLOW STEPS j k h i

“I want to take a Community Education (non-credit) class.”
FOLLOW STEPS m n

Complete an application and submit it to the Admissions Office along with a copy of your high school diploma, transcript if a graduation date is recorded on it, or GED. Original documents may be requested. If documents are not in English, an official translation must be attached. A $10 application fee for in-state residents or a $35 application fee for out-of-state residents is required. If you are claiming entitlement to in-state tuition, submit an Application for Massachusetts In-State Tuition Rates with the appropriate documentation. Some programs have additional admission requirements and a selective admissions process. For more information, call the Admissions Office at 617-228-3398.

Submit official undergraduate transcripts from previous college(s) to the Admissions Office for evaluation of transfer credits. Credit may be awarded for courses completed successfully at other regionally accredited colleges if the courses are comparable to those offered within the BHCC curriculum. Credits earned at colleges which follow a quarter semester system will be converted to semester-hour equivalents resulting in an adjustment in the number of credits transferred. The College may accept a maximum of 45 credits toward the BHCC associate degree. Some programs have additional admission requirements and a selective admissions process. For more information, call the Admissions Office at 617-228-3398.

Fill out an application and submit your application to the International Center. Attach an official copy of a high school diploma or GED certification, your paper-based TOEFL with a score of at least 423 or your computer-based TOEFL with a score of at least 113 or your Internet-based TOEFL with a total score of at least 38 and a minimum writing score of 15 and a $35 application fee (U.S. dollars). Students with TOEFL scores of at least 500 on the paper-based test, 173 on the computer-based test or 60 on the Internet-based test are exempt from taking English as a Second Language (ESL) classes. Students with TOEFL scores below 500 on the paper-based test, 173 on the computer-based test or 60 on the Internet-based test will be placed into Academic ESL classes. All documents must be original or certified copies. If documents are not in English, an official translation must be attached.

If you drop or withdraw from a course, you must complete a schedule adjustment or official withdrawal form or you will automatically receive a grade of F or NA in the course. You may obtain appropriate forms at the Enrollment Services Center. Refer to the Enrollment Services section on page 13 for detailed enrollment information.

* Payment plans are not available for the summer sessions.
If you have been away from the college for two consecutive semesters (excluding summer sessions) due to an interruption of attendance, or if you were suspended from the College for one semester, or you have graduated from a degree or certificate program, you need to reapply to the College. Complete an application and submit it to the Admissions Office. If you have been away from the College for two or more semesters, you must submit a copy of your high school diploma, transcript if a graduation date is recorded on it, or GED. Original documents may be requested. If documents are not in English, an official translation must be attached. If you attended another college while away from BHCC, submit official copies of your transcripts to the Admissions Office for evaluation of transfer credit. Some programs have additional admission requirements and a selective admissions process. For more information, call the Admissions Office at 617-228-3398.

Computerized Placement Tests (CPTs) in reading, mathematics and English are required for students with a TOEFL score of at least 500 on the paper-based TOEFL or 173 on the computer-based TOEFL or 60 on the Internet-based TOEFL. Students who score below these thresholds must take the LOEP in English as a Second Language. Call the Assessment Center at 617-228-2468 or go to room B109, Charlestown Campus, to get information about the test. If you have completed a mathematics or English course with a grade of C or higher at an accredited institution, you may be eligible for exemption from testing. Submit a copy of your transcript or grade report, in a sealed envelope, to the Admissions Office, room B202.

If you plan on enrolling in a math, reading, or English course (or a course with a math, reading, or English prerequisite) you must take the Computerized Placement Tests (CPTs) before registering for classes. Drop by the Assessment Center in Room B109 for walk-in testing. If you have completed a mathematics or English course at an accredited institution, you may be eligible for exemption from testing. Submit a copy of your transcript or grade report to the Admissions Office, B202.

If you are claiming entitlement to in-state tuition, submit an Application for Massachusetts In-State Tuition Rates form with appropriate documentation. Review the current course schedule and select the classes you are interested in taking. Visit the Enrollment Services Center to register for classes.

Complete the I-20 application form if you plan to attend BHCC on a student (F-1) visa. Submit an affidavit of support or a notarized letter from your sponsor stating that the sponsor will be responsible for your educational and living expenses for the duration of your studies at BHCC. Also, submit an official bank statement showing sufficient funds to cover total educational and living expenses for one year. This amount must be a minimum of $18,600 U.S. dollars. This statement must be dated within 30 days of your I-20 application. You will need another affidavit to present to the U.S. Embassy or Consulate.

Non-credit courses are offered by the Community Education Office, room M107. You may register for classes in person, by mail, phone, or fax. If registering by mail, phone, or fax, include your credit card information. Please call the Community Education Office for further information at 617-228-2462 or 617-228-2485. Hours of operation are Monday - Friday, 8:30 a.m. - 5:00 p.m.

Payment is due at the time of registration. If you are registering in person, you may pay by cash, check, money order, VISA, MasterCard or Discover.
## BHCC and University of Massachusetts Joint Admissions Programs

<table>
<thead>
<tr>
<th>BUNKER HILL COMMUNITY COLLEGE</th>
<th>UNIVERSITY OF MASSACHUSETTS</th>
<th>Boston</th>
<th>Dartmouth</th>
<th>Lowell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Science *</td>
<td>Food &amp; Natural Resources, Natural Sciences &amp; Math</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Biological Science (AS)</td>
<td>Natural Resources &amp; Environment</td>
<td>College of Natural Resources &amp; Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business *</td>
<td>School of Management</td>
<td>College of Management</td>
<td>Business &amp; Industry</td>
<td>College of Business</td>
</tr>
<tr>
<td>Chemical Science *</td>
<td>Food &amp; Natural Resources, Natural Sciences &amp; Math</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Communication *</td>
<td>Social &amp; Behavioral Sciences</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Computer Science *</td>
<td>Natural Sciences &amp; Math</td>
<td>College of Arts &amp; Sciences</td>
<td>Engineering</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Computer Info. Systems *</td>
<td>Natural Sciences &amp; Math</td>
<td>College of Arts &amp; Sciences/College of Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal Justice</td>
<td></td>
<td>College of Arts &amp; Sciences</td>
<td></td>
<td>Dept. of Criminal Justice</td>
</tr>
<tr>
<td>Education *</td>
<td>* see below</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering/Physics *</td>
<td>Engineering/Natural Science &amp; Math</td>
<td></td>
<td>Engineering</td>
<td>College of Engineering</td>
</tr>
<tr>
<td>Engineering Transfer (AS)</td>
<td>Engineering/Natural Sciences &amp; Math</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English *</td>
<td>Humanities &amp; Fine Arts</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Fine Arts *</td>
<td>Humanities &amp; Fine Arts</td>
<td>College of Arts &amp; Sciences</td>
<td>Visual &amp; Performing Arts</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Foreign Language *</td>
<td>Humanities &amp; Fine Arts</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>General Concentration *</td>
<td>* see below</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>History/Government *</td>
<td>Hum./Fine Arts/ Social &amp; Behavioral Sciences</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Human Services (AS)</td>
<td>Food &amp; Natural Resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics *</td>
<td>Hum./Fine Arts/ Social &amp; Behavioral Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Technology (AS)</td>
<td>Humanities &amp; Fine Arts</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Music *</td>
<td>Humanities &amp; Fine Arts</td>
<td>College of Arts &amp; Sciences</td>
<td>Visual &amp; Performing Arts</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Physics *</td>
<td>Social &amp; Behavioral Sciences</td>
<td>College of Arts &amp; Sciences</td>
<td>Engineering</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Psychology *</td>
<td>Social &amp; Behavioral Sciences</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Sociology *</td>
<td>Social &amp; Behavioral Sciences</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td>College of Arts &amp; Sciences</td>
</tr>
<tr>
<td>Theater *</td>
<td>Humanities &amp; Fine Arts</td>
<td>College of Arts &amp; Sciences</td>
<td>Arts &amp; Sciences</td>
<td></td>
</tr>
</tbody>
</table>

* All (AA) programs are also eligible for the Commonwealth Transfer Compact

* Humanities & Fine Arts, Natural Sciences & Mathematics, Social & Behavioral Sciences
## BHCC Joint Admissions Programs with Massachusetts State Colleges

<table>
<thead>
<tr>
<th>BUNKER HILL COMM. COLLEGE</th>
<th>Bridgewater State</th>
<th>Fitchburg State</th>
<th>Framingham State</th>
<th>Mass College of Liberal Arts</th>
<th>Salem State</th>
<th>Westfield State</th>
<th>Worcester State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Science*</td>
<td>Biology</td>
<td>Biology</td>
<td>Biology</td>
<td>Biology</td>
<td>Biology</td>
<td>Biology</td>
<td>Biology, Chem., Natural Science</td>
</tr>
<tr>
<td>Chemical Science*</td>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry, Natural Science</td>
</tr>
<tr>
<td>Communication*</td>
<td>Communication</td>
<td>All Liberal Arts Majors*</td>
<td>Communication, English</td>
<td>Communication, English</td>
<td>Communication, English*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Science*</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science, Cartography, Math</td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>Computer Info. Sys.*</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Sci., Bus.</td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>Comp. Prog. Tech. (AS)</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal Justice (AS)</td>
<td>Criminal Justice</td>
<td>Criminal Justice</td>
<td>Criminal Justice</td>
<td>Criminal Justice</td>
<td>Criminal Justice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education*</td>
<td>Liberal Arts Majors</td>
<td>Liberal Arts degrees*</td>
<td>Liberal Arts degrees*</td>
<td>Liberal Arts degrees*</td>
<td>Liberal Arts degrees*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English*</td>
<td>English</td>
<td>English</td>
<td>English</td>
<td>English</td>
<td>English</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Fine Arts*</td>
<td>Art**</td>
<td>Art (Studio), Art (History)</td>
<td>Fine &amp; Performing Arts</td>
<td>Art*, Theater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Prot. &amp; Safety (AS)</td>
<td>French &amp; Spanish</td>
<td>Liberal Arts degrees</td>
<td>Arts &amp; Sciences**</td>
<td>Arts &amp; Sciences**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Concentration*</td>
<td>All Majors*</td>
<td>All Majors or General Studies</td>
<td>All Liberal Arts Majors*</td>
<td>Liberal Arts degrees*</td>
<td>Library Arts degrees*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History, Government*</td>
<td>History, Politics</td>
<td>History, Politics</td>
<td>History</td>
<td>History, Political Science</td>
<td>History, Political Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Services*</td>
<td>Human Services</td>
<td>Psychology, Sociology</td>
<td>Sociology</td>
<td>Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Services (AS)</td>
<td>Psychology, Sociology</td>
<td>Psychology, Sociology</td>
<td>Psychology</td>
<td>Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics*</td>
<td>Mathematics</td>
<td>Mathematics</td>
<td>Math</td>
<td>Math, Cartography</td>
<td>Math</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music*</td>
<td>Music**</td>
<td>Fine &amp; Performing Arts</td>
<td>Music</td>
<td>Nursing**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Education (AS)</td>
<td>Nursing</td>
<td>Nursing</td>
<td>Nursing</td>
<td>Arts &amp; Sciences**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics*</td>
<td>Physics</td>
<td>Physics</td>
<td>Arts &amp; Sciences**</td>
<td>Physics, Natural Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology*</td>
<td>Psychology</td>
<td>Psychology</td>
<td>Psychology</td>
<td>Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology*</td>
<td>Sociology</td>
<td>Psychology, Sociology</td>
<td>Sociology</td>
<td>Sociology, Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theater*</td>
<td>Theater</td>
<td>English (Theater track)</td>
<td>All Liberal Arts Majors*</td>
<td>Fine &amp; Performing Arts</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*All (AA) programs are also Commonwealth Transfer Compact eligible

*Except the following: Aviation Science, Education, Social Work, Athletic Training
**Acceptance to Art & Music majors require portfolio review or audition
*Except Arts

*Except Arts

*Students would apply to a Liberal Arts degree program and apply for teacher certification programs
**All Majors except Art

*Acceptance to the Art major requires additional interview or portfolio review
**All Majors except Art

*Except Majors: Education, Psychology, Sociology, Mass Comm, Criminal Justice, & Movement Science

*English (writing concentration)

**Must have a 2.50 GPA & have passed RN License Exam

Mass Maritime & Mass College of Art are not participating in this program at the present time.
## Commonwealth of Massachusetts Transfer Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>What do I need to do?</th>
<th>What will I get out of it?</th>
</tr>
</thead>
</table>
| **COMMONWEALTH TRANSFER COMPACT *\** | • Enroll in and graduate with an Associate in Arts degree from BHCC.  
• Complete at least 35 credits of General Education courses.  
• Achieve a cumulative G.P.A of 2.00 or greater (exclusive of developmental courses). | • When accepted to a four-year Massachusetts public college or university, you will:  
• transfer a minimum of 60 credits for most majors. |
| **JOINT ADMISSIONS** | • Enroll in and graduate with an approved associate degree from BHCC.  
• Ask about the Joint Admissions Program in the BHCC Admissions  
The College encourages you to inquire during your first semester.  
• Make sure the program at BHCC and your selected four-year college or university program are approved for Joint Admissions.  
• Fill out an “Intent to Enroll” form.  
• Earn a degree from BHCC with a cumulative GPA of 2.50 or greater (exclusive of developmental courses). | • You will receive:  
• guaranteed admission to a participating four-year institution.  
• exemption from submitting an application for admission. |
| **TUITION ADVANTAGE PROGRAM (TAP)** | • Earn an associate degree in a designated Joint Admissions Program.  
• Earn a degree from BHCC with a cumulative GPA of 3.00 or greater (exclusive of developmental courses).  
• Matriculate into an approved Joint Admissions Program at a participating college/university within one calendar year after graduating from BHCC.  
• Continue achieving a 3.00 cumulative GPA for the first two semesters in order to be eligible for continuing tuition assistance. | • You will receive:  
• a tuition reduction equal to 33 percent of Massachusetts resident tuition at a participating Massachusetts state college or university for two academic years only, regardless of how long it takes to complete the degree. |

* See page 33 for information about the Commonwealth Transfer Compact.
Suffolk University Joint Admissions Program

Bunker Hill Community College and Suffolk University participate in a Joint Admissions Agreement modeled after the Commonwealth’s Joint Admissions Programs. Through this program, participating students are guaranteed admission to Suffolk University’s College of Liberal Arts and Sciences or Sawyer School of Management. In order to be eligible, students must graduate with a cumulative grade point average of 2.50 or higher from an approved Bunker Hill Community College academic program. Similar to the Commonwealth’s programs, students receive specialized individual advising and support while studying at Bunker Hill Community College.

Partnership Agreements with Secondary Schools

Kids to College

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

Massachusetts Educational Opportunity Program (MEOP)

The Massachusetts Educational Opportunity Program (MEOP) at Bunker Hill Community College offers a broad range of after-school enrichment activities to highly motivated high school students of demonstrated academic and economic need. Student participants are recruited from Madison Park Technical Vocational, Charlestown, Muriel Snowden, John D. O’Bryant and Somerville high schools.

The MEOP staff designs and implements a student-centered curriculum with hands-on coursework in a variety of subject areas including career exploration, college preparation, essay writing, information literacy, public speaking, cultural awareness, team building activities and community service. Field trips to local colleges and museums supplement classroom activities. For more information, call the MEOP office at 617-228-2063.

Articulation Agreements through Tech Prep

In order to assist students in making a smooth transition from high school to college and to prepare students to enter an increasingly competitive workforce, Bunker Hill Community College participates in the Tech Prep Program as a member of the Metro Boston Tech Prep Consortium. Tech Prep is a federally-funded initiative of the Carl D. Perkins Vocational-Technical Education Act Amendments of 1998. As part of the Tech Prep Program, the College has entered into particular articulation agreements with area high schools. These agreements allow qualified students who have attained a high level of academic achievement in their high school course work to earn college credit. The College grants articulated credit for specific high school coursework for Tech Prep students in the following subject areas: accounting, allied health, business administration, computer information technology, culinary arts, early childhood development, graphic arts, hotel restaurant management, media technology, office administration and travel management.

Tech Prep also sponsors a variety of activities that encourage students to continue their pursuit of a college education. These activities include visits to business and industry in related career fields, as well as conferences and workshops for students in engineering, healthcare, business and information technology. Participating Tech Prep member high schools include Brightton, Brookline, Charlestown, East Boston, Hyde Park, Jeremiah Burke, Madison Park Technical Vocational, Malden, Medford Technical Vocational, Noonan Business Academy, Rindge School of Technical Arts, Somerville, South Boston and West Roxbury. Tech Prep students who are interested in obtaining articulated credit are advised to contact their high school guidance counselor or the Tech Prep Coordinator, room B226, Charlestown Campus or to call 617-228-2339.
Cost of Attendance

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

Application Fee (paid once with the initial application; nonrefundable)
- Massachusetts Residents ....................................................... $10.00
- Non-Residents ........................................................................ $35.00

Tuition and Fees
- Massachusetts Residents (MA) ........................................ $106.00/credit per credit: $24 tuition/$82 fees
- Non-Massachusetts Residents and International Students ............................................. $312.00/credit per credit: $230 tuition/$82 fees
- The New England Regional Student Program ........................ $118.00/credit per credit: $36 tuition/$82 fees
  (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)
- Health Course Fee............................................................. $35.00/credit
- Health Insurance Fees:*
  - Fall Semester ................................................................. $833.00
  - Spring Semester ............................................................ $558.00
  * Massachusetts state law requires that all students taking nine or more credits in fall semester or nine or more credits in spring semester have medical insurance. There are no exceptions.
- Liability Insurance Fee ...................................................... $15.00
- Parking Permit Fee ............................................................ $30.00
- Photo ID Replacement Fee ................................................ $15.00
- Returned Check Fee ........................................................... $25.00
- Transcript Fee ................................................................. $5.00/transcript
- Refund Check Replacement Fee ........................................... $20.00

Student Comprehensive Health Insurance Plan
Chapter 23 of the Massachusetts Acts of 1988 requires that all students registered for nine or more credit hours must participate in a comprehensive health insurance plan unless they certify that they are participating in a health insurance plan with comparable coverage. If a student has comparable coverage and wishes to waive participation in the Massachusetts Community Colleges insurance plan, the student must submit waiver information via the Internet by the due date that appears on the registration statement or at the time of registration. Students may access the waiver form online at www.universityhealthplans.com. The College has set up dedicated computer stations in the Main Lobby of the Charlestown Campus for students without Internet access. MassHealth qualifies as comparable coverage, however, free care that is provided by hospitals and community health centers to low-income uninsured and underinsured people is not insurance and does not qualify.

All students carrying nine or more credit hours in the fall or nine or more credit hours in the spring must comply. Classes offered in the Center for Self-Directed Learning or during mini sessions are considered part of the long semester for purposes of determining health insurance requirements. Students are not required to have health insurance coverage during the summer term. In addition, students who participate in the plan may purchase coverage for dependents from the insurance company. Students enrolled for fewer than nine credit hours may apply for health insurance
coverage directly to University Health Plans, Inc. Overseas health plans, travel, and accident insurance plans are deemed not comparable or accessible; therefore, all international students must participate in the College health insurance program. Consult the Division of Health Care Finance & Policy at 1-800-609-7232 for more information.

**Special Cost Courses**

Students enrolled in health career program courses with prefixes AHE, DMS, EMT, MIG, NUR, RTH, SGT, SON, VSN, and students enrolled in CIT141 and CIT241 must pay an additional fee of $35 per credit hour. Students should contact the Student Payment Office or the Enrollment Services Center for more information.

**Residency Tuition**

Students registering for classes at Bunker Hill Community College, who are claiming entitlement to in-state tuition, must complete an “Application for Massachusetts In-state Tuition” form. Students must show proof that they have lived in the state of Massachusetts for a period of six months prior to the first day of class of the given semester. 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 Enrollment Services Center at 617-228-2422.

**Payment**

At the time of registration, students receive a registration statement 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 monthly 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 in cash, by personal check, money order, travelers' checks, VISA, MasterCard, or Discover.

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, Charlestown Campus. 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 also available for fall and spring semesters excluding the summer and mini sessions. You may sign up on the payment plan by logging on to www.tuitionpay.com For specific information about the payment plan, contact the Student Payment Office at 617-228-2150.
Refund Policies

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’s Office is located in the Student Payment Office, room B219, Charlestown Campus.

Bunker Hill Community College is responsible for making “diligent efforts” to collect amounts due the state. Diligent efforts shall include written billings, dunning notices and subsequent assignments to a collection agency. The student is responsible for all collection costs and any fees incurred in the collection of debt and for informing the College of any dispute regarding the debt. The College advises students that their debts may be discharged through the intercept of any other Commonwealth payments that are due to them or scheduled to be paid to them.

Refund Policy
Students dropping or withdrawing from classes must complete the appropriate form available in the Enrollment Services Center. Failure to withdraw officially 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 outlined in this catalog applies only when proper withdrawal or class drop procedures, as established by the Enrollment Services Center, are followed. Application fees are nonrefundable. Lack of attendance or course abandonment does not constitute a drop or withdrawal.

Through the schedule adjustment (add/drop) period, 100 percent of tuition and fees are refunded. After the schedule adjustment (add/drop) period, no tuition or fees are refunded. Please note that Telecourses, Center for Self-Directed Learning and Home Study/External Studies courses have a five-day schedule adjustment period, beginning on the date of registration. Consult the Enrollment Services Center or the Student Payment Office for details.

Health Insurance Refund Policy
Except for medical withdrawal due to covered injury or sickness, students withdrawing from the College during the first 31 days of the period for which coverage is purchased shall not be covered under the policy and a full refund of the premium will be made. Students withdrawing after 31 days will remain covered under the policy for which the premium was paid and no refund will be allowed. Students who do not withdraw completely, but who drop below nine credit hours within the first 31 days, may apply to the Student Payment Office for a refund of health insurance premiums. Registering for minisemester, web courses, Telecourses, Center for Self-Directed Learning and Home Study/External Studies courses later in the fall or spring semester may restore the student’s obligation to carry health insurance.

Tuition Waivers
Several kinds of tuition waivers are available to Bunker Hill Community College students. These waivers include, but are not limited to, National Guard, veterans, senior citizens, Native Americans, state employees and wards of the state. In order to receive a tuition discount, students must present the waiver at the time of registration. If students present the waiver after registration, the College will make no adjustment. The Commonwealth of Massachusetts does not fund all courses; therefore, the use of certain waivers for those unfunded courses will be restricted. Students eligible for waivers should obtain clarification from the Enrollment Services Center before making course selections.

Veterans’ Benefits
Students who wish to apply for Veterans’ Affairs benefits must submit their DD-214 to the Enrollment Services Center, room B205, Charlestown Campus. Students receiving VA benefits are required to attend classes regularly and maintain satisfactory academic progress.
Financial Aid

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

General Eligibility Requirements

In order to be eligible for financial aid, applicants must be United States citizens or eligible non-citizens, possess valid social security numbers, be enrolled in or accepted for enrollment in an eligible academic program and working toward a degree or certificate. Additionally, applicants must maintain satisfactory academic progress (see Satisfactory Academic Progress listed under Academic Policies and Procedures), comply with Federal Selective Service Law and not be in default on any educational loans or owe a refund on any federal grants or loans to any institution. Students who have previously obtained a bachelor’s degree or equivalent at any U.S. or foreign institution are not eligible for financial aid grants, but may be eligible for loans. It is important to know that students may lose their financial aid eligibility if they have attempted 150 percent of the credits needed for a certificate or a degree.

The College strongly advises students to consult with the Financial Aid Office if they are contemplating a change in enrollment status.

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 their attempted credits for a semester, the federal regulations require that the College assume they 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.
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 http://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 if they have any questions about this process.

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).
- Federal Subsidized Family Federal Educational Loan (FFEL).
- Federal Unsubsidized Family Federal Education Loan (FFEL).
- 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 FFEL.
2. Subsidized FFEL.
3. FFEL PLUS.
5. Federal SEOG Program.
6. Other Title IV programs.
7. Other state, private, and institutional aid.
8. The student.

Bunker Hill Community College will return any funds necessary to Title IV based upon the calculation. Based upon the return of Title IV Funds calculation, students are responsible to repay to the Title IV or state programs any funds that were disbursed directly to them and for which the student was determined to be ineligible.

The procedures and policies listed above supersede those published previously and are subject to change. Please contact the Financial Aid Office if you have any questions about the policy.

Priority Deadlines for Financial Aid

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

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

Appeals Process for Financial Reasons

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

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

<table>
<thead>
<tr>
<th>CREDITS ATTEMPTED</th>
<th>CUMULATIVE GRADE POINT AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 12</td>
<td>no minimum</td>
</tr>
<tr>
<td>12-30</td>
<td>1.79</td>
</tr>
<tr>
<td>More than 30</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Appeals Process for Academic Progress

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

Grants

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

Home Study Courses

Students enrolled in only Home Study courses are considered to be no more than half-time students and can receive no more than 50 percent of their financial aid award, even if they are enrolled in enough coursework to be full-time.

Employment

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

Withdrawal/Graduation

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

Alternative Financing

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

Individual Assistance

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

Academic Excellence Award for Continuing Students
Maximum of five (5) awards for Spring 2008 and a maximum of five (5) awards for Fall 2009.
Eligibility Criteria: Awarded to continuing BHCC students who have earned at least 15 credits at BHCC, achieved a cumulative GPA of 3.75 or higher, and will be enrolled full-time (12 or more credits) for the semester for which the award is granted.
Amount: In-state tuition only for one semester.
Application Deadline: November 30, 2007 for the Spring 2008 semester; March 7, 2008 for the Fall 2008 semester.

Binns/Fleites Scholarship
Eligibility Criteria: Continuing BHCC student who is a participant in the Student Success Program, who has completed at least 15 credits at BHCC, and has achieved a cumulative GPA of 3.00 or higher.
Amount: In-state tuition and fees (up to 12 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.
Application Deadline: March 7, 2008.

Frank J. Bellairs Memorial Scholarship
Eligibility Criteria: New Culinary Arts student who is enrolled in a minimum of two (2) courses for the Fall 2007 semester. Preference will be given to students who entered BHCC with a GED, or to non-traditional or adult learners.
Amount: $250 for the Fall 2007 semester. Scholarship is renewable for the Spring 2008 semester if the student maintains eligibility requirements and a cumulative GPA of 2.00 or higher. Scholarship must be used to purchase the necessary supplies and uniforms required by a student in the program and cannot be used toward tuition and fees.
Application Available: Contact the Department Chair of the Hotel/Restaurant/Travel Program.

Brandy R. Bonney Memorial Scholarship
Eligibility Criteria: One graduating senior from Somerville High School nominated by their 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 (B) or higher at the close of the high school academic year; 4.) be an active member of their high school and community.
Amount: In-state tuition and fees (up to 12 credits) for the Fall 2008 semester. Scholarship is renew for the spring 2009 semester if the student maintains eligibility requirements.
This scholarship is funded by the Bunker Hill Community College Foundation, Inc. and Bunker Hill Community College.
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 30, 2008.

Students applying for the following scholarships/awards for the 2008-2009 academic year must be matriculated and enrolled full-time (12 credits or more) at BHCC at the time of application, unless otherwise noted in the scholarship eligibility criteria; attend BHCC during the Fall 2008 semester; have no In-Progress (IP) grades at the time of the scholarship application deadline; and have earned the minimum number of credits and/or cumulative GPA as specified for each scholarship. When scholarship eligibility criteria require a minimum number of credits or grade point average earned, only college-level courses (numbered 100 and above) taken at Bunker Hill Community College and applicable toward a degree or certificate program will be considered unless otherwise noted in the scholarship eligibility requirements. Students may obtain scholarship applications at the Financial Aid Office, Room B213, Charlestown Campus. On the Chelsea Campus, students may obtain scholarship applications at the Front Desk in the Main Lobby.
Deputy Warden John A. Blaney Memorial Scholarship
Eligibility Criteria: Continuing BHCC second semester Criminal Justice student who has achieved a cumulative GPA of 3.50 or higher and intends to complete the A.S. degree in Criminal Justice.
Amount: $1,000 for the Fall 2008 semester.
Application Deadline: March 7, 2008.

Boston Sand & Gravel Company Scholarship
Eligibility Criteria: Awarded to two (2) continuing BHCC students with a cumulative GPA of 3.00 or higher who exemplify the institutional values of the College (see page 8), dedication to their field of study, and intend to complete either an A.S. or A.A. degree at BHCC.
Amount: In-state tuition and fees (up to 12 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.
Application Deadline: March 7, 2008.

BHCC/Charlestown Resident Scholarship
Eligibility Criteria: New or continuing BHCC student who is a resident of Charlestown, MA, who has demonstrated outstanding service to the Charlestown community and is an active member of the community; continuing students must have a cumulative GPA of 2.0 or higher. Applicants must submit two (2) letters of recommendation from individuals familiar with the applicant's achievements. As a condition of eligibility, the recipient must be available to attend the Bunker Hill Pre-Parade Breakfast held in June 2008 for the presentation of the scholarship.
Amount: In-state tuition and fees (up to 12 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.
Application Deadline: March 7, 2008.

BHCC/Charlestown Housing Development Award
Eligibility Criteria: New or continuing BHCC student who is a resident of Charlestown, MA, who has demonstrated outstanding service to the Charlestown community and is an active member of the community; continuing students must have a cumulative GPA of 2.0 or higher. Applicants must submit two (2) letters of recommendation from individuals familiar with the applicant's achievements. As a condition of eligibility, the recipient must be available to attend the Bunker Hill Pre-Parade Breakfast held in June 2008 for the presentation of the scholarship.
Amount: In-state tuition and fees (up to 12 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.
Application Deadline: March 7, 2008.

BHCC/Chelsea Resident Scholarship
Eligibility Criteria: Continuing BHCC student who is a resident of Chelsea, MA, who has completed at least 15 credits at BHCC, and has achieved a cumulative GPA of 2.00 or higher.
Amount: The scholarship is for in-state tuition and fees (up to 12 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.
Application Deadline: March 7, 2008.

BHCC Foundation Grant
Eligibility Criteria: Grant is awarded to two (2) new or continuing BHCC students, one nominated by Mandela Health Spot and the other 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 2008, a letter and nomination form will be sent to the Executive Director of each organization from the President of BHCC requesting a nomination for the following academic year. Grant recipients may be eligible for re-nomination the following year while they continue their degree or certificate program requirements at BHCC if they meet grant criteria.
Amount: In-state tuition only (up to 12 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements. This grant is funded by the Bunker Hill Community College Foundation, Inc.

BHCC Commonwealth Honors Program Scholarships
Continuing Commonwealth Honors Program Students
Eligibility Criteria: Continuing Commonwealth Honors Program student enrolled in the Commonwealth Honors Program within the current year. Student must demonstrate academic excellence and evidence of completion of Honors Program Contracts. Applicants, in a 500-word essay, must address the following topic: Select one of the Honors Contracts you have completed and discuss briefly how you would extend or further investigate the topic. Applications will be reviewed by members of the BHCC Commonwealth Honors Program Committee, using the applicant's contributions to the Honors Program as part of their selection criteria.

Graduating Commonwealth Honors Program Students
Eligibility Criteria: Graduating Commonwealth Honors Program students who have completed the Commonwealth Honors Program and have been accepted by and plan 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. 2. If you were to join the Commonwealth Honors Program, explain how that student would benefit from the program and include how you have benefited from the Commonwealth Honors Program. Applications will be reviewed by members of the BHCC Commonwealth Honors Program Committee, using the applicant's contributions to the Honors Program as a criterion for their selection.
Amount per Scholarship: $500.
Application Available: Contact the faculty directors of Commonwealth Honors Programs.

BHCC Memorial Scholarship
Eligibility Criteria: Continuing BHCC student who is enrolled part-time (between 6 and 11 credits) for Spring 2008 and has completed at least 15 credits at BHCC with a cumulative GPA of 3.00 or higher and will be enrolled part-time (between 6 and 11 credits) for the Fall 2008 semester.
Amount: The scholarship is for in-state tuition and fees (up to 11 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.
Application Deadline: March 7, 2008

English as a Second Language Award for Continuing Students
Eligibility Criteria: Awarded to two (2) Continuing BHCC students with a cumulative GPA of 3.0 or higher who are matriculated in an associate degree program and have completed at least 6 credits of ESL at BHCC. Must be enrolled for at least 6 credits in ESL for the Spring 2008 semester and will be enrolled for at least 6 credits for the Fall 2008 semester.
Amount: The scholarship is for in-state tuition and fees (up to 6 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.
Application Deadline: March 7, 2008.
Scholarships and Awards

**Michael D. Hurley, Jr. Memorial Scholarship**

**Eligibility Criteria:** Awarded to two (2) continuing BHCC students with a cumulative GPA of 3.00 or higher. Priority will be given to Criminal Justice majors.

**Amount:** Two (2) scholarships for the Fall 2008 semester: one for $500 and one for $250. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.

**Application Deadline:** March 7, 2008.

**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 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.

**Application Deadline:** March 7, 2008.

**Thomas F. Kershaw Scholarship**

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

**Amount:** $100 for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.

**Application Deadline:** March 7, 2008.

**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. Must be enrolled in an A.S. or A.A. degree program that is approved for Joint Admissions with the Massachusetts State Colleges and the University of Massachusetts (see pages 19 and 20).

**Amount:** $250 for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.

**Application Deadline:** March 7, 2008.

**Marguerite I. Munster Memorial Scholarship**

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

**Amount:** $500.

**Application Available:** Contact the Nurse Education Department Chair, room B137C.

**Application Deadline:** November 23, 2007.

**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 36 credit hours at BHCC (includes all credits earned at BHCC and current Spring 2008 credits) and have earned a cumulative GPA of 3.50 or higher. Applicants, in an essay of no more than 300 words, must indicate how they have contributed to the institutional values of the BHCC community (see page 8) and must also outline their career goals. Applicants will need to submit three (3) letters of recommendation (two of which must be from BHCC faculty), which speak to the applicant’s commitment to their course 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 2008 semester and is renewable for the Spring 2009 semester if the student maintains eligibility requirements.

**Application Available:** Dean of Student Affairs, room B-308 and Student Activities and Athletics, room D106 on the Charlestown Campus.

**Application Deadline:** March 7, 2008.

**President’s High School Scholarship**


**Eligibility Criteria:** One graduating senior from each of the high schools listed above, nominated by their high school principal/headmaster (or designee) are 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 (B) or higher at the close of the high school academic year; 4.) be an active member of their high school and community.

**Amount:** In-state tuition and fees (up to 12 credits) for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements. This scholarship is funded by the Bunker Hill Community College Foundation, Inc. and Bunker Hill Community College.

**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 30, 2008.

**President’s Leadership Award**

Eligibility Criteria: December 2007 BHCC graduate or June 2008 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 2007 semester.

**Amount:** $1,000.

**Application Available:** Dean of Student Affairs, room B-308 and Student Activities and Athletics, room D106 on the Charlestown Campus.

**Application Deadline:** April 4, 2008.

**Refrigeration Service Engineers Society (RSES) Scholarship**

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

**Amount:** $250 for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.

**Application Deadline:** March 7, 2008.

**Rosann Sperduto ’88 Memorial Scholarship**

Eligibility Criteria: A female December 2007 BHCC graduate, or a female graduating BHCC in June 2008 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 2008 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 4, 2008.

**James R. Ware Stop & Shop Scholarship**

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

**Amount:** $250 for the Fall 2008 semester. Scholarship is renewable for the Spring 2009 semester if the student maintains eligibility requirements.

**Application Deadline:** March 7, 2008.

**Study Abroad Scholarships**

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

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

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

**Application Deadline:** November 1, 2007.

**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 2008 credits) and earned a cumulative GPA of 2.50 or higher. Applicants, in an essay of no more than 300 words, must indicate specifically how they have contributed to the institutional values of the BHCC community (see page 8) and/or communities in which they are involved. Applicants will need to 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 2008 semester and is renewable for the Spring 2009 semester if the student maintains eligibility requirements.

**Application Available:** Office of the Dean of Student Affairs, room B-308 and Student Activities and Athletics, room D106 on the Charlestown Campus.

**Application Deadline:** Application Deadline: March 7, 2008.
Academic Information

Academic Advising

Academic advisors are available for all BHCC students. The advisor’s role is to provide a variety of services to assist students in achieving their academic, vocational and personal goals. These services include interpretation of assessment scores and selection of a program of study, course placement, course selection, and registration. Advisors also assist students with a variety of issues and concerns affecting their educational success. Depending on academic status, a student may be assigned to a specific full-time faculty or professional staff member, or they may be assigned to the Advising/Counseling Center.

Degree-seeking students will receive notification of their assigned advisors or assignment to the Advising/Counseling Center by mail. Non-degree-seeking students are assigned to the Advising/Counseling Center.

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 e-mail. For students assigned to the Advising/Counseling Center, advising is offered on a walk-in basis and students are free to meet with any of the advising staff. The Advising/Counseling Center is located on the Charlestown Campus in room B109. For more information, call 617-228-2230. Advising is also available on the Chelsea Campus; please call 617-228-2101 for more information. In addition, questions about advising can be sent to onlineadvising@bhcc.mass.edu.

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. 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 is located in room B118, Charlestown Campus.

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

Course Objectives and Requirements

At the beginning of each course, the instructor distributes a syllabus to inform students of course objectives, individual grading and attendance policies and other information related to the course, including field trips, internships or other special requirements.

Study Abroad Opportunities

The International Center assists BHCC students in integrating study abroad experiences into their academic programs. Students study in a variety of countries for periods ranging from ten days to eight weeks. The Center provides scholarship and financial aid information. For more information, visit the International Center, room E236, Charlestown Campus.
**Graduation Information**

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

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

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

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

**Transfer and Articulation Information for Baccalaureate Programs**

Bunker Hill Community College strives to ease the process by which our graduates transfer to four-year colleges and universities. As part of this goal, the College worked with four-year colleges and universities to develop formal and informal transfer agreements. The agreements were individually developed with the receiving institution and, as a consequence, are unique and are designed to provide information about the transferability of BHCC courses to the receiving institutions. The chart that follows provides an overview of our current agreements. Contact the Transfer Counselor, Admissions Office, room B202, Charlestown Campus or call 617-228-2299 for assistance in planning for transfer and in interpreting transfer agreements, as well as for a complete description of guarantees, requirements, benefits and limitations of the agreements.

**Commonwealth Transfer Compact**

The Commonwealth Transfer Compact is an articulation agreement between the community colleges and all four-year state colleges and universities in Massachusetts. It assists community college students to transfer to upper-division colleges with minimal loss of associate degree credit. The Board of Higher Education approved the current Compact, effective January 1990.

Students are eligible for Transfer Compact status if they meet the following requirements:

1. Complete an associate degree with a minimum of 60 credit hours, exclusive of developmental courses,
2. Achieve a cumulative grade point average of 2.00 (in a 4.0 system) or better at the community college awarding the degree,
3. Complete the following minimum general education core, exclusive of developmental courses:
   - English composition/writing: six credit hours.
   - Behavioral and social science: nine credit hours.
   - Humanities and fine arts: nine credit hours.
   - Natural and physical science: eight credit hours.
   - Mathematics: three credit hours.

The College reviews each graduate’s transcript for certification under the Transfer Compact. If the graduate is eligible, the Commonwealth Transfer Compact is noted on the transcript.

**Early Childhood Education Transfer Compact**

The statewide Early Childhood Education Transfer Compact enables students to transfer associate degree credit from Early Childhood Education programs to the same programs at specific four-year state colleges and the University of Massachusetts. Complete Early Childhood Education Transfer Compact information can be found at the Massachusetts Board of Higher Education’s website, www.mass.edu, under the Statewide Education Transfer Compacts link. Students seeking Compact status should review the Compact carefully with a Transfer Counselor in the Admissions Office, room B202, to make sure that the courses selected meet transfer requirements.
# Articulation Agreements between Bunker Hill Community College and Other Academic Institutions

## ASSOCIATE IN ARTS:

### A.A. Business
Bentley College; Northeastern University; Regis College - Center for Graduate and Continuing Studies; Salem State College; Suffolk University; Sawyer School of Management - Accounting, Computer Information Systems, Entrepreneurship, Finance, Interdisciplinary Business Studies, Management, Marketing

### A.A. Education
Salem State College

### A.A. General Concentration
Bentley College; Bridgewater State College - Liberal Arts/Elementary Education; Suffolk University, College of Liberal Arts and Sciences

### A.A. Psychology
Suffolk University, College of Liberal Arts and Sciences - Psychology

### A.A. Sociology
Suffolk University, College of Liberal Arts and Sciences - Sociology

## ASSOCIATE IN SCIENCE:

### A.S. Biological Sciences
University of Massachusetts Amherst - Biology; University of Massachusetts Boston - Biology; University of Massachusetts Lowell - Biology

### A.S. Business Administration: Accounting Option
Bentley College; Northeastern University; Regis College - Center for Graduate and Continuing Studies; Salem State College; Suffolk University; Sawyer School of Management - Accounting

### A.S. Business Administration: Finance Option
Bentley College; Northeastern University; Regis College - Center for Graduate and Continuing Studies; Suffolk University; Sawyer School of Management - Accounting, Computer Information Systems, Finance, Management, Marketing, Business Administration

### A.S. Business Administration: International Business Option
Regis College - Center for Graduate and Continuing Studies; Salem State College; Suffolk University; Sawyer School of Management - Accounting, Computer Information Systems, Finance, Management, Marketing, Business Administration

### A.S. Business Administration: Management Option
Northeastern University; Regis College - Center for Graduate and Continuing Studies; Salem State College; Suffolk University Sawyer School of Management - Accounting, Computer Information Systems, Finance, Management, Marketing, Business Administration

### A.S. Criminal Justice
Salem State College; Springfield College; Suffolk University - College of Liberal Arts and Science - Sociology/Criminology and Law

### A.S. Early Childhood Education
Springfield College

### A.S. Human Services
Springfield College

### A.S. Nursing
Salem State College; University of Massachusetts Lowell - School of Health and Environment
Bunker Hill Community College is committed to providing effective and dynamic instructional, academic and student support services through a variety of traditional and multidimensional resources. The College philosophy is that each student is a unique learner and that academic resources and support services should strive to meet the individual needs of all students.

The Library and Information Center
The Library and Information Center delivers services crucial for student success, including information literacy instruction, quality resource selection and an academic learning atmosphere. The library web page at http://www.noblenet.org/bhcc/ serves as an information gateway and extends library services with links to an online catalog, a directory of high-quality research websites and to numerous full-text and citation subscription databases accessible from off-campus. The 67,000-volume print collection, which includes books, magazines, newspapers and journals, is augmented by resources available through the library’s memberships in NOBLE, NELINET, Boston Regional Library System and OCLC. Consistent with the Library’s on-campus services, the needs of distance and nontraditional learners are also addressed with carefully selected online resources, which offer in-context instruction customized to the curriculum. To maximize use of library resources, information literacy workshops as well as one-on-one instruction sessions are available throughout the calendar year. The BHCC photo identification card serves as the Library card. The library is open year-round. Its regular academic schedule is Monday through Friday, 8 a.m. - 9 p.m. and Saturday and Sunday, 8:30 a.m. - 4:30 p.m.

The Tutoring and Academic Support Center (TASC)
The Tutoring and Academic Support Center supports and enhances student learning and academic success by offering a variety of traditional and nontraditional services to all Bunker Hill Community College students. The TASC Centers offer tutorial assistance, small group workshops, and academic mentoring to students enrolled in credit-bearing courses. Students are offered a wide range of services to support their work on basic academic skills as well as on course-specific work in their programs. Students may register for weekly, individual, and group appointments. These services are offered in a student-centered atmosphere.

Charlestown TASC. Major areas of concentration on the Charlestown Campus are: English and Writing, English as a Second Language, Mathematics (from Basic Mathematics to Advanced Calculus and Physics), Computer courses, Science courses, Business courses, Behavioral Science, Literature, History, Human Services and Early Childhood Education. The Charlestown TASC also offers a range of multimedia software for practice and review in mathematics, reading, writing, ESL, and science. Students may utilize these services during the Center’s regularly scheduled hours. The Charlestown Campus Tutoring and Academic Support Center is located in E174. The Center is open during the fall and spring semesters Monday through Thursday 8:30 a.m. - 8:00 p.m., and Friday through Sunday from 8:30 a.m. - 4:30 p.m. During the summer, tutoring hours are Monday through Thursday 10:00 a.m. - 6:00 p.m. For more information, contact the Center at 617-228-3467 or at tasc@bhcc.mass.edu.

Chelsea TASC. Students may drop-in for group and individual tutoring or register for by-appointment tutoring sessions. The Chelsea – TASC offers tutoring in Mathematics from 090-195, Biology from 101-205, Chemistry, Physics, Reading, English, English as a Second Language, Medical Terminology and Surgical Technology. It also makes available to students the use of state-of-the-art multimedia computers, educational software, a photocopier, and a quiet study area. The Chelsea Campus Tutoring and Academic Support Center is located on the second floor of the Chelsea Campus in Room 202. During the fall and spring semesters the Center is open Monday - Thursday, 8 a.m. - 9 p.m.; Friday 10 a.m. - 6 p.m.; and Saturday 10 a.m. - 3 p.m. For additional information regarding these services, contact the Center at 617-228-3356.
Technology Support/Academic Computing

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

Charlestown Campus. The Charlestown Computing Center is located on the first floor, D-Building and consists of 11 specialized classrooms and an open laboratory for student classroom instruction and an open laboratory area to use on a first-come, first-served basis. The Visual Media Arts Center (VMAC) is located on the first floor of the E-Building and features Macintosh computer rooms E159-E171. From September through May, the Charlestown Computing Center is open Monday through Thursday, 7 a.m. - 10 p.m.; Friday, 8:30 a.m. - 5 p.m. and Saturday, 8 a.m. - 2 p.m. The VMAC is open Monday through Thursday, 8 a.m. - 9 p.m.; Friday, 8 a.m. - 4 p.m. and Saturday, 8 a.m. - 3 p.m. The Centers are closed during semester breaks, with the exception of spring break, when hours and access are limited. For limited schedule information, see the posted schedule or ask a staff member for help. During June, July and August, the Charlestown Computing Center is open Monday through Thursday, 7:30 a.m. - 10 p.m. and Friday, 8:30 a.m. - 5 p.m.

Chelsea Campus. Chelsea’s computer facilities consist of two specialized computer classrooms, a resource room and an open laboratory. These facilities support students’ needs with applications consistent between campuses. From September through May, the computer laboratory is open Monday through Thursday, 9 a.m. - 9 p.m.; Friday, 8 a.m. - 4 p.m. and Saturday, 9 a.m. - 2 p.m. During all semester breaks, access is limited. Hours of operation for these periods will be posted. During June, July and August the computer laboratory is open Monday through Thursday, 9 a.m. - 9 p.m. and Friday, 8 a.m. - 4 p.m.

The Student Success Program

The Student Success Program provides a comprehensive program of academic and student support services designed to help students achieve their educational goals at Bunker Hill Community College and to transfer to four-year colleges or universities. The program provides the following services: academic counseling, peer tutoring, a counseling/mentor program, cultural enrichment events and college transfer tours. It also provides workshops on a variety of topics focusing on learning strategies, life management skills, career planning skills and the college transfer process. To qualify for these services, students must apply and be selected to participate. They must demonstrate an academic need and meet one or more of the following criteria: first generation college student, low-income student or student with a documented disability. The United States Department of Education, TRIO Student Support Services Grant funds the Student Success Program. For more information, contact the Student Success Program Office, room E226A, Charlestown Campus, or call 617-228-2303.

The College Connection

The College Connection is a pilot academic and advising support service available to students enrolled in the daytime RDG090 classes. Each of these classes has a dedicated tutor-advisor who visits the class on a regular basis, provides individualized reading tutoring, follows up with absent students, connects students to appropriate college resources, and provides advising services. A literacy specialist is also available to provide academic support to students who have significant reading difficulties. The goal of the initiative is to improve the retention, pass rates, and reading levels of students enrolled in developmental reading classes, as well as to prepare students to meet college expectations.

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 E-142, is open during the fall and spring semesters, Monday through Fridays. Hours may vary from semester to semester, depending on tutor availability. Students may be referred to the Writing Place by their instructors and are encouraged to schedule weekly sessions with a tutor by contacting the Writing Place at 617-228-3244.

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

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

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

The Transitions to College Program offers courses for students who have received their high school diploma in their native country and have the English language proficiency or GED and plan to attend college. The Transition to College courses are offered at the Charlestown Campus in the evening include: Transitions Math, Transitions Writing & Reading and the Transitions to College seminar. In addition, the ABE & Transitions to College program offers a variety of support services to assist students in achieving academic success: tutoring, career counseling and job skills counseling. The Massachusetts Department of Education funds the ABE & Transitions to College program. For more information, call the ABE & Transitions to College Office at 617-228-2108.

**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, home study correspondence courses, 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.

BHCC is a member of Massachusetts Colleges Online (MCO), a consortium of the 24 community and state colleges. The institutions have formed this partnership to extend convenient and flexible online courses and programs with students throughout the state and beyond. Students are encouraged to explore the 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 onlinadvising@bhcc.mass.edu for verification.

**The Center for Self-Directed Learning**

Students may enroll in college credit courses available through the Center for Self-Directed Learning (CSDL). Students have the flexibility to make their own schedules, progress at their own pace and complete assignments and tests according to their unique learning needs. The CSDL provides multimedia resources for individualized, independent instruction under the supervision of professional learning specialists. The instructional media materials include a wide range of DVDs, videotapes, CDs and innovative computer-assisted instruction. Regardless of the medium, students are always active participants in the learning process, solving problems, answering questions and developing skills. In order to ensure that effective learning takes place, student progress is evaluated on a continuous basis. Course facilitators and tutors are available to assist students at all times during the scheduled hours of operation of the Center: Monday through Thursday, 8:30 a.m. - 9 p.m.; Friday, 8:30 a.m. - 1 p.m. and Saturday and Sunday, 8:30 a.m. - 4:30 p.m. During the summer semester, the hours of operation are Monday - Thursday, 8:30 a.m. - 9 p.m. Refer to the current course schedule booklet or the college website at www.bhcc.mass.edu for a detailed listing of course offerings. The CSDL is located in room E235, Charlestown Campus. For more information, contact the Center at 617-228-2225 or csdl@bhcc.mass.edu.

**Prior Learning Assessment Program**

The Prior Learning Assessment program (PLA) provides a process for evaluation and, when appropriate, awards academic credits for learning acquired outside the traditional college environment. In order to receive PLA credits, students must provide evidence that their prior learning is equivalent to college-level learning and it must correspond to the courses offered at BHCC. This program assists students with identifying and documenting prior learning they possess. The PLA advisor assists students in preparing portfolios and documenting credits. Specialists in each topic review completed portfolios. The credits may be used to fulfill degree or certificate requirements or may be used as electives. Students may apply a maximum of 45 PLA credits in addition to the requirements or may be used as electives.
Weekend College

The Multi-Purpose, Multi-Media Language Lab provides students with a high-tech learning environment along with knowledgeable tutoring staff to guide them with any aspect of language learning from speaking, listening, pronunciation, to reading, writing, grammar, and punctuation. The lab currently has 8 language learning software programs, 12 support staff members, and 35 partitioned workstations to ensure privacy. The objective of the Lab is to help every student improve their language skills, whatever they may be. In addition to software and tutoring, the Lab offers the following support services:

- One-hour interactive grammar and software workshops.
- English 095 and 111 practice exit exams.
- ESL 079, 089, and 099 practice exit exams.
- One-on-One drop-in tutoring sessions.
- ESL-IP course instruction and tutoring.
- TOEFL practice exams, study guides, and tutoring.
- Foreign language learning programs.
- Online website services.

Credits toward an associate degree at BHCC. For more information, visit the Prior Learning Assessment Office, room E235, Charlestown Campus, or call 617-228-2350.

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

College-Level Examination Program (CLEP). 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 exams from the series. In addition to general area examinations, such as social science, humanities and natural science, students also may select from more than 30 specific examinations. CLEP exams are administered in the ACT Center, room E224, Charlestown Campus. For more information regarding the CLEP tests, visit the Prior Learning Assessment Office, room E235, Charlestown Campus, or call 617-228-2350.

Multi-Purpose, Multi-Media Language Lab

The lab is located within the Center for Self Directed Learning in room E226. For more information about the Lab, call us at 617-228-3440 or visit our website at www.noblenet.org/bhcc/LL. Fall and Spring semester hours are Monday - Thursday, 9:00 a.m. - 9:00 p.m.; Friday, 9:00 a.m. - 1:00 p.m. and Saturday and Sunday, 9:00 a.m. - 4:30 p.m. Summer semester hours are Monday - Thursday, 9:00 a.m. - 9:00 p.m.

Distance Education at BHCC: BHCConline/Web Courses

Bunker Hill Community College offers courses online as a convenient alternative to the traditional classroom. These web courses, designated as WB, are designed for self-directed, motivated learners. The courses are equivalent in content and academic rigor to traditional classroom courses, but offer students the flexibility and convenience of learning virtually anytime or 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 online or hybrid courses, students must have a computer with Internet access. A multimedia computer with at least a 600 MHz processor, 128 MB of RAM, or a comparable Macintosh is recommended. Although a 56k connection may be adequate, broadband access is preferable. Internet Explorer 6.0, Netscape 7.x, or Mozilla Firefox 1.0x are some of accepted browsers. A recent version of Microsoft Office is also recommended.

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

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

Students must begin their online coursework during the first week of the semester and are expected to complete their course in a semester’s time. Students may access their online course(s) on the first day of classes. To receive a username and password for course access, students must complete the email verification process. Directions are available in the course schedule book, or online at www.bhcc.mass.edu/BHCConline. Questions regarding access, technical requirements and related information may be e-mailed to onlinetoolhelp@bhcc.mass.edu. Students may also call 617-228-2466 for more information.

New students are encouraged to attend one of the scheduled on-campus online course orientations or complete the online orientation demo available on the
Interactive Televised Courses
Bunker Hill Community College uses interactive television technology for live courses broadcast from a network of higher educational institutions in Massachusetts. For more information, call 617-228-2214.

Home Study/External Study
Home Study/External Study is a delivery system for self-paced, individualized instruction that offers a series of courses designed for those who cannot attend classes on a weekly basis. In these courses, designated as ES, students utilize specially-designed study packets that enable them to study in the comfort of their homes. Course requirements include weekly take-home quizzes that are mailed back to the College plus exams that must be taken on campus. Home Study courses are credit-bearing and can be applied to degree programs at Bunker Hill Community College or may be transferred to other institutions. All Home Study courses provide the same course content that students would receive in a traditional classroom setting. To receive additional information, call 617-228-2466.

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:

- Eight-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; and
- Traditional sixteen-week courses available on Friday evenings, Saturdays, and Sundays.

Weekend College Enrollment Process
Students follow the same steps to enrollment as non-Weekend College students. For more information, go to www.bhcc.mass.edu and follow the directions for steps to enrollment. Interested students may also contact an online advisor at onlineadvising@bhcc.mass.edu or call 617-228-2214 for further information.

The College offers drop-in advising services on Saturdays and Sundays during the fall and spring semesters from 8:30 a.m. - 4:00 p.m. in room B109. Call 617-228-2230 for more information. The College provides assessment testing, required for most students before they register, on weekdays, evenings and some Saturdays. The computerized placement tests (CPTs) assess the students’ skill level in mathematics, English, and reading. The College uses test results to determine students’ starting points for their programs. The College administers CPTs in the Assessment Center, room B118, Charlestown Campus. Assessment testing is available on a drop-in basis. For testing times, call 617-228-2468. Students receive a testing exemption if they provide transcripts of completed courses in math and writing.

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

Weekend College Support Services
The Library, Center for Self-Directed Learning, Tutoring and Academic Support Center, Language Lab, BHCConline Office and Advising Center provide an array of services for all students during the weekends during the fall and spring semesters. For more information, students may attend one of the scheduled weekend information sessions, drop by the Advising Center in Room B109 or email onlineadvising@bhcc.mass.edu.
Academic Policy and Procedure

Code of Behavior

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

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

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

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

Absence Due to Religious Beliefs

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

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

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

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

Approved October 8, 1985
**Attendance**

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

Students who know they will be absent for three or more consecutive class sessions because of a family emergency or personal illness should report the extended absence to the Office of the Dean of Student Affairs. The Dean will notify the faculty of the absence. Upon returning to class, students are responsible for discussing with their faculty members the completion of all course requirements. If the faculty member and student find it impossible to complete all assigned work, the student may need to withdraw from the course.

Students who attend no class meetings during the first four weeks of the semester will be withdrawn from the course and receive an NA (non-attendance) grade. The grade appears on the transcript and is counted toward credits attempted but is not computed in the grade point average. The NA grade designation is not used during the summer semester.

**Auditing a Course**

Students desiring to audit a course must obtain permission from the Registrar or the Assistant Registrar. Audit students must pay full tuition and fees. The audit request must be made at the time of registration.

**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 professor/instructor. Students may initiate grade complaints no later than 30 calendar days following the last day of the instructional period for which the grade was granted. Refer to the Bunker Hill Community College Student Handbook for more information.

**Clinical Experience Responsibilities**

Students enrolled in programs that require clinical experience must adhere to all stated objectives and course competencies including those required for the clinical experience. Students are accountable for their behavior and demeanor during all clinical experiences and must conduct themselves in a manner that is in keeping with the professional conduct expected in their fields.

The College reserves the right to suspend and/or remove students from the clinical experience whose behavior is considered inappropriate. Removal may adversely affect prospects for completing the requirements of these programs. Students so removed may appeal in writing to the Office of the Associate Dean of Academic Affairs. Students participating in clinical experiences should refer to the Criminal Offender Record Information (CORI) and the Sex Offender Registry Information (SORI) requirements listed on page 15 of this catalog.

**Course Load**

Students who carry 12 or more credit hours in a fall or spring semester or six credit hours in a summer or mini-session are full-time students. Students must enroll in a minimum of 15 credit hours per semester in order to complete an associate degree program in two years. Students who wish to carry more than 18 credits during a fall or spring semester or nine credits during a summer or mini-session must obtain written permission from 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 List**

Students completing a minimum of 12 credit hours in courses graded A, B or C with a grade point average of at least 3.00 are named to the Dean’s List, provided that no grade lower than C was earned in any course that semester. Grades lower than C include D, F, W, WA, NA and IP. For Dean’s List computation, P is not considered a letter grade. Only courses numbered 100 or higher are considered in determining eligibility for the Dean’s List.

**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 or Home Studies courses. Refer to the College’s course schedule booklet for published deadlines.

**Final Examination Schedule**

Final examinations take place during the last week of the semester. Final examination makeup time is scheduled for the last day of final exam week. Students who are scheduled for two final examinations at the same time or who have more than two exams scheduled in one day may request that they be allowed to take one of those exams during the final examination makeup time. Students who miss final examinations must notify the academic dean of their program area immediately, stating the reason. The individual faculty member makes the decision regarding makeup of final exams.
Grading and Notation System (effective January, 1990)

<table>
<thead>
<tr>
<th>GRADES AND NOTATIONS</th>
<th>DEFINITIONS OF GRADES AND NOTATIONS</th>
<th>QUALITY POINTS PER CREDIT HOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Equivalent to a numerical grade of 94 - 100</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>Equivalent to a numerical grade of 90 - 93</td>
<td>3.70</td>
</tr>
<tr>
<td>B+</td>
<td>Equivalent to a numerical grade of 87 - 89</td>
<td>3.30</td>
</tr>
<tr>
<td>B</td>
<td>Equivalent to a numerical grade of 83 - 86</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>Equivalent to a numerical grade of 80 - 82</td>
<td>2.70</td>
</tr>
<tr>
<td>C+</td>
<td>Equivalent to a numerical grade of 77 - 79</td>
<td>2.30</td>
</tr>
<tr>
<td>C</td>
<td>Equivalent to a numerical grade of 70 - 76</td>
<td>2.00</td>
</tr>
<tr>
<td>D</td>
<td>Equivalent to a numerical grade of 60 - 69</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>Equivalent to a numerical grade of 0 - 59</td>
<td>none</td>
</tr>
<tr>
<td>P</td>
<td>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.</td>
<td>none</td>
</tr>
<tr>
<td>IP</td>
<td>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 Enrollment Services Center.</td>
<td>none</td>
</tr>
<tr>
<td>AU</td>
<td>Audit; no credit earned.</td>
<td>none</td>
</tr>
<tr>
<td>NA</td>
<td>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.</td>
<td>none</td>
</tr>
<tr>
<td>W</td>
<td>Official withdrawal from a course; no credit earned.</td>
<td>none</td>
</tr>
<tr>
<td>WA</td>
<td>Administrative withdrawal from a course; no credit earned.</td>
<td>none</td>
</tr>
</tbody>
</table>

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

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

Example for determining a Cumulative Grade Point Average:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS ATTEMPTED</th>
<th>GRADE</th>
<th>QUALITY POINTS</th>
<th>QUALITY POINTS EARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG112</td>
<td>3</td>
<td>A-</td>
<td>(3.70)</td>
<td>11.10</td>
</tr>
<tr>
<td>MAT196</td>
<td>3</td>
<td>C+</td>
<td>(2.30)</td>
<td>6.90</td>
</tr>
<tr>
<td>BIO102</td>
<td>4</td>
<td>B</td>
<td>(3.00)</td>
<td>12.00</td>
</tr>
<tr>
<td>SPN201</td>
<td>3</td>
<td>F</td>
<td>(0.00)</td>
<td>0.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td></td>
<td></td>
<td>30.00</td>
</tr>
</tbody>
</table>

Cumulative Grade Point Average (C.GPA): 30 ÷ 13 = 2.31

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

**Graduation with Honors**

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

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

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

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

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

Program Changes
Students wishing to change from one program of study to another should consult with their advisors. Students then must complete a change of program form, available in the Enrollment Services Center. The Enrollment Services Center issues final approval for all program changes. A program change may increase the time needed for students to complete program requirements for graduation. Students who receive financial aid should consult with the Financial Aid Office regarding the fiscal implications of program changes.

Students may not register for a new program until the change of program form is processed. When a program change is approved, the student must meet the degree requirements of the catalog in effect at the time of the change.

Repeating a Course
Students may repeat only courses in which they earn a grade of D, F, W, WA or NA. The grade earned in the final attempt automatically becomes the official grade for purposes of calculating grade point average and for determining eligibility for graduation. The grades for each attempt, however, are recorded on the student’s transcript. Certain courses in the health programs must be repeated until the student earns a grade of A or B. When this exception applies, the College notifies the student.

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

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

<table>
<thead>
<tr>
<th>CREDITS ATTEMPTED</th>
<th>CUMULATIVE GRADE POINT AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 12</td>
<td>no minimum</td>
</tr>
<tr>
<td>12-30</td>
<td>1.79</td>
</tr>
<tr>
<td>Above 30</td>
<td>2.00</td>
</tr>
</tbody>
</table>

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, unless a TASC advisor grants permission to register for 12 credits.

Students who fail to attain both the required cumulative GPA and the percentage of total credits attempted remain on academic probation even though they attain the appropriate semester GPA and complete 66 percent of credits attempted in the probationary semester. Students who remain on academic probation status for three consecutive semesters are placed on academic suspension.

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

Academic Suspension
The College will suspend students from attending the College if either of the following circumstances occurs during any probationary semester:

- A student fails to achieve a semester grade point average of 1.79 for between 12 and 30 credits attempted or 2.00 for more than 30 credits attempted;
- A student fails to complete a minimum of 66 percent of the total number of 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).

Following a minimum leave of one semester, the College may consider for readmission students on academic suspension who provide the College with evidence of increased potential for academic success. Students must complete an application for readmission secured through the Enrollment Services Center. Readmission is contingent upon a review of the application by the Associate Dean of Academic Affairs and space availability. Students are placed on academic probation for the semester in which they are readmitted (see Academic Probation).

Appeals Process
Students placed on academic probation or suspension from the College for unsatisfactory academic progress have the right to appeal to have the sanction lifted. For students on academic probation, the College grants appeals based on computational error. For students placed on suspension, the College grants appeals based on documented extraordinary personal circumstance. The decision of the Academic Appeals Committee is final. Academic reinstatement does not automatically reestablish eligibility for Financial Aid. See page 26 for information on the Financial Aid appeals process.

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

To withdraw from a course, students must complete and submit the appropriate course withdrawal forms, which are available at the Enrollment Services Center. After students officially withdraw, their transcripts show grades of W. The College designates course withdrawals as “uncompleted courses,” which may adversely affect academic standing and financial aid eligibility. Failure to attend or ceasing to attend classes does not constitute withdrawal from the course and results in a grade of F or NA for the course (see Satisfactory Academic Progress).

Withdrawal from the College
Students may withdraw from the College only during the semester in which they are registered. Withdrawals are not processed retroactively, that is, after the semester in which the student was enrolled. Students who withdraw from the College are not entitled to a refund. To withdraw from the College, students must complete a withdrawal form available at the Enrollment Services Center, complete all the withdrawal steps and submit the completed form to the Enrollment Services Center. Students who withdraw from the College receive W grades on their transcripts for all courses for the semester withdrawn. Failure to attend or ceasing to attend a class or classes does not constitute official withdrawal from the College and results in grades of F or NA for the course or courses. Failure to withdraw formally may affect students’ academic standing and eligibility to receive financial aid (see Satisfactory Academic Progress). Students desiring to be readmitted to the College may do so without submitting an application if they reapply within two consecutive semesters of the date of withdrawal.
Institutional Policy Statements

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

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

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

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

• The right to Inspect and Review the student’s educational records within 45 days of the day the College receives a request for access. Students should submit to the registrar, dean, head of the academic department or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

• The right to Challenge Records and request the amendment of the student’s educational record that the student believes is inaccurate or misleading. Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

• The right to consent to Record Disclosure of personally identifiable information contained in the student’s educational records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor or collection agency); a person serving on the Board of Trustees or a student serving on an official committee, such as a disciplinary or grievance committee,
or assisting another school official in performing his or her task. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility.

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

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

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

Directory Information

Bunker Hill Community College has designated the following items as directory information: student name, academic program, semesters of attendance, current enrollment status, Dean’s List, 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 Enrollment Services Center. If a privacy code is placed on a student’s record, no directory information will be released in College publications or to third parties, excluding cases in which the Solomon Amendment or lawful subpoenas require the College to release such information by law.

Notwithstanding the College’s definition of directory information, the Department of Defense, pursuant to the Omnibus Consolidated Appropriations Act of 1997, identifies the following additional student information as directory information for Department of Defense purposes: student’s address, age and level of education. This information is available and accessible from student records. Nonconsensual release of directory information may be submitted to the Department of Defense in accordance with the Solomon Amendment.

Sexual Harassment

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

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

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

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

When a student, an employee or any other person in the College believes s/he has been the subject of sexual harassment, the grievance process is a mechanism for redress. All grievants must contact the College’s Affirmative Action Officer before proceeding under the Affirmative Action Policy’s Grievance and Hearing Procedure. Reasonable efforts are made to maintain confidentiality during the grievance process.

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

For the full text of the College’s policy concerning sexual harassment, refer to the Bunker Hill Community College Student Handbook.

Student Right-to-Know Completion Information

As mandated by the Public Law 101-542, the Student Right-to-Know and Campus Security Act, as amended by Public Law 102-26, the Higher Education Technical Amendments of 1991, the public may obtain Bunker Hill Community College student completion information. This information is available in the Office of Institutional Effectiveness and the Office of the Dean of Student Affairs.
Academic and Student Services

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

Online Services
The College offers all students secure, easy online access to academic/financial records and course availability information. Using a Personal Identification Number (PIN), students access this information directly at https://onlineservices.bhcc.mass.edu. The College provides information online for students regarding semester grades, unofficial transcript, placement test summary, account summary, financial aid status, search for classes and course schedules.

Registration. Students with a GPA of at least 2.00 and a minimum of 18 completed credits may register and pay online, providing their student payment account and immunization records (if applicable) are in good standing. Students who have fewer than 18 completed credits and a 2.00 GPA may petition the Enrollment Services Center for online registration access by calling 617-228-2422 or they may request access by e-mailing the Dean of eCollege/Weekend College at bsakamoto@bhcc.mass.edu.

Payment. Students can access their financial account summaries online at https://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 or Discover credit cards. For information regarding your PIN and online access, please call the Help Desk at 617-228-3441. Students also are able to make payments by phone by calling 1-866-519-0785.

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

Student Records. Students who have completed coursework since 1984 can access their academic records online. The records include GPA, assessment test scores (since 2003), educational plans, current course schedules and unofficial transcripts.

Obtaining a Personal Identification Number (PIN). The College creates students’ PINs using the last six digits of their social security numbers. For students without social security numbers, the College creates PINs by using the last six digits of their student ID numbers. Generally, the College creates students’ web IDs by using the first initial, middle initial and the last name. For example, Pat Bailey Brown’s (012-34-5678) web ID is “pbbrown” and her initial PIN is 345678. After logging in for the first time, students should change their PIN to a 6 to 9 character alphanumeric PIN such as “brown5678.” For information regarding obtaining a PIN number or accessing online services, call the Student Helpline at 617-228-3441.

Advising/Counseling Center
The Advising/Counseling Center provides a variety of services to assist students in achieving their academic, vocational and personal goals. These services include interpretation of assessment scores and assistance with selection of a program of study, course placement, course selection, scheduling and registration. The Center staff also assists students with a variety of issues and concerns affecting their educational success. These student issues and concerns include matters related to courses and programs, study habits, test anxiety, time management, confidence...
building and conflict resolution. The College encourages students with academic and/or personal concerns to schedule an appointment with an academic counselor at the Advising/Counseling Center, room B109, Charlestown Campus, or to call 617-228-2230 for an appointment.

**Transfer Counseling**

The College encourages students to meet with the transfer counselor to discuss the selection of a major and a transfer college, as well as to seek assistance with procedures to facilitate the transfer process. For transfer information, visit the Admissions Office, room B202, Charlestown Campus, or call 617-228-2299.

**The 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 90 countries who are welcomed to the College every year. The Center, with assistance from the Student Government Association, provides opportunities for students, faculty and staff to participate in international study and travel experiences in a variety of locations such as Costa Rica, the Czech Republic, France, Italy, Mexico, Spain, Switzerland and the United Kingdom. The Center hosts many international visitors and the Center staff members develop customized training programs for educators and students from around the world. With federal funding, the Center provides support to faculty to develop new international courses and to update their courses to include an international perspective, so that graduates are prepared to practice their professions within a global and multicultural environment.

The International Center is located in room E236, Charlestown Campus, and can be reached by calling 617-228-2460 or by e-mail at international@bhcc.mass.edu.

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

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

Job Search Activities. Workshops designed to assist students in all aspects of finding and keeping employment are offered, including resume writing, interviewing skills, how to look for a job, tips for second language job seekers, and more. Jobs are posted weekly from Boston-area employers and students and alumni can receive coaching and support while they conduct their job search. Employers are invited to recruit on campus throughout the year and a Job Club for graduating students is also offered.

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

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 services should visit the Office for Students with Disabilities, room D106, Charlestown Campus, or call 617-228-3415 or 617-228-2234.

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 regularly-scheduled health education and counseling programs.

The Health Care Coordinator provides emergency care and treatment of minor injuries and common illnesses and is available to answer the individual health concerns of students, faculty and staff. The Coordinator acts as a resource for referral to local health care providers and health screening. For more information, visit the Health Services Office, room E154, Charlestown Campus or call 617-228-2274.

Evening Services
In order to address evening students’ needs, the College offers support services Monday through Thursday evenings. Enrollment Services and Advising and Assessment are open Monday - Thursday in the evening until 7 p.m.

An academic dean is available on the Charlestown Campus Monday through Friday evenings until 7 p.m. during each semester. Students may consult the academic deans to seek information regarding their programs of study, specific courses or for other academic issues. BHCCOnline, Academic Computing Center, Audio-Visual Center, Center for Self-Directed Learning, Library, Language Lab and the Tutoring and Academic Support Center are open during the evenings on the Charlestown Campus to support the academic needs of evening students.
The College provides advising, career services, transfer counseling, disabled student advising, financial aid assistance, health service information and assistance and a general support program for students in the Success Program during the evenings on the Charlestown Campus, either on a drop-in basis or by appointment. 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 student cultural activities including sunset a poetry series and musical entertainment.

**The Enrollment Services Center** in the Main Lobby of both campuses is open evenings to provide students with program information, assistance with transcript requests, change of program forms, degree audits, advising and registration. In addition, students may speak with a faculty member, advisor or a peer counselor concerning admission to the College or specific program requirements.

**The Student Payment Office** is open Monday through Thursday evenings to assist students with account information and the purchase of parking permits.

**The Bookstore** is open several evenings at the beginning of each semester with extended Bookstore hours in the evenings and on Saturdays. A café is located in the Main Lobby of the Charlestown Campus.

**Student Activities and Athletics**

Bunker Hill Community College offers a variety of co-curricular activities to provide students with opportunities to develop leadership skills and to engage in social interaction. Staff and students, who serve as leaders of a wide variety of clubs and organizations, administer the programs. The activities promote intellectual development and cultural awareness and understanding.

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

The Campus Activities Board (CAB) organizes and administers events and activities that include films, lectures, concerts, political forums, comedy shows, and international festivals. Membership in the CAB is voluntary and open to all students in good academic standing with the College.

Clubs and Organizations provide the opportunity for students to meet other students, have fun, learn, and develop organizational skills. The Student Government Association formally approves clubs and organizations. The following clubs and organizations are currently active:

- African-American Cultural Society
- Alpha Kappa Mu Honor Society
- Amnesty International at BHCC
- Arab Students Association
- Art Club
- Asian Students Association
- Brazilian Cultural Club
- Business Club
- Campus Activities Board
- Cape Verdean Club
- Criminal Justice Society
- Evening Students Association
- Gay, Lesbian, Bisexual and Transgender Student Union
- Gospel Choir
- Haitian Club
- Hillel Club
- Hospitality Club
- Islamic Students Association
- Italian American Society

---

**Student Activities and Athletics**

The College provides advising, career services, transfer counseling, disabled student advising, financial aid assistance, health service information and assistance and a general support program for students in the Success Program during the evenings on the Charlestown Campus, either on a drop-in basis or by appointment. 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 student cultural activities including sunset a poetry series and musical entertainment.

**The Enrollment Services Center** in the Main Lobby of both campuses is open evenings to provide students with program information, assistance with transcript requests, change of program forms, degree audits, advising and registration. In addition, students may speak with a faculty member, advisor or a peer counselor concerning admission to the College or specific program requirements.

**The Student Payment Office** is open Monday through Thursday evenings to assist students with account information and the purchase of parking permits.

**The Bookstore** is open several evenings at the beginning of each semester with extended Bookstore hours in the evenings and on Saturdays. A café is located in the Main Lobby of the Charlestown Campus.

**Student Activities and Athletics**

Bunker Hill Community College offers a variety of co-curricular activities to provide students with opportunities to develop leadership skills and to engage in social interaction. Staff and students, who serve as leaders of a wide variety of clubs and organizations, administer the programs. The activities promote intellectual development and cultural awareness and understanding.

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

The Campus Activities Board (CAB) organizes and administers events and activities that include films, lectures, concerts, political forums, comedy shows, and international festivals. Membership in the CAB is voluntary and open to all students in good academic standing with the College.

Clubs and Organizations provide the opportunity for students to meet other students, have fun, learn, and develop organizational skills. The Student Government Association formally approves clubs and organizations. The following clubs and organizations are currently active:

- African-American Cultural Society
- Alpha Kappa Mu Honor Society
- Amnesty International at BHCC
- Arab Students Association
- Art Club
- Asian Students Association
- Brazilian Cultural Club
- Business Club
- Campus Activities Board
- Cape Verdean Club
- Criminal Justice Society
- Evening Students Association
- Gay, Lesbian, Bisexual and Transgender Student Union
- Gospel Choir
- Haitian Club
- Hillel Club
- Hospitality Club
- Islamic Students Association
- Italian American Society
Latinos Unidos Club
Multicultural Club
Parents Association
The Real Life Club
S.H.O.C.W.A.V.E.S. (Students Helping Our Communities with Active Volunteer Experiences and Service)
Stage and Screen Club
Student Government Association
Upsidedown Club
Veterans of all Nations Club
WBCC Radio Station
Writer’s Block

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

Student Handbook. The Student Handbook provides a comprehensive explanation of 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 and Athletics Office, room D106H, Charlestown Campus. Direct all inquiries related to College regulations, student conduct and the student grievance procedure to the Office of the Dean of Student Affairs.

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 Office of Student Activities and Athletics, room D106H.

Food Services. The College operates a full-service cafeteria during the fall and spring semesters on the fourth floor, E-Building, Charlestown Campus, and a café, which is open year-round, in the Main Lobby, Charlestown Campus.

Day Care/Child Focus Centers. Located on both the Charlestown and Chelsea Campuses, the Centers are preschools and kindergartens licensed by the Massachusetts Office of Child Care Services. The Centers are open to the children of students, staff and faculty of Bunker Hill Community College. For more information, call 617-241-5464.

Instructional Media Support. The Charlestown Campus provides instructional media support for classroom and special events. The Center offers services ranging from equipment distribution and maintenance to complete program production.

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

Parking. Parking at the two College campuses is restricted to permit holders. On the Charlestown Campus, one-hour visitor parking is available in Lot Number 4, adjacent to the B-Building. The perimeter roadway is reserved for faculty and staff parking. Student parking is available in designated Lots numbered 1 and 2. Charlestown Campus Lots 4 and 5, adjacent to B-Building and E-Building, respectively, provide designated parking spaces for persons with disabilities. The Chelsea Campus provides similar parking in designated spaces. The Student Handbook contains complete information regarding parking regulations. The College is not responsible for any damage to and/or theft of any vehicles.

Public Transportation and Directions. All College campuses and satellites are accessible by public transportation. See directions to each College location and an MBTA map beginning on page 205.

Security. Crime Statistics Law, 20 U.S.C. 1092F, mandates that each year colleges report for the previous calendar year and for two prior years, if available, statistics concerning on-campus occurrences of crimes of murder, sexual offenses, robbery, aggravated assault, burglary and motor vehicle theft. Also, the law requires that the College report the number of on-campus arrests for liquor violations, drug abuse violations and the possession of weapons. In compliance with the law, Bunker Hill Community College makes this information available through the Public Safety Office, room E127, Charlestown Campus and via the College website at www.bhcc.mass.edu.

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

Bookstore. The College operates bookstores on both the Charlestown and Chelsea Campuses as a service to the students, faculty and staff. The bookstores stock textbooks and related materials for all College courses. In addition, they sell general supplies such as paperback books, clothing, computer discs and gift items.
BHCC Learning Communities provide students with the opportunity to learn in a supportive, engaging, and enriching environment. Students who participate in BHCC Learning Communities benefit from interdisciplinary learning experiences, integrated support services, peer mentoring, and teacher-to-student mentoring.

BHCC Learning Communities promote active and engaged learning through such practices as collaborative learning, group projects, 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.

The Learning Community Seminar
Starting in the Spring of 2008, students will be invited to enroll in the Learning Community Seminar, (LCS-500) a core course orienting them to the BHCC college experience and connecting them with other students, faculty, and college resources. The Seminar is designed to help students discover their strengths and interests, explore career options, and develop the skills and confidence it takes to succeed. Modeled on the “workshop format” in which students learn by doing, the Seminar provides a student-centered learning environment that maximizes academic and personal growth. Frequent group activities, team projects, and peer mentoring create a community of learners sharing common needs and solutions.

The Learning Community Seminar will be open to a limited number of first time, full time students in the spring of 2008. These Seminar sections will be geared toward the following student populations: Business & Computer majors; Behavioral Science & Social Science majors; English language learners; General Concentration majors; Language Arts & Humanities majors; Science, Technology, Engineering, & Math majors; students interested in Health Profession careers; students placing into two or more developmental courses; and students taking developmental Math. Students who are interested in enrolling in the Seminar should discuss this option with an academic advisor.

Affiliated and Integrated Learning Communities
Starting in the fall of 2008, BHCC will offer more Learning Community options for students who share common academic goals, career aspirations, or interests. Students in BHCC Affiliated Learning Communities may share a common major, or they may have something else in common, such as new parenthood, being the first in their families to attend college, or a desire to transfer to a four-year college or university. BHCC Integrated Learning Communities will offer linked or clustered classes, in which the same group of students takes two or more classes together. The teachers in these Learning Communities will have organized readings, assignments, and other activities around common themes. Sometimes the work in the Learning Community will be related to the student’s major.

For more information about BHCC Learning Communities, contact the Assistant Director at 617-228-2238.
BHCC Commonwealth Honors Program: An Invitation to Excellence

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

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

The Honors Seminar is an interdisciplinary three-credit course that allows students to develop their research skills by exploring the theme chosen for the semester from different perspectives. Recent Honors Seminar topics have included: Popular Culture: Shaping and Reflecting Who We Are; Emerging Issues: Understanding the Present, Planning for the Future; Our Changing Planet: Climate – Past and Present; Evil.

Admissions and Program Requirements
Some students enter the Honors Program immediately from high school. Others are returning BHCC students. To enter the Program you must satisfy one of the following requirements:

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

Scholarships
The College offers two scholarships of $500 to Honors Program 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. For a complete listing of BHCC awards and scholarships, visit the College website at www.bhcc.mass.edu.
Bunker Hill Community College offers numerous programs of study that lead to the following degrees and certificates: Associate in Arts (A.A.) degrees, Associate in Science (A.S.) degrees and certificates. All programs of study include courses from three required areas: general education requirements, career and/or liberal arts electives and program requirements. These required areas are explained on the following pages.

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

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

**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, consult the institution to which you wish to transfer. Students will find current transfer agreements listed on page 34 of this catalog.

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

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

**General Education Requirements**

Bunker Hill Community College is committed to the belief that all graduates should possess the skills and breadth of knowledge necessary to live full and productive lives. The general education portion of associate degree programs assists students in acquiring knowledge and skills that enhance their major areas of concentration.

Students who receive A.A. or A.S. degrees must take a total of 22 credits of general education.

Those credits must include:

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

Students should consult their individual programs of study for general education course requirements specific to their major.

Some general education requirements are met by concentration courses. In this instance, an asterisk next to the menu number refers to a footnote below the grid that states: “This requirement is satisfied by concentration courses.”

Refer to the fold-out section at the back of this publication for General Education Requirements and Elective Courses.

**Student Learning Outcomes Assessment**

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

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

In the pages that follow, each program has stated its mission in the program overview and has outlined the learning outcomes acquired upon completion of the program. Students should review this material along with the program curriculum in order to determine their individual expectations for a course of study. More information regarding the Student Learning Outcomes Assessment Program may be obtained from the Office of the Vice President of Academic Affairs.
### Associate Degree and Certificate Programs

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

#### Associate in Arts Degrees*

<table>
<thead>
<tr>
<th>GRID #</th>
<th>PROGRAM</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Business Concentration</td>
<td>56</td>
</tr>
<tr>
<td>74</td>
<td>Chemical Science Concentration</td>
<td>132</td>
</tr>
<tr>
<td>10</td>
<td>Communication Concentration</td>
<td>65</td>
</tr>
<tr>
<td>11</td>
<td>Computer Information Systems Concentration</td>
<td>66</td>
</tr>
<tr>
<td>12</td>
<td>Computer Science Concentration</td>
<td>67</td>
</tr>
<tr>
<td>31</td>
<td>Education Concentration</td>
<td>85</td>
</tr>
<tr>
<td>35</td>
<td>English Concentration</td>
<td>89</td>
</tr>
<tr>
<td>77</td>
<td>Fine Arts Concentration</td>
<td>135</td>
</tr>
<tr>
<td>37</td>
<td>Foreign Language Concentration</td>
<td>91</td>
</tr>
<tr>
<td>38</td>
<td>General Concentration</td>
<td>92</td>
</tr>
<tr>
<td>12</td>
<td>History and Government Concentration</td>
<td>122</td>
</tr>
<tr>
<td>64</td>
<td>Mathematics Concentration</td>
<td>121</td>
</tr>
<tr>
<td>65</td>
<td>Music Concentration</td>
<td>122</td>
</tr>
<tr>
<td>70</td>
<td>Physics/Engineering Concentration</td>
<td>128</td>
</tr>
<tr>
<td>71</td>
<td>Psychology Concentration</td>
<td>129</td>
</tr>
<tr>
<td>75</td>
<td>Sociology Concentration</td>
<td>133</td>
</tr>
<tr>
<td>76</td>
<td>Theatre Concentration</td>
<td>134</td>
</tr>
<tr>
<td>54</td>
<td>Business Administration Program</td>
<td>130</td>
</tr>
<tr>
<td>55</td>
<td>Biological Science Program</td>
<td>130</td>
</tr>
<tr>
<td>72</td>
<td>Business Administration Program</td>
<td>131</td>
</tr>
<tr>
<td>2</td>
<td>Accounting Option</td>
<td>57</td>
</tr>
<tr>
<td>3</td>
<td>Finance Option</td>
<td>58</td>
</tr>
<tr>
<td>4</td>
<td>International Business Option</td>
<td>59</td>
</tr>
<tr>
<td>5</td>
<td>Management Option</td>
<td>60</td>
</tr>
<tr>
<td>13</td>
<td>Computer Information Technology</td>
<td>68</td>
</tr>
<tr>
<td>14</td>
<td>Database Programming and Administration Option</td>
<td>69</td>
</tr>
</tbody>
</table>

* Students enrolling in any A.A. degree program can earn World Studies Emphasis certification simultaneously.

#### Associate in Science Degrees

<table>
<thead>
<tr>
<th>GRID #</th>
<th>PROGRAM</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Computer Support Specialist Option</td>
<td>73</td>
</tr>
<tr>
<td>20</td>
<td>Network Technology and Administration Option</td>
<td>74</td>
</tr>
<tr>
<td>21</td>
<td>Web Development Option</td>
<td>75</td>
</tr>
<tr>
<td>25</td>
<td>Criminal Justice Program</td>
<td>79</td>
</tr>
<tr>
<td>29</td>
<td>Early Childhood Development Program</td>
<td>83</td>
</tr>
<tr>
<td>32</td>
<td>Electric Power Utility Program</td>
<td>86</td>
</tr>
<tr>
<td>33</td>
<td>Biomedical Engineering Option</td>
<td>87</td>
</tr>
<tr>
<td>34</td>
<td>Engineering Transfer Option</td>
<td>88</td>
</tr>
<tr>
<td>36</td>
<td>Fire Protection and Safety Program</td>
<td>90</td>
</tr>
<tr>
<td>58</td>
<td>Hotel/Restaurant/Travel Program</td>
<td>115</td>
</tr>
<tr>
<td>59</td>
<td>Travel and Tourism Management Option</td>
<td>116</td>
</tr>
<tr>
<td>61</td>
<td>Human Services Program</td>
<td>118</td>
</tr>
<tr>
<td>39</td>
<td>Cardiac Sonography Option</td>
<td>94</td>
</tr>
<tr>
<td>40</td>
<td>General Sonography Option</td>
<td>95</td>
</tr>
<tr>
<td>41</td>
<td>Medical Radiography Option</td>
<td>96</td>
</tr>
<tr>
<td>42</td>
<td>Medical Radiography Part-time Evening Option</td>
<td>97</td>
</tr>
<tr>
<td>45</td>
<td>Nursing Program: Day/Evening Option</td>
<td>101</td>
</tr>
<tr>
<td>46</td>
<td>Nursing Program: Weekend Option</td>
<td>102</td>
</tr>
<tr>
<td>66</td>
<td>Administrative Information Management Program</td>
<td>124</td>
</tr>
<tr>
<td>67</td>
<td>Medical Information Management Option</td>
<td>125</td>
</tr>
<tr>
<td>47</td>
<td>Pharmacy Technology Program</td>
<td>103</td>
</tr>
<tr>
<td>48</td>
<td>Respiratory Therapy Program</td>
<td>104</td>
</tr>
<tr>
<td>76</td>
<td>Graphic Design Program</td>
<td>136</td>
</tr>
<tr>
<td>79</td>
<td>Media Communications Program</td>
<td>137</td>
</tr>
</tbody>
</table>

#### Certificate Programs

<table>
<thead>
<tr>
<th>GRID #</th>
<th>PROGRAM</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Medical Assistant</td>
<td>105</td>
</tr>
<tr>
<td>51</td>
<td>Medical Lab Assistant</td>
<td>107</td>
</tr>
<tr>
<td>52</td>
<td>Patient Care Technician</td>
<td>108</td>
</tr>
<tr>
<td>53</td>
<td>Phlebotomy Technician</td>
<td>109</td>
</tr>
<tr>
<td>6</td>
<td>Accounting Information</td>
<td>61</td>
</tr>
<tr>
<td>7</td>
<td>e-Commerce Marketing Management</td>
<td>62</td>
</tr>
<tr>
<td>8</td>
<td>International Business</td>
<td>63</td>
</tr>
<tr>
<td>9</td>
<td>Paralegal</td>
<td>64</td>
</tr>
<tr>
<td>15</td>
<td>Computer Forensics</td>
<td>70</td>
</tr>
<tr>
<td>16</td>
<td>Database Programming and Administration</td>
<td>71</td>
</tr>
<tr>
<td>22</td>
<td>Computer Support Specialist</td>
<td>76</td>
</tr>
<tr>
<td>23</td>
<td>Network Technology and Administration</td>
<td>77</td>
</tr>
<tr>
<td>24</td>
<td>Web Development</td>
<td>78</td>
</tr>
<tr>
<td>28</td>
<td>Culinary Arts</td>
<td>82</td>
</tr>
<tr>
<td>30</td>
<td>Early Childhood Development Human Services</td>
<td>84</td>
</tr>
<tr>
<td>62</td>
<td>Professional Human Services Work</td>
<td>119</td>
</tr>
<tr>
<td>63</td>
<td>Psychiatric Rehabilitation</td>
<td>120</td>
</tr>
<tr>
<td>26</td>
<td>Law Enforcement</td>
<td>80</td>
</tr>
<tr>
<td>50</td>
<td>Medical Coding</td>
<td>106</td>
</tr>
<tr>
<td>43</td>
<td>PACS Administration</td>
<td>98</td>
</tr>
<tr>
<td>44</td>
<td>Vascular Sonography</td>
<td>99</td>
</tr>
<tr>
<td>68</td>
<td>Information Management Specialist</td>
<td>126</td>
</tr>
<tr>
<td>69</td>
<td>Medical Information Management Assistant</td>
<td>127</td>
</tr>
<tr>
<td>54</td>
<td>Central Processing</td>
<td>110</td>
</tr>
<tr>
<td>55</td>
<td>Surgical Technology</td>
<td>111</td>
</tr>
<tr>
<td>56</td>
<td>Travel and Tourism Management</td>
<td>117</td>
</tr>
</tbody>
</table>
## 1 Associate in Arts Degree: Business Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>BUS101</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>MAN111</td>
<td></td>
<td>3</td>
<td></td>
<td>BUS101; ESL098 and ESL099 or ENG090 and RDG095</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>MAN105</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>ECO201</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td>3</td>
<td></td>
<td>ACC101</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>ECO202</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Calculus for Management Science</td>
<td>MAT231</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT195</td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>

* This requirement is satisfied by Concentration Courses.

### CONCENTRATION OVERVIEW

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

This concentration prepares students to transfer to upper-level colleges or universities and major in business administration. A bachelor’s degree enhances the competitive status of students for entry into business-related fields, and is required for graduate work. The college has transfer articulation agreements with many four-year academic institutions in the area. The college encourages students to consult with their advisors.

### CAREER OUTLOOK

This concentration meets all requirements of the Commonwealth Transfer Compact. 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 mastery 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 114.
Associate in Science Degree: Business Administration Program

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

## Accounting Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Management</td>
<td>MAN111</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or ENG090 and RDG095</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL096 or RDG095</td>
</tr>
<tr>
<td>Business Law I</td>
<td>BUS201</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td></td>
<td>3</td>
<td>ACC101</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Organizational Behavior/Design</td>
<td>MAN112*</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or ENG090 and RDG095</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>MAN105</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>Accounting Information Systems</td>
<td>ACC105</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC101 and ENG095 and RDG095</td>
</tr>
<tr>
<td>Intermediate Accounting I</td>
<td>ACC201</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ACC102</td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Federal Income Tax I</td>
<td>ACC203</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ACC102</td>
</tr>
<tr>
<td>Cost Accounting I</td>
<td>ACC207</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ACC102</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Intermediate Accounting II</td>
<td>ACC202</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC201</td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Volunteer Income Tax Assistance</td>
<td>ACC205</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC203</td>
</tr>
<tr>
<td>Managerial Accounting I</td>
<td>ACC216</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC207</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>61</strong></td>
<td></td>
</tr>
</tbody>
</table>

* This course satisfies "Individual and Society" General Education Requirement Area 2.

**OPTION OVERVIEW**

The Business Administration Department offers five high-demand academic programs, placing graduates in a competitive position when seeking employment or transferring to upper-level academic institutions. Students qualify for entry-level positions within their areas of concentration. This option teaches students the accounting software used in industry by introducing computerized applications early in the sequence of courses. Students interface with the public through the Volunteer Income Tax Assistance (VITA) component of this option as they help interested members of the community prepare their tax returns.

**CAREER OUTLOOK**

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

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

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

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Business</td>
<td>BUS101</td>
<td>Must be taken first semester</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>MAN111</td>
<td></td>
<td></td>
<td>3</td>
<td>BUS101; ESL098 and ESL099 or ENG098 and RDG095</td>
</tr>
<tr>
<td>Real Estate Law or Estates and Trusts</td>
<td>BUS120 or BUS121</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td></td>
<td>3</td>
<td>ACC101</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>ECO201*</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>ACC111</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Personal Finance</td>
<td>ACC112</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Organizational Behavior/Design</td>
<td>MAN112**</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>ECO202</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Financial Management</td>
<td>ACC210</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC102</td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Money and Banking</td>
<td>ACC211</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ECO201 and ECO202</td>
</tr>
<tr>
<td>Mutual Funds Industry</td>
<td>MAN213</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC102 and ACC111</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** 61

---

* This course satisfies “World View” General Education Requirement Area 3.
** This course satisfies “Individual and Society” General Education Requirement Area 2.

### OPTION OVERVIEW

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

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

### CAREER OUTLOOK

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

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

- Understand the process of preparing a budget and recognize the value it provides the end-user.
- Analyze the many choices available to the investor and recognize the importance of diversifying investment options.
- Evaluate sets of financial statements using financial ratios and draw accurate conclusions as to the strengths or weaknesses of the concern.
- Understand the mutual fund industry in order to design a comprehensive portfolio for a wide range of investors.
4 International Business Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>ECO201*</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>MAN105</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>MAN111</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Business Law I</td>
<td>BUS201</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Microeconomics</td>
<td>ECO202</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td></td>
<td>3</td>
<td>ACC101</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>International Business</td>
<td>BUS106</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ECO201 or ECO202</td>
</tr>
<tr>
<td>International Marketing</td>
<td>MAN106</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>MAN105</td>
</tr>
<tr>
<td>Liberal Arts Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Cultural Anthropology</td>
<td>SOC109**</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Money and Banking</td>
<td>ACC211</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ECO201 and ECO202</td>
</tr>
<tr>
<td>Exporting/Importing or</td>
<td>BUS108</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>BUS106</td>
</tr>
<tr>
<td>International Logistics</td>
<td>BUS112</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective***</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

* This course satisfies “World View” General Education Requirement Area 3.
** This course satisfies “Individual and Society” General Education Requirement Area 2.
*** Career Elective may be selected from the following areas: any ACC course not required in the chosen option; any BUS course not required in the chosen option; any MAN course not required in the chosen option.

OPTION OVERVIEW
The Business Administration Department offers five high-demand academic programs, placing graduates in a competitive position when seeking employment or transferring to upper-level academic institutions. Students qualify for entry-level positions within their areas of concentration.

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. The college advises students to speak with the department chairperson for specific transfer information.

CAREER OUTLOOK
This option qualifies graduates to seek employment with a business conducting international operations that satisfies the required career electives.

UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:
- Understand the many variables that impact a business conducting transactions in an international arena.
- Gain an appreciation of what is required of a business to compete and survive in the global marketplace.
- Examine marketing strategies that are available to businesses attempting to promote their products beyond the domestic boundaries of the United States.
## Management Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Business</td>
<td>BUS101</td>
<td>Must be taken first semester</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>MAN105</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>Business Law I</td>
<td>BUS201</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Management</td>
<td>MAN111</td>
<td></td>
<td>3</td>
<td></td>
<td>BUS101</td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td>3</td>
<td></td>
<td>ACC101</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Organizational Behavior/Design</td>
<td>MAN112*</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ESL098 and ESL099 or ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>ECO201**</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Management</td>
<td>ACC210</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>ACC102</td>
</tr>
<tr>
<td>Management Seminar</td>
<td>MAN201***</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>MAN111</td>
</tr>
<tr>
<td>Liberal Arts Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective+</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective+</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective+</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** 61

* This course satisfies “Individual and Society” General Education Requirement Area 2.
** This course satisfies “World View” General Education Requirement Area 3.
*** Management Seminar is a Capstone course and should be taken in the student’s final semester.
+ Career Electives may be selected from the following areas: any ACC course not required in the chosen option; any BUS course not required in the chosen option; any MAN course not required in the chosen option.

### OPTION OVERVIEW

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

This option prepares students with a solid foundation of managerial principles and concepts that are readily practiced 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. The college advises students to speak with the department chairperson for specific transfer information.

### CAREER OUTLOOK

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

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

- Direct, plan, organize, and control the operations of a business.
- Demonstrate the necessary leadership 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.
# Accounting Information Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td></td>
<td>3</td>
<td>ACC101</td>
</tr>
<tr>
<td>Accounting Information Systems</td>
<td>ACC105</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC101 and ENG095 and RDG095</td>
</tr>
<tr>
<td>Intermediate Accounting I</td>
<td>ACC201</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ACC102</td>
</tr>
<tr>
<td>Applications/Concepts or Introduction to MS Office</td>
<td>CIT110 or ITB133</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Decision Support Using MS Excel</td>
<td>CIT234</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or ITB133</td>
</tr>
<tr>
<td>Statistics</td>
<td>MAT181 or 183</td>
<td></td>
<td></td>
<td>3-4</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>COURSES FROM POOL (2)</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>27-28</td>
<td></td>
</tr>
</tbody>
</table>

**THE POOL OF ELECTIVES**

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate Accounting II</td>
<td>ACC202</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC201</td>
</tr>
<tr>
<td>Cost Accounting</td>
<td>ACC207</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ACC102</td>
</tr>
<tr>
<td>Federal Income Tax I</td>
<td>ACC203</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ACC102</td>
</tr>
<tr>
<td>Financial Management</td>
<td>ACC210</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC102</td>
</tr>
<tr>
<td>Systems Analysis &amp; Design</td>
<td>CIT211</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120, and at least two other CIT courses</td>
</tr>
</tbody>
</table>

**PROGRAM OVERVIEW**

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

**CAREER OUTLOOK**

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

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

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

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Business</td>
<td>BUS101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>The Internet</td>
<td>CIT117</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td>ACC101 and ENG095 and RDG095</td>
</tr>
<tr>
<td>Accounting Information Systems</td>
<td>ACC105</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ACC101 and ENG095 and RDG095</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>MAN105</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>e-Commerce Marketing Mgmt.</td>
<td>MAN217</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>MAN105</td>
</tr>
<tr>
<td>Career Elective*</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Career Elective*</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

* Career Electives may be selected from the following areas: any ACC course not required in the chosen option; any BUS course not required in the chosen option; any MAN course not required in the chosen option.

PROGRAM OVERVIEW
This program prepares students to understand the business, marketing, and technical issues that drive e-commerce. This program teaches students the principles, skills, and knowledge needed to operate within a small business administration environment. The program provides hands-on practice on e-commerce marketing, computerized accounting, and business computer applications. Students develop a strong capacity for decision-making, problem solving, and gain the ability to organize and manage e-commerce projects effectively.

CAREER OUTLOOK
Graduates of this program qualify for entry-level positions dealing with e-commerce projects. Students can apply all of the credits earned in this certificate to the Associate in Science Degree: Business Administration Management Option.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
- Identify ways in which the Internet can be used to advance the mission and the marketing strategy of the organization.
- Develop a strong capacity for decision-making.
- Explore management and marketing issues involved in setting up, developing, and maintaining an e-commerce website.
International Business Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Business</td>
<td>BUS106</td>
<td>Fall</td>
<td>3</td>
<td>3</td>
<td>ECO201 and ECO202</td>
</tr>
<tr>
<td>Cultural Anthropology</td>
<td>SOC109</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Foreign Language I</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language II</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Marketing</td>
<td>MAN106</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>MAN105</td>
</tr>
<tr>
<td>Courses from Pool (4)</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>27</strong></td>
<td></td>
</tr>
</tbody>
</table>

THE POOL OF ELECTIVES

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export/Import Process</td>
<td>BUS108</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>BUS106</td>
</tr>
<tr>
<td>Money and Banking</td>
<td>ACC211</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>ECO201 and ECO202</td>
</tr>
<tr>
<td>International Logistics</td>
<td>BUS112</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>BUS106</td>
</tr>
<tr>
<td>International Business Issues</td>
<td>BUS114</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>BUS106</td>
</tr>
<tr>
<td>Career Elective*</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Internship</td>
<td>MAN299</td>
<td></td>
<td>3</td>
<td></td>
<td>Chair approval</td>
</tr>
</tbody>
</table>

* Career Elective may be selected from the following areas: any ACC course not required in the chosen option; any BUS course not required in the chosen option; any MAN course not required in the chosen option.

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

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

UPON COMPLETION OF THIS PROGRAM GRADUATES WILL BE ABLE TO:
- Understand the export/import process.
- Understand the technology specific to international business.
- Understand the concepts of international business financing.
- Understand freight forwarding.
Paralegal Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Business Law I</td>
<td>BUS201</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Real Estate Law</td>
<td>BUS120</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Estates and Trusts</td>
<td>BUS121</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Intro to Law/Paralegal Practices</td>
<td>BUS122</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Criminal Law</td>
<td>CRJ103</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ENG095 or placement</td>
</tr>
<tr>
<td>Business Law II</td>
<td>BUS202</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>BUS201</td>
</tr>
<tr>
<td>Legal Research/Writing</td>
<td>BUS123</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>BUS122</td>
</tr>
<tr>
<td>Family Law</td>
<td>BUS124</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>BUS122</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>27</strong></td>
<td></td>
</tr>
</tbody>
</table>

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.

CAREER OUTLOOK
Graduates of this program qualify for careers as paralegals in law firms, finance, insurance, real estate companies, and government agencies.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
- Understand the dynamics of a law practice.
- Assist attorneys in case preparation.
- Write legal briefs and conduct research.
- Understand the basic principles of real estate law, estates and trusts, business law, and criminal law.
### Associate in Arts Degree: Communication Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td>4</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalism I</td>
<td>ENG241</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement</td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Courses from Pool (4)</td>
<td></td>
<td></td>
<td>12</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>62</td>
<td></td>
</tr>
<tr>
<td><strong>THE POOL OF ELECTIVES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Advertising</td>
<td>BUS225</td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAN105</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Film as Art</td>
<td>FLM101</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Intro to Desktop Publishing</td>
<td>VMA131</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Introduction to Mass Media</td>
<td>VMA111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Journalism II</td>
<td>ENG242</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095</td>
</tr>
</tbody>
</table>

* The department recommends a two-semester foreign language sequence. Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

### CONCENTRATION OVERVIEW

The English Department offers programs which qualify graduates to transfer to four-year institutions that prepare them for careers in teaching, journalism, public relations, and media communications. Students must complete a bachelor’s degree and teaching certificate to pursue a teaching career. A bachelor’s degree in English is a minimum requirement for entry level work in careers such as publishing, advertising, public relations, and journalism. The communications concentration prepares students to transfer to four-year colleges or universities in journalism or media communications. The degree meets requirements of the Commonwealth Transfer Compact.

### 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 114.
## Associate in Arts Degree: Computer Information Systems Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3*</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems Analysis/Design</td>
<td>CIT211</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT110 or CIT120</td>
</tr>
<tr>
<td>Visual Basic</td>
<td>CIT216</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT110 or CIT120</td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td>3</td>
<td></td>
<td>ACC101</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>ECO202</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 and MAT095 or placement</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>ECO201</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 and MAT095 or placement</td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Computer Elective**</td>
<td>CIT</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Elective**</td>
<td>CIT</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td>MAT</td>
<td></td>
<td>3 - 4</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td>MAT</td>
<td></td>
<td>3 - 4</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>46 - 48</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>62 - 64</td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.

**Recommended computer electives: CIT118, 120, 128, 216, 242, 272, 284; ITB162, 268.

**CONCENTRATION OVERVIEW**

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entry-level careers as database professionals through the Associate in Science (A.S.) and Certificate Database Programming & Administration Programs. CIT also prepares students to transfer to four-year college Information Technology (IT) Programs through two Associate in Arts (A.A.) Programs: A.A. Computer Information Systems Transfer & A.A. Computer Science Transfer. The department’s goals are in concert with the college’s goals (www.bhcc.mass.edu). Using input from its Industry Advisory Committee and internship course, the department is continually updating and fine tuning its programs of study.

**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 114.
### Associate in Arts Degree: Computer Science Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OPTION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Intro to Computer Science &amp; Object Oriented</td>
<td>CIT120</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095, RDG095, and MAT095</td>
</tr>
<tr>
<td>Programming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to JAVA</td>
<td>CIT239</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT120</td>
</tr>
<tr>
<td>Advanced JAVA</td>
<td>CIT285</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT239</td>
</tr>
<tr>
<td>Data Structures</td>
<td>CIT242</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT239</td>
</tr>
<tr>
<td>Linear Algebra or C++ Programming</td>
<td>MAT291 or</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT281</td>
</tr>
<tr>
<td></td>
<td>CIT237</td>
<td></td>
<td></td>
<td></td>
<td>CIT120 and MAT197</td>
</tr>
<tr>
<td>Precalculus</td>
<td>MAT197</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT195 or placement</td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT196 or MAT197</td>
</tr>
<tr>
<td>Calculus II</td>
<td>MAT282</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT281</td>
</tr>
<tr>
<td>College Physics I/II Lab</td>
<td>PHY251</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT281 or concurrently</td>
</tr>
<tr>
<td></td>
<td>PHY252</td>
<td></td>
<td>4</td>
<td></td>
<td>PHY251, prereq or coreq MAT282</td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>pre or co-req</td>
<td>ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>pre or co-req</td>
<td>ENG111</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td>47 - 48</td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.
The Department recommends that a college-level math course be taken before or concurrently with CIT120.

### OPTION OVERVIEW

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entry-level careers as database professionals through the Associate in Science (A.S.) and Certificate Database Programming & Administration Programs. CIT also prepares students to transfer to four-year college Information Technology (IT) Programs through the Computer Information Systems Transfer Program and the A.S. Computer Science Transfer Option. The department’s goals are in concert with the college’s goals (www.bhcc.mass.edu). Using input from its Industry Advisory Committee and internship course, the department is continually updating and fine tuning its programs of study.

### 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 114.*
Computer Information Technology

Associate in Science Degree: Computer Information Technology Program

This program prepares students with entry-level skills in various computer concentrations. Students take the required core courses as well as a cluster of courses in a specific concentration. Students choose elective courses from relevant disciplines within the college. Graduates of this program qualify for entry-level positions in businesses and work environments that rely on network functions. The Database Programming and Administration Option is offered by the Computer Information Technology Department. The Computer Support Specialist Option and Network Technology and Administration Option are offered by the Information Technology for Business and Industry Department.

### Computer Science Transfer Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OPTION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Intro to Computer Science &amp; Object Oriented Programming</td>
<td>CIT120</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095, RDG095, and MAT095</td>
</tr>
<tr>
<td>Introduction to JAVA</td>
<td>CIT239</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT120</td>
</tr>
<tr>
<td>Advanced JAVA</td>
<td>CIT285</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT239</td>
</tr>
<tr>
<td>Data Structures</td>
<td>CIT242</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT239</td>
</tr>
<tr>
<td>C++ Programming</td>
<td>CIT237</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT120</td>
</tr>
<tr>
<td>College Algebra</td>
<td>MAT195</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Precalculus</td>
<td>MAT197</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT195 or placement</td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT196 or MAT197</td>
</tr>
<tr>
<td>Calculus II</td>
<td>MAT282</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT281</td>
</tr>
<tr>
<td>College Physics I/Lab</td>
<td>PHY251</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT281 or concurrently</td>
</tr>
<tr>
<td>College Physics II/Lab</td>
<td>PHY252</td>
<td></td>
<td></td>
<td>4</td>
<td>PHY251</td>
</tr>
<tr>
<td>Elective**</td>
<td></td>
<td></td>
<td></td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Elective**</td>
<td></td>
<td></td>
<td></td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Elective**</td>
<td></td>
<td></td>
<td></td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>47-50</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** 62-65

---

* This requirement is satisfied by Option courses.

** The department recommends the following courses as electives: CIT118, 284; MAT283, 285, 291 or any lab science. Students choosing two 4-credit electives will need one less elective.

OPTION OVERVIEW

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entry-level careers as database professionals through the Associate in Science (A.S.) and Certificate Database Programming & Administration Programs. CIT also prepares students to transfer to four-year college Information Technology (IT) Programs through the Computer Information Systems Transfer Program & the A.S. Computer Science Transfer Option. The department’s goals are in concert with the college’s goals (www.bhcc.mass.edu). Using input from its Industry Advisory Committee and internship course, the department is continually updating and fine tuning its programs of study.

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.
### Database Programming and Administration Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Database Administration</td>
<td>CIT245</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT236 or chair approval</td>
</tr>
<tr>
<td>Principles of Internet &amp; Info Security</td>
<td>CIT118</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT20 or chair approval</td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Systems Analysis/Design</td>
<td>CIT211</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120, and at least two other CIT courses</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Visual Basic</td>
<td>CIT216</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120</td>
</tr>
<tr>
<td>Intermediate Visual Basic</td>
<td>CIT218</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT216</td>
</tr>
<tr>
<td>Database Design with MS Access</td>
<td>CIT128</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>SQL Programming</td>
<td>CIT236</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>Database Programming</td>
<td>CIT240</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT236 or chair approval</td>
</tr>
<tr>
<td>Elective*</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>61</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Recommended electives: CIT118, 299, ITB162 or 268.

---

**OPTION OVERVIEW**

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entry-level careers as Database professionals through the Associate in Science (A.S.) and Certificate Database Programming & Administration Program. CIT also prepares students to transfer to four-year college Information Technology (IT) Programs through two Associate in Arts (A.A.) Programs: A.A. Computer Information Systems Transfer & A.A. Computer Science Transfer. The department’s goals are in concert with the college’s goals (www.bhcc.mass.edu). Using input from its Industry Advisory Committee and internship course, the department is continually updating and fine tuning its programs of study.

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

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

- Qualify with the skill set necessary to take the first level of Oracle database certification.
### Computer Forensics Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Internet &amp; Information Security</td>
<td>CIT118</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Introduction to Computer Forensics</td>
<td>CIT121</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT112 or permission of chair</td>
</tr>
<tr>
<td>Information Security and Assurance</td>
<td>CIT219</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT118</td>
</tr>
<tr>
<td>Advanced Computer Forensics</td>
<td>CIT221</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT121</td>
</tr>
<tr>
<td>Criminal Law</td>
<td>CRJ103</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095</td>
</tr>
<tr>
<td>Evidence &amp; Court Procedures</td>
<td>CRJ202</td>
<td></td>
<td></td>
<td>3</td>
<td>CRJ101 and CRJ103 or permission of chair</td>
</tr>
<tr>
<td>CRJ elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIT/ITB elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIT/ITB/CRJ elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>27</strong></td>
<td></td>
</tr>
</tbody>
</table>

Completion of CIT110 or CIT112 (CIT112 preferred) for CJ Professional or CRJ101 for IT Professionals are prerequisites to the program.

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

**PROGRAM OVERVIEW**

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

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

**CAREER OUTLOOK**

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

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

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

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Information Security</td>
<td>CIT118</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>Database Administration</td>
<td>CIT245</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT236 or chair approval</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Database Design with MS Access</td>
<td>CIT128</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>SQL Programming</td>
<td>CIT236</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>Database Programming</td>
<td>CIT240</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT236 or chair approval</td>
</tr>
<tr>
<td>Visual Basic</td>
<td>CIT216</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120</td>
</tr>
<tr>
<td>Intermediate Visual Basic</td>
<td>CIT218</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT216</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>27</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

**UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:**
- Have the skill set necessary to take the first level of Oracle database certification.

### Excel Applications Support Specialist Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Internet &amp; Information Security</td>
<td>CIT118</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>Decision Support Using MS Excel</td>
<td>CIT234</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>Collaboration, Communication &amp; Integration in MS Office Applications</td>
<td>CIT250</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 and RDG095 and ENG095 or chair approval</td>
</tr>
<tr>
<td>Practical Computer System Integration &amp; Troubleshooting</td>
<td>ITB140</td>
<td></td>
<td></td>
<td>3</td>
<td>RDG095 or ESL098 or placement</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PC Keyboarding Techniques</td>
<td>OIM100</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Computer Information Technology Internship</td>
<td>CIT299</td>
<td></td>
<td></td>
<td>3</td>
<td>Chair approval</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>22</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROGRAM OVERVIEW**
This certificate is designed to prepare students for entry-level positions in Excel support. The program has a total of 22 credits, spread over eight distinct courses. 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, ITB, 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.

**UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:**
- Use spreadsheet models, analyze and evaluate revenues, expenses and cash flows.
- Understand and utilize collaboration techniques of the Microsoft Office Suite.
- Understand the requirements of securing data and computer systems.
**Object Oriented Computer Programming and Design Certificate Program**

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro to Computer Science &amp; Object Oriented Programming</td>
<td>CIT120</td>
<td>Semester I</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Precalculus</td>
<td>MAT197</td>
<td>Semester I</td>
<td>4</td>
<td></td>
<td>MAT195 or placement</td>
</tr>
<tr>
<td>C++ Programming</td>
<td>CIT237</td>
<td>Semester II</td>
<td>3</td>
<td></td>
<td>MAT197; CIT120 or any programming language</td>
</tr>
<tr>
<td>Windows Operating Systems</td>
<td>ITB268</td>
<td>Semester II</td>
<td>3</td>
<td></td>
<td>CIT110</td>
</tr>
<tr>
<td>Advanced C++/OOP</td>
<td>CIT284</td>
<td>Semester III</td>
<td>3</td>
<td></td>
<td>CIT227 or CIT229 or permission</td>
</tr>
<tr>
<td>Introduction to Java</td>
<td>CIT239</td>
<td>Semester III</td>
<td>3</td>
<td></td>
<td>CIT120</td>
</tr>
<tr>
<td>Data Structures</td>
<td>CIT242</td>
<td>Semester IV</td>
<td>3</td>
<td></td>
<td>CIT239</td>
</tr>
<tr>
<td>Advanced Java</td>
<td>CIT285</td>
<td>Semester IV</td>
<td>3</td>
<td></td>
<td>CIT239</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>25</strong></td>
<td></td>
</tr>
</tbody>
</table>

Within two semesters of entering the program, students are expected to demonstrate acceptable keyboarding proficiency.

**Program Overview**

This certificate prepares students with in-depth knowledge of object oriented programming and design.

**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.

**Upon Completion of This Program, 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.
Associate in Science Degree: Computer Information Technology Program

This program prepares students with entry-level skills in various computer concentrations. Students take the required courses in a specific concentration. Students choose elective courses from relevant disciplines within the college. Graduates of this program qualify for entry-level positions in businesses and work environments that rely on network functions. The Database Programming and Administration Option is offered by the Computer Information Technology Department. The Computer Support Specialist Option, Network Technology and Administration Option and The Web Development Option are offered by the Information Technology for Business and Industry Department.

19 Computer Support Specialist Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Introduction to Networking</td>
<td>ITB162</td>
<td></td>
<td>3</td>
<td>3</td>
<td>prereq or coreq CIT110</td>
</tr>
<tr>
<td>HTML &amp; Dreamweaver</td>
<td>ITB111</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems Analysis/Design</td>
<td>CIT211</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110 or CIT120 and at least two other CIT courses</td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to MS Office</td>
<td>ITB133</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced MS Office</td>
<td>ITB233</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ITB133</td>
</tr>
<tr>
<td>PC Hardware</td>
<td>ITB182</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110 or CIT120 or permission</td>
</tr>
<tr>
<td>Windows Operating Systems</td>
<td>ITB268</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110</td>
</tr>
<tr>
<td>Visual Basic</td>
<td>CIT216</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110 or CIT120</td>
</tr>
<tr>
<td>Help Desk Techniques</td>
<td>ITB230</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110 or CIT120 and one additional CIT course; ENG095 and RDG095 or placement</td>
</tr>
<tr>
<td>Internship</td>
<td>ITB299</td>
<td></td>
<td>3</td>
<td></td>
<td>Chair approval</td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td>61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OPTION OVERVIEW

The Information Technology for Business and Industry (ITBI) Department mission is to establish and foster a department that provides students with the requisite technical knowledge and skills associated with emerging state-of-the-art computer and computer-related technologies and facilitates entry into workforce or the pursuit of advanced degrees. The department cultivates an atmosphere responsive to the rapidly changing needs of industry, where the pursuit of new technologies is encouraged, supported, and studied. This option prepares students to become vital links between the company and its customers, to deal directly with customer issues, to become good sources of product information, to educate users, and to solve hardware or software operation and application problems.

CAREER OUTLOOK

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

UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:
- Pass the Comp TIA A+ Certification Examination.
- Understand help desk, Internet support, hardware and other entry level IT support professions.
Network Technology and Administration Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td>Fall, 1st year</td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td>Spring, 1st year</td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Organizational Behavior</td>
<td>MAN112*</td>
<td>Spring, 1st year</td>
<td>3</td>
<td></td>
<td>ESL098 and ESL099 or ENG090 and RDG095 or placement</td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td>Spring, 2nd year</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td>Fall, 2nd year</td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td>Fall, 1st year</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td>Spring, 2nd year</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td>Fall, 1st year</td>
<td>3</td>
<td></td>
<td>ENG095 or RDG095 or placement</td>
</tr>
<tr>
<td>Introduction to Networking</td>
<td>ITB162</td>
<td>Fall, 1st year</td>
<td>3</td>
<td></td>
<td>MAT095; pre or co-req CIT110</td>
</tr>
<tr>
<td>Routers and Routing Basics</td>
<td>ITB167</td>
<td>Fall, 1st year</td>
<td>3</td>
<td></td>
<td>ITB162</td>
</tr>
<tr>
<td>Switching Basics and Intermediate Routing</td>
<td>ITB267</td>
<td>Spring, 1st year</td>
<td>3</td>
<td></td>
<td>ITB167</td>
</tr>
<tr>
<td>WAN Technologies</td>
<td>ITB274</td>
<td>Spring, 1st year</td>
<td>3</td>
<td></td>
<td>ITB267</td>
</tr>
<tr>
<td>Windows Operating Systems</td>
<td>ITB268</td>
<td>Spring, 1st year</td>
<td>3</td>
<td></td>
<td>CIT110 or instructor/chair approval</td>
</tr>
<tr>
<td>MS Windows Server Admin/Lab</td>
<td>ITB282</td>
<td>Fall, 2nd year</td>
<td>4</td>
<td></td>
<td>ITB162; Pre/co-req ITB268</td>
</tr>
<tr>
<td>Linux Administration/Lab</td>
<td>ITB270</td>
<td>Spring, 2nd year</td>
<td>4</td>
<td></td>
<td>ITB162 and ITB268</td>
</tr>
<tr>
<td>Networking Security</td>
<td>ITB264</td>
<td>Spring, 2nd year</td>
<td>3</td>
<td></td>
<td>ITB162</td>
</tr>
<tr>
<td>Wireless Technology</td>
<td>ITB262</td>
<td>Fall, 2nd year</td>
<td>3</td>
<td></td>
<td>ITB162</td>
</tr>
<tr>
<td>PC Hardware</td>
<td>ITB182</td>
<td>Fall, 2nd year</td>
<td>3</td>
<td></td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td>Fall, 2nd year</td>
<td>3</td>
<td></td>
<td>chair approval</td>
</tr>
<tr>
<td>Internship</td>
<td>ITB299</td>
<td>Spring, 2nd year</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL CREDITS: 63

* This course satisfies “Individual and Society” General Education Requirement Area 2.

Note: For evening students, ITB264 and ITB270 are offered in the fall and ITB262 and ITB282 are offered in the spring.

OPTION OVERVIEW
The Information Technology for Business and Industry (ITBI) Department mission is to establish and foster a department that provides students with the requisite technical knowledge and skills associated with emerging state-of-the-art computer and computer-related technologies and facilitates entry into the workforce. The department cultivates an atmosphere responsive to the rapidly changing needs of industry, where the pursuit of new technologies is encouraged, supported, and studied.

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

UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:
- Have knowledge of the latest versions of Network Operating Systems (NOS) including Linux and Microsoft.
- Set up and configure a network.
- Set up user accounts and profiles to protect the network’s integrity and security.
- Qualify to pass 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.
Web Development Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Intro to Mass Media</td>
<td>VMA111*</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Database Design with MS Access</td>
<td>CIT128</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>HTML &amp; Dreamweaver</td>
<td>ITB111</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Javascript</td>
<td>ITB113</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 and ITB111</td>
</tr>
<tr>
<td>Flash 8 &amp; Fireworks 8</td>
<td>ITB115</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110</td>
</tr>
<tr>
<td>XML</td>
<td>ITB117</td>
<td></td>
<td></td>
<td>3</td>
<td>ITB111</td>
</tr>
<tr>
<td>Introduction to Networking</td>
<td>ITB182</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110</td>
</tr>
<tr>
<td>XSL</td>
<td>ITB211</td>
<td></td>
<td></td>
<td>3</td>
<td>ITB111 and ITB117</td>
</tr>
<tr>
<td>ASP.NET/JSP</td>
<td>ITB215</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 and ITB111 and ITB117 and ITB239</td>
</tr>
<tr>
<td>XML Web Services</td>
<td>ITB221</td>
<td></td>
<td></td>
<td>3</td>
<td>ITB111 and ITB113 and ITB117</td>
</tr>
<tr>
<td>Windows Operating Systems</td>
<td>ITB268</td>
<td></td>
<td></td>
<td>3</td>
<td>CIT110 or instructor or chair approval</td>
</tr>
<tr>
<td>Digital Imaging with Photoshop</td>
<td>VMA105</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Internship</td>
<td>ITB299</td>
<td></td>
<td></td>
<td>3</td>
<td>Chair approval</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>64</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This course satisfies “World View” General Education Requirement Area 3.

**OPTION OVERVIEW**
This program prepares students for entry-level positions in firms that specialize in web-based delivery development of products, services, and web technologies; for entry-level positions in general business opportunities that employ in-house staff in the support and development of their own web delivery mechanisms, for such support services as company directories real-time content presentation. This program also provides a student a sound basis to enter the ever growing opportunities available for independent web development consulting opportunities. Additionally this program trains students in the concepts and application 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. This program will also prepare the student 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 web development support positions and provide them a solid basis for pursing certification as a Webmaster.

**UPON COMPLETION OF THIS OPTION, 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.
## Computer Support Specialist Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td></td>
<td>ESLO98 or RDG095 or placement</td>
</tr>
<tr>
<td>HTML &amp; Dreamweaver</td>
<td>ITB111</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Networking</td>
<td>ITB162</td>
<td></td>
<td>3</td>
<td></td>
<td>prereq or coreq CIT110</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to MS Office</td>
<td>ITB133</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual Basic</td>
<td>CIT216</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT110 or CIT120</td>
</tr>
<tr>
<td>PC Hardware</td>
<td>ITB182</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT110 or CIT120 or permission</td>
</tr>
<tr>
<td>Window Operating Systems</td>
<td>ITB268</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT110</td>
</tr>
<tr>
<td>Help Desk Techniques</td>
<td>ITB230</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT110 or CIT120 and one additional CIT course; ENG095 and RDG095 or placement</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>27</strong></td>
<td></td>
</tr>
</tbody>
</table>

### PROGRAM OVERVIEW

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

### CAREER OUTLOOK

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

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

- Have the skill set necessary to pass the Comp TIA A+ Certification Examination.
- Understand help desk, Internet support, hardware and other entry level IT support professions.
Network Technology and Administration Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Networking</td>
<td>ITB162</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095; prereq or coreq CIT110</td>
</tr>
<tr>
<td>Routers and Routing Basics</td>
<td>ITB167</td>
<td></td>
<td>3</td>
<td>ITB162</td>
<td></td>
</tr>
<tr>
<td>Switching Basics and Intermediate Routing</td>
<td>ITB267</td>
<td></td>
<td>3</td>
<td>ITB167</td>
<td></td>
</tr>
<tr>
<td>WAN Technologies</td>
<td>ITB274</td>
<td></td>
<td>3</td>
<td>ITB267</td>
<td></td>
</tr>
<tr>
<td>MS Windows Server Admin/Lab</td>
<td>ITB282</td>
<td></td>
<td>4</td>
<td>ITB162; pre/coreq ITB268</td>
<td></td>
</tr>
<tr>
<td>Linux Administration/Lab</td>
<td>ITB270</td>
<td></td>
<td>4</td>
<td>ITB162 and ITB268</td>
<td></td>
</tr>
<tr>
<td>Networking Security</td>
<td>ITB264</td>
<td></td>
<td>3</td>
<td>ITB162</td>
<td></td>
</tr>
<tr>
<td>Wireless Technology</td>
<td>ITB262</td>
<td></td>
<td>3</td>
<td>ITB162</td>
<td></td>
</tr>
<tr>
<td>PC Hardware</td>
<td>ITB182</td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>29</strong></td>
<td></td>
</tr>
</tbody>
</table>

**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 qualify to become network administrators, responsible for day-to-day network operations, and for other entry-level network positions.

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

- Set up, maintain, and support networks for small and medium sized businesses.
- Qualify to pass 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.
### Web Development Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML &amp; Dreamweaver</td>
<td>ITB111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110 and ITB111</td>
</tr>
<tr>
<td>Javascript</td>
<td>ITB113</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110</td>
</tr>
<tr>
<td>Flash MX &amp; Fireworks MX</td>
<td>ITB115</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ITB111</td>
</tr>
<tr>
<td>XML</td>
<td>ITB117</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ITB111 and ITB117</td>
</tr>
<tr>
<td>XSL</td>
<td>ITB211</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110 and CIT128 or CIT239</td>
</tr>
<tr>
<td>ASP.NET/JSP</td>
<td>ITB215</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110 or instructor or chair approval</td>
</tr>
<tr>
<td>Windows Operating Systems</td>
<td>ITB268</td>
<td></td>
<td>3</td>
<td>3</td>
<td>CIT110 or CIT120 or chair approval</td>
</tr>
<tr>
<td>Database Design with MS Access</td>
<td>CIT128</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Digital Imaging with Photoshop</td>
<td>VMA105</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**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.

**UPON COMPLETION OF THIS PROGRAM, 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.
PROGRAM OVERVIEW
The Criminal Justice Program will provide academically rigorous education to prepare students for entry-level careers in security, law enforcement, and corrections. Preparation 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 will also be provided. In addition to specific content knowledge, all students will develop critical thinking, technological, cross-cultural and gender competencies, ethical understanding and communication skills.

CAREER OUTLOOK
Graduates of this program qualify for entry-level positions in security, law enforcement, and corrections in local, state, and some federal law enforcement agencies.

UPON COMPLETION OF THIS PROGRAM, 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;
  - researching criminal justice issues.

• Communicate effectively both orally and in writing.

• Use a computer to access data and information.

* See the department chairperson or course syllabi for detailed program competencies and policies.
## Program Overview

Developed in cooperation with the Massachusetts Chiefs of Police Association, the Law Enforcement Certificate Program has been approved by the Massachusetts Board 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.

## Upon Completion of This Program, Graduates Will Be Able To:

- Enhance their cultural awareness and interpersonal communication skills.
- Acquire specific content knowledge of criminal justice and criminal law.

## Law Enforcement Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Criminal Justice</td>
<td>CRJ101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Criminal Law</td>
<td>CRJ103</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement</td>
</tr>
<tr>
<td>Evidence &amp; Court Procedure</td>
<td>CRJ202</td>
<td></td>
<td></td>
<td>3</td>
<td>CRJ101 and CRJ103 or permission</td>
</tr>
<tr>
<td>Policing in a Democratic Society</td>
<td>CRJ220</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SDC101</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Criminology</td>
<td>SDC107</td>
<td></td>
<td></td>
<td>3</td>
<td>PSY101 or SDC101</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>27</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
27 Associate in Science Degree: Culinary Arts Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL EDUCATION COURSES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>ENG111</td>
<td></td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topics in Career Math</td>
<td>MAT100*</td>
<td></td>
<td>3</td>
<td>MAT090</td>
<td></td>
</tr>
<tr>
<td>Nutrition Science/Lab</td>
<td>BIO115**</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td></td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>CORE COURSES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Services Sanitation &amp; Skills</td>
<td>CUL111</td>
<td>Fall</td>
<td>3</td>
<td>ENG095 and MAT095 and RDG095</td>
<td></td>
</tr>
<tr>
<td>Introduction to Culinary Arts</td>
<td>CUL115</td>
<td>Fall</td>
<td>4</td>
<td>CUL111</td>
<td></td>
</tr>
<tr>
<td>Principles of Baking</td>
<td>CUL125</td>
<td>Fall</td>
<td>4</td>
<td>CUL111</td>
<td></td>
</tr>
<tr>
<td>Café and Bistro Cuisine</td>
<td>CUL135</td>
<td>Spring</td>
<td>4</td>
<td>CUL115 and CUL125</td>
<td></td>
</tr>
<tr>
<td>Advanced Desserts and Pastries</td>
<td>CUL145</td>
<td>Spring</td>
<td>4</td>
<td>CUL115 and CUL125</td>
<td></td>
</tr>
<tr>
<td>Menu Design and Purchasing</td>
<td>CUL211</td>
<td>Fall</td>
<td>3</td>
<td>CUL135 and CUL145</td>
<td></td>
</tr>
<tr>
<td>Essentials of Food Production</td>
<td>CUL215</td>
<td>Fall</td>
<td>4</td>
<td>CUL211</td>
<td></td>
</tr>
<tr>
<td>Essentials of Dining Service</td>
<td>CUL225</td>
<td>Fall</td>
<td>4</td>
<td>CUL211</td>
<td></td>
</tr>
<tr>
<td>Advanced &amp; Ethnic Food Production</td>
<td>CUL235</td>
<td>Spring</td>
<td>4</td>
<td>CUL215 and CUL225</td>
<td></td>
</tr>
<tr>
<td>Food and Beverage Operations</td>
<td>CUL245</td>
<td>Spring</td>
<td>4</td>
<td>CUL215 and CUL225</td>
<td></td>
</tr>
<tr>
<td>Culinary Arts Internship</td>
<td>CUL299</td>
<td>Summer</td>
<td>3</td>
<td>Permission of chair</td>
<td></td>
</tr>
<tr>
<td>Hospitality Law</td>
<td>HRT117</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective+</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td>47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This course satisfies “Quantitative Thought” General Education Requirement Area 4.
** This course satisfies “Science & Technology” General Education Requirement Area 5.
+ Career Electives: HRT104, HRT115, or CIT110

PROGRAM OVERVIEW
The mission of the Culinary Arts Program is to be a leader in Hospitality and Culinary Arts education, developing 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.

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

CAREER OUTLOOK
Graduates of this program qualify for a variety of positions in hotels, restaurants, and resorts. Typically, these positions are in food production, shift supervision, and kitchen management. Students also qualify to transfer to four-year colleges or universities to pursue bachelor’s degrees.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
- Demonstrate practiced and acquired technical skills in the usage of tools and equipment found in a typical food service/food production setting.
- Demonstrate necessary administrative skills common to basic cost control and planning methods found in a typical commercial food service/food production setting.
- Demonstrate conceptual skills acquired through course work relative to planning a successful restaurant operation.
Culinary Arts Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Service Sanitation and Skills</td>
<td>CUL111</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ENG095 and MAT090 and RDG095 or placement</td>
</tr>
<tr>
<td>Introduction to Culinary Arts</td>
<td>CUL115</td>
<td>Fall</td>
<td>4</td>
<td></td>
<td>CUL111</td>
</tr>
<tr>
<td>Principles of Baking</td>
<td>CUL125</td>
<td>Fall</td>
<td>4</td>
<td></td>
<td>CUL111</td>
</tr>
<tr>
<td>Café and Bistro Cuisine</td>
<td>CUL135</td>
<td>Spring</td>
<td>4</td>
<td></td>
<td>CUL115 and CUL125</td>
</tr>
<tr>
<td>Advanced Desserts and Pastries</td>
<td>CUL145</td>
<td>Spring</td>
<td>4</td>
<td></td>
<td>CUL115 and CUL125</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Menu Design and Purchasing</td>
<td>CUL211</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>CUL135 and CUL145</td>
</tr>
<tr>
<td>Nutrition Science/Lab</td>
<td>BIO115</td>
<td>Spring</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>29</td>
<td></td>
</tr>
</tbody>
</table>

PROGRAM OVERVIEW
This program prepares students with the basic skills and knowledge required for entry-level positions in the food service industry. This two-semester, 25-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: Hotel/Restaurant/Travel Program.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
• Demonstrate practiced and acquired technical skills in the usage of tools and equipment found in a typical food service/food production setting.
• Demonstrate 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 Degree: Early Childhood Development Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Growth/Development</td>
<td>ECE103*</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
<td></td>
</tr>
<tr>
<td>Program Environments</td>
<td>ECE106</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
<td></td>
</tr>
<tr>
<td>Issues in Early Childhood Education</td>
<td>ECE102</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
<td></td>
</tr>
<tr>
<td>Guidance/Discipline</td>
<td>ECE101</td>
<td></td>
<td>3</td>
<td>ECE103</td>
<td></td>
</tr>
<tr>
<td>Curriculum in Early Childhood Education</td>
<td>ECE104</td>
<td></td>
<td>3</td>
<td>ECE103</td>
<td></td>
</tr>
<tr>
<td>Observation/Recording Behavior</td>
<td>ECE117</td>
<td></td>
<td>3</td>
<td>ECE103</td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>ENG111</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td></td>
<td>From Area 3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101**</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
<td></td>
</tr>
<tr>
<td>Children's Literature I</td>
<td>LIT217</td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td></td>
<td>From Area 4</td>
<td>3</td>
<td>MAT095 or placement</td>
<td></td>
</tr>
<tr>
<td>Science and Technology</td>
<td></td>
<td>From Area 5</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>From Area 6</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Families/Community in Early Childhood Education</td>
<td>ECE112</td>
<td></td>
<td>3</td>
<td>3 courses in ECE; ECE103</td>
<td></td>
</tr>
<tr>
<td>Practicum in Early Childhood Education I</td>
<td>ECE120</td>
<td></td>
<td>3</td>
<td>Chair approval</td>
<td></td>
</tr>
<tr>
<td>Special Needs Child in Early Childhood Education</td>
<td>ECE111</td>
<td></td>
<td>3</td>
<td>3 courses in ECE; ECE103</td>
<td></td>
</tr>
<tr>
<td>Practicum in Early Childhood Education II</td>
<td>ECE121</td>
<td></td>
<td>3</td>
<td>Chair approval</td>
<td></td>
</tr>
<tr>
<td>Elective***</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective***</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

* ECE103 was formerly PSY109. Students may not receive credit for both ECE103 and PSY109.
** This course satisfies "Individual and Society" General Education Requirement Area 2.
*** Recommended electives: ECE108, ECE113 or ECE115.

PROGRAM OVERVIEW

Early Childhood Education & Human Services Department’s mission statement and goals state two primary purposes. These are: 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. 2) To serve the community as an information and knowledge-base in the area of social service, with specific expertise in early childhood education and development, human services, and education.

This program prepares students in the fields of growth of the child, influences of the family upon the child, and environmental pressures upon the family.

CAREER OUTLOOK

Graduates of this program qualify for employment in a variety of settings, including day care centers, preschools, head start programs, family home care, social service organizations, and day camps. Students also may transfer to four-year colleges or universities in elementary education, human services work with families and children, or special needs childcare. Graduates of this program qualify as teachers and/or lead teachers in the state of Massachusetts. For more information on minimal requirements for employment, contact the department chairperson.

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

- Use knowledge of child development and relationships with children and families to understand children as individuals and plan for their unique development by organizing environments which facilitate development in all developmental areas.
- Design and implement developmentally appropriate learning experiences using methods and materials which promote growth and development.
- Work with parents, families, and community leaders to support growth and development of children by engaging each child in meaningful experiences.
- Observe children in their care and be able to analyze and synthesize information about children so as to improve their own work with children, families, and communities.
- Analyze, evaluate and strengthen their work with children by reflecting upon effective practices and collaborating with other professionals in the field.
## Early Childhood Development Certificate Program

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

*ECE103 was formerly PSY109. Students may not receive credit for both ECE103 and PSY109.

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

### 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 or after meeting the educational requirements for teacher and/or lead teacher certification.

### CAREER OUTLOOK
Graduates of this program qualify as teacher’s aides in the State of Massachusetts. For more information on minimal requirements for employment, contact the department chairperson.

### UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
- Use knowledge of child development and relationships with children and families to understand children as individuals and plan for their unique development by organizing environments which facilitate development in all developmental areas.
- Design and implement developmentally appropriate learning experiences using methods and materials which promote growth and development.
- Work with parents, families, and community leaders to support growth and development of children by engaging each child in meaningful experiences.
- Observe children in their care to analyze and synthesize information about those children so as to improve their work with children, families, and communities.
- Analyze, evaluate and strengthen their work with children by reflecting upon effective practices and collaborating with other professionals in the field.

TOTAL CREDITS: 24
### Associate in Arts Degree: Education Concentration

Transfer agreements to Bridgewater, Salem State and UMass Boston vary. Please check with Department Chair or Transfer Counselor.

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td></td>
<td>From Area 2*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td></td>
<td>From Area 3*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td></td>
<td>From Area 4</td>
<td>3</td>
<td>4</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td></td>
<td>From Area 5</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>From Area 6</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Child Growth/Development or Adolescent/Adult Development</td>
<td>ECE103** or PSY124</td>
<td></td>
<td>3</td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World Civilization I</td>
<td>HIS111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>World Civilization II</td>
<td>HIS112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>US History I or US History II</td>
<td>HIS151 or HIS152</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Children’s Literature or Elective</td>
<td>LIT217</td>
<td></td>
<td>3</td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective***</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective***</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td>62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This requirement is satisfied by Concentration Courses.
** ECE103 was formerly PSY109. Prerequisite for ECE103 is ESL098 and ESL099 or RDG095 and ENG090 or placement.
*** Students may not receive credit for both ECE103 and PSY109.

**CONCENTRATION OVERVIEW**

Early Childhood Education & Human Services Department’s mission statement and goals state two primary purposes. These are: 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.

2.) To serve the community as an information and knowledge-base in the area of social service, with specific expertise in early childhood education and development, human services, and education.

This concentration prepares students seeking bachelor’s degrees in education or liberal arts to transfer to four-year colleges or universities. In order to assure certification by the Massachusetts Office of Child Care Services, students seeking entry-level work in child care should enroll in the Associate in Science Degree: Early Childhood Development Program. For more information, contact the department chairperson.

**CAREER OUTLOOK**

Graduates of this concentration, which meets all the requirements of the Commonwealth Transfer Compact, qualify to transfer to four-year colleges or universities as juniors. Potential teaching careers include teacher aide; 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 114.
Electric Power Utility Program – A Partnership with NSTAR

In partnership with NSTAR, Bunker Hill Community College, and Local 369 UWUA, students can achieve a two-year Accredited Associate in Science Degree with a focus on Electric Power Utility Technology. Students will conduct much of their laboratory training at an NSTAR facility. Most classroom course work will be conducted at BHCC.

ADMISSION REQUIREMENTS:
Students must apply to the program through the Advising Counseling Center (B108) and:
1. Complete the NSTAR application.
2. Possess a high school diploma or GED certificate.

Associate in Science Degree: Electric Power Utility Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td>Semester I</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
<td></td>
</tr>
<tr>
<td>Topics in Algebra &amp; Trigonometry</td>
<td>MAT193</td>
<td>Semester I</td>
<td>3</td>
<td>MAT095 or placement</td>
<td></td>
</tr>
<tr>
<td>DC Circuit Theory/Lab</td>
<td>ETT101</td>
<td>Semester I</td>
<td>4</td>
<td>Pre or Coreq. MAT193</td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Single Phase &amp; Polyphase Metering</td>
<td>ITB151</td>
<td>Semester I</td>
<td>4</td>
<td>Acceptance in Program</td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td>Semester II</td>
<td>3</td>
<td>ENG111</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td>Semester II</td>
<td>3</td>
<td>RDG095 or ESL098</td>
<td></td>
</tr>
<tr>
<td>Group Dynamics</td>
<td>PSY107</td>
<td>Semester II</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Circuit Theory/Lab</td>
<td>ETT104</td>
<td>Semester II</td>
<td>4</td>
<td>ETT101</td>
<td></td>
</tr>
<tr>
<td>Overview of Underground and Substation Operations</td>
<td>ITB153</td>
<td>Semester II</td>
<td>4</td>
<td>Acceptance in Program</td>
<td></td>
</tr>
<tr>
<td>Electric Power/Utility Tech Internship</td>
<td>ITB251</td>
<td>Summer I, Yr I</td>
<td>3</td>
<td>ITB151 and ITB153</td>
<td></td>
</tr>
<tr>
<td>Intro to Mass Media</td>
<td>VMA111</td>
<td>Semester III</td>
<td>3</td>
<td>ENG095 and MAT090</td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Overhead Linework I</td>
<td>ITB253</td>
<td>Semester III</td>
<td>4</td>
<td>ITB251</td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Overhead Linework II</td>
<td>ITB255</td>
<td>Semester III</td>
<td>4</td>
<td>ITB251</td>
<td></td>
</tr>
<tr>
<td>Power and Distribution Systems</td>
<td>ITB257</td>
<td>Semester III</td>
<td>3</td>
<td>ETT104</td>
<td></td>
</tr>
<tr>
<td>Intro to Physics</td>
<td>PHY191</td>
<td>Semester IV</td>
<td>4</td>
<td>MAT193</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td>Semester IV</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Overhead Linework I</td>
<td>ITB259</td>
<td>Semester IV</td>
<td>4</td>
<td>ITB253 and ITB255</td>
<td></td>
</tr>
<tr>
<td>Intermediate Overhead Linework II</td>
<td>ITB261</td>
<td>Semester IV</td>
<td>4</td>
<td>ITB253 and ITB255</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td><strong>63</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CAREER OUTLOOK
Based on a student's grades, skills, and attitude, employment opportunities exist with NSTAR or an NSTAR qualified contractor upon graduation. Current starting salary is approximately $23 to $25 per hour, and overtime is also compensated. NSTAR offers a competitive and comprehensive benefits package including: health and dental care, life insurance, pension plan, 401K plan (including company matching program), as well as continuing education reimbursement.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
• Demonstrate practiced and acquired skills while working at NSTAR in a variety of electrical fields with emphasis on the Overhead Line Worker.
• Use a computer to access data and information.
• Communicate effectively both orally and in writing.
• Obtain licenses from NSTAR.

Students will earn the following certifications:
• OSHA 1910.269 Regulations.
• First Aid/CPR.
• Pole-Top, Vault Rescue, Bucket Truck Rescue.
• CDL Pre-trip Training.
• DL Class B Drivers License.
• D.O.T. Medical Certification.
Associate in Science Degree: Engineering Program

The Associate of Science in Engineering Program is offered as part of a response to the skill shortages in the engineering workforce, and is consistent with the mission of the College. It is designed to meet the needs of BHCC students and to address the workforce demands of Greater Boston. The curriculum is structured to mirror the freshman and sophomore years of a university engineering degree. Accordingly, the Science Department is developing articulation agreements with area universities to enable BHCC engineering graduates to transfer as juniors, upon completing the Associate of Science degree. The curriculum offers two options: an Engineering Transfer Option and a Biomedical Engineering Option.

### Biomedical Engineering Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual/Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>OPTION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Intro to Engineering/Lab</td>
<td>ENR101</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT195</td>
</tr>
<tr>
<td>Biomedical Engineering/Lab</td>
<td>BME100</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT281 and CHM201 coreq: MAT282</td>
</tr>
<tr>
<td>Biomedical Engineering II</td>
<td>BME200</td>
<td></td>
<td>3</td>
<td>3</td>
<td>BME100 and MAT282; coreq: MAT283</td>
</tr>
<tr>
<td>Biomedical Engineering III</td>
<td>BME250</td>
<td></td>
<td>3</td>
<td>3</td>
<td>BME200; coreq: MAT285</td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT196 or MAT197</td>
</tr>
<tr>
<td>Calculus II</td>
<td>MAT282</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT281</td>
</tr>
<tr>
<td>Calculus III</td>
<td>MAT283</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT282</td>
</tr>
<tr>
<td>Ordinary Differential Equations</td>
<td>MAT285</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT282</td>
</tr>
<tr>
<td>College Physics I/Lab</td>
<td>PHY251</td>
<td></td>
<td>4</td>
<td>4</td>
<td>Pre/coreq: MAT281</td>
</tr>
<tr>
<td>College Physics II/Lab</td>
<td>PHY252</td>
<td></td>
<td>4</td>
<td>4</td>
<td>PHY251; Pre/coreq: MAT282</td>
</tr>
<tr>
<td>General Chemistry I/Lab</td>
<td>CHM201</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT195</td>
</tr>
<tr>
<td>General Chemistry II/Lab</td>
<td>CHM202</td>
<td></td>
<td>4</td>
<td>4</td>
<td>CHM201</td>
</tr>
<tr>
<td>General Biology I/Lab</td>
<td>BIO195</td>
<td></td>
<td>4</td>
<td>4</td>
<td>ENG095 and MAT095 and RDG095</td>
</tr>
<tr>
<td>General Biology II/Lab</td>
<td>BIO196</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO195</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>69</td>
<td></td>
</tr>
</tbody>
</table>

* This requirement is satisfied by Option Courses.
# Engineering Transfer Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL EDUCATION COURSES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual/Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>OPTION COURSES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro to Engineering/Lab</td>
<td>ENR101</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT195</td>
</tr>
<tr>
<td>Engineering Statics</td>
<td>ENR260</td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT282 and PHY251</td>
</tr>
<tr>
<td>Ordinary Differential Equations</td>
<td>MAT285</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT282</td>
</tr>
<tr>
<td>Engineering Dynamics</td>
<td>ENR265</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENR260; coreq: MAT285</td>
</tr>
<tr>
<td>Strength of Materials</td>
<td>ENR270</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENR260; coreq: MAT285</td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT196 or MAT197</td>
</tr>
<tr>
<td>Calculus II</td>
<td>MAT282</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT281</td>
</tr>
<tr>
<td>Calculus III</td>
<td>MAT283</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT282</td>
</tr>
<tr>
<td>College Physics I/Lab</td>
<td>PHY251</td>
<td></td>
<td>4</td>
<td>4</td>
<td>Pre/coreq: MAT281</td>
</tr>
<tr>
<td>College Physics II/Lab</td>
<td>PHY252</td>
<td></td>
<td>4</td>
<td>4</td>
<td>PHY251; Pre/coreq: MAT282</td>
</tr>
<tr>
<td>General Chemistry I/Lab</td>
<td>CHM201</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT195</td>
</tr>
<tr>
<td>General Chemistry II/Lab</td>
<td>CHM202</td>
<td></td>
<td>4</td>
<td>4</td>
<td>CHM201</td>
</tr>
<tr>
<td>Career Elective**</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Career Elective**</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>51</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>

* This requirement is satisfied by Option Courses.

** Career Elective may be selected from any non-required ENR courses.

** 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

Overall engineering jobs will rise by 9.4% through 2010, according to the US DOL, though growth in specific disciplines of engineering will rise faster. Graduates 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.

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

- Design and conduct experiments.
- Analyze and interpret data.
- Apply computational tools and scientific concept 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 Degree: English Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6*</td>
<td></td>
<td></td>
<td>19</td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing Tutor Seminar I</td>
<td>ENG115</td>
<td></td>
<td>1 - 4</td>
<td>instructor approval</td>
<td></td>
</tr>
<tr>
<td>Literature Course</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
<td></td>
</tr>
<tr>
<td>Literature Course</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
<td></td>
</tr>
<tr>
<td>Literature Course</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
<td></td>
</tr>
<tr>
<td>Literature Course</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
<td></td>
</tr>
<tr>
<td>English Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
<td></td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>41 - 44</td>
<td>60 - 63</td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.

### 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. This program meets all requirements of the Commonwealth Transfer Compact.

### CAREER OUTLOOK

Graduates of this concentration qualify to transfer to four-year institutions that prepare students for careers in teaching, journalism, public relations, and media communications. Students must complete a bachelor’s degree and teaching certificate to pursue a teaching career. A bachelor’s degree in English is a minimum requirement for entry level work in careers such as publishing, advertising, public relations, and journalism. In order to advance in some fields, graduate work may be required.

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

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

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 114.
# Associate in Science Degree: Fire Protection and Safety Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Algebra</td>
<td>MAT195*</td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SOC101**</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Inspection/Fire Prevention</td>
<td>FPS101</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Protection/Safety</td>
<td>FPS103</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Building Construction for Fire</td>
<td>FPS105</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulics/Fire Protection</td>
<td>FPS205</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>FPS208</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Codes/Standards</td>
<td>FPS211</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Protection Systems/Equipment</td>
<td>FPS212</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Science I/Lab</td>
<td>CHM110</td>
<td></td>
<td>4</td>
<td>4</td>
<td>ENG095 and MAT095 or placement</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective***</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective***</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td>61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This course satisfies “Quantitative Thought” General Education Requirement Area 4.
** This course satisfies “Individual and Society” General Education Requirement Area 2.
*** Choose two of these three Career Elective options: FPS107, 207, or 209.

“Science and Technology” General Education Requirement Area 5 is satisfied by program courses.

**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 leads to higher scores on promotional examinations. The textbooks used for the associate degree program, as well as the laws and standards of fire service, engineering, and fire science, are identical and/or related to texts and materials listed in the promotional brochures promulgated by the Massachusetts Department of Civil Service. This program is offered in the evening only.

**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 upper-level colleges or universities seeking a bachelor’s degree in fire protection and safety. This program also prepares fire fighters who wish to upgrade their career status.

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

- Understand the principles of fire protection and safety.
- Demonstrate preparedness to be a fire company officer.
- Understand the principles of arson investigation.
- Demonstrate familiarity with inspections for fire prevention.
- Demonstrate preparedness to take promotional civil service fire exams.
## Associate in Arts Degree: Foreign Language Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Foreign Language</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(Intermediate Proficiency)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Foreign Language</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(Intermediate Proficiency)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of Western Civilization I</td>
<td>HIS101</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>History of Western Civilization II</td>
<td>HIS102</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>Masterpieces of World Literature I</td>
<td>LIT211</td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Masterpieces of World Literature II</td>
<td>LIT212</td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Second Foreign Language</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(Elementary Proficiency)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Foreign Language</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(Elementary Proficiency)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.

### CONCENTRATION OVERVIEW

The goal of the Foreign Language department at Bunker Hill Community College is to expose students to a language and culture in order to make them knowledgeable and active members of a global society. Students will 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 the cultural and linguistic heritage of other groups and their influence on our own, and are prepared to participate in a society characterized by linguistic and cultural diversity.

This concentration prepares students to transfer to four-year colleges or universities to major in a foreign language. The program meets all requirements of the Commonwealth Transfer Compact.

### 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 readings 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 114.
### Associate in Arts Degree: General Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

The department encourages students to consult with their intended transfer institution to determine appropriate electives. The department recommends a two-semester language sequence.

### CONCENTRATION OVERVIEW
This concentration prepares students who have not yet chosen a major field of study to transfer to four-year colleges or universities as juniors. The college encourages students to take electives in disciplines in which they may major at a four-year institution. This concentration meets all requirements of the Commonwealth Transfer Compact.

### 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 114.
The Medical Imaging Program prepares students in four different Associate in Science Degree options:

THE FOUR ASSOCIATE IN SCIENCE DEGREE OPTIONS ARE:

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

Programmatic accreditation is as follows:

The Cardiac Sonography and General Sonography Options are accredited by the Commission on Accreditation of Allied Health Education Programs.

The Medical Radiography Options are accredited by the Joint Review Committee on Education in Radiologic Technology.

See BHCC accreditation statement on the inside back cover of this catalog for contact information for each of the accrediting agencies.

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

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 Exam. The program begins in the fall semester, and didactic and clinical education are carefully correlated to provide reinforcement in the clinical setting of skills learned in the classroom. Students in the program must earn a numerical course grade of 80% or better in all imaging courses, and a minimum grade of C in all general education courses. Failure to meet clinical objectives or failure to meet the academic standard in any course will result in withdrawal from the program. Students may apply for readmission to the program one time, on a space-available basis. All medical imaging students must undergo a physical examination, complete the necessary immunization forms, including the three (3) dose Hepatitis B immunization series, have CPR certification, carry malpractice and health insurance, and undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 172 – 178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of medical imaging courses. If a student is found to have a CORI issue, he/she will be referred to the BHCC CORI officer for further discussion. If a CORI offense precludes participation in the clinical component of the program, the student will be withdrawn from the program. Admission to the medical imaging program does not guarantee clinical placement. The outcome of the CORI check may impact the student’s ability to participate in the clinical experience. Individuals with previous court convictions also must meet eligibility requirements of the previously mentioned credentialing bodies. For further information, please see the department chairperson.

PREREQUISITES FOR ALL MEDICAL IMAGING OPTIONS:

1. Attend one MANDATORY information session. (Refer to BHCC website for dates)
2. Possess a high school diploma or GED certificate.
3. Take college placement test (CPT), or LOEP for ESL students.
4. Complete the following courses with a grade of C or better:
   a. One semester of college algebra (MAT 195) or equivalent;
   b. One semester of college level Anatomy/Physiology I/Lab (must be completed within 5 years of application unless currently working in related healthcare position).

AFTER ALL PREREQUISITES ARE COMPLETED:

1. Apply through The Admissions Office between September 15 – December 30.
2. Top-scoring applicants in each option will be invited to interview with the Medical Imaging Admissions Committee.
3. Job shadows will be recommended to each of these applicants prior to the interview.
4. Communication skills and overall knowledge of the field will be ranked during the interview and essay process.
5. The Medical Imaging Admissions Committee will evaluate each candidate’s record at the completion of interviews.
6. Admission to the Medical Imaging Program will be based on the initial ranking as well as the ranking of the interview.

Note: A college physics course is highly recommended for Diagnostic Medical Sonography applicants.
**Cardiac Sonography Option**

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

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

**UPON COMPLETION OF THIS OPTION, GRADUATES WILL BE ABLE TO:**
- Possess the general knowledge and technical skills required to perform cardiac echo examinations as an entry-level cardiac sonographer.
- Demonstrate sufficient knowledge of cardiac sonography to pursue registry status through The American Registry of Diagnostic Medical Sonographers.
- Understand the importance of lifelong continuing education in the field of Cardiac Sonography.

**COURSE TITLE** | **COURSE NUMBER** | **SEMESTER TAKEN** | **GRADE** | **CREDITS** | **PREREQUISITES**
--- | --- | --- | --- | --- | ---
Patient Care in Medical Imaging | MIG109 | Fall | 4 | coreq MIG107 |
Intro to Ultrasound | MIG101 | Fall | 2 | |
Ultrasound Instrumentation | MIG105 | Fall | 3 | |
Anatomy/Physiology II/Lab | BIO204 | Fall | 4 | BIO203 |
Echo I | MIG112 | Spring | 3 | MIG101 |
Interpretation I | MIG115 | Spring | 4 | MIG109 |
College Writing I | ENG111 | Spring | 3 | ENG095 or placement and ESL098 or RDG095 |
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 Instrumentation II | MIG207 | Fall | 2 | MIG119 |
Cardiac Sonography Clinical I | MIG211 | Fall | 3 | MIG119; coreq MIG201 |
Cardiac Sonography Clinical II | MIG213 | Spring | 4 | MIG211; coreq MIG215 |
Echo IV/Interpretation | MIG215 | Spring | 4 | MIG203 |
Advanced Interpretation Seminar | MIG216 | Spring | 2 | MIG211 and MIG203; coreq MIG215 |
Applications/Concepts | CIT110 | Spring | 3 | ESL098 or RDG095 or placement |
Cardiac Sonography Clinical III | MIG217 | Summer | 4 | MIG213 |
**TOTAL CREDITS** | | | | **66** |
**General Sonography Option**

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care in Medical Imaging</td>
<td>MIG109</td>
<td>Fall</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Introduction to Ultrasound</td>
<td>MIG101</td>
<td>Fall</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Ultrasound Instrumentation</td>
<td>MIG105</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Cross Sectional Anatomy</td>
<td>SON113</td>
<td>Fall</td>
<td></td>
<td>4</td>
<td>Coreq: BII204</td>
</tr>
<tr>
<td>Anatomy/Physiology II/Lab</td>
<td>BII204</td>
<td>Fall</td>
<td></td>
<td>4</td>
<td>BII203</td>
</tr>
<tr>
<td>Abdominal Ultrasound</td>
<td>SON115</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>Coreq: SON121</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ESL098 and RDG095 or placement</td>
</tr>
<tr>
<td>Ultrasound Scanning Protocols &amp; Pathology</td>
<td>SON117</td>
<td>Spring</td>
<td></td>
<td>4</td>
<td>Coreq: SON121</td>
</tr>
<tr>
<td>Subspeciality Sonography &amp; Neurosonography</td>
<td>SON119</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>Coreq: SON121</td>
</tr>
<tr>
<td>General Sonography Clinical I</td>
<td>SON121</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>Coreqs: SON115 and SON117 and SON119</td>
</tr>
<tr>
<td>Vascular Ultrasound</td>
<td>MIG205</td>
<td>Summer I</td>
<td></td>
<td>3</td>
<td>Coreq: SON123</td>
</tr>
<tr>
<td>General Sonography Clinical II</td>
<td>SON123</td>
<td>Summer</td>
<td></td>
<td>3</td>
<td>SON121; Coreq: MIG205</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td>Summer II</td>
<td></td>
<td>3</td>
<td>ENG099 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Diagnostic Instrumentation</td>
<td>SON213</td>
<td>Fall</td>
<td></td>
<td>2</td>
<td>Coreq: SON223</td>
</tr>
<tr>
<td>Advanced General Sonography Seminar I</td>
<td>SON215</td>
<td>Fall</td>
<td></td>
<td>2</td>
<td>Coreq: SON223</td>
</tr>
<tr>
<td>Obstetrical/Gynecological Sonography I</td>
<td>SON219</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>Coreq: SON223</td>
</tr>
<tr>
<td>General Sonography Clinical III</td>
<td>SON223</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>SON123; Coreqs: SON213, SON215, and SON219</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SOC101</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Advanced General Sonography Seminar II</td>
<td>SON217</td>
<td>Spring</td>
<td></td>
<td>2</td>
<td>SON215; Coreq: SON225</td>
</tr>
<tr>
<td>Obstetrical/Gynecological Sonography II</td>
<td>SON221</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>SON219; Coreq: SON225</td>
</tr>
<tr>
<td>General Sonography Clinical IV</td>
<td>SON225</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>SON223; Coreqs: SON217 and SON221</td>
</tr>
<tr>
<td>General Sonography Clinical V</td>
<td>SON227</td>
<td>Summer</td>
<td></td>
<td>3</td>
<td>SON225</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>69</strong></td>
<td></td>
</tr>
</tbody>
</table>

**OPTION OVERVIEW**

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

**CAREER OUTLOOK**

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

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

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

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care in Medical Imaging</td>
<td>MIG109</td>
<td>Fall</td>
<td>4</td>
<td>4</td>
<td>coreq MIG107</td>
</tr>
<tr>
<td>Intro to Medical Radiography</td>
<td>MIG107</td>
<td>Fall</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Positioning I</td>
<td>MIG122</td>
<td>Fall</td>
<td>3</td>
<td>3</td>
<td>Coreq MIG124</td>
</tr>
<tr>
<td>Medical Radiography Clinical I</td>
<td>MIG124</td>
<td>Fall</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Anatomy/Physiology II/Lab</td>
<td>BIO204</td>
<td>Spring</td>
<td>4</td>
<td>4</td>
<td>BIO203</td>
</tr>
<tr>
<td>Radiologic Imaging I</td>
<td>MIG120</td>
<td>Spring</td>
<td>2</td>
<td>2</td>
<td>MIG107</td>
</tr>
<tr>
<td>Imaging Technology I</td>
<td>MIG111</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Positioning II</td>
<td>MIG126</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>MIG122; coreq MIG128</td>
</tr>
<tr>
<td>Medical Radiography Clinical II</td>
<td>MIG128</td>
<td>Spring</td>
<td>2</td>
<td>2</td>
<td>MIG124</td>
</tr>
<tr>
<td>Medical Radiography Clinical III</td>
<td>MIG222</td>
<td>Summer</td>
<td>4</td>
<td>4</td>
<td>MIG128</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td>Summer II</td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SOC101</td>
<td>Summer II</td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Positioning III</td>
<td>MIG220</td>
<td>Fall</td>
<td>3</td>
<td>3</td>
<td>MIG126</td>
</tr>
<tr>
<td>Medical Radiography Clinical IV</td>
<td>MIG228</td>
<td>Fall</td>
<td>2</td>
<td>2</td>
<td>MIG222</td>
</tr>
<tr>
<td>Imaging Technology II</td>
<td>MIG224</td>
<td>Fall</td>
<td>3</td>
<td>3</td>
<td>MIG111</td>
</tr>
<tr>
<td>Radiologic Imaging II</td>
<td>MIG226</td>
<td>Fall</td>
<td>3</td>
<td>3</td>
<td>MIG120</td>
</tr>
<tr>
<td>Pharmacology of Radiology</td>
<td>MIG227</td>
<td>Fall</td>
<td>1</td>
<td>1</td>
<td>MIG109 and BIO204</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td>Fall</td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Radiation Protection</td>
<td>MIG230</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>MIG226</td>
</tr>
<tr>
<td>Medical Radiography Clinical V</td>
<td>MIG236</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>MIG228</td>
</tr>
<tr>
<td>CT/Cross Sectional Anatomy</td>
<td>MIG234</td>
<td>Spring</td>
<td>2</td>
<td>2</td>
<td>BIO204</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td>Spring</td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Advanced Medical Radiography Seminar</td>
<td>MIG238</td>
<td>Spring</td>
<td>2</td>
<td>2</td>
<td>MIG224 and MIG226</td>
</tr>
</tbody>
</table>

TOTAL CREDITS 63

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

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

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

- Demonstrate competence in the essential aspects of medical radiography at the entry level.
- Develop skills in problem-solving, critical thinking, and effective communication.
- Promote life-long learning, professional growth, values, and ethics.
### Medical Radiography Part-time Evening Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care in Medical Imaging</td>
<td>MIG109</td>
<td>Fall</td>
<td></td>
<td>4</td>
<td>coreq MIG107</td>
</tr>
<tr>
<td>Intro to Medical Radiography</td>
<td>MIG107</td>
<td>Fall</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Imaging Technology I</td>
<td>MIG111</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Radiologic Imaging I</td>
<td>MIG120</td>
<td>Spring</td>
<td></td>
<td>2</td>
<td>MIG107</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>MIG111</td>
</tr>
<tr>
<td>Imaging Technology II</td>
<td>MIG224</td>
<td>Summer</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SOC101</td>
<td>Summer</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td>Summer</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Radiologic Imaging II</td>
<td>MIG226</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>MIG120</td>
</tr>
<tr>
<td>Radiation Protection</td>
<td>MIG230</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>Coreq MIG226</td>
</tr>
<tr>
<td>Positioning I</td>
<td>MIG122</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>Coreq MIG124</td>
</tr>
<tr>
<td>Anatomy/Physiology II/Lab</td>
<td>BIO204</td>
<td>Spring</td>
<td></td>
<td>4</td>
<td>BIO203</td>
</tr>
<tr>
<td>Medical Radiography Clinical I</td>
<td>MIG124</td>
<td>Spring</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Positioning II</td>
<td>MIG126</td>
<td>Summer</td>
<td></td>
<td>3</td>
<td>MIG122; coreq MIG128</td>
</tr>
<tr>
<td>Pharmacology of Radiology</td>
<td>MIG227</td>
<td>Summer</td>
<td></td>
<td>1</td>
<td>MIG109 and BIO204</td>
</tr>
<tr>
<td>Medical Radiography Clinical II</td>
<td>MIG128</td>
<td>Summer</td>
<td></td>
<td>2</td>
<td>MIG124</td>
</tr>
<tr>
<td>Positioning III</td>
<td>MIG220</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>MIG126</td>
</tr>
<tr>
<td>Medical Radiography Clinical III</td>
<td>MIG222</td>
<td>Fall</td>
<td></td>
<td>4</td>
<td>MIG128</td>
</tr>
<tr>
<td>Medical Radiography Clinical IV</td>
<td>MIG228</td>
<td>Spring (day)</td>
<td></td>
<td>2</td>
<td>MIG222</td>
</tr>
<tr>
<td>CT/Cross Sectional Anatomy</td>
<td>MIG234</td>
<td>Fall</td>
<td></td>
<td>2</td>
<td>BIO204</td>
</tr>
<tr>
<td>Advanced Medical Radiography Seminar</td>
<td>MIG238</td>
<td>Spring</td>
<td></td>
<td>2</td>
<td>MIG224 and MIG226</td>
</tr>
<tr>
<td>Medical Radiography Clinical V</td>
<td>MIG236</td>
<td>Summer (day)</td>
<td></td>
<td>3</td>
<td>MIG228</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS**: 63

### OPTION OVERVIEW

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

### CAREER OUTLOOK

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

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

- Demonstrate competence in the essential aspects of medical radiography at the entry level.
- Develop skills in problem-solving, critical thinking, and effective communication.
- Promote lifelong learning, professional growth, values, and ethics.
PACS Administration Certificate Program

PACS Administration, or Picture Archival and Communication Systems, is designed for experienced computer science or medical imaging professionals seeking to enter the field of PACS Administration. This program provides relevant knowledge of both IT and Medical Imaging concepts in a web-based format for the working adult. This is a full-time, two semester program. Many of the courses are offered each semester, and through the summer for flexibility, and the program may be extended to a third semester if necessary. Students are responsible for finding a host hospital in which to complete the 100 hour internship in which relevant skills will be reinforced. Students must earn a numerical grade of 80 or higher in all courses. Failure to meet internship objectives or failure to obtain a numerical course grade of 80 or better constitutes failure in that course. Students may apply for readmission to the program one time.

All PACS students are required to undergo a physical examination; complete the necessary immunization forms, including three (3) Hepatitis B immunization series; have malpractice and health insurance and undergo a Criminal Offender Record Information (CORI) Check. In accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6  172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the internship component of the PACS Certificate Program. The outcome of the CORI check may impact the student’s ability to participate in the internship experience.

ADMISSION REQUIREMENTS:
Students must apply to the program through the Admissions Office between September 15 – December 29 and:
1. Applicants must have a degree in a computer science field, extensive experience as determined by the Chair of the CIT Department, or be a graduate of an accredited Medical Imaging Program and be credentialed with a recognized national agency.
2. Submit an application with high school and college transcripts.
3. Submit a letter of interest with professional resume and references.
4. Attend an on-site or phone interview.

Admission is selective. Completed applications will be reviewed by the Medical Imaging and CIT Department Chairs.

PACS Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Diagnostic Imaging &amp; PACS</td>
<td>MIG161</td>
<td></td>
<td>3</td>
<td>Admission to PACS Certificate Program</td>
<td></td>
</tr>
<tr>
<td>Advanced PACS Seminar</td>
<td>MIG251</td>
<td></td>
<td>3</td>
<td>MIG161 and CIT141</td>
<td></td>
</tr>
<tr>
<td>Information Technology Fundamentals</td>
<td>CIT112</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095</td>
<td></td>
</tr>
<tr>
<td>Principles of Information Security</td>
<td>CIT118</td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120 or permission of chair</td>
<td></td>
</tr>
<tr>
<td>PACS Administration I</td>
<td>CIT141</td>
<td></td>
<td>3</td>
<td>CIT112 or permission of chair</td>
<td></td>
</tr>
<tr>
<td>PACS Administration II</td>
<td>CIT241</td>
<td></td>
<td>3</td>
<td>CIT141</td>
<td></td>
</tr>
<tr>
<td>Practical Computer System Integration &amp; Troubleshooting</td>
<td>ITB140</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095</td>
<td></td>
</tr>
<tr>
<td>PACS Administration Internship</td>
<td>MIG299</td>
<td></td>
<td>3</td>
<td>Admission to PACS Certificate Program</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>24</strong></td>
<td></td>
</tr>
</tbody>
</table>

CAREER OUTLOOK

Every hospital in the country is in the process of migrating their medical imaging department to a filmless state due to PACS technology. Every hospital will need at least one PACS administrator, and many will need more than one. Teaching hospitals have already begun this process, and community hospitals are now in the process of planning for and purchasing these database management systems for their departments.

UPON COMPLETION OF THIS PROGRAM, 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 PACs Administrator.
Vascular Sonography Certificate Program

This program prepares students for career positions in the profession of vascular ultrasound (vascular technology). This one-year certificate program combines didactic and clinical experience in the areas of arterial, venous and cerebrovascular ultrasound as well as a course in vascular instrumentation. In addition to exposure to ultrasound protocols the student will become acquainted with other types of diagnostic instruments used to assess blood flow.

ADMISSION REQUIREMENTS:
To be considered for admission into this program, applicants must apply to the program through the Enrollment Services Center and:
1. Attend a MANDATORY information session.
2. Be a graduate of a CAAHEP accredited Diagnostic Ultrasound Program with an A.S. or be a graduate with a B.S. from an allied health program.
3. If a graduate of a non-CAAHEP approved ultrasound program, applicant must be registered by the American Registry of Diagnostic Medical Sonography (ARDMS).

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vascular Principles and Instrumentation</td>
<td>VSN111</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Peripheral Arterial Testing</td>
<td>VSN113</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Vascular Ultrasound Clinical I</td>
<td>VSN115</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>Coreqs: VSN111 and VSN113</td>
</tr>
<tr>
<td>Peripheral Venous Testing</td>
<td>VSN211</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>VSN113</td>
</tr>
<tr>
<td>Cerebrovascular Testing</td>
<td>VSN213</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>VSN113</td>
</tr>
<tr>
<td>Vascular Ultrasound Clinical II</td>
<td>VSN215</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>VSN115; coreq: VSN211</td>
</tr>
<tr>
<td>Vascular Ultrasound Clinical III</td>
<td>VSN217</td>
<td>Summer</td>
<td></td>
<td>3</td>
<td>VSN215</td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

4. Complete Anatomy and Physiology I and II.
5. Show evidence of good physical and emotional health as indicated by a physician's recommendation.
6. High school physics or college physics is recommended.
7. Qualified applicants may be asked to complete an interview process conducted by academic and clinical faculty.
8. Must provide an original letter from a credentialed sonographer (Registered Vascular Technologist) or physician stating that the student has secured a clinical site prior to the start of the program.

CAREER OUTLOOK
According to the United States Department of Labor employment in the field of Vascular Technology is expected to grow faster than most imaging modalities. Graduates of this program are qualified for entry-level positions as Vascular Technologists in hospitals and clinical settings.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
• Pursue employment opportunities as entry-level Vascular Technologists.
Health

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 NCLEX-RN (National Council Licensure Exam for Registered Nurses). The National League for Nursing Accrediting Commission (N.L.N.A.C.) 61 Broadway, NY, NY, 10006, 212-363-5555, ext. 153, 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.

Students must earn a numerical grade of 75 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 75 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 the three (3) dose Hepatitis B immunization series; have CPR certification; carry malpractice and health insurance; and undergo a Criminal Offender Record Information (CORI) check. In accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 §§ 172-178 and regulations pursuant to these statutes, CORI checks are required prior to participation in the clinical component of nursing courses. Admission to the nursing program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. Individuals with previous court convictions also must meet eligibility requirements of the Massachusetts Board of Registration in Nursing for licensure. For further information, please see the department chairperson.

This is a full-time two and one half-year program. Students may select either day, evening or weekend program options.

PREREQUISITES FOR THE NURSING PROGRAM:

1. Attend one MANDATORY information session.
2. Possess a high school diploma or GED certificate.
3. Achieve a reading level of 10th grade or higher on the College Placement Test (CPT).
4. Complete the following courses with a grade of C or better:
   • One year of high school chemistry with lab or one semester of college chemistry with lab.
   • MAT095 Fundamentals of Algebra or placement above MAT095.
   • BIO203 Anatomy & Physiology I/Lab (credits for Anatomy and Physiology/Lab that were earned more than five (5) years prior to enrollment in the nursing program are not accepted).
   • ENG111 College Writing I.
   • NUR100 Drug Calculations.

AFTER ALL PREREQUISITES ARE COMPLETED:

1. Apply through The Admissions Office during the following enrollment periods:
   Fall Program: September 15 - December 29. Spring Program: May 1 - August 31.
2. After applying, qualified applicants will be invited to take the Nursing admissions test (Test of Essential Academic Skills).
3. Applicants must score at least 70% in reading and 50% in math and science on the TEAS (Test of Essential Academic Skills).
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.
### Nursing Program: Day/Evening Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREREQUISITE COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Anatomy/Physiology/Lab I</td>
<td>BIO203*</td>
<td></td>
<td>4</td>
<td></td>
<td>BIO101 or BIO195</td>
</tr>
<tr>
<td>Drug Calculation</td>
<td>NUR100</td>
<td></td>
<td>1</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td><strong>PROGRAM CURRICULUM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anatomy/Physiology/Lab II</td>
<td>BIO204*</td>
<td>Semester 1</td>
<td>4</td>
<td></td>
<td>BIO203</td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td>Semester 1</td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Physical Assessment/Basic Skills</td>
<td>NUR101</td>
<td>Semester 1</td>
<td>2</td>
<td>BIO203 and ENG111 and NUR100</td>
<td></td>
</tr>
<tr>
<td>Nursing I +</td>
<td>NUR111</td>
<td>Semester 1</td>
<td>7</td>
<td>BIO203 and ENG111 and NUR100</td>
<td></td>
</tr>
<tr>
<td>Human Growth/Development</td>
<td>PSY113</td>
<td>Semester 2</td>
<td>3</td>
<td></td>
<td>PSY101</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Nursing II++</td>
<td>NUR112</td>
<td>Semester 2</td>
<td>10</td>
<td>BIO204 and NUR101 and NUR111 and PSY101</td>
<td></td>
</tr>
<tr>
<td>Microbiology/Lab</td>
<td>BIO205*</td>
<td>Semester 2</td>
<td>4</td>
<td>BIO203 or BIO195</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Nursing III++</td>
<td>NUR211</td>
<td>Semester 3</td>
<td>9</td>
<td>BIO205 and NUR112 and PSY113</td>
<td></td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SOC101**</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
<td></td>
</tr>
<tr>
<td>Nursing IV++</td>
<td>NUR212</td>
<td>Semester 4</td>
<td>9</td>
<td>NUR211</td>
<td></td>
</tr>
<tr>
<td>Nursing Seminar</td>
<td>NUR213</td>
<td>Semester 4</td>
<td>1</td>
<td>NUR211</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td>69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Credits earned more than five years prior to enrollment in the nursing clinical sequence are not accepted.
** This course satisfies “Individual and Society” General Education Requirement Area 2.
+ Clinical Practice one day or evening per week.
++ Clinical Practice two days or evenings per week.

*World View* General Education Requirement Area 3, *Science and Technology* General Education Requirement Area 5, and *Humanities* General Education Requirement Area 6 are satisfied by program courses.

Students must earn a numerical grade of 75 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 objectives or the appropriate course grade noted above fail that course.

**CAREER OUTLOOK**

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

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

- Apply the nursing process and critical thinking in the delivery of holistic nursing care in a variety of settings.
- Apply scientific knowledge and technology in the delivery of holistic nursing care.
- Integrate the roles of the associate degree nurse into nursing practice.
- Communicate effectively with individuals, families, and groups within the health care system.
- Integrate cultural competence in the delivery of nursing care to a transcultural, diverse population throughout the lifespan.
- Integrate principles of teaching/learning in the delivery of holistic nursing care.
- Integrate the legal, ethical, and professional standards in the delivery of care.
- Demonstrate accountability as a manager of care utilizing delegation and leadership skills.
Health

Nursing Program: Weekend Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREREQUISITE COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENO95 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Anatomy/Physiology/Lab I</td>
<td>BIO203*</td>
<td></td>
<td>4</td>
<td></td>
<td>BIO101 or BIO195</td>
</tr>
<tr>
<td>Drug Calculation</td>
<td>NUR100</td>
<td></td>
<td>1</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Anatomy/Physiology/Lab II</td>
<td>BIO204*</td>
<td></td>
<td>4</td>
<td></td>
<td>BIO203</td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Human Growth/Development</td>
<td>PSY113</td>
<td></td>
<td>3</td>
<td></td>
<td>PSY101</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Microbiology/Lab</td>
<td>BIO205*</td>
<td></td>
<td>4</td>
<td></td>
<td>BIO203 or BIO195</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SOC101</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
</tbody>
</table>

**PROGRAM CURRICULUM**

| Physical Assessment/Basic Skills    | NUR101        | Fall, year 1   | 2     |         | BIO203 and ENG111 and NUR100  |
| Nursing I +                         | NUR111        | Fall, year 1   | 7     |         | BIO203 and ENG111 and NUR100  |
| Nursing II++                        | NUR112        | Spring, year 1 | 10    |         | BIO204 and NUR101 and NUR111 and PSY101 |
| Nursing III++                       | NUR211        | Fall, year 2   | 9     |         | BIO205 and NUR112 and PSY113  |
| Nursing IV++                        | NUR212        | Spring, year 2 | 9     |         | NUR211                        |
| Nursing Seminar                     | NUR213        | Spring, year 2 | 1     |         | NUR211                        |

**TOTAL CREDITS** 69

* Credits earned more than five years prior to enrollment in the nursing clinical sequence are not accepted.
+ Clinical Practice one day or evening per week.
++ Clinical Practice two days or evenings per week.

"World View" General Education Requirement Area 3, "Science and Technology" General Education Requirement Area 5, and “Humanities” General Education Requirement Area 6 are satisfied by program courses.

Students must earn a numerical grade of 75 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 objectives or the appropriate course grade noted above fail that course.

CAREER OUTLOOK

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

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

- Apply the nursing process and critical thinking in the delivery of holistic nursing care in a variety of settings.
- Apply scientific knowledge and technology in the delivery of holistic nursing care.
- Integrate the roles of the associate degree nurse into nursing practice.
- Communicate effectively with individuals, families, and groups within the health care system.
- Integrate cultural competence in the delivery of nursing care to a transcultural, diverse population throughout the lifespan.
- Integrate principles of teaching/learning in the delivery of holistic nursing care.
- Integrate the legal, ethical, and professional standards in the delivery of care.
- Demonstrate accountability as a manager of care utilizing delegation and leadership skills.
## Associate in Science Degree: Pharmacy Technology Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Biology I/Lab</td>
<td>BIO101</td>
<td></td>
<td></td>
<td>4</td>
<td>ENG095 and MAT090 and RDG095 or placement</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Survey of Pharmacy</td>
<td>PHM100</td>
<td>Fall only</td>
<td></td>
<td>3</td>
<td>RDG095 or placement</td>
</tr>
<tr>
<td>Pharmacy Law/Ethics</td>
<td>PHM121</td>
<td>Fall only</td>
<td></td>
<td>3</td>
<td>RDG095 or placement</td>
</tr>
<tr>
<td>Medical Calculations</td>
<td>PHM131</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>MAT090 or placement</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Community-Based Pharmaceutics</td>
<td>PHM103</td>
<td>Spring only</td>
<td></td>
<td>4</td>
<td>CIT110 and PHM131 or concurrently</td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>OIM/NHP180</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Psychology or Principles of Sociology</td>
<td>PSY101 or SOC101</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
<td></td>
</tr>
<tr>
<td>Microbiology/Lab</td>
<td>BIO205</td>
<td></td>
<td></td>
<td>4</td>
<td>BIO101 and CHM110 or BIO195 or BIO203</td>
</tr>
<tr>
<td>Institutional-Based Pharmaceutics</td>
<td>PHM104</td>
<td>Fall only</td>
<td></td>
<td>4</td>
<td>CIT110 and PHM131 or concurrently</td>
</tr>
<tr>
<td>Pharmacology I</td>
<td>PHM111</td>
<td>Fall only</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Community Pharmacy Practicum/Seminar</td>
<td>PHM 211</td>
<td>Fall only</td>
<td></td>
<td>5</td>
<td>PHM103 and PHM111 and PHM121 or concurrently</td>
</tr>
<tr>
<td>Chemical Science I</td>
<td>CHM110</td>
<td></td>
<td></td>
<td>4</td>
<td>ENG095 and MAT095 or placement</td>
</tr>
<tr>
<td>Pharmacology II</td>
<td>PHM112</td>
<td>Spring only</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Institutional Pharmacy Practicum/Seminar</td>
<td>PHM212</td>
<td>Spring only</td>
<td></td>
<td>5</td>
<td>PHM103 and PHM111 and PHM121 or concurrently</td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>

This joint program between BHCC and Holyoke Community College is a distance-learning program in which all the pharmacy (PHM) courses are taught via live video-conference from Holyoke Community College. Students attend Holyoke Community College for a total of 10 days over two semesters, during which the two Pharmaceutics laboratory programs are completed.

### PROGRAM OVERVIEW

This program prepares students to become highly skilled pharmacy technicians or pharmacist assistants, capable of working in various pharmacy settings, utilizing computer and robotic systems in the preparation, dispensing, and billing medications.

### CAREER OUTLOOK

Graduates of this program qualify for entry-level pharmacy technician positions in a variety of settings, including hospital, military, nursing home, community, and industrial pharmacies. The demand for well-trained, educated pharmacy technicians is predicted to continue to exceed the available supply. Graduates also qualify for many alternative paths after additional education or experience, such as pharmaceutical sales, pharmaceutical management, or government work.

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

- Compound, prepare and package any sterile or non-sterile pharmaceutical product for administration, or dispensing to a patient.
- Utilize pharmacy computer systems for data collection, information retrieval, prescription dispensing, patient profiling, drug inventories, insurance interaction, and billing.
- Function as a competent pharmacy technician or assistant in any pharmacy setting, with the knowledge and ability to adapt to the pharmacy’s requirements as needed.
# Associate in Science Degree: Respiratory Therapy Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy/Physiology I/Lab</td>
<td>BIO203*</td>
<td>Fall, year 1</td>
<td></td>
<td>4</td>
<td>BIO101 or BIO106 or BIO195</td>
</tr>
<tr>
<td>College Algebra</td>
<td>MAT195**</td>
<td>Fall, year 1</td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Principles of Respiratory Therapy I</td>
<td>RTH101</td>
<td>Fall, year 1</td>
<td></td>
<td>4</td>
<td>Coreqs: RTH111 and RTH121</td>
</tr>
<tr>
<td>Modalities of Respiratory Therapy I</td>
<td>RTH111</td>
<td>Fall, year 1</td>
<td></td>
<td>2</td>
<td>Coreqs: RTH101 and RTH121</td>
</tr>
<tr>
<td>Clinical Practice in Respiratory Therapy I</td>
<td>RTH121</td>
<td>Fall, year 1</td>
<td></td>
<td>2</td>
<td>Coreqs: RTH101 and RTH111</td>
</tr>
<tr>
<td>Respiratory Therapy Pharmacology</td>
<td>RTH132</td>
<td>Fall, year 1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Anatomy/Physiology II/Lab</td>
<td>BIO204</td>
<td>Spring, year 1</td>
<td></td>
<td>4</td>
<td>BIO203</td>
</tr>
<tr>
<td>Chemical Science I/Lab</td>
<td>CHM110</td>
<td>Spring, year 1</td>
<td></td>
<td>4</td>
<td>ENG095 and MAT095</td>
</tr>
<tr>
<td>Principles of Respiratory Therapy II</td>
<td>RTH102</td>
<td>Spring, year 1</td>
<td></td>
<td>4</td>
<td>RTH101</td>
</tr>
<tr>
<td>Modalities of Respiratory Therapy II</td>
<td>RTH112</td>
<td>Spring, year 1</td>
<td></td>
<td>2</td>
<td>RTH101 and RTH111</td>
</tr>
<tr>
<td>Clinical Practice in Respiratory Therapy II</td>
<td>RTH122</td>
<td>Spring, year 1</td>
<td></td>
<td>2</td>
<td>RTH101 and RTH111 and RTH121</td>
</tr>
<tr>
<td>Cardiopulmonary Physiology</td>
<td>RTH134</td>
<td>Spring, year 1</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td>Summer, year 1</td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Microbiology/Lab</td>
<td>BIO205</td>
<td>Summer, year 1</td>
<td></td>
<td>4</td>
<td>BIO195 or BIO203</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td>Fall, year 2</td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Principles of Respiratory Therapy III</td>
<td>RTH201</td>
<td>Fall, year 2</td>
<td></td>
<td>4</td>
<td>RTH102 and RTH112 and RTH122</td>
</tr>
<tr>
<td>Modalities of Respiratory Therapy III</td>
<td>RTH211</td>
<td>Fall, year 2</td>
<td></td>
<td>3</td>
<td>RTH102 and RTH112 and RTH122</td>
</tr>
<tr>
<td>Clinical Practice in Respiratory Therapy III</td>
<td>RTH221</td>
<td>Fall, year 2</td>
<td></td>
<td>4</td>
<td>RTH102 and RTH112 and RTH122</td>
</tr>
<tr>
<td>Cardiopulmonary Diseases</td>
<td>RTH232</td>
<td>Fall, year 2</td>
<td></td>
<td>2</td>
<td>RTH134</td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101***</td>
<td>Spring, year 2</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Respiratory Therapy IV</td>
<td>RTH202</td>
<td>Spring, year 2</td>
<td></td>
<td>4</td>
<td>RTH201 and RTH211 and RTH221</td>
</tr>
<tr>
<td>Modalities of Respiratory Therapy IV</td>
<td>RTH212</td>
<td>Spring, year 2</td>
<td></td>
<td>2</td>
<td>RTH201 and RTH211 and RTH221</td>
</tr>
<tr>
<td>Clinical Practice in Respiratory Therapy IV</td>
<td>RTH222</td>
<td>Spring, year 2</td>
<td></td>
<td>4</td>
<td>RTH201 and RTH211 and RTH221</td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>70</td>
<td></td>
</tr>
</tbody>
</table>

* This course fulfills General Education “Science and Technology” Requirement Area 5.
** This course fulfills General Education “Quantitative Thought” Requirement Area 4.
*** This course fulfills General Education “Individual and Society” Requirement Area 2.

## PROGRAM OVERVIEW

This is a 21-month respiratory therapist day program which prepares students through lectures, laboratory activities and hospital based hands-on clinical experience, to evaluate, treat and care for patients with breathing disorders. Respiratory students work under the direction of a physician in a variety of health care settings, such as acute hospitals, long term facilities, neonatal and pediatric care specialties, pulmonary rehabilitation and home care.

## CAREER OUTLOOK

This program prepares students to pursue careers as respiratory therapists at the associate degree level and prepares students to be eligible to take the CRT Examination offered by the National Board for Respiratory Care (NBRC). Having successfully earned the CRT credential the graduate is eligible to take the advanced-level NBRC Registry examinations to earn the RRT credential. Respiratory care practitioners are licensed in the state of Massachusetts.

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

- Administer oxygen and other medical gases.
- Administer humidification and aerosol therapy, including aerosolized medications.
- Interpret and report tests in diagnosing lung and breathing disorders and recommending treatment methods.
- Manage mechanical ventilators and artificial airway devices for patient who can’t breathe normally on their own.
- Perform postural drainage, bronchopulmonary hygiene, breathing exercises, pulmonary rehabilitation, and cardiopulmonary resuscitation.
- Measure ventilatory volumes, pressure and flows.
- Perform pulmonary function testing, hemodynamic and other related physiologic monitoring of the cardio-pulmonary system.
- Interview patients and perform chest physical exam to determine what kind of therapy is best for their condition.
- Educate patient and families about lung conditions so they can maximize their recovery.
- Consult with physicians to recommend a change in therapy, based on their evaluation of the patient.
Medical Assistant Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Clinical Practice</td>
<td>AHE110</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Medical Assisting Skills</td>
<td>AHE112</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health Employment Issues</td>
<td>AHE104</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Advanced Clinical Skills</td>
<td>AHE201</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE111 or AHE112</td>
</tr>
<tr>
<td>Practicum/Medical Assistant</td>
<td>AHE205</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE112; coreq AHE201</td>
</tr>
<tr>
<td>Practicum Seminar/Allied Health</td>
<td>AHE209</td>
<td></td>
<td>1</td>
<td></td>
<td>coreq AHE205</td>
</tr>
<tr>
<td>Computer or Office Adm. Course</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Procedures for the Medical Office</td>
<td>OIM170</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL CREDITS: 25

ESL OPTION:

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Clinical Practice</td>
<td>AHE110</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Medical Assisting Skills</td>
<td>AHE112</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health Employment Issues</td>
<td>AHE104</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ESL Health Communications</td>
<td>ESL052</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Advanced Clinical Skills</td>
<td>AHE201</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE111 or AHE112</td>
</tr>
<tr>
<td>Practicum/Medical Assistant</td>
<td>AHE205</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE112; coreq AHE201</td>
</tr>
<tr>
<td>Practicum Seminar/Allied Health</td>
<td>AHE209</td>
<td></td>
<td>1</td>
<td></td>
<td>coreq AHE205</td>
</tr>
<tr>
<td>Computer or Office Adm. Course</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Procedures for the Medical Office</td>
<td>OIM170</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL CREDITS: 25

The college requires Criminal Offender Record Information (CORI) checks prior to participation in the clinical component of allied health courses in accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 § 172-178, and regulations pursuant to these statutes. Admission to an Allied Health program does not guarantee clinical placement. The outcome of the CORI may impact the student’s ability to participate in the clinical experience. For further information, see the department chairperson.

Students must maintain a grade of B- in AHE110 and AHE112 in order to continue in the second semester.
### Medical Coding Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Biology/Lab</td>
<td>BIO108</td>
<td></td>
<td></td>
<td>4</td>
<td>ENG095 and MAT090 and RDG095 or placement</td>
</tr>
<tr>
<td>Medical Coding I</td>
<td>NHP101</td>
<td></td>
<td></td>
<td>3</td>
<td>BIO107 and CIT110 and ENG111 and NHP110 and NHP180</td>
</tr>
<tr>
<td>Medical Coding II</td>
<td>NHP102</td>
<td></td>
<td></td>
<td>3</td>
<td>NHP101</td>
</tr>
<tr>
<td>Concepts of Disease</td>
<td>NHP110</td>
<td></td>
<td></td>
<td>3</td>
<td>BIO107 and NHP180</td>
</tr>
<tr>
<td>Advanced Medical Coding</td>
<td>NHP201</td>
<td></td>
<td></td>
<td>4</td>
<td>BIO107 and NHP102</td>
</tr>
<tr>
<td>Clinical Practicum</td>
<td>NHP202</td>
<td></td>
<td></td>
<td>4</td>
<td>BIO107 and NHP101 and NHP180 and NHP110; pre/coreq NHP201</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>24</strong></td>
<td></td>
</tr>
</tbody>
</table>

**PROGRAM OVERVIEW**

Through comprehensive instruction, this program prepares students to pursue a career in medical coding. The program covers coding common illnesses, procedures and medical diagnoses using the ICD-9 system and coding office visits surgical intervention and other ambulatory procedures using Current Procedural Coding (CPT).

**CAREER OUTLOOK**

Graduates from this option qualify for employment in hospitals, HMOs, clinics, doctors’ offices and insurance companies.

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

- Demonstrate an understanding and mastery of the primary coding systems.
- Demonstrate familiarity with some of the concerns of professional coders in the areas of medical law, confidentiality and ethics as applied to patient records.
- Accurately code common diseases, medical diagnoses procedures and surgical interventions.
- Qualify to take National Certification Exam.
### Medical Lab Assistant Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Clinical Practice</td>
<td>AHE110</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phlebotomy Theory/Lab</td>
<td>AHE115</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG090 and MAT090 and RDG090 or placement</td>
</tr>
<tr>
<td>Health Employment Issues</td>
<td>AHE104</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Clinical Laboratory Procedures</td>
<td>AHE208</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE115 or AHE201</td>
</tr>
<tr>
<td>Practicum/Laboratory Assistant</td>
<td>AHE207</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE115</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Principles of Biology I/Lab or Human Biology/Lab</td>
<td>BIO101 or BIO108</td>
<td></td>
<td></td>
<td>4</td>
<td>ENG095 and MAT095 and RDG095 or placement</td>
</tr>
<tr>
<td>Chemical Science I/Lab</td>
<td>CHM110</td>
<td></td>
<td></td>
<td>4</td>
<td>ENG095 and MAT095 or placement</td>
</tr>
<tr>
<td>Computer or Office Adm. Course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>29</strong></td>
<td></td>
</tr>
</tbody>
</table>

The college requires Criminal Offender Record Information (CORI) checks prior to participation in the clinical component of allied health courses in accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 §§ 172-178, and regulations pursuant to these statutes. Admission to an Allied Health program does not guarantee clinical placement. The outcome of the CORI may impact the student's ability to participate in the clinical experience. For further information, see the department chairperson. Students must maintain a grade of B- in AHE110 and AHE115 in order to continue in the second semester.

**PROGRAM OVERVIEW**

This program prepares students to perform basic and routine laboratory procedures. The program prepares students in CPR, EKG, and phlebotomy.

**CAREER OUTLOOK**

Graduates of this program qualify for employment as multi-skilled workers and lab assistants who assist laboratory technicians in labs, hospitals, clinics, health maintenance organizations, and doctors' offices.

**UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:**
- Perform basic and routine laboratory procedures, phlebotomy, and EKG.
- Demonstrate basic computer skills.

**PROGRAM REQUIREMENTS:**
- High school diploma or GED certification.
- Attendance at information session, individual program application and interview with program staff.
- Complete college placement tests in reading, math, and English.
- Health insurance, completion of health form, and completion of CORI.
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 entry-level positions in health care, at the same time allowing them to take prerequisite courses for the Nursing, Medical Imaging, Surgical Technology, or other related programs.

Career Outlook
Graduates of this program qualify for employment in hospitals, clinics, chronic care facilities, and the home environment as multi-skilled workers, patient care technicians, patient care associates, medical aides, certified nursing assistants, and home health aides. Graduates receive a BHCC Certificate, State Nurse Aide, Home Health Aide, and Healthcare Provider CPR Certifications.

Upon Completion of this Program, Graduates Will Be Able To:
- Perform direct patient care competently.
- Perform basic computer skills.

Program Requirements:
- High school diploma or GED certification.
- Attendance at information session, individual program application and interview with program staff.
- Complete college placement tests in reading, math, and English.
- Health insurance, completion of health form, and completion of CORI.
## Phlebotomy Technician Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Clinical Practice</td>
<td>AHE110</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phlebotomy Theory/Lab</td>
<td>AHE115</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG090 and MAT090 and RDG090 or placement</td>
</tr>
<tr>
<td>Health Employment Issues</td>
<td>AHE104</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Clinical Laboratory Procedures</td>
<td>AHE208</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE115 or AHE201</td>
</tr>
<tr>
<td>Practicum/Phlebotomy Tech</td>
<td>AHE206</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE110 and AHE115</td>
</tr>
<tr>
<td>Computer or Office Administration Course</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Practicum Seminar/Allied Health</td>
<td>AHE209</td>
<td></td>
<td></td>
<td>1</td>
<td>coreq AHE206</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>25</strong></td>
<td></td>
</tr>
</tbody>
</table>

### ESL OPTION

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Clinical Practice</td>
<td>AHE110</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phlebotomy Theory/Lab</td>
<td>AHE115</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG090 and MAT090 and RDG090 or placement</td>
</tr>
<tr>
<td>Health Employment Issues</td>
<td>AHE104</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Clinical Laboratory Procedures</td>
<td>AHE208</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE115 or AHE201</td>
</tr>
<tr>
<td>Practicum/Phlebotomy Tech</td>
<td>AHE206</td>
<td></td>
<td></td>
<td>3</td>
<td>AHE110 and AHE115</td>
</tr>
<tr>
<td>ESL Health Communications</td>
<td>ESL052</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Computer or Office Adm. Course</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>22</strong></td>
<td></td>
</tr>
</tbody>
</table>

The college requires Criminal Offender Record Information (CORI) checks prior to participation in the clinical component of allied health courses in accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 § 172-178, and regulations pursuant to these statutes. Admission to an Allied Health program does not guarantee clinical placement. The outcome of the CORI may impact the student’s ability to participate in the clinical experience. For further information, see the department chairperson. Students must maintain a grade of B- in AHE110 and AHE115 in order to continue in the second semester.
Central Processing Certificate Program (Sterile Processing and Distribution Management)

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. In accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 § 172-178, and regulations pursuant to these statutes, Criminal Offender Record Information (CORI) checks are required prior to participation in the clinical component of central processing courses. Admission to the central processing program does not guarantee clinical placement. The outcome of the CORI check may impact the student's ability to participate in the clinical experience. For further information, see the department chairperson.

ADMISSION REQUIREMENTS:
1. Possess a high school diploma or GED certificate.
2. Complete Writing Skills II (ENG095) with a grade of C or better or place into College Writing I (ENG111).
3. Complete Fundamentals of Algebra (MAT095) with a grade of C or better or place into College Algebra (MAT195).
4. Complete the college placement tests in reading, math, and English (10th grade reading level preferred).
5. Qualified applicants will be invited for an interview.

Applicants should apply through the Admissions Office.

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.

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

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Processing I</td>
<td>SGT109</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Central Processing I Clinical</td>
<td>SGT109A</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>NHP180</td>
<td></td>
<td></td>
<td>3</td>
<td>SGT109 and ENG090 and MAT090 and RDG090</td>
</tr>
<tr>
<td>Central Processing II</td>
<td>SGT110</td>
<td></td>
<td></td>
<td>2</td>
<td>SGT109 and ENG090 and MAT090 and RDG090</td>
</tr>
<tr>
<td>Central Processing II Clinical</td>
<td>SGT110A</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Central Processing Clinical</td>
<td>SGT111</td>
<td></td>
<td></td>
<td>2</td>
<td>SGT110</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>
Surgical Technology Certificate Program - Chelsea Campus

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. Students must maintain a grade of C or better in all surgical technology courses. In accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 § 172-178, and regulations pursuant to these statutes Criminal Offender Record Information (CORI) checks are required prior to participation in the clinical component of surgical technology courses. Admission to the surgical technology program does not guarantee clinical placement. The outcome of the CORI check may impact the student’s ability to participate in the clinical experience. For further information, see the department chairperson.

Surgical Technology Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ESL098 and RDG095 or placement</td>
</tr>
<tr>
<td>Human Biology/Lab</td>
<td>BIO108</td>
<td>Fall</td>
<td></td>
<td>4</td>
<td>ENG095 and MAT090 and RDG095 or placement</td>
</tr>
<tr>
<td>Surgical Technology I</td>
<td>SGT105</td>
<td>Fall</td>
<td></td>
<td>5</td>
<td>ENG095 and MAT095 or placement</td>
</tr>
<tr>
<td>Human Growth/Development</td>
<td>PSY113</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>Surgical Technology II</td>
<td>SGT106</td>
<td>Spring</td>
<td></td>
<td>8</td>
<td>BIO107 and SGT105</td>
</tr>
<tr>
<td>Surgical Technology III</td>
<td>SGT107</td>
<td>Summer</td>
<td></td>
<td>3</td>
<td>SGT106</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td>**</td>
<td></td>
<td>**</td>
<td><strong>29</strong></td>
<td></td>
</tr>
</tbody>
</table>

ADMISSION REQUIREMENTS:
1. Possess a high school diploma or GED certificate.
2. Complete Writing Skills II (ENG095) with a grade of C or better or place into College Writing I (ENG111).
3. Complete Fundamentals of Algebra (MAT095) with a grade of C or better or place into College Algebra (MAT195).
4. Complete the college placement tests in reading, math, and English (10th grade reading level preferred).
5. Qualified applicants will be invited for an interview.

Applicants should apply through the Admissions Office.

CAREER OUTLOOK
Graduates of this program qualify for surgical technologist positions in hospitals. The prospect for jobs is very good at the present time as the cost of health care rises. Graduates of the program qualify to take the certification exam after a few months of on-the-job experience.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
- Assist the operative team during the pre-operative, intra-operative, and post-operative phases of surgery.
- Prepare equipment and supplies for use during surgery.
- Function as “first scrub” on most surgical procedures.
## Associate in Arts Degree: History and Government Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Individual and Society</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science and Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of Western Civilization I or World Civilization I</td>
<td>HIS101 or HIS111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>History of Western Civilization II or World Civilization II</td>
<td>HIS102 or HIS112</td>
<td>choose sequential course</td>
<td>3</td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>State/Local Politics</td>
<td>GOV103</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Government/Politics in US</td>
<td>GOV101</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>US History I</td>
<td>HIS151</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>US History II</td>
<td>HIS152</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Literature in America I or Masterpieces of World Lit. I</td>
<td>LIT203 or LIT211**</td>
<td></td>
<td>3</td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature in America II or Masterpieces of World Lit. II</td>
<td>LIT204 or LIT212</td>
<td></td>
<td>3</td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.**

**Choose sequential courses: LIT204 or LIT212.

Recommended electives: GEO101, GOV101, GOV103, ECO201, ECO202, PHL111.

### CONCENTRATION OVERVIEW

The mission of this program prepares students to transfer to four-year colleges or universities and provides a foundation for advanced studies for students who major in history or government.

This 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.

### CAREER OUTLOOK

Graduates of this concentration, which meets all the requirements of the Commonwealth Transfer Compact, qualify to transfer to four-year colleges or universities as juniors. This 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:**

- Demonstrate an understanding of chronology for their subject.
- Articulate the importance of information synthesis.
- Demonstrate analytical skill in evaluating people and problems.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 114.
World Studies Emphasis Certification

PROGRAM OVERVIEW
This program enables students enrolled in Associate in Arts degree programs to obtain World Studies Emphasis certification with no additional coursework through careful selection of general education and elective courses needed to fulfill their degree requirements. World Studies Emphasis certification is an additional credential to demonstrate acquired knowledge, skills, and competencies needed to live and work in a globally interdependent world. Students must complete five courses from the World Studies Emphasis menu. The common objective of these courses is to foster an ability to appreciate, analyze, and deal constructively with historical/contemporary experiences of diversity in the United States and other parts of the world. The menu includes courses in the areas of history, sociology, geography, science, religion, language, and literature.

CAREER OUTLOOK
Graduates who transfer to four-year colleges or universities with a major in international studies, geography, history, literature, languages, education, classics, sociology, anthropology, religion, or a regional studies program such as Middle East Studies, find World Studies Emphasis certification to be an asset. Graduates with World Studies Emphasis certification enhance their future employability because business, government, non-profit, and education leaders now seek employees with an understanding of world issues and the capacity to work in a multicultural environment.

UPON COMPLETION OF THIS PROGRAM, IN ADDITION TO THE REQUIRED ASSOCIATE IN ARTS DEGREE, GRADUATES WILL BE ABLE TO:

• Demonstrate an understanding of the geographical, political, and social issues of a country or region other than their own.

• Understand the impact of historical events, culture, 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.
**World Studies Emphasis Certification**

<table>
<thead>
<tr>
<th>AREA I: LANGUAGES</th>
<th>COURSE TITLE</th>
<th>COURSE #</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>ARB</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>FRE</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>SPN</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portuguese</td>
<td>POR</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandarin</td>
<td>CHN</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>JPN</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AREA II: LITERATURE</th>
<th>COURSE TITLE</th>
<th>COURSE #</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature in America I</td>
<td>LIT203</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>pre or co Req ENG111</td>
</tr>
<tr>
<td>Literature in America II</td>
<td>LIT204</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>pre or co Req ENG111</td>
</tr>
<tr>
<td>Masterpieces of World Literature I</td>
<td>LIT211</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>pre or co Req ENG111</td>
</tr>
<tr>
<td>Masterpieces of World Literature II</td>
<td>LIT212</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>pre or co Req ENG111</td>
</tr>
<tr>
<td>African Literature</td>
<td>LIT219</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>pre or co Req ENG111</td>
</tr>
<tr>
<td>Latin American Literature</td>
<td>LIT221</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>pre or co Req ENG111</td>
</tr>
<tr>
<td>Immigrant Experience in Literature</td>
<td>LIT223</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>pre or co Req ENG111</td>
</tr>
<tr>
<td>Middle East Literature</td>
<td>LIT224</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>pre or co Req ENG111</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AREA III: HISTORY</th>
<th>COURSE TITLE</th>
<th>COURSE #</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of Western Civilization I</td>
<td>HIS101</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>History of Western Civilization II</td>
<td>HIS102</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>World Civilization I</td>
<td>HIS111</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>World Civilization II</td>
<td>HIS112</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>US History I</td>
<td>HIS151</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US History II</td>
<td>HIS152</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AREA IV: SOCIOLOGY</th>
<th>COURSE TITLE</th>
<th>COURSE #</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Anthropology</td>
<td>SOC109</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AREA V: GEOGRAPHY</th>
<th>COURSE TITLE</th>
<th>COURSE #</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Regional Geography</td>
<td>GEO101</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AREA VI: RELIGION</th>
<th>COURSE TITLE</th>
<th>COURSE #</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Religions</td>
<td>PHL111</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Religions of the Middle East</td>
<td>PHL113</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AREA VII: SCIENCE</th>
<th>COURSE TITLE</th>
<th>COURSE #</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Science I/Lab</td>
<td>ENV105</td>
<td></td>
<td>4</td>
<td></td>
<td>15 - 16</td>
<td>ENG095 and MAT090 and RDG095 or placement</td>
</tr>
</tbody>
</table>

World Studies Emphasis certification is an additional credential to the Associate in Arts degree. It cannot be taken as a stand-alone program. Students must choose five courses from only three of the seven areas listed in the grid above.
Associate in Science Degree: Hotel/Restaurant/Travel Program

This program prepares students in two options: Hotel and Restaurant Management and Travel and Tourism Management. The program prepares students in a variety of industry-oriented learning settings and a variety of teaching and learning environments that reflect the unique circumstances of the hospitality industry. Well-trained graduates are in great demand, with opportunities to advance, based upon their technical and critical thinking skills.

Hotel/Restaurant Management Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Intro to Hospitality Mgt.</td>
<td>HRT104</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Lodging Operations Mgt. I</td>
<td>HRT111</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Food Service Operations Mgt. I</td>
<td>HRT115</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hospitality Marketing Mgt.</td>
<td>HRT109</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>College Algebra</td>
<td>MAT195*</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Lodging Operations Mgt. II</td>
<td>HRT211</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Science and Technology</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Food Service Operations Mgt. II</td>
<td>HRT215</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td></td>
<td>3</td>
<td>ACC101</td>
</tr>
<tr>
<td>Culinary Theory/Skills Proficiency</td>
<td>CUL112</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>World View</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hospitality Law</td>
<td>HRT117</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Meeting/Special Events Planning</td>
<td>HRT219</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>HRT104</td>
</tr>
<tr>
<td>Management Seminar</td>
<td>MAN201</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>HRT104</td>
</tr>
<tr>
<td>Field Experience Internship</td>
<td>HRT210</td>
<td></td>
<td></td>
<td>3</td>
<td>HRT104</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>64</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This course satisfies “Quantitative Thought” General Education Requirement Area 4.

OPTION OVERVIEW

The mission of the Hospitality Management programs is to be a leader in programs providing education for entry level careers in Hotel & Restaurant Management, Food Service Management, and Travel & Tourism 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 tourism industry as an economic growth vehicle and as a method of working with a culturally diverse workforce.

CAREER OUTLOOK

Graduates of this option qualify for many supervisory and managerial positions as well as for management training programs in nationally recognized hotels and restaurants. Students also qualify to transfer to four-year college or university programs in Hotel/Restaurant Management.

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

- Perform technical skills in basic cooking and kitchen operations, basic skills in front desk, reservations and housekeeping procedures.
- Perform administrative skills in basic business bookkeeping procedure, business cost controls, and planning and coordinating hotel and restaurant operations.
- Demonstrate conceptual skills necessary to understanding the interrelationship of the component parts of the travel and tourism/hospitality industry.
### Travel and Tourism Management Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Intro to Hospitality Management</td>
<td>HRT104</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel and Tourism</td>
<td>HRT101</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel Agency Operations I</td>
<td>HRT102</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC101</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>College Algebra</td>
<td>MAT195*</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Travel Agency Operations II</td>
<td>HRT103</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>HRT102</td>
</tr>
<tr>
<td>Principles of Accounting II</td>
<td>ACC102</td>
<td></td>
<td>3</td>
<td></td>
<td>ACC101</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality Marketing Mgt.</td>
<td>HRT109</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality Law</td>
<td>HRT117</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Field Experience Internship</td>
<td>HRT210</td>
<td></td>
<td>3</td>
<td></td>
<td>HRT104</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting/Special Events Planning</td>
<td>HRT219</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>HRT104</td>
</tr>
<tr>
<td>Tourism Planning/Destination Dev.</td>
<td>HRT107</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Seminar</td>
<td>MAN201</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>HRT104</td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>61</strong></td>
<td></td>
</tr>
</tbody>
</table>

*This course satisfies “Quantitative Thought” General Education Requirement Area 4.

**OPTION OVERVIEW**

The mission of the Hospitality Management programs is to be a leader in programs providing education for entry level careers in Hotel & Restaurant Management, Food Service Management, and Travel & Tourism 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 the ever-increasing career opportunities in regional, national, and international tourism development. The option provides students with a broad-based introduction to key areas of opportunity in the tourism industry. By exposure to a variety of teaching methods, students understand the tourism industry as an economic growth vehicle and as a vehicle for working with a culturally diverse workforce.

**CAREER OUTLOOK**

Graduates of this option qualify for a variety of positions in the travel and tourism industry including front line guest service, ticketing, ground support, and steward positions for major airline companies, travel agencies, and tour companies. Students also qualify to transfer to four-year college or university programs in Travel and Tourism Management.

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

- Perform technical skills in usage of the Sabre travel agency software.
- Perform administrative skills in basic business bookkeeping procedure, business cost controls, planning and coordinating tours, and writing basic traveler itineraries.
Travel and Tourism Management Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro to Hospitality Management</td>
<td>HRT104</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Travel and Tourism</td>
<td>HRT101</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Travel Agency Operations I</td>
<td>HRT102</td>
<td>Fall</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Tourism Planning/Destination Dev</td>
<td>HRT107</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Travel Agency Operations II</td>
<td>HRT103</td>
<td>Spring</td>
<td></td>
<td>3</td>
<td>HRT102</td>
</tr>
<tr>
<td>Field Experience Internship</td>
<td>HRT210</td>
<td></td>
<td></td>
<td>3</td>
<td>HRT104</td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

PROGRAM OVERVIEW
This program prepares students for a wide range of career opportunities with regional, national, and international emphasis on tourism development. Course offerings provide a broad-based introduction to the key topical areas of the tourism industry. By exposure to a variety of teaching methods, students understand the tourism industry as an economic growth vehicle and as a vehicle for working with a culturally diverse workforce.

CAREER OUTLOOK
Graduates of this program qualify to fill a variety of entry-level positions in the travel and tourism industry, including travel agencies, tour guides, local, regional, and state agencies, as well as in a variety of hotel industry positions. Graduates of this program may use all credits towards the Travel and Tourism Management Option in the Associate in Science Degree: Hotel/Restaurant/Travel Program.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
- Perform technical skills in usage of the Sabre travel agency software.
- Perform administrative skills in basic business bookkeeping procedure, business cost controls, planning and coordinating tours, and writing basic traveler itineraries.
Associate in Science Degree: Human Services Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Psychology</td>
<td>PSY101*</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Intro to Human Services Profession w/ Field Practice</td>
<td>HSV101</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Case Management in Human Services</td>
<td>HSV118</td>
<td></td>
<td></td>
<td>3</td>
<td>PSY115</td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Child Growth/Development</td>
<td>ECE103</td>
<td></td>
<td></td>
<td>3</td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>Adolescent/Adult Development</td>
<td>PSY124</td>
<td></td>
<td></td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>Addiction</td>
<td>HSV112</td>
<td></td>
<td></td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>Counseling</td>
<td>PSY115**</td>
<td></td>
<td></td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Human Services Practicum I</td>
<td>HSV120</td>
<td></td>
<td></td>
<td>3</td>
<td>Chair approval</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Human Services Practicum II</td>
<td>HSV121</td>
<td></td>
<td></td>
<td>3</td>
<td>Chair approval and HSV120</td>
</tr>
<tr>
<td>Issues in HSV</td>
<td>HSV117</td>
<td></td>
<td></td>
<td>3</td>
<td>HSV101 and PSY101 and PSY115 and PSY124</td>
</tr>
<tr>
<td>Human Services Practicum III</td>
<td>HSV122</td>
<td></td>
<td></td>
<td>3</td>
<td>Chair approval and HSV121</td>
</tr>
<tr>
<td>Computer Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

* This course satisfies "Individual and Society" General Education Requirement Area 2.
** This course is restricted to those students enrolled in the Human Services, Education, Early Childhood, Psychology, or Sociology programs or by permission of the department chair of Education, Early Childhood, and Human Services or the department chair of Behavioral Sciences.

PROGRAM OVERVIEW

Early Childhood Education & Human Services Department’s mission statement and goals state two primary purposes. These are: 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. 2) To serve the community as an information and knowledge-base in the area of social service, with specific expertise in early childhood education and development, human services, and education.

This program prepares students as assistants and paraprofessionals in careers that direct the delivery of services to people.

CAREER OUTLOOK

Graduates of this program qualify for careers in social welfare, mental health, community development, public administration, youth work, work with elderly, family counseling, homemaking, and recreation in such institutions as community centers, neighborhood houses, recreational centers, and social agency rehabilitation units.

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

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

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Intro to Human Services Profession w/ Field Practice</td>
<td>HSV101</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 and ESL099 or RDG095 and ENG090 or placement</td>
</tr>
<tr>
<td>Addiction</td>
<td>HSV112</td>
<td></td>
<td>3</td>
<td>PSY101</td>
<td></td>
</tr>
<tr>
<td>Adolescent and Adult Development</td>
<td>PSY124</td>
<td></td>
<td>3</td>
<td>PSY101</td>
<td></td>
</tr>
<tr>
<td>Counseling</td>
<td>PSY115*</td>
<td></td>
<td>3</td>
<td>PSY101</td>
<td></td>
</tr>
<tr>
<td>Practicum in Human Services I</td>
<td>HSV120</td>
<td></td>
<td>3</td>
<td></td>
<td>Chair approval and HSV120</td>
</tr>
<tr>
<td>Practicum in Human Services II</td>
<td>HSV121</td>
<td></td>
<td>3</td>
<td></td>
<td>Chair approval and HSV120</td>
</tr>
<tr>
<td>Practicum in Human Services III</td>
<td>HSV122</td>
<td></td>
<td>3</td>
<td></td>
<td>Chair approval and HSV120 and HSV121</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

* This course is restricted to those students enrolled in the Human Services, Education, Early Childhood, Psychology, or Sociology programs or by permission of the department chair of Education, Early Childhood, and Human Services or the department chair of Behavioral Sciences.

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

### PROGRAM OVERVIEW
This certificate prepares students for direct service jobs in human services providing the delivery of services to participants in human service organizations.

### CAREER OUTLOOK
Students completing the certificate 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.

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

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

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or EDG095 or placement</td>
</tr>
<tr>
<td>Counseling</td>
<td>PSY115</td>
<td></td>
<td>3</td>
<td></td>
<td>PSY101</td>
</tr>
<tr>
<td>Addiction</td>
<td>HSV112</td>
<td></td>
<td>3</td>
<td></td>
<td>PSY101</td>
</tr>
<tr>
<td>Intro to Psychiatric Rehabilitation</td>
<td>PSY133</td>
<td></td>
<td>3</td>
<td></td>
<td>PSY101</td>
</tr>
<tr>
<td>Practical Application in Counseling</td>
<td>HSV109</td>
<td></td>
<td>1</td>
<td></td>
<td>PSY101 and coreq PSY115</td>
</tr>
<tr>
<td>Practical Application in HSV Specialty Work</td>
<td>HSV110</td>
<td></td>
<td>1</td>
<td></td>
<td>PSY115 and HSV109; coreq PSY133</td>
</tr>
<tr>
<td>Practical Application in HSV Case Mgmt</td>
<td>HSV111</td>
<td></td>
<td>1</td>
<td></td>
<td>HSV110 and HSV specialty service courses</td>
</tr>
<tr>
<td>Case Management in Human Services</td>
<td>HSV118</td>
<td></td>
<td>3</td>
<td></td>
<td>Special Option Intro Course (PSY133)</td>
</tr>
<tr>
<td>Abnormal Psychology</td>
<td>PSY127</td>
<td></td>
<td>3</td>
<td></td>
<td>PSY101 or permission of instructor</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>24</strong></td>
<td></td>
</tr>
</tbody>
</table>

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

---

### PROGRAM OVERVIEW

This certificate prepares students for direct service jobs in human services providing the delivery of services to participants in human service organizations.

### CAREER OUTLOOK

Students completing the certificate 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.

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

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

---

Note: Criminal Offender Record Information (CORI) check and/or a Sex Offender Registry Information (SORI) check is required for this program.
Associate in Arts Degree: Mathematics Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT196 or MAT197</td>
</tr>
<tr>
<td>Calculus II</td>
<td>MAT282</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT281</td>
</tr>
<tr>
<td>Calculus III</td>
<td>MAT283</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT282</td>
</tr>
<tr>
<td>Ordinary Differential Equations</td>
<td>MAT285</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT282</td>
</tr>
<tr>
<td>Linear Algebra</td>
<td>MAT291</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT281</td>
</tr>
<tr>
<td>College Physics I/Lab</td>
<td>PHY251</td>
<td></td>
<td></td>
<td>4</td>
<td>MAT281 or concurrently</td>
</tr>
<tr>
<td>College Physics II/Lab</td>
<td>PHY252</td>
<td></td>
<td></td>
<td>4</td>
<td>PHY251; prereq or coreq MAT282</td>
</tr>
<tr>
<td>Computer Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>45</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>60</strong></td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses. Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW
This concentration prepares students to transfer to four-year colleges or universities to seek bachelors’ degrees in mathematics. After transferring, students study to become more proficient in areas such as calculus, analysis, discrete mathematics, and number theory.

CAREER OUTLOOK
Graduates of this concentration should transfer to a four-year college or university, as most entry-level employment opportunities in industry require a minimum of a bachelor’s degree. Professional positions in education and research fields usually require a minimum of a master’s degree. The program meets all requirements of the Commonwealth Transfer Compact.

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 114.
### Associate in Arts Degree: Music Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td></td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6*</td>
<td></td>
<td></td>
<td>19</td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Appreciation I</td>
<td>MUS118</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foundations of Music</td>
<td>MUS122</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Music Appreciation II</td>
<td>MUS119</td>
<td></td>
<td></td>
<td>3</td>
<td>MUS118 or permission</td>
</tr>
<tr>
<td>Theory of Harmony</td>
<td>MUS123</td>
<td></td>
<td></td>
<td>3</td>
<td>MUST122</td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td>MUS137</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Electronic Music I</td>
<td>MUS151</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Music in the United States</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Music Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Music Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>43</td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.

### 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.

### CAREER OUTLOOK

Graduates of this concentration qualify for entry-level positions in the music field. Depending on electives selected, students begin work toward a career in music education, performance, or music management. Graduates of this concentration qualify to transfer to four-year colleges or universities for bachelors’ degrees in music.

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

- Create or analyze work that has aesthetic value.
- Explain personal preferences and interpret the underlying meanings of music as expressed in a specific historical period or contemporary popular culture.
- Demonstrate knowledge of musical expression and identify unifying factors.
- Examine and compare various modes of musical expression.

*Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 114.*
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 of information management professionals. Students use the most current computer applications in a hands-on environment. The options include software programs in Microsoft Word, Access, Excel, PowerPoint, and Outlook, as well as in the use of e-mail and the Internet. Students who plan to transfer to a four-year business administration or information management program should contact the department chairperson for more information.

OFFICE AND INFORMATION MANAGEMENT CERTIFICATE PROGRAMS
The program offers two certificate programs: 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.

Students with previous keyboarding training may take the Keyboarding Exemption Exam given every semester. Students should contact the department chair for test dates and information regarding the process.
Administrative Information Management Option

**OPTION OVERVIEW**

The Office and Information Management Department's mission is to provide industry-identified knowledge, skills, and abilities to prepare students for entry-level careers within office administrative and/or medical office administrative 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.

This option prepares students in computer, human relations, and organizational skills. In addition to required core requirements, students choose three career electives from a wide array of business, communications, computer, desktop publishing, and legal courses. This option prepares students to enhance their skills and be more marketable within their own areas of interest. Students participate in an internship in a business setting during their last spring semester to reinforce skills learned. Classes in this option prepare individuals who seek retraining, upgrading 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. Depending upon the specialization selected, graduates qualify for entry-level positions such as account specialist or representative, executive/administrative assistant, office administrator, computer application specialist, customer service representative, or information processing specialist.

**UPON COMPLETION OF THIS OPTION,**

**GRADUATES WILL BE ABLE TO:**

- Demonstrate proficiency in computer operations and software applications.
- Qualify for the MOUS certification exam.
- Use the complete range of Microsoft applications in the most efficient way.
- Demonstrate proficiency in office operations and communication mediums.

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>ENG111</td>
<td></td>
</tr>
<tr>
<td>Individual and Society</td>
<td></td>
<td>From Area 2*</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td></td>
<td>From Area 3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td></td>
<td>From Area 4</td>
<td>3</td>
<td>MAT095 or placement</td>
<td></td>
</tr>
<tr>
<td>Science and Technology</td>
<td></td>
<td>From Area 5</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>From Area 6</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td><strong>CORE COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation Generation II</td>
<td>OIM110</td>
<td></td>
<td>3</td>
<td>OIM101</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
<td></td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>BUS101</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Records and Information Management</td>
<td>OIM106</td>
<td></td>
<td>3</td>
<td>OIM101</td>
<td></td>
</tr>
<tr>
<td>Business Correspondence and Editing</td>
<td>OIM130</td>
<td></td>
<td>3</td>
<td>OIM101 and ENG095</td>
<td></td>
</tr>
<tr>
<td>Admin Tech and Procedures</td>
<td>OIM115</td>
<td></td>
<td>3</td>
<td>OIM101 and CIT110</td>
<td></td>
</tr>
<tr>
<td>Principles of Internet &amp; Information Security</td>
<td>CIT118</td>
<td></td>
<td>3</td>
<td>CIT110 and RDG095 and ENG095</td>
<td></td>
</tr>
<tr>
<td>Admin Business Communication</td>
<td>OIM230</td>
<td>Fall only</td>
<td>3</td>
<td>Pre/coreqs: OIM106, OIM110, OIM115, and OIM130</td>
<td></td>
</tr>
<tr>
<td>Database Design with MS Access</td>
<td>CIT128</td>
<td></td>
<td>3</td>
<td>CIT110 or CIT120</td>
<td></td>
</tr>
<tr>
<td>Design Support Using MS Excel</td>
<td>CIT254</td>
<td></td>
<td>3</td>
<td>CIT110 or CIT133</td>
<td></td>
</tr>
<tr>
<td>Collaboration, Communication &amp; Integration in MS Office</td>
<td>CIT255</td>
<td></td>
<td>3</td>
<td>CIT110 and RDG095 and ENG095</td>
<td></td>
</tr>
<tr>
<td>Group Dynamics</td>
<td>PSY107</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office and Information Management Internship</td>
<td>OIM299</td>
<td></td>
<td>3</td>
<td>all core courses</td>
<td></td>
</tr>
<tr>
<td>Career Elective**</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>42</td>
</tr>
</tbody>
</table>

* This requirement is satisfied by Concentration Courses.

** Career Electives: ACC101, BUS106, BUS201, MAN111, MAN112, VMA131.

Note: Students with NO previous keyboarding experience or who type less than 35 words per minute should take OIM101 in the first semester. Students who type 35 words per minute or more AND know MS Word should register to take an exemption test for OIM101 through the Center for Self-Directed Learning in Room E238.
The Office and Information Management Department's mission is to provide industry-identified knowledge, skills, and abilities to prepare students for entry-level careers within office administrative and/or medical office administrative 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.

This option prepares students to work as professionals within a medical office environment. It prepares students in basic medical terminology, which is then applied using Medisoft computer applications, a leading business productivity software package. It also prepares students in third party billing and coding. Students participate in an internship in a medical office setting during their last spring semester to reinforce skills learned.

### CAREER OUTLOOK

Graduates of this option qualify for job opportunities in physicians' and dentists' offices, clinics, HMOs, community health agencies, long-term care facilities, and hospitals. Students also qualify for jobs in large corporations that provide on-site health services, medical research, or produce medical products. Graduates qualify for entry-level positions such as medical receptionists, medical records management specialists, medical transcriptionists, medical office managers, patient service representatives, and medical administrative assistants. Students also qualify for at-home opportunities as medical transcriptionists.

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

- Demonstrate proficiency in computer operations and software applications unique to a medical setting.
- Demonstrate proficiency in understanding and using medical terminology.
- Use the complete range of Microsoft applications in the most efficient way.
- Demonstrate proficiency in medical office operations and communication mediums.

### COURSE TITLE

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG995 or placement</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2*</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>CORE COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation Generation II</td>
<td>OIM110</td>
<td></td>
<td>3</td>
<td></td>
<td>OIM101</td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>NHP180</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Records &amp; Information Management</td>
<td>OIM106</td>
<td></td>
<td>3</td>
<td></td>
<td>OIM101</td>
</tr>
<tr>
<td>Business Correspondence and Editing</td>
<td>OIM130</td>
<td></td>
<td>3</td>
<td></td>
<td>OIM101 and ENG095</td>
</tr>
<tr>
<td>Admin Tech and Procedures</td>
<td>OIM115</td>
<td></td>
<td>3</td>
<td></td>
<td>OIM101 and CIT110</td>
</tr>
<tr>
<td>Principles of Internet &amp; Information Security</td>
<td>CIT118</td>
<td>Fall only</td>
<td>3</td>
<td></td>
<td>CIT110 and RDG095 and ENG095</td>
</tr>
<tr>
<td>Admin Business Communication</td>
<td>OIM230</td>
<td>Fall only</td>
<td>3</td>
<td></td>
<td>Pre/coreqs: OIM106, OIM110, OIM115 and OIM130</td>
</tr>
<tr>
<td>Database Design with MS Access</td>
<td>CIT128</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT110 or CIT120</td>
</tr>
<tr>
<td>Medical Information Management</td>
<td>OIM190</td>
<td>Fall only</td>
<td>3</td>
<td></td>
<td>OIM101</td>
</tr>
<tr>
<td>Intro to Physicians' Billing</td>
<td>OIM200</td>
<td></td>
<td>3</td>
<td></td>
<td>NHP180</td>
</tr>
<tr>
<td>Collaboration, Communication &amp; Integration in MS Office</td>
<td>CIT250</td>
<td>Fall only</td>
<td>3</td>
<td></td>
<td>CIT110 and RDG095 and ENG095</td>
</tr>
<tr>
<td>Group Dynamics</td>
<td>PSY107</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Biology I/Lab</td>
<td>BI0101 or BI0115</td>
<td></td>
<td>4</td>
<td></td>
<td>ENG095 and MAT090 and RDG095 or placement</td>
</tr>
<tr>
<td>Nutrition Science/Lab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office and Information Internship</td>
<td>OIM299</td>
<td></td>
<td>3</td>
<td></td>
<td>all core courses</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.

Note: Students with NO previous keyboarding experience or who type less than 35 words per minute should take OIM101 in the first semester. Students who type 35 words per minute or more AND know MS Word should register to take an exemption test for OIM101 through the Center for Self-Directed Learning in Room E225.
Office and Information Management

PROGRAM OVERVIEW
This program prepares students with the practical skills needed to work in an office using hands-on training with the most current computer applications.

CAREER OUTLOOK
Graduates of this program qualify for entry-level positions such as receptionists, data-entry clerks, information processing specialists, office assistants, or customer service representatives in a wide variety of businesses and corporations. All courses in this certificate program may be applied to any option in the Associate in Science Degree: Office and Information Management Program.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL BE ABLE TO:
• Demonstrate proficiency in computer operations and software applications.
• Use the complete range of Microsoft applications in the most efficient way.
• Demonstrate proficiency in office operations and communication mediums.

Information Management Specialist Certificate Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation Generation II</td>
<td>OIM110</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Records and Information Management</td>
<td>OIM106</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Business Correspondence and Editing</td>
<td>OIM130</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Admin Tech and Procedures</td>
<td>OIM115</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Principles of Internet &amp; Security</td>
<td>CIT118</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Database Design with MS Access</td>
<td>CIT128</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Design Support Using MS Excel</td>
<td>CIT234</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Career Elective*</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL CREDITS 27


Note: Students with NO previous keyboarding experience or who type less than 35 words per minute should take OIM101 in the first semester. Students who type 35 words per minute or more AND know MS Word should register to take an exemption test for OIM101 through the Center for Self-Directed Learning in Room E235.
### 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 computer applications and 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, medical research, or medical products. Graduates will qualify for entry-level positions such as medical receptionists, medical records management specialists, medical transcriptionists, patient service representatives, and medical administrative assistants. Students also qualify for opportunities as medical transcriptionists.

### UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL:
- Demonstrate proficiency in computer operations and the software applications unique to a medical setting.
- Demonstrate proficiency in understanding and using medical terminology.
- Use the complete range of Microsoft applications in the most efficient way.
- Have demonstrated proficiency in medical office operations and communication mediums.

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Records and Information Management</td>
<td>OIM106</td>
<td></td>
<td>3</td>
<td></td>
<td>OIM101</td>
</tr>
<tr>
<td>Medical Information Management</td>
<td>OIM190</td>
<td>Fall only</td>
<td>3</td>
<td>OIM101</td>
<td></td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>NHP180</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applications/Concepts</td>
<td>CIT110</td>
<td></td>
<td>3</td>
<td></td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Documentation Generation II</td>
<td>OIM110</td>
<td></td>
<td>3</td>
<td></td>
<td>OIM101</td>
</tr>
<tr>
<td>Business Correspondence and Editing</td>
<td>OIM130</td>
<td></td>
<td>3</td>
<td></td>
<td>OIM101 and ENG095</td>
</tr>
<tr>
<td>Admin Tech and Procedures</td>
<td>OIM115</td>
<td></td>
<td>3</td>
<td></td>
<td>OIM101 and CIT110</td>
</tr>
<tr>
<td>Introduction to Physicians' Billing</td>
<td>OIM200</td>
<td></td>
<td>3</td>
<td></td>
<td>NHP180</td>
</tr>
<tr>
<td>Database Design with MS Access</td>
<td>CIT128</td>
<td></td>
<td>3</td>
<td></td>
<td>CIT110 or CIT120</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td>27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Students with NO previous keyboarding experience or who type less than 35 words per minute should take OIM101 in the first semester. Students who type 35 words per minute or more AND know MS Word should register to take an exemption test for OIM101 through the Center for Self-Directed Learning in Room E235.
## Associate in Arts Degree: Physics/Engineering Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
<td></td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>ENG111</td>
<td></td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td>MAT095 or placement</td>
<td></td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION COURSES**

**CONCENTRATION COURSES**

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Physics I/Lab</td>
<td>PHY251</td>
<td></td>
<td>4</td>
<td>MAT281 or concurrently</td>
<td></td>
</tr>
<tr>
<td>College Physics II/Lab</td>
<td>PHY252</td>
<td></td>
<td>4</td>
<td>PHY251; prereq or coreq MAT282</td>
<td></td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td>4</td>
<td>MAT196 or MAT197</td>
<td></td>
</tr>
<tr>
<td>Calculus II</td>
<td>MAT282</td>
<td></td>
<td>4</td>
<td>MAT281</td>
<td></td>
</tr>
<tr>
<td>Calculus III</td>
<td>MAT283</td>
<td></td>
<td>4</td>
<td>MAT282</td>
<td></td>
</tr>
<tr>
<td>Ordinary Differential Equations</td>
<td>MAT285</td>
<td></td>
<td>4</td>
<td>MAT282</td>
<td></td>
</tr>
<tr>
<td>Linear Algebra</td>
<td>MAT291</td>
<td></td>
<td>3</td>
<td>MAT281</td>
<td></td>
</tr>
<tr>
<td>General Chemistry I/Lab</td>
<td>CHM201</td>
<td></td>
<td>4</td>
<td>MAT195</td>
<td></td>
</tr>
<tr>
<td>General Chemistry II/Lab</td>
<td>CHM202</td>
<td></td>
<td>4</td>
<td>CHM201</td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>ENG095 or placement</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>LIT</td>
<td></td>
<td>3</td>
<td>ENG095 or placement</td>
<td></td>
</tr>
<tr>
<td>Computer Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS**

| 65 |

* This requirement is satisfied by Concentration Courses. Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

### CONCENTRATION OVERVIEW

This concentration prepares students to transfer to four-year colleges or universities to seek bachelor's degrees in physical science, physics, or engineering. After transferring, students study to become more proficient in one or more of the divisions of the physical sciences: i.e. nuclear physics, astrophysics, optics, or electrical engineering.

### 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 engineers, researchers, or college instructors usually require a minimum of a master’s degree. The program meets all requirements of the Commonwealth Transfer Compact.

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

- Understand basic physics principles.
- Apply mathematics techniques in scientific problem solving.
- Analyze and create solutions for problems involving physics principles.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 114.
### Associate in Arts Degree: Psychology Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SOC101</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Human Growth/Development</td>
<td>PSY113</td>
<td></td>
<td>3</td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>Psychology of Adjustment</td>
<td>PSY103</td>
<td></td>
<td>3</td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td>pre or co-req ENG111</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

The department encourages students to take a computer course.

**CONCENTRATION OVERVIEW**

The mission of the Behavioral Science Department is to produce students who are critical thinkers, i.e. students who can examine various propositions, theoretical statements and social assertions they encounter with an analytical eye and a healthy skepticism. Further, students all 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.

This concentration prepares students to transfer to four-year colleges or universities for bachelors’ degrees in the behavioral sciences.

**CAREER OUTLOOK**

Graduates of this concentration should 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 masters’ degrees. This concentration meets all requirements of the Commonwealth Transfer Compact.

**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 114.*
**Associate in Science Degree: Biological Sciences**

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. It engages students in industry-level, inquiry based laboratory activities in order to develop and strengthen their critical thinking as well as their industry skills.

### Z2 Biology Transfer Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual/Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Biology I/Lab</td>
<td>BIO195</td>
<td></td>
<td>4</td>
<td>4</td>
<td>ENG095 and MAT095 and RDG095</td>
</tr>
<tr>
<td>General Biology II/Lab</td>
<td>BIO196</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO195</td>
</tr>
<tr>
<td>General Chemistry I/Lab</td>
<td>CHM201</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT195</td>
</tr>
<tr>
<td>General Chemistry II/Lab</td>
<td>CHM202</td>
<td></td>
<td>4</td>
<td>4</td>
<td>CHM201</td>
</tr>
<tr>
<td>General Physics I/Lab</td>
<td>PHY201*</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT195</td>
</tr>
<tr>
<td>General Physics II/Lab</td>
<td>PHY202*</td>
<td></td>
<td>4</td>
<td>4</td>
<td>PHY201</td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT196 or MAT197</td>
</tr>
<tr>
<td>Courses from Option Electives (Choose 5)</td>
<td></td>
<td></td>
<td>19-21</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>62-64</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### OPTION ELECTIVES

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Chemistry/Lab I</td>
<td>CHM251</td>
<td></td>
<td>4</td>
<td>4</td>
<td>CHM202</td>
</tr>
<tr>
<td>Organic Chemistry/Lab II</td>
<td>CHM252</td>
<td></td>
<td>4</td>
<td>4</td>
<td>CHM251</td>
</tr>
<tr>
<td>Statistics I/Lab</td>
<td>MAT183</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT095</td>
</tr>
<tr>
<td>Calculus II</td>
<td>MAT282</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT281</td>
</tr>
<tr>
<td>Intro to Biotechnology</td>
<td>BIO120</td>
<td></td>
<td>4</td>
<td>4</td>
<td>ENG095 and MAT090 and RDG095</td>
</tr>
<tr>
<td>Cell Biology/Lab</td>
<td>BIO207</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO195 and CHM201 and CIT110</td>
</tr>
<tr>
<td>Genetics and Lab</td>
<td>BIO208</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO207 or permission of science department</td>
</tr>
<tr>
<td>Biotechnology and Lab</td>
<td>BIO251</td>
<td></td>
<td>5</td>
<td>5</td>
<td>BIO208</td>
</tr>
<tr>
<td>Honors Seminar</td>
<td>HON200</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* May substitute College Physics I and II (PHY251/PHY252).

**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, pre-dental, pharmacy or chiropractic degree program should enroll in this program.

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

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

#### Biotechnology Option

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual/Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Biology I/Lab</td>
<td>BIO195</td>
<td></td>
<td>4</td>
<td>4</td>
<td>ENG095 and MAT095 and RDG095</td>
</tr>
<tr>
<td>General Biology II/Lab</td>
<td>BIO196</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO195</td>
</tr>
<tr>
<td>General Chemistry I/Lab</td>
<td>CHM201</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT195</td>
</tr>
<tr>
<td>General Chemistry II/Lab</td>
<td>CHM202</td>
<td></td>
<td>4</td>
<td>4</td>
<td>CHM201</td>
</tr>
<tr>
<td>Cell Biology/Lab</td>
<td>BIO207</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO195 and CHM201 and CIT110</td>
</tr>
<tr>
<td>Genetics and Lab</td>
<td>BIO208</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO207 or permission of science department</td>
</tr>
<tr>
<td>Biotechnology and Lab</td>
<td>BIO251</td>
<td></td>
<td>5</td>
<td>5</td>
<td>BIO208</td>
</tr>
<tr>
<td>Precalculus</td>
<td>MAT197</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT195</td>
</tr>
<tr>
<td>Courses from Option Electives</td>
<td></td>
<td></td>
<td></td>
<td>15-16</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>62-64</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### OPTION ELECTIVES

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microbiology/Lab</td>
<td>BIO205</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO195 or BIO203</td>
</tr>
<tr>
<td>Seminar in Biotechnology</td>
<td>BIO252</td>
<td></td>
<td>4</td>
<td>4</td>
<td>BIO251</td>
</tr>
<tr>
<td>Chemical Science II</td>
<td>CHM111</td>
<td></td>
<td>4</td>
<td>4</td>
<td>CHM110</td>
</tr>
<tr>
<td>Statistics I/Lab</td>
<td>MAT183</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT095</td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td>4</td>
<td>4</td>
<td>MAT196 or MAT197</td>
</tr>
<tr>
<td>Honors Seminar</td>
<td>HON200</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### OPTION OVERVIEW

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 will also reinforce general industry specific skills such as communication, organization, and teamwork. Graduates of this program may also transfer to four-year colleges and universities to continue their studies in biotechnology or other life sciences.

#### CAREER OUTLOOK

This option will cover the concepts, methodology and techniques of biochemistry, cell biology, genetics, cell culture, molecular biology, immunology, bioinformatics and microbiology. This qualifies for entry level positions in a wide range of biotechnology disciplines in industry, police, government and academic labs. According to the MBC directory (www.massbio.org/directory), the current annual salary for entry level research assistant positions ranges from $32,000 - $48,000, while the annual salary for entry level lab assistant positions ranges from $24,000 - $33,000. These positions require a biotechnology certificate, AS degree or BS degree with 0-2 years of experience. Such positions offer the possibility of merit bonus and promotion and are available locally as well as nationwide.

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

- Use currently accepted biological, chemical, and physical concepts to investigate problems and ideas presented in advanced biological study.
- Use biological concepts to evaluate their own 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 Degree: Chemical Science Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT281</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT196 and MAT197 or placement</td>
</tr>
<tr>
<td>Calculus II</td>
<td>MAT282</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT195</td>
</tr>
<tr>
<td>General Chemistry I/Lab</td>
<td>CHM201</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT281</td>
</tr>
<tr>
<td>General Chemistry II/Lab</td>
<td>CHM202</td>
<td></td>
<td>4</td>
<td></td>
<td>CHM201</td>
</tr>
<tr>
<td>Organic Chemistry I/Lab</td>
<td>CHM251</td>
<td></td>
<td>4</td>
<td></td>
<td>CHM202</td>
</tr>
<tr>
<td>Organic Chemistry II/Lab</td>
<td>CHM252</td>
<td></td>
<td>4</td>
<td></td>
<td>CHM251</td>
</tr>
<tr>
<td>College Physics I/Lab</td>
<td>PHY251</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT281 or concurrently</td>
</tr>
<tr>
<td>College Physics II/Lab</td>
<td>PHY252</td>
<td></td>
<td>4</td>
<td></td>
<td>MAT282 and PHY251 or concurrently</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3 pre or co-req ENG111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3 pre or co-req ENG111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 course from Pool</td>
<td></td>
<td></td>
<td>3 - 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>62 - 63</td>
</tr>
</tbody>
</table>

### 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: i.e. polymer chemistry, physical chemistry, organic chemistry, biochemistry, analytical chemistry, chemical engineering, hazardous waste management. A further goal of the program is to provide students with the technical course-work and laboratory experience that would enable them to enter the workforce as entry-level laboratory technicians in positions that require some background in the physical and/or biological sciences.

### CAREER OUTLOOK

Graduates of this concentration should transfer to a four-year college or university because entry-level employment opportunities in chemistry such as lab or field technicians usually require a minimum of a bachelor's degree in chemistry. Professional positions such as engineers, researchers, or college instructors usually require a minimum of a master's degree. This program meets all requirements of the Commonwealth Transfer Compact.

**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 114.*
# Associate in Arts Degree: Sociology Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4*</td>
<td></td>
<td></td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Psychology</td>
<td>PSY101</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>SOC101</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Statistics I</td>
<td>MAT181</td>
<td></td>
<td>3</td>
<td>3</td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Cultural Anthropology</td>
<td>SOC109</td>
<td></td>
<td>3</td>
<td>3</td>
<td>ESL098 or RDG095 or placement</td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Problems or Urban Sociology</td>
<td>SOC103 or SOC105</td>
<td></td>
<td>3</td>
<td>3</td>
<td>SOC101 and SOC109 or permission</td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

* This requirement is satisfied by Concentration Courses.

## CONCENTRATION OVERVIEW

The mission of the Behavioral Science Department is to produce students who are critical thinkers, i.e. students who can examine various propositions, theoretical statements and social assertions they encounter with an analytical eye and a healthy skepticism. Further, students all 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. This concentration prepares students to transfer to four-year colleges or universities to seek bachelor’s degrees in the behavioral sciences.

## 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 require a master’s degree. This program meets all requirements of the Commonwealth Transfer Compact.

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

- Understand and describe the Functionalist, Interactionist, and Conflict perspectives.
- Apply these theories to social structure, socialization, stratification, social control, and deviance.
- Understand the development of societies from hunter-gathers to post-modern information.
- Describe the nature of urban life and globalization.

Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously. See page 114.
Associate in Arts Degree: Theatre Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual and Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World View</td>
<td>From Area 3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>From Area 6*</td>
<td></td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONCENTRATION COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acting I</td>
<td>THE107</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play Production Workshop</td>
<td>THE109</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>ENG171</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theatre Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td></td>
<td>62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This requirement is satisfied by Concentration Courses.

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW
This concentration prepares students to transfer to four-year colleges or universities to seek bachelor's degrees in one of the following: 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.

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. This concentration meets all requirements of the Commonwealth Transfer Compact.

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 114.
### Associate in Arts Degree: Fine Arts Concentration

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual/Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT090 or placement</td>
</tr>
<tr>
<td>Scientific View of the World</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman Seminar</td>
<td>VMA100</td>
<td>Fall</td>
<td>1</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Two-Dimensional Design</td>
<td>VMA102</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Drawing I</td>
<td>VMA104*</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Drawing II</td>
<td>VMA204</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>VMA104</td>
</tr>
<tr>
<td>Introduction to Mass Media</td>
<td>VMA111**</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Art History I or</td>
<td>VMA112 or</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Art History II</td>
<td>VMA113</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three-Dimensional Design</td>
<td>VMA103</td>
<td></td>
<td>3</td>
<td></td>
<td>VMA102</td>
</tr>
<tr>
<td>Painting I</td>
<td>VMA122</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Painting II</td>
<td>VMA222</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>VMA102</td>
</tr>
<tr>
<td>Portfolio Prep. Seminar</td>
<td>VMA209</td>
<td>Spring</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective***</td>
<td></td>
<td>Spring</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Literature Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>pre or co-req ENG111</td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS**  
64

---

**CONCENTRATION OVERVIEW**  
This concentration, which meets all the requirements of the Commonwealth Transfer Compact, prepares students to transfer to four-year colleges or universities offering fine arts degrees.

**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 114.*

---

* This course satisfies General Education “Humanities” Requirement Area 6.  
** This course satisfies General Education “World View” Requirement Area 3.  
*** Career Electives may be any non-required VMA courses.
# Associate in Science Degree: Graphic Design Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual/Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Mass Media</td>
<td>VMA111*</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 and MAT 090</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Scientific View of the World</td>
<td>From Area 5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing I</td>
<td>VMA104**</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT 090</td>
</tr>
<tr>
<td>Freshman Seminar</td>
<td>VMA100</td>
<td>Fall</td>
<td>1</td>
<td></td>
<td>ENG095 and MAT 090</td>
</tr>
<tr>
<td>Two-Dimensional Design</td>
<td>VMA102</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT 090</td>
</tr>
<tr>
<td>Digital Imaging w/Photoshop</td>
<td>VMA105</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT 090</td>
</tr>
<tr>
<td>Three-Dimensional Design</td>
<td>VMA103</td>
<td></td>
<td>3</td>
<td></td>
<td>VMA102</td>
</tr>
<tr>
<td>History of Graphic Design</td>
<td>VMA114</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT 090</td>
</tr>
<tr>
<td>Intro to Desktop Publishing</td>
<td>VMA131</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 and MAT 090</td>
</tr>
<tr>
<td>Typography</td>
<td>VMA132</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT 090</td>
</tr>
<tr>
<td>Drawing II*</td>
<td>VMA204</td>
<td></td>
<td>3</td>
<td></td>
<td>VMA104</td>
</tr>
<tr>
<td>Graphic Design Applications</td>
<td>VMA231</td>
<td></td>
<td>3</td>
<td></td>
<td>VMA131</td>
</tr>
<tr>
<td>Design Communication I</td>
<td>VMA232</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>VMA131 and VMA132</td>
</tr>
<tr>
<td>Design Communication II</td>
<td>VMA233</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>VMA232</td>
</tr>
<tr>
<td>Publication Design</td>
<td>VMA234</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>VMA232 or chair approval</td>
</tr>
<tr>
<td>Graphic Design Internship**</td>
<td>VMA298G</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>VMA232</td>
</tr>
<tr>
<td>Portfolio Prep Seminar</td>
<td>VMA209</td>
<td>Spring</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective***</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective***</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This course satisfies “World View” General Education Requirement Area 3.
** This course satisfies “Humanities” General Education Requirement Area 6.
*** Career Elective may be any non-required VMA course.
+ Transfer-track students only.
++ Career-track students only.

## PROGRAM OVERVIEW

This program introduces students to the aesthetics, materials, and methods of effective visual communication for commercial art and design. The program combines theoretical elements with practical experience, up-to-date technologies, and professional equipment to give students a complete knowledge and understanding of career options, requirements, and responsibilities. Students may take elective courses in options other than their own, as scheduling permits. Because courses are offered sequentially, students must take courses in the appropriate semester.

## CAREER OUTLOOK

Graduates of this program qualify for job opportunities in advertising, communications, marketing, packaging, publishing, and in companies using printed material in their product or in the promotion of that product.

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

- Demonstrate proficiency in basic visual design skills and production skills.
- Demonstrate proficiency in basic computer operation and page layout software applications.
- Demonstrate proficiency in drawing and image software applications.
- Use the Internet and integrate Internet text and images in media.
- Demonstrate their understanding of paper, finishing, printing processes, and the distribution or delivery process.
Associate in Science Degree: Media Communication Program

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>GRADE</th>
<th>CREDITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing I</td>
<td>ENG111</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 or placement and ESL098 or RDG095*</td>
</tr>
<tr>
<td>College Writing II</td>
<td>ENG112</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG111</td>
</tr>
<tr>
<td>Individual &amp; Society</td>
<td>From Area 2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Mass Media</td>
<td>VMA111*</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Quantitative Thought</td>
<td>From Area 4</td>
<td></td>
<td>3</td>
<td></td>
<td>MAT095 or placement</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>From Area 5</td>
<td>Fall</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing I</td>
<td>VMA104**</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>VMA Freshman Seminar</td>
<td>VMA100</td>
<td>Fall</td>
<td>1</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Two-Dimensional Design</td>
<td>VMA102</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Elements of Video Production</td>
<td>VMA141</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Digital Imaging w/Photoshop</td>
<td>VMA105</td>
<td></td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>History of Moving Image</td>
<td>VMA115</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Introduction to Audio Tech</td>
<td>VMA151</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>ENG095 and MAT090</td>
</tr>
<tr>
<td>Advanced Video Production</td>
<td>VMA241</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>VMA141; coreq VMA242</td>
</tr>
<tr>
<td>Video Post-Production</td>
<td>VMA242</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>VMA141; coreq VMA241</td>
</tr>
<tr>
<td>Projects in Video Production</td>
<td>VMA243</td>
<td>Fall</td>
<td>3</td>
<td></td>
<td>VMA241 and VMA242 or instructor approval</td>
</tr>
<tr>
<td>DVD Authoring</td>
<td>VMA274</td>
<td></td>
<td>3</td>
<td></td>
<td>VMA105 and VMA141</td>
</tr>
<tr>
<td>Media Project Planning</td>
<td>VMA244</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>VMA141</td>
</tr>
<tr>
<td>Media Communications Internship</td>
<td>VMA299M</td>
<td>Spring</td>
<td>3</td>
<td></td>
<td>VMA241 or chair approval</td>
</tr>
<tr>
<td>Portfolio Preparation Seminar</td>
<td>VMA209</td>
<td>Spring</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Elective***</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td></td>
<td></td>
<td></td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

---

** This course satisfies “World View” General Education Requirement Area 3.
*** This course satisfies “Humanities” General Education Requirement Area 6.
*** Career Electives may be any non-required VMA courses.

**PROGRAM 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 fast-changing and technology-driven world. This program seeks to promote creative problem-solving skills as well as a thorough technical background aimed at providing students with educational and professional career opportunities in both artistic and commercial settings. Courses in theory, organization, and applications complement the lab courses. In addition to basic program requirements, students participate in an internship in a commercial setting and take a course in career-related electives appropriate to career goals.

**CAREER OUTLOOK**

Graduates of this program qualify to continue their education in programs leading to a bachelor’s degree. Graduates also qualify for employment in educational media centers, media service organizations, corporate media departments, cable television, libraries, and hospitals.

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

- Write clearly and intelligently about mass media issues.
- Demonstrate an understanding of the processes involved in planning, scripting, shooting, and editing a media production.
- Demonstrate an understanding of the basic technical aspects of the video camera, lighting for video, audio recording, videotape recording and editing.
- Demonstrate a basic level of skill in using the video camera, various kinds of microphones, a lighting kit and analog and nonlinear editing systems.
- Demonstrate a knowledge, understanding and basic skill in the use of television studio production and audio production elements.
- Demonstrate a knowledge, understanding and basic skill in the production of multimedia projects using various computer software programs.
### Accounting

#### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC101</td>
<td><strong>PRINCIPLES OF ACCOUNTING I</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>ACC102</td>
<td><strong>PRINCIPLES OF ACCOUNTING II</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course will expand upon the basic concepts and theories that students learned in the Principles of Accounting I course. Students will be expected to apply their knowledge in a managerial decision-making mode. Areas studied include, but not limited to, the following: examine long-term assets and liabilities; financial statement analysis; transactions unique to the corporate business structure; bonds payable; planning and controlling using master budgets and cost behavior recognition utilizing cost-volume analysis as well as gaining exposure to accounting for manufacturers. Prerequisite: Principles of Accounting I (ACC101).</td>
<td></td>
</tr>
<tr>
<td>ACC105</td>
<td><strong>ACCOUNTING INFORMATION SYSTEMS</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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), and Reading Skills II (RDG095).</td>
<td></td>
</tr>
<tr>
<td>ACC111</td>
<td><strong>INVESTMENTS</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>ACC112</td>
<td><strong>PERSONAL FINANCE</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>ACC201</td>
<td><strong>INTERMEDIATE ACCOUNTING I</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>ACC202</td>
<td><strong>INTERMEDIATE ACCOUNTING II</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A continuation of Intermediate Accounting I (ACC101), this course discusses accounting problems for long-term assets, current, and long-term liabilities. Issues in investments, leases, employee compensation, and taxes are covered. Accounting for shareholder equity and earnings per share are covered. The preparation of the Statement of Cash flow is studied. Prerequisite: Intermediate Accounting I (ACC201).</td>
<td></td>
</tr>
<tr>
<td>ACC203</td>
<td><strong>FEDERAL INCOME TAX I</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>ACC204</td>
<td><strong>FEDERAL INCOME TAX II</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>ACC205</td>
<td><strong>VOLUNTEER INCOME TAX ASSISTANCE</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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. Students also staff centers in Boston and surrounding areas, helping local residents complete their tax returns. Prerequisite: Federal Income Tax I (ACC203).</td>
<td></td>
</tr>
<tr>
<td>ACC207</td>
<td><strong>COST ACCOUNTING I</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>ACC210</td>
<td><strong>FINANCIAL MANAGEMENT</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>ACC211</td>
<td><strong>MONEY AND BANKING</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>ACC216</td>
<td><strong>MANAGERIAL ACCOUNTING</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course examines the needs of management and provides students with the necessary analytical skills that become critical to the financial decision-making process. The course covers such areas as budgetary planning and control, cost information, management decision-making, cost volume profit analysis, capital budgeting decisions, and control of decentralized organizations. Prerequisite: Cost Accounting I (ACC207).</td>
<td></td>
</tr>
</tbody>
</table>
Allied Health

AHE095 | 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.

AHE104 | 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.

AHE106 | CNA PRACTICUM 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. Corequisites: Principles of Clinical Practice (AHE110) and Patient Care Skills (AHE111).

AHE108 | 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).

AHE110 | 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.

AHE111 | PATIENT CARE SKILLS 3 Credits
This course, taken with CNA Practicum (AHE106) and Principles of Clinical Practice (AHE110), covers the patient care theory and skills required to take the Certified Nurse Aide and Home Health exams. Corequisites: CNA Practicum (AHE106) and Principles of Clinical Practice (AHE110).

AHE112 | MEDICAL ASSISTING 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. Corequisite: Principles of Clinical Practice (AHE110).

AHE115 | PHLEBOTOMY/LABORATORY THEORY 3 Credits
This course teaches anatomy and physiology of the circulatory system and the process of collecting blood samples. Introduction to EKG and Phlebotomy is included. This course and Practicum/Phlebotomy Technology (AHE206) meet the requirements necessary to sit for a phlebotomy certification exam offered by several private certification groups. Certification is the responsibility of the student. Prerequisites: Writing Skills I (ENG090), Fundamentals of Math (MAT090), and Reading Skills I (RDG090). Corequisite: Principles of Clinical Practice (AHE110) or permission of program director.

AHE201 | ADVANCED CLINICAL SKILLS 3 Credits
This course covers advanced theory and skills for the patient care assistant and medical assistant. Students are cross-trained in EKG and Phlebotomy. Prerequisites: Patient Care Skills (AHE111) or Medical Assisting Skills (AHE112).

AHE204 | PRACTICUM/PATIENT CARE 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: Patient Care Skills (AHE111). Corequisite: Advanced Clinical Skills (AHE201).

AHE205 | 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. Prerequisites: Principles of Clinical Practice (AHE110) and Phlebotomy/Laboratory Theory (AHE115).

AHE207 | PRACTICUM/LABORATORY 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. Prerequisites: Phlebotomy/Laboratory Theory (AHE115).

AHE208 | 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).

AHE209 | PRACTICUM SEMINAR FOR ALLIED HEALTH 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. Corequisite: Practicum Patient Care Assistant (AHE204) or Practicum Medical Assistant (AHE205) or Practicum Phlebotomy Technician (AHE206) or Practicum Laboratory Assistant (AHE207).

Arabic

ARB101 | ELEMENTARY ARABIC I 3 Credits
This course is a beginners 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.

ARB102 | 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
Biology

BIO104 HUMAN BIOLOGY/LAB 4 Credits
This course is designed to introduce students pursuing career 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. Note: May be used as a prerequisite for Anatomy & Physiology I/Lab (BIO205). Prerequisites: Writing Skills II (ENG095), Fundamentals of Math (MAT090), and Reading Skills II (RDG095) or placement equivalency.

BIO111 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.

BIO115 NUTRITION SCIENCE/LAB 4 Credits
This course covers a study of plant and animal sources of human food, their nutritional values, and the way they are utilized by the body in health and disease. Topics include chemistry and biology of food, personal nutrition evaluation, nutrition-related health problems, and global food and nutrition issues. Laboratory exercises introduce students to the diagnostic procedures used by nutritionists and to reinforce learning of nutritional theory. A background in biology or chemistry is not required. The course meets General Education “Science and Technology” Requirement Area 5. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), Fundamentals of Math (MAT090), and Reading Skills II (RDG095) or placement equivalency.

BIO120 INTRODUCTION TO BIOTECHNOLOGY 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. The course meets General Education “Science and Technology” Requirement Area 5. Class meets: 3 hrs. lecture; 1.5 hrs lab. Prerequisite: Writing Skills II (ENG095), Fundamentals of Math (MAT090), and Reading Skills II (RDG095) or placement equivalency.

BIO195 GENERAL BIOLOGY I/LAB 4 Credits
The first semester of this two-semester lecture/laboratory course concentrates on the cell as the basic unit of life. After establishing a foundation of biochemical principles, this course investigates cell structure, cellular functions, cellular respiration, and photosynthesis. The course concludes with an examination of cellular reproduction and the genetic bases of inheritance. Laboratory work provides students with the basic skills necessary to work in advanced laboratory situations. The course is intended for students planning to transfer as science majors. Pre-Approved health students should enroll in Principles of Biology I/Lab (BIO101). The course meets General Education “Science and Technology” Requirement Area 5. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisites: Writing Skills II (ENG095), Fundamentals of Algebra (MAT095), and Reading Skills II (RDG095), or placement equivalency.

BIO196 GENERAL BIOLOGY II/LAB 4 Credits
This course covers a continuation of General Biology I/Lab (BIO195). The course investigates the mechanisms of natural selection, adaptation, and speciation to explain biological diversity and extinction. The course continues with a study of the form, function, and taxonomy of representative organisms from the five kingdoms of life. The course concludes with an examination of the interactions of organisms in populations and natural communities and the way the living and non-living environments unite to form ecosystems. Laboratory work continues to develop the student’s critical thinking and problem-solving skills. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: General Biology I/Lab (BIO195).
BIO203 ANATOMY/PHYSIOLOGY I/LAB 4 Credits
This course covers a survey of the human body that stresses biological principles, chemical interpretations, and physical applications at the various levels of organization. The course lectures cover embryonic and physiologic theories of muscular, nervous, integument, skeletal, and endocrine systems. The class laboratories examine the integument, skeletal, and nervous systems. The department encourages students to complete Principles of Biology II/Lab (BIO102) and/or Chemical Science I/Lab (CHM110) before enrolling in this course. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Principles of Biology I/Lab (BIO101) or Human Biology/Lab (BIO108) or General Biology I/Lab (BIO195).

BIO204 ANATOMY/PHYSIOLOGY II/LAB 4 Credits
A continuation of Anatomy/Physiology I/Lab (BIO203) in lectures and lab work, this course concentrates on the circulatory, immune, excretory, endocrine, digestive, respiratory, and reproductive systems. In addition, lectures cover the subjects of fluid regulation and metabolism. The muscular system as well as the circulatory, digestive, respiratory, and urogenital systems form the basis of the laboratory program. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Anatomy/Physiology I/Lab (BIO203).

BIO205 MICROBIOLOGY/LAB 4 Credits
This course covers the morphology, growth, metabolism, and genetics of microorganisms, including bacteria, viruses, protozoa, and fungi. The course also covers the following topics: pathogenicity, disease transmission, control of microbial growth, the biological basis of resistance, immune response to infection, survey of important human pathogens, and the role of microorganisms in genetic engineering. Experimental work develops students' critical thinking skills and provides training in the cultivating and identification of microorganisms. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: General Biology I/Lab (BIO195) or Anatomy/Physiology I/Lab (BIO205).

BIO207 CELL BIOLOGY/LAB 4 Credits
A study of cell structure and function including the following topics: organelles, membrane function, metabolism, gene action, communication, and regulation of growth. Some specialized cells will be discussed. The laboratory will include biotechnological, molecular, and cellular experiments. Class meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: General Biology I/Lab (BIO195), General Chemistry I/Lab (CHM201) and Applications/Concepts (CIT110) or CIT placement test equivalence.

BIO208 GENETICS AND LAB 4 Credits
This course offers a broad understanding of classical, molecular and evolutionary genetics. Highlighted topics 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 and the theory and practice of current techniques in genetics. Prerequisite: Cell Biology/Lab (BIO207) or permission of science department.

BIO251 BIOTECHNOLOGY AND LAB 5 Credits
This course offers a broad understanding of the important aspects of molecular biology and biotechnology. The course will focus on recombinant DNA technology, genetically engineered organisms, protein expression and analysis, Genomics and the far reaching applications of biotechnology. Another emphasis of this course will be on the understanding of current experimental procedures and scientific models, the underlying concepts and the development of these models through laboratory investigation. Students will use research-quality laboratory equipment to master the laboratory techniques commonly used in biotechnology. Students will follow and modify protocols for optimum results as well as carry out inquiry-based investigations. Prerequisite: Genetics and Lab (BIO208).

BIO252 SEMINAR IN BIOTECHNOLOGY 4 Credits
This course will focus on the skills and work practices required for employment in the biotechnology industry. Topics will include biotech business models, company profiles, hiring trends, documentation, documentation (GLP), impact of regulatory agencies, relationship of R&D to large scale manufacturing of products, laboratory safety, intellectual property and ethical implications. This course will also expand on the concepts and applications presented in Biotechnology and Lab (BIO251). Topics will include Bioinformatics, Proteomics, immunological tools, fluorescence techniques, DNA and protein micro arrays, diagnostics tools, animal models and RNA interference (RNAi). Lab work will focus on bioassay, screening techniques, and calibrations. Formal written laboratory reports and classroom presentations will strengthen the student's communication skills. Upon completion of this course, students will be qualified to apply for internships in the biotechnology field. Prerequisite: Biotechnology and Lab (BIO251).

Business

BUS101 INTRODUCTION TO BUSINESS 3 Credits
This course is an introduction to the purposes, role, and responsibilities of business in a capitalistic society, including an introduction to the major areas of business such as: Finance, Management, Economics, and Marketing. This course provides a basic foundation for the student who will specialize in some aspect of business in college, and it also provides the opportunity for non-business majors to learn about the business in which they will someday be both producers and consumers. Note: this is a first semester course and must be taken prior to Principles of Management (MAN111) for students accepted into either the Management or Finance option of the Business Administration Program. This course cannot be taken for degree credit if Principles of Management (MAN111) is taken first for the aforementioned options.

BUS106 INTERNATIONAL BUSINESS 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 economics, businesses and consumers will also be examined. Prerequisite: Macroeconomics (ECO201) or Microeconomics (ECO202).

BUS108 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).

BUS112 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).

**BUS114 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).

**BUS120 REAL ESTATE LAW** 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.

**BUS121 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.

**BUS122 INTRO TO LAW/PARALEGAL PRACTICES** 3 Credits
This course provides students with an understanding of the paralegal field. The course assists students to become familiar with all aspects of the legal system. The course emphasizes the role of the paralegal and the way that role complements that of the lawyer. The course explores the role of law in our society, the judicial system, contract law, tort law, equity, and criminal law.

**BUS123 LEGAL RESEARCH/WRITING** 3 Credits
This course covers an introduction to legal writing and proper use of legal terminology in developing and drafting a format for the legal memorandum, preparing briefs, and, in particular, formulating research skills. Prerequisite: Intro to Law/Paralegal Practices (BUS122).

**BUS124 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: Intro to Law/Paralegal Practices (BUS122).

**BUS201 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.

**BUS202 BUSINESS LAW II** 3 Credits
This concentrated course reviews and emphasizes corporation and basic contract law, product liability, sales, warranties, bankruptcy, repossessions, sale and transfer, foreclosures, insurance, trusts, and wills. Prerequisite: Business Law I (BUS201).

**BUS225 PRINCIPLES OF ADVERTISING** 3 Credits
This introductory course in advertising covers concepts, consumerism, strategies, and media use. Recommended prerequisite: Principles of Marketing (MAN105).

**Chemistry**

**CHM110 CHEMICAL SCIENCE I/LAB** 4 Credits
This course is an introduction to chemical theory and terminology. Topics include measurement theory, methods of scientific investigation, atomic theory, compound chemical nomenclature, chemical reactions, the mole concept, solution chemistry, acid base theory, and the role of chemistry in society. Laboratory work reinforces concepts as well as introduces students to basic laboratory techniques, safety regulations, and chemical hygiene. The course does not satisfy the chemistry requirement of the Biological, Chemical, or Physics/Engineering concentrations. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095) and Fundamentals of Algebra (MAT095).

**CHM111 CHEMICAL SCIENCE II/LAB** 4 Credits
This course is an introduction to organic and biochemistry. Topics include organic compound classification, organic nomenclature, organic synthesis and reactions, the macromolecules of life, and the chemical aspects of metabolism. Experimental work further develops students' laboratory knowledge and skills. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisite: Chemical Science I/Lab (CHM110).

**CHM151 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: Fundamentals of Algebra (MAT095).

**CHM201 GENERAL CHEMISTRY I/LAB** 4 Credits
This course covers a consideration of chemical principles including atomic structure and bonding, stoichiometry, gas laws, and solution chemistry. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: College Algebra (MAT195). Note: This course is intended for students planning to transfer as science majors. Pre-allied health students should enroll in Chemical Science I/Lab (CHM110).

**CHM202 GENERAL CHEMISTRY II/LAB** 4 Credits
Topics for this course include solution chemistry, acids and bases, oxidation and reduction, reaction rates and equilibrium, and an introduction to methods of qualitative analysis. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: General Chemistry I/Lab (CHM201).

**CHM251 ORGANIC CHEMISTRY I/LAB** 4 Credits
This course covers a study of carbon compounds including nomenclature, molecular structure, and functional groups. Topics include stereochemical relationships of compounds, the reactivity and properties of saturated, unsaturated, and aromatic compounds. The course uses mechanisms that relate to chemical changes as a unifying principle. The laboratory component of the course presents and uses instrumental methods of analysis as they relate to organic compounds. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in General Chemistry II/Lab (CHM202).

**CHM252 ORGANIC CHEMISTRY II/LAB** 4 Credits
This course covers a continuation of Organic Chemistry I/Lab (CHM251). The course places additional emphasis on the manipulation of functional groups and synthetic approaches. Compounds discussed in this course include carbon compounds, acid derivatives, amines, and carbohydrates. The laboratory places an emphasis on synthesis, isolation and purification of
CHN101 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 and grasp 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.

Computers: Computer Information Technology
CIT101 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 Learners Outcomes and Competencies in this course are approved by the National Workforce Center for Emerging Technologies (NWCE). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT110 APPLICATIONS/CONCEPTS 3 Credits
(Formerly CIT105 and CMP105) 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 approved by the National Workforce Center for Emerging Technologies (NWCE). Students with prior learning experience may “test-out” of this course by contacting pla@bhcc.mass.edu. Prerequisite: Academic Reading III (ESL098) or Completion of Reading Skills II (RDG095) or exemption from reading requirement by placement required by placement testing. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT112 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 Services cluster. These frameworks are published at http://www.mcte.org/frameworks. This course is eligible for Massachusetts Tech Prep advanced placement credit. Prerequisite: Reading Skills (RDG095) or Academic Reading III (ESL098) or exemption from reading requirement by placement required by placement testing. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT118 PRINCIPLES OF INTERNET & INFORMATION SECURITY 3 Credits
(Formerly CIT117 The Internet) 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 scams, firewalls, spamming, personal and corporate firewalls, designing, writing software, chat rooms, Internet crimes against children, cyber predators, digital computer forensics, wired and wireless home & organization networks, cyber terrorism, and cyber vandalism. Students gain practical experience in Internet security considerations through a capstone security project. Taught in the College’s hands-on laboratory students will gain an in-depth knowledge of the principles, practices, procedures and competencies in the techniques used in securing both personal and organizational information. Prerequisite: Applications/Concepts (CIT110) or Introduction to Computer Science and Object Oriented Programming (CIT120), equivalent experience or permission of the Department Chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT120 INTRO TO COMPUTER SCIENCE & OBJECT ORIENTED PROGRAMMING 3 Credits
(Formerly CIT115) 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 objects, classes, inheritance 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. Prerequisites: Fundamentals of Algebra (MAT095) and Reading Skills II (RDG095) or placement. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT121 INTRODUCTION TO COMPUTER FORENSICS 3 Credits
This is an introductory course in Computer Forensics Computing, Digital Forensics, or
Computer Forensics is the name for a newly emerging field of study and practice that incorporates many areas of expertise. Some of these areas have been called network security, intrusion detection, incident response, infrastructure protection, disaster recovery, continuity planning, software engineering, cyber security, and computer crime investigation. It is an area of practice in public law enforcement at the federal, state and local levels that deals with cyber crime, cyber vandalism, cyber predators, and cyber terrorism. In the private sector, it deals with critical infrastructure, such as business, hospitals, utilities, transportation, finance, education, and other key institutions. Taught in the College’s hands-on laboratory students will gain an in-depth knowledge of the principles, procedures, and techniques used in digital forensic analysis.

Prerequisite: Applications/Concepts (CIT110) or Information Technology Fundamentals (CIT112) or equivalent experience or permission of department chairperson.

CIT128 DATABASE DESIGN WITH MS ACCESS  
(Formerly CIT217) 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 Office User Specialist (MOUS) Certification Program and students may choose to take the MOUS ACCESS Certification Examination(s) upon completion of this course. Visit www.mous.net for more information on Certification Options. 
Prerequisite: Applications/Concepts (CIT110) or Introduction to Computer Science and Object Oriented Programming (CIT120), equivalent experience or permission of the Department Chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT141 PACS ADMINISTRATION I  
This is an introductory course covering the major aspects of administering Picture Archiving & Communication Systems, PACS. This course provides students with an overview and introduction to the core aspects PACS Systems Administration and Technology including but not limited to: PACS components, functions and standards, PACS network and infrastructure, PACS image acquisition, archiving, query, storage and retrieval, and PACS Management Software modules. This course focuses on an understanding and appreciation of the duties of PACS administration professional and how PACS relates to and interacts with the Hospital Information (HIS) and Radiology Information (RIS) Systems. Upon completion of the 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 email, operating system and file management skills. For additional information Fundamentals (CIT112), equivalent course, equivalent experience or permission of the CIT Department Chairperson. Pre/corequisite: Introduction to Diagnostic Imaging & PACS (MIG161).

CIT211 SYSTEM ANALYSIS AND DESIGN  
(Formerly CMP211) 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 Introduction to Computer Science & OOP Programming (CIT120) equivalent experience or permission of the Department Chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT216 VISUAL BASIC  
This course covers an introduction to computer programming using Visual Basic. The course provides students with “hands-on” exposure to object-oriented programming techniques and emphasizes programming logic, using the event-driven components of Visual Basic. Using laboratory case assignments, students plan, design, and create their own Windows applications. They learn how to create a user interface, set control properties, design the logic structures of the project and write the associated Visual Basic code. Prerequisite: Applications/Concepts (CIT110) or Introduction to Computer Science & OOP (CIT120) or equivalent experience or permission of the Department Chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT218 INTERMEDIATE VISUAL BASIC  
Expanding on the principles of 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. The course emphasizes development of graphical interfaces. Prerequisite: Visual Basic (CIT216) or permission of the instructor and/or department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT219 INFORMATION SECURITY AND ASSURANCE  
This is a course in the foundations of information security. Emphasis will be placed on understanding the key issues associated with protecting information, the technologies behind securing information and the subsequent detection and response to security incidents. Topics will include inspection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical responses and an overview of the Information Security Planning functions. There will be a hands-on lab component required for this course. Students taking this course will be required to sign The White hat Oath, a Code of Ethics form the International Information Systems Security Certification Consortium, Inc. (www.isc2.org). Prerequisite: Internet and Information Security (CIT118).

CIT221 ADVANCED COMPUTER FORENSICS  
This course provides advanced work in computer and digital forensic analysis. Emphasis in this course will be placed on file system forensic recovery, analysis and reporting, intrusion detection and analysis, and advanced use of computer forensics tools. Topics covered in Introduction to Computer Forensics 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 (CIT212).

CIT234 DECISION SUPPORT USING MS EXCEL  
This comprehensive course covers the use and application of Decision Support using spreadsheet software based on the most current version of Microsoft Excel. The applications include basic spreadsheet operations, charting, web queries, multiple sheet workbooks, macros, advanced functions, and database features. The course emphasizes applications
involving financial decision-making, financial planning and “what-if” analyses as they relate to various business and organizational models. It also emphasizes Internet applications of MS Excel. The course covers integration of the other MS Office programs. Upon completion of the course, students have an in-depth knowledge of Statistical Data Analysis and Decision Modeling based on MS Excel. Microsoft Corporation approved this course material as coursework for the Microsoft Office User Specialist (MOUS) Certification Program and students may choose to take the MOUS Excel Certification Examinations. (Visit www.mous.net for more information). Prerequisite: Applications/Concepts (CIT110) or Introduction to Computer Science OOP (CIT120) or equivalent experience or permission of the Department Chairperson. For additional information and/or a course syllabus, contact CITDepartment@bhcc.mass.edu.

CIT236 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 database, students learn SQL basics and then move on to the more sophisticated and challenging aspects of SQL. Students get in-depth knowledge of the language through extensive use of Internet based, industry standard SQL programming and certification testing engines. Upon completion of this course, student have the skills and competencies required to program in SQL and the background necessary to continue to intermediate and advanced courses in PL/SQL and database administration. Prerequisite: Applications/Concepts (CIT110) or Introduction to Computer Science and Object Orient Programming (CIT120), equivalent experience or permission of the Department Chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT237 C++ PROGRAMMING 3 Credits
This course introduces students to computer programming using the C++ language. Students develop the ability to correctly analyze a variety of problems and generate appropriate algorithmic solutions. The course emphasizes the principles of top-down structured design. The course introduces students to the concepts of object-oriented programming while exploring the syntax and usage of the C++ programming language. Prerequisites Introductions to Computer Science & Object Oriented Programming (CIT120) or with permission of the instructor and/or department chairperson and Topics in Algebra/Training (MAT193) or Pre-Calculus (MAT197). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT239 INTRODUCTION TO JAVA 3 Credits
This course introduces students to the Java programming environment. Topics covered include the fundamentals of the Java language including variable types, control structures, classes, and inheritance and file handling. Students gain experience writing object-oriented programs. The course covers creating both Java applications and Java Applets including events handling, animation, and audio. Prerequisite: Introduction to Computer Science & Objective Oriented Programming (CIT120). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT240 DATABASE PROGRAMMING 3 Credits
This is an intermediate course in the use of the ORACLE Database Management Systems Procedural Language, PLSQL. Students perform mid-to advanced level manipulation of ORACLE database including functions related to multiple tables, compound and complex queries, exporting and importing tables, sub-queries, and reporting using a live ORACLE database. Prerequisite: SQL Programming (CIT236). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT241 PACS ADMINISTRATION II 3 Credits
This course covers the more complex aspects of Picture Archiving & Communication Systems and proceeds to advanced topics including but not limited to: PACS workflow monitoring, clinical PACS system review, archive back-up, PACS system security, disaster recovery, and advanced features of PACS display software. This course continues to focus on the duties of PACS administration professionals and covers in more depth the relation to and interaction with the Hospital Information (HIS) and Radiology Information (RIS) Systems as well as PACS Internet applications, telemedicine and teleradiology. Upon completion of this course students will have the knowledge, skills and competencies necessary to administer PACS systems. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu. Prerequisite: PACS Administration I (CIT141).

CIT242 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 C++ Programming (CIT237). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu. Prerequisite: C++ Programming (CIT237) or Programming with Java (CIT239).

CIT245 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 #1Z0-031. Students will also be provided with the personal edition of the Oracle software. Prerequisite: SQL Programming (CIT236), equivalent experience or permission of the Department Chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

CIT250 COLLABORATION, COMMUNICATION & INTEGRATION IN MS OFFICE APPLICATIONS 3 Credits
This is a course in modern office technology which introduces students to all major areas of personal and organizational collaboration, communication and integration of MS Office applications in the “Internet Age.” Building on students’ basic knowledge of the most current version of the core MS office applications, the course proceeds to cover in detail, the aspects of Office applications including but not limited to handwriting and speech recognition, Object Linking & embedding (OLE), Discussion Groups and Servers, LiveMeeting, and the other teamwork 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. Particular emphasis is placed on LiveMeeting as the primary online Internet collaboration platform. 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 the web enabling and web publishing features of all applications as well as gaining an in-depth
knowledge of the principles, practices, procedures, competencies and techniques used in implementing all of these collaborative applications in offices large and small. Microsoft Corporation has approved this courseware for the Microsoft Office User Specialist (MOUS) Certification Program and students may choose to take the MOUS Certification Examination(s) upon completion of this course. Visit www.mous.net for more information on Certification Options. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu. Prerequisite: Applications & Concepts (CIT110) or equivalent course or experience; completion of Reading Skills II (RDG095), Writing Skills II (ENG095), or permission of the department chairperson.

**CIT272 ASSEMBLY LANGUAGE**  
3 Credits  
This course is designed for the computer science major. The course covers the following topics: basic computer architecture, memory, CPU, I/O devices, operating system and applications software, data representation, coding of subroutines, parameter passing, local variables and calling procedures, basic instruction set for the Intel microprocessors, and the overall functions of an assembler. The course emphasizes embedding C code into assembler as well as embedding assembly code in C. Prerequisite: C++ Programming (CIT239) or permission of the instructor or department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

**CIT284 ADVANCED C++**  
3 Credits  
This course covers intermediate-level programming. Students learn advanced topics of C++ , dynamic memory, allocation, pointers, etc., and OOP and 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) or Programming with Java (CIT239) or permission of the department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

**CIT285 ADVANCED JAVA PROGRAMMING**  
3 Credits  
This course thoroughly examines many of the sophisticated features of the Java programming language, including interfaces, advanced graphics, data structures, file I/O techniques, multithreading, networking, advanced JDBC, servlets, Java Beans, the Java Native Interface, and CORBA. 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. Prerequisite: Programming with Java (CIT239) and College Algebra (MAT195). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

**CIT299 COMPUTER INFORMATION TECHNOLOGY INTERNSHIP**  
3 Credits  
This course enhances the academic experience for students. All internships take place at pre-approved 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 permission of the department chairperson to register for this course.

**Computers: Information Technology for Business and Industry**

**ITB111 HTML & DREAMWEAVER**  
3 Credits  
This course teaches the student the principles and concepts of designing and creating WEB pages in an HTML format. The course is designed to expose the student to the constructs of HTML tags, the attribute modification of HTML tags, the incorporation of CSS tags, CSS pseudo tags, dynamic effects using styles, and class assignments. Additionally, the course will teach the student the utilization of graphics and dynamic graphics used in Web design. Also included will be content presentation control via HTML tables, HTML layers, and HTML frames. The course will explore the requirements, tools and controls used in WEB page development by lecture, in-class practical exercises, and home study exercises. The course will also teach the student to create WEB sites using Dreamweaver as a state-of-the-art web authoring tool to enable rapid deployment of WEB development projects. For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu.

**ITB113 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. For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu. Prerequisites: Applications/Concepts (CIT110) and HTML & Dreamweaver (ITB111).

**ITB115 FLASH MX & FIREWORKS MX**  
3 Credits  
Fireworks is a graphics design tool that allows designers to work visually to create graphics and the code that brings the graphics to life. Fireworks combines the features of many other graphic programs to allow designers to incorporate the results into a WEB environment or as components of other presentation tools such as MS PowerPoint or Flash. Flash MX is a vector based animation and authoring application tool that provides the capability to design and develop animated graphics, animated movies, animated buttons, and interactive navigation menus that are increasingly being incorporated into WEB design strategies. Flash provides a Web message delivery medium that is unique and attention grabbing when viewed. For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu. Prerequisite: Applications/Concepts (CIT110).

**ITB117 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 (ITB111).

**ITB133 INTRODUCTION TO MS 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
Admittance into the Electric Power Utility Program. The course emphasizes Internet applications relating to MS Office. It also covers integration among the MS Office Applications. Microsoft Corporation approved the course material as curriculum for the Microsoft Office User Specialist (MOUS) Program Core Level. Upon completion of the course, students have an in-depth knowledge of basic MS Office applications and concepts, and may choose to take the MOUS Core Certification Examinations. Please visit www.mous.net for more details on MOUS Certification.

**ITB140 PRACTICAL COMPUTER SYSTEM INTEGRATION & TROUBLESHOOTING**  
Using several multi-media, Computer-Based Training (CBT) tools, this course covers most major technical issues related to Personal Computer and/or Workstation troubleshooting. Through real-world simulations, students gain an understanding of situations where hardware & software problems lead to lost productivity and “downtime”. Students are taught methodologies and techniques that can be used to resolve problems that arise from complex computer system integration. Although intended primarily for students in the business and medical fields, anyone interested in learning more about Windows XP hardware and software issues relating to PC and workstation connection to networks and the Internet should consider taking this course. Troubleshooting fundamentals, tools, error messages and their meaning and use of the command prompt are also taught. Upon completion of this course, students will have detailed knowledge, skills and competencies required to troubleshoot most PC and workstation problems. All Learner Outcomes and Competencies in this course are approved by the National Workforce Center for Emerging Technologies (NWCE). 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 ITBDepartment@bhcc.mass.edu.

**ITB153 UNDERGROUND & SUBSTATION OPERATIONS**  
This course introduces students to the basic operation of the underground and substation systems. Students will become familiar with the underground network electrical system and the various job classifications of personnel. Using the power formula to determine wire size an electrical heat shrink joint will be constructed, and manhole entry/exit procedures will be discussed. Cable types and sizes and an equipment orientation will be performed to provide students with a basic understanding of underground apparatus. In addition students will learn the purpose of substations and become familiar with the various types of equipment involved. Students will become familiar with the dispatch center and its functions. Prerequisite: Admittance into the Electric Power Utility Program.

**ITB162 INTRODUCTION TO NETWORKING**  
This course provides students with classroom and laboratory experience in current and emerging networking technology that empowers them to enter employment or further education and training in the computer-networking field. Instruction includes, but is not limited to, networking, network terminology and protocols, network standards, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. The course particularly emphasizes the use of decision-making and problem-solving techniques in applying science, mathematics, communication, and social studies concepts to solve networking problems. In addition, students learn the proper care, maintenance, and use of networking software, tools, and equipment and all local, state, and federal safety, building, and environmental codes and regulations. Prerequisite: Applications/Concepts (CIT110). For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu.

**ITB167 ROUTERS AND ROUTING BASICS**  
Course topics include, but are not limited to, the Open System Interconnection (OSI) Reference Model, local area networks (LANs); wide area networks (WANs), transmission control protocol/Internet protocol (TCP/IP) addressing, routers, router configuration, routing and routing protocols, internetworking open system (IOS) images and network troubleshooting. The course covers these topics in both a classroom and laboratory setup. The course particularly emphasizes understanding the nature and component of networks that make up LANs, WANs and the Internet. The class assists students to become familiar with the use of command protocols when configuring networks and to troubleshoot a 5-router topology. Prerequisite: Introduction to Networking (ITB162). For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu.

**ITB182 PC HARDWARE**  
This course provides students with a better understanding of the way computer hardware interacts and the impact of the hardware on the operating systems and the applications software. The class covers areas such as systems boards, input devices, output devices, and video displays. Students gain hands-on experience tearing down and rebuilding a computer. Prerequisite: Applications/Concepts (CIT110) or Introduction to Computer Science & Object Oriented Programming (CIT120) or permission of the department chairperson. For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu.

**ITB211 XSLT**  
This course is designed to add a new dimension to the students’ XML Web Design learning foundation by introducing them to the XSL style sheet and transformation language. XSL is a specialized formatting and manipulation that is uniquely applicable to the XML markup language which enables the developer of XML Web content to perform such tasks as contextual formatting, conditional selection of Web content from a data source, sorting of content on a Web page, dynamic counting, dynamic summarization, attribute processing, and creating dynamic document-wide numbering schemes. Prerequisite: HTML & Dreamweaver (ITB111) and XML (ITB117).

**ITB215 ASP.NET/JSP**  
This course will teach students the concepts and practical application of WEB-to-database interface. ASP is a powerful server-based technology from Microsoft Corporation. ASP uses specialized instructions to automatically render WEB pages that extract data from real-time databases. ASP technology permits WEB developers to present real-time data. Prerequisites:
ITB221 XML WEB SERVICES 3 Credits

This course is designed to teach students how to program and utilize Web services architectures using the Extensible Markup Language (XML) as the foundation language. XML Web services are services consisting of a combination of programming and data that are made available from a business's Web server for Web users or other Web-connected programs. Web services range from such major services as storage management and customer relationship management down to much more limited services such as the furnishing of a stock quote and the checking of bids for an auction item such as is done on E-bay. The accelerating creation and availability of these services is a major Web trend. This course will prepare students to employ XML Web services within an overall Web design architecture. Prerequisites: HTML & Dreamweaver (ITB111) and JavaScript (ITB113) and XML (ITB117).

ITB230 HELD 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 Introduction to Computer Science & Object-Oriented Programming (CIT120), Writing Skills II (ENG095), Reading Skills II (RDG095) and one additional completed CIT course. For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu.

ITB233 ADVANCED MS OFFICE 3 Credits

This advanced course covers the user and application of integrated PC applications software based on the most current version of Microsoft Office. The course 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 approved this course material as courseware for the Microsoft Office User Specialist (MOUS) Program Expert Level. Upon completion of the course, students have an in-depth knowledge of expert MS Office applications and concepts and may choose to take the MOUS Certification Examinations. Prerequisite: Introduction to MS Office (ITB133). For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu.

ITB251 ELECTRIC POWER/UTILITY TECH INTERNSHIP 3 Credits

This course will cover a variety of topics that consist of practical work experience in the NSTAR workforce environment involving working on line trucks and learning and performing all of the tasks of an overhead line worker. The course will also cover the instruction and practical exercise of soft skills in today's work environment. Soft skills are those skills used everyday in the workplace to assist in making assigned tasks easier to accomplish through teamwork and collaboration in a multi-cultural environment. Soft skills are increasingly being incorporated in job descriptions throughout the workforce as companies and institutions seek to employ students that have had successfully incorporated soft skills as part of their curriculum. Prerequisites: College Writing I (ENG111), Fundamentals of Single Phase and Polyphase Metering (ITB151), Underground & Substation Operations (ITB155), and Group Dynamics (PSY107).

ITB253 FUNDAMENTALS OF OVERHEAD LINELWORK I 4 Credits

This course introduces students to the basic fundamentals of overhead line work and begin to perform more advanced pole work techniques. During this intensive training period students will learn to become comfortable working 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 (ITB251).

ITB255 FUNDAMENTALS OF OVERHEAD LINELWORK 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 (ITB251).

ITB257 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 (ETT104).

ITB259 INTERMEDIATE OVERHEAD LINELWORK I 4 Credits

This course introduces students to more advanced tasks and functions associated with overhead line work. Students will continue to lash poles, run wire and install cross arms of various types and heights. Guy wires, and anchors will be installed using geometric functions to determine their location. Single and three phase electrical services will be installed from a bucket truck using concepts learned in AC/DC theory courses. Hands on usage of 600-voltage test equipment will be demonstrated and performed by the students. Students will also begin installing streetlights using Ohm's Law to determine wattage and wire size. Prerequisites: Fundamentals of Overhead Line I (ITB253) and Fundamentals of Overhead Line II (ITB255).

ITB261 INTERMEDIATE OVERHEAD LINELWORK 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 Line I (ITB253) and Fundamentals of Overhead Line II (ITB255).

ITB262 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 (ITB162).
ITB264  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 (ITB162).

ITB267  SWITCHING BASICS AND INTERMEDIATE ROUTING  3 Credits
(Formerly CIT267) In both the classroom and laboratory setup, students work with a Threaded Case Study (TCS), which involves a school district that wants to upgrade its networking system. Instruction includes, but is not limited to, a review of the Open System Interconnection (OSI) Reference Model, a study of the OSI layer functions, local area network (LAN) switching, Ethernet and virtual LANs (VLANs), LAN design, interior gateway routing protocol (IGRP), access control lists (ACLs), Novell Internet Packet Exchange (IPX), and network management. The course particularly emphasizes students’ ability to demonstrate and apply learning from Semesters 1 and 2 to a network and their ability to explain how and why a particular strategy is employed. In addition, students learn appropriate methodologies for managing networks, with emphasis on clear and adequate documentation of the Network. Prerequisite: Switching Basics (ITB167), which involves a school district that wants to upgrade its networking system. Instruction includes, but is not limited to, a review of local area network (LAN) switching, virtual LANs, LAN design, routing protocols, access lists, wide area networks (WANs), the open system interconnection (OSI) reference model, networking, point-to-point protocols (PPPs), integrated services digital network (ISDN), dial-on-demand routing (DDR), frame relays and network management. The course particularly emphasizes students’ ability to demonstrate and apply learning acquired during Introduction to Networking (ITB162) and Routers and Routing Basics (ITB167) to a network and to explain how and why a particular strategy is employed. In addition, students prepare for the CCNA Exam and have the option to prepare for the Network+ Certification Exam. Prerequisite: Switching Basics and Intermediate Routing (ITB267). For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu.

ITB281  NETWARE NETWORK ADMINISTRATION/LAB  4 Credits
(Formerly CIT281 and CMP281) 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 (ITB162). Pre/corequisite: Windows Operating Systems (ITB268). For additional information and/or a course syllabus contact itbidept@bhcc.mass.edu.

ITB299  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 that introduces guest lectures from industry and finally either an internship, job shadowing, or team walk through approach to learning. This course provides a solid foundation to understanding the types of jobs available to students with network administration skills, what it is like to work in the networking field, and students will acquire a perspective of employer’s expectations. Students will become more successful with the interview process since they will have had real world experience and/or understanding of what will be expected of them when they begin their networking career. Prerequisite: Permission of department chairperson.
### Criminal Justice

**CRJ101  INTRODUCTION TO CRIMINAL JUSTICE  3 Credits**  
This course covers a survey of the history, development, and role of the American criminal justice system. It includes the organization and jurisdiction of the various criminal justice agencies, a review of the court process, professional orientation, and current trends in the criminal justice system.

**CRJ102  THE JUVENILE PROCESS: DELINQUENCY, ADJUDICATION AND CORRECTIONS  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.

**CRJ103  CRIMINAL LAW  3 Credits**  
This course examines the substantive law of crimes including the general and special 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. Prerequisite: Writing Skills II (ENG095).

**CRJ104  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.

**CRJ106  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.

**CRJ107  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.

**CRJ108  CRIMINAL INVESTIGATION  3 Credits**  
This course identifies and traces the significance and application of the tools of criminal investigation. It includes fundamentals and theory of an investigation, crime scene procedures, report writing, collection and preservation of evidence, methods of gathering information, and specialized and scientific methods.

**CRJ109  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.

**CRJ110  RACE, ETHNICITY AND CULTURAL ISSUES IN THE AMERICAN CRIMINAL JUSTICE SYSTEM  3 Credits**  
This course examines the impact of the policies, procedures, and interpretation of data concerning the American criminal justice system across ethnic, racial, sexual, and cultural lines. It examines cross-cultural interaction within the system and the history and institutional attitudes concerning multicultural issues.

**CRJ111  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: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103).

**CRJ114  WHITE COLLAR & ORGANIZED CRIME  3 Credits**  
This survey course covers the nature and extent of white-collar and organized crime, the social-psychological makeup of white-collar/organized criminals, historical roots, and the interrelationship of white-collar criminals and organized crime. It explores possible solutions, the scope of techniques used in combating crime, interagency and jurisdictional problems, and the benefits of cooperation.

**CRJ115  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.

**CRJ201  MANAGEMENT FOR 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.

**CRJ202  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: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or permission of the department chairperson.

**CRJ203  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.

**CRJ212  COMMUNITY CORRECTIONS  3 Credits**  
This 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. Prerequisite: Criminal Law (CRJ103).
CRJ214 NEGOTIATIONS/ 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. Prerequisite: Criminal Law (CRJ103).

CRJ216 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.

CRJ218 INFORMATION & ELECTRONIC SECURITY 3 Credits
This course introduces crimes involving the use of computers, the federal and state laws addressing them, and the preventive and investigative methods used to secure computers and defend and prosecute offenders. Part of information security is the electronics and technology needed to provide protection. Topics include budgeting, vendor selection, and security systems (biometrics, access control, closed circuit television, etc.) to meet organizational needs. Prerequisite: Principles of Security Management (CRJ106) and Management for Criminal Justice (CRJ201).

CRJ220 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.

CRJ228 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. Prerequisite: Criminal Investigation (CRJ108).

CRJ230 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. Prerequisite: Criminal Law (CRJ103).

CRJ232 CIVIL RIGHTS & CIVIL LIBERTIES 3 Credits
This course explores the concepts of individual rights and liberties in America and the ways they are balanced against the rights and interests of the sovereign. It scrutinizes first Amendment issues of freedom of speech and religion. The course analyzes the fourteenth Amendment and its impact on states’ rights as they affect individuals, as well as the ever-changing concept of civil rights and liberties as they conflict with “homeland security” and the “war against terrorism.” Prerequisite: State/Local Politics (GOV105).

CRJ234 ETHICS AND PROFESSIONAL RESPONSIBILITY IN THE CRIMINAL JUSTICE SYSTEM 3 Credits
This course gives students an overview of the ethical dilemmas facing criminal justice professionals in American society. It aids students in the comprehension and retention of diverse ethical issues by analyzing the aspects of ethical behavior and decision-making in law enforcement, court procedure and operations, and corrections. Prerequisites: Introduction to Criminal Justice (CRJ101), Criminal Law (CRJ103), Introduction to Corrections (CRJ107), Criminal Investigation (CRJ108), Policing in a Democratic Society (CRJ220), College Writing I (ENG111), or permission of instructor.

CRJ299 CRIMINAL JUSTICE INTERNSHIP 3 Credits
Students work 150 hours in a criminal justice facility, probation department, juvenile detention center, or house of corrections, as assigned by the contract advisor. Students work under an assigned criminal justice professional, participate actively in the preparation of pre-sentence reports, and conduct intake and post conviction interviews. Students learn how to perform record checks and prepare probation recommendations, etc. Students work on inmate classification, work release programs, and in educational settings. Students may assist counselors and other staff, depending upon the type of facility to which the student is assigned. Through active participation in online functions of the criminal justice agency, students gain knowledge and understanding. The contract advisor and the assigned criminal justice official evaluate students’ work. Students meet bi-weekly with their advisors to prepare papers and work on related projects. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisite: Permission of the instructor.

Culinary Arts

CUL102 FOOD SERVICE PURCHASING 3 Credits
Students are taught ways in which products are packaged, proper procedures for storing, and identifying products in terms of quality, quantity, or grade. Also included are ordering procedures, par stock planning, ways to plan storage and facilities, and systems to control the flow of products.

CUL103 DINING ROOM PROCEDURES 3 Credits
This course presents table service techniques and procedures used in most dining rooms. Students learn American, French, and Russian style table service, as well as buffet service and preparation of tableside foods. Students are also introduced to wines, wine service, and bartending techniques.

CUL104 HEALTHY FOODS PREPARATION 3 Credits
This course acquaints students with basic nutritional concepts and their relationships to the promotion of good health, consumer food choices, and appropriate means to ensure pleasurable and healthful dining experiences. The course also covers current nutritional concerns related to dietary practices and the consumer.

CUL108 BAKING 3 Credits
This course covers the fundamentals of baking, including the methods and equipment for the production of a variety of baked goods. Students learn to produce yeast products, general desserts, and various pastry products. Additional expenses may include supplies, equipment, and/or uniforms.
CUL111  FOOD SERVICE SANITATION AND SKILLS  3 Credits
This two-week intensive course provides students with all necessary information to complete the Food Service Certification course required by the National Restaurant Association. Students learn the skills required to correctly handle all food service equipment, including weights and measures. The course provides “hands-on” experience for students. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Writing Skills II (ENG095), Fundamentals of Algebra (MAT095), and Reading Skills II (RDG095).

CUL112  CULINARY THEORY/SKILLS PROFICIENCY  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.

CUL114  APPLIED FOOD SERVICE SANITATION  1 Credit
Students study and prepare for the Education Foundation Sanitation exam prepared by the National Restaurant Association (NRA). Students learn the regulations governing sanitation and the methods employed for eliminating hazards. Testing for the NRA Education Foundation is required.

CUL115  INTRODUCTION TO CULINARY ARTS  4 Credits
This six-week 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. Prerequisite: Food Service Sanitation and Skills (CUL111).

CUL120  ADVANCED CULINARY SKILLS/APPLICATIONS  3 Credits
Students expand upon the knowledge gained in Culinary Theories and Skills Proficiency (CUL112). Students develop ethnic menus, as well as prepare and serve the menu items. The course introduces students to advanced cooking techniques. The course emphasizes presentation, mise en place, timing and skill in organizing and executing the meal. The course introduces students to Garde Manager and Charcuterie as well as ice carving, vegetable carving, and butter sculpture. At the completion of the course, students are ready to begin their internships in various area restaurants. Additional expenses may include supplies, equipment and/or uniforms. Prerequisite: Culinary Theory/Skills Proficiency (CUL112).

CUL125  PRINCIPLES OF BAKING  4 Credits
This six-week 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. Prerequisite: Food Service Sanitation and Skills (CUL111).

CUL135  CAFÉ AND BISTRO CUISINE  4 Credits
This seven-week course introduces students to the procedures of the art of Garde Manger and cold food preparation. The course covers basic cooking methods and the chemistry of cooking. The course teaches students to become responsible for menu preparation and production of the daily meal in a 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).

CUL145  ADVANCED DESSERTS AND PASTRIES  4 Credits
This seven-week course takes students beyond the basic principles of baking. The students learn cake decorating and advanced pastry production techniques. The course introduces students to the proper application of mixes, laminated dough, fillings, and choux pastries. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Introduction to Culinary Arts (CUL115) and Principles of Baking (CUL125).

CUL211  MENU DESIGN AND PURCHASING  3 Credits
This two-week intensive 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. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisites: Café and Bistro Cuisine (CUL135) and Advanced Desserts and Pastries (CUL145).

CUL215  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 demonstrate food-garnishing techniques. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisite: Menu Design and Purchasing (CUL211).

CUL225  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. Prerequisite: Menu Design and Purchasing (CUL211).

CUL235  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).
Early Childhood Development

CUL245  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 (CUL121) and Essentials of Dining Service (CUL225).

CUL299  CULINARY ARTS INTERNSHIP  3 Credits
The internship allows students the opportunity to gain practical experience in the field of culinary arts. The internship begins after completion of the first academic year and consists of 300 hours of work experience in an approved foodservice facility.

ECE095  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/corequisite: 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.

ECE101  GUIDANCE/DISCIPLE  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).

ECE102  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. 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.

ECE103  CHILD GROWTH/DEVELOPMENT  3 Credits
(Formerly PSY109) This course covers the normal development of children through the age of twelve with emphasis on the physical, cognitive, social, and emotional components of development of the infant, toddler, preschool, and school age child. The course meets Office of Child Care Services guidelines for child growth and development. 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.

ECE104  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).

ECE106  PROGRAM ENVIRONMENTS  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. 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.

ECE108  INFANT/TODDLER CURRICULUM DEVELOPMENT  3 Credits
This course is the study of the aspects of planning and implementing group care for infants and toddlers, including developmental issues, routines and transitions in care-giving, curriculum activities, environmental designs, equipment and materials, guiding behavior including limit setting and developing security through behavioral management, and working with parents. The course meets Office of Child Care Services requirements for Infant/Toddler Lead Teacher certification. Prerequisite: Child Growth/Development (ECE 103) 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.

ECE111  SPECIAL NEEDS CHILD IN EARLY CHILDHOOD EDUCATION  3 Credits
This course covers the study of children with physical, social, emotional and/or cognitive disabilities with emphasis on techniques for mainstreaming and inclusion of these children into existing early childhood programs. Prerequisites: Child Growth/Development (ECE103) plus three (3) ECE courses or equivalent.

ECE112  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 courses or equivalent.

ECE113  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 Office of Child Care Services Director certification requirements. Prerequisite: Lead teacher certifications or permission of department chair prior to enrollment.

ECE115  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 Office for Child Care Services Director II certification requirements. Prerequisite: Lead teacher qualifications or permission of department chair prior to enrollment.

**ECE117 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).

**ECE120 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 chairperson. The course is graded on a pass/fail scale. The course is open only to students matriculated in the Associate in Science Degree: Early Childhood Concentration. Prerequisite: Permission of department chairperson.

**ECE121 PRACTICUM IN 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 chairperson. The course is graded on a pass/fail scale. The course is open only to students matriculated in the Associate in Science Degree: Early Childhood Concentration. Prerequisite: Permission of department chairperson.

**Economics**

**ECO201 MACROECONOMICS** 3 Credits
This course covers an introduction to the American economy. Topics include: scarcity, opportunity cost and the production possibility curve, unemployment, inflation, GDP and related aggregates, economic growth, classical Keynesian models of income and employment determination, government policies for full employment and price stability, and money and the banking system. The course meets General Education “World View” Requirement Area 3. Prerequisites: Fundamentals of Algebra (MAT095) and Reading Skills II (RDG095) or placement.

**ECO202 MICROECONOMICS** 3 Credits
This course covers an introduction to the market system. It covers basic demand and supply analysis, theory of consumer choice, demand and supply elasticity, long run and short run cost curves, and price and output determination under different market structures, such as perfect competition, monopoly and monopolistic competition. The course applies microeconomic principles for analyzing government regulations. The course meets General Education “World View” Requirement Area 3. Prerequisites: Fundamentals of Algebra (MAT095) and Reading Skills II (RDG095) or placement.

**Education**

**EDU140 PRACTICUM IN INSTRUCTION** 3 Credits
This course exposes students to various techniques of learning through the experience of tutoring. Faculty develop 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: Writing Skills I (ENG090) and Fundamentals of Mathematics (MAT090).

**EDU150 TUTORING/LITERACY** 3 Credits
This field-based tutoring experience provides literacy training for all ages in a variety of local agencies. Students must participate in a weekly on-campus seminar and six hours of on-site tutoring per week. On-site supervisors provide minimal on-the-job training, while the on-campus seminar relates the field experience to the student’s program content and theories. Prerequisites: Writing Skills I (ENG090) and Fundamentals of Mathematics (MAT090).

**Emergency Medical**

**EMT103 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**

**ENR101 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 hours lecture – 3 hours lab. Prerequisite: PreCalculus (MAT197).

**ENR260 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. Prerequisites: Grade of C or better in Calculus II (MAT282) and College Physics I/ Lab (PHY251).

**ENR265 ENGINEERING DYNAMICS** 3 Credits
The course covers Kinematics and Kinetics of particles and rigid bodies, with the application of Newton’s Second Law and the principles of work-energy and impulse. The course enables students to distinguish statics problems from dynamics problems and to identify inertial effects. The course also enables students who are interested in Engineering Mechanics or related disciplines to comprehend the vast applications of the principles of dynamics ranging from
structural design of vehicles, electro-mechanical devices such as motors and movable tools, biomedical devices such as artificial heart and bladder, to predictions of the motions of satellites, spacecraft, etc. Course meets 3 hours lecture. Prerequisite: Grade of C or better in Engineering Statics (ENR260). Corequisite: Ordinary Differential Equations (MAT285).

ENR270  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: Engineering Statics (ENR260). Corequisite: Ordinary Differential Equations (MAT285).

Engeneering (Biomedical)
BME100  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 and physiology, static biomechanics, rehabilitation engineering, static bioinstrumentation, biosensors, biosignal processing, and models of neurons. MATLAB is used for ease in problem solving. Laboratory involves using a virtual instrument (Biopac) to record and analyze signals from the body. Class meets: 3 hrs. lecture; 2 hrs. laboratory. Prerequisite: Calculus I (MAT281) and General Chemistry I/Lab (CHM201). Corequisite: Calculus II (MAT282).

BME200  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. Prerequisite: Biomedical Engineering I (BME100) and Calculus II (MAT282). Corequisite: Calculus III (MAT283).

BME250  BIOMEDICAL ENGINEERING III  3 Credits
This course explores Fourier analysis, Laplace analysis and Z-transforms along with the techniques for generating quantitative mathematical models of physiological control systems and the behavior of physiological control systems using both time and frequency domain methods. Computer problems are implemented in MATLAB. Class meets: 3 hrs. lecture. Prerequisite: Biomedical Engineering II (BME200). Corequisite: Ordinary Differential Equations (MAT285).

English
ENG090  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).

ENG095  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.

ENG111  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.

ENG112  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).

ENG115  WRITING TUTOR SEMINAR I  3 Credits
This course prepares skilled writing students to work as peer tutors in the college’s Writing Place. It provides advanced instruction in grammar and composition, with special emphasis on the writing process. Through the weekly seminar and tutoring sessions, students develop teaching strategies, problem-solving skills, and greater understanding of composition theory and practice. Prerequisite: Permission of the instructor.

ENG171  ORAL COMMUNICATION  3 Credits
This course develops students’ poise and self-confidence through oral expression. The course emphasizes presentation of individual talks and participation in class discussions.

ENG203  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).

ENG241  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).

ENG242  JOURNALISM II  3 Credits
A continuation of Journalism I (ENG241), this course analyzes the elements of journalism and
English as a Second Language

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).

Environmental Science

ENV105 ENVIRONMENTAL SCIENCE I/LAB 4 Credits
This course covers an introduction to the physical and biological structure of the natural environment within a global perspective. The course emphasizes both a local and global perspective on the study of natural systems and the impacts of human society on these systems. Topics include: ecosystem dynamics, international conservation biology; biodiversity, evolution and adaptation, population dynamics, climate, and the role of science and technology in business and society, and sustaining ecosystems and wildlife. Laboratory investigations develop critical thinking and formal report writing skills. The department recommends this course for A.S. degree students as the General Education “Science and Technology” Requirement Area 5. Course meets 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), Fundamentals of Math (MAT090), and Reading Skills II (RDG095) or placement.

ENV106 ENVIRONMENTAL SCIENCE II/LAB 4 Credits
A follow up to Environmental Science I (ENV105), 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. Prerequisite: Principles of Biology I/Lab (BIO101) or Chemical Science I/Lab (CHM110) or Environmental Science I/Lab (ENV105) or equivalent.

English as a Second Language

ESL052 HEALTH COMMUNICATION 3 Credits
This course gives students further practice in the oral skills necessary for employment in health care. It includes various listening and speaking activities designed to strengthen the student’s ability to communicate effectively with patients and staff.

ESL076 ACADEMIC NOTE-TAKING I 3 Credits
This low-intermediate course focuses on listening and note-taking skills. Students begin to develop a system for note-taking and learn how to use their notes to answer comprehension questions. All listening and note-taking activities include reading and writing exercises. Students learn grammar in the context of the materials used for listening activities and in student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: ESL placement test.

ESL077 ACADEMIC SPEAKING I 3 Credits
This low-intermediate course focuses on the speaking skills necessary in an academic setting. All speaking activities are organized around reading and writing exercises. Students learn grammar in the context of speaking, in the context of the reading materials, and in the context of student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: ESL placement test.

ESL078 ACADEMIC READING I 3 Credits
This low-intermediate course focuses on reading skills and vocabulary development. Students demonstrate an understanding of reading materials with comprehension questions and writing assignments. Students learn grammar in the context of the reading materials and student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: ESL placement test.

ESL079 ACADEMIC WRITING I 3 Credits
This low-intermediate course focuses on the fundamentals of sentence structure and paragraph writing. Students write paragraphs from personal experience and from readings. Students learn grammar in the context of the readings and student generated writing. Students may be required to complete assignments in the language lab. Students must pass the ESL Writing Competency Exam in order to receive a passing grade for this course. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: ESL placement test.

ESL086 ACADEMIC NOTE-TAKING II 3 Credits
This high-intermediate course focuses on listening and note-taking skills. Students continue to develop a system for note-taking and learn how to use their notes to answer comprehension questions. All listening and note-taking activities include reading and writing exercises. Students learn grammar in the context of the materials used for listening activities and student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: Grade of C or better in all ESL level I courses or ESL placement test.

ESL087 ACADEMIC SPEAKING II 3 Credits
This high-intermediate course focuses on the speaking skills necessary in an academic setting. Students discuss academic reading materials in small groups and begin to develop a method for delivering an oral presentation to a large group. All speaking activities are organized around reading and writing exercises. Students learn grammar in the context of speaking, in the context of the reading materials, and in the context of student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: Grade of C or better in all ESL level I courses or ESL placement test.

ESL088 ACADEMIC READING II 3 Credits
This high-intermediate course focuses on reading skills and vocabulary development. Students demonstrate an understanding of reading materials with comprehension questions and writing assignments. Students learn grammar in the context of the reading materials and in student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: Grade of C or better in all ESL level I courses or ESL placement test.

ESL089 ACADEMIC WRITING II 3 Credits
This high-intermediate course focuses on the fundamentals of sentence structure and paragraph essay writing. Students write paragraphs from personal experience and from readings. Students learn grammar in the context of the readings and student generated writing. Students may be required to complete assignments in the language lab. Students must pass the ESL Writing Competency Exam in order to receive a passing grade for this course. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: Grade of C or better in all ESL level I courses or ESL placement test.
ESL096  ACADEMIC NOTE-TAKING III  3 Credits
This advanced course focuses on note-taking skills. Students continue to develop an academic note-taking system and learn how to use their notes to answer comprehension questions. Students listen to academic lectures, take notes, and learn how to answer essay type questions based on the lectures. All note-taking activities include reading and writing exercises. Students learn grammar in the context of the readings used for the lectures and in student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: Grade of C or better in all ESL level II courses or ESL placement test.

ESL097  ACADEMIC SPEAKING III  3 Credits
This advanced course focuses on the speaking skills necessary in an academic setting. Students discuss academic reading materials in small groups. Students develop a method for delivering an oral presentation to a large group and increase self-confidence. All speaking activities are organized around reading and writing exercises. Students learn grammar in the context of speaking, in the context of the reading materials, and in the context of student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: Grade of C or better in all ESL level II courses or ESL placement test.

ESL098  ACADEMIC READING III  3 Credits
This advanced course focuses on the critical and analytical reading skills necessary in content courses. Students learn to cite sources and answer essay type questions based on readings. Students demonstrate comprehension of reading materials with writing assignments. Students learn grammar in the context of the reading materials and student generated writing. Students may be required to complete assignments in the language lab. Students must complete the course with a grade of C or better in order to take other ESL courses. Prerequisite: Grade of C or better in all ESL level II courses or ESL placement test.

ESL099  ACADEMIC WRITING III  3 Credits
This advanced course focuses on the academic writing skills necessary for content courses. Students continue to develop their abilities with sentence structure, paragraph writing, and essay writing. Students write paragraphs and essays from personal experiences and from readings. Students learn to cite sources and answer essay questions from readings. Students learn grammar in the context of the readings and student generated writing. Students may be required to complete assignments in the language lab. Students must pass the ESL Writing Competency Exam in order to receive a passing grade for this course. Students must complete the course with a grade of C or better in order to take ESL courses. Prerequisite: Grade of C or better in all ESL level II courses or ESL placement test.

Electronics

ETT101  DC CIRCUIT THEORY/LAB  4 Credits
This course provides an introduction to the nature of electricity in general, in-depth coverage of direct current electrical theory and laboratory practices. Topics covered include static electricity, the Bohr Atom, Ohm's Law, Kirchhoff's Law, network theorems, and magnetism. Course meets: 3 hrs. lecture/2 hrs. lab. Prerequisite: Topics of Algebra/Trigonometry (MAT193) or may be taken concurrently.

ETT104  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).

Film

FLM101  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/corequisite: College Writing I (ENG111).

FLM102  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 “Humanities” General Education Requirement Area 6.

Fire Science

FPS101  INSPECTION/FIRE PREVENTION  3 Credits
This course examines mercantile, manufacturing, and institutional processes and equipment, as well as facilities and work practices of fire prevention in order to understand potential hazards and techniques for controlling and detecting such hazards. Fieldwork supplements classroom instruction.

FPS103  FIRE PROTECTION/SAFETY  3 Credits
This course covers a history of fire protection and safety, and loss of life and property by fire. The course includes a review of municipal fire defenses, and a study of the organization and functions of federal, state, and private fire protection and safety organizations. The course presents a survey of professional fire protection and safety career opportunities.

FPS105  BUILDING CONSTRUCTION FOR FIRE  3 Credits
This course critically examines building and construction methods, past and present, within the scope of pertinent standards and codes.

FPS107  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.

FPS205  HYDRAULICS/FIRE PROTECTION  3 Credits
This course covers the study of incompressible fluids, including fluid properties, principles of fluid static, fluid flow system principles, pipe friction and heat loss, flow measurements, pumps and other hydraulic devices, and machinery. It includes application related to fire protection systems such as sprinklers, standpipes, hoses, nozzles, pumps, and water supply systems. The course uses demonstrations to illustrate and supplement the principles developed in class.

FPS207  FIRE FIGHTING TACTICS/STRATEGY  3 Credits
This course reviews fire chemistry, equipment and manpower, basic fire fighting tactics and strategy, methods of attack, and pre-planning fire problems. It presents fire situations for analysis and study consistent with accepted fire fighting practices.
History

FPS208 HAZARDOUS MATERIALS  3 Credits
This course introduces students to hazardous materials such as flammable liquids, solids and gases, oxidizing materials, corrosive substances, and liquefied gases. It provides a presentation of labeling and transportation laws and storage practices. The course covers case histories of incidents involving injury to fire fighters.

FPS209 FIRE INVESTIGATION/ARSON  3 Credits
This course examines the history and development of fire investigation and detection, including inspection techniques, gathering evidence, development of technical reports, fundamentals of arson investigation, processing of criminal evidence, and criminal procedures related to various General Laws and Statutes. The course emphasizes investigative methods and the application and assistance of various scientific aids available to the fire service investigator.

FPS211 FIRE CODES/STANDARDS  3 Credits
This course examines state and federal safety and fire prevention codes. Students study applicable sections of federal regulations, codes, and standards as they relate to the storage and handling of hazardous materials and substances.

FPS212 FIRE PROTECTION SYSTEMS/EQUIPMENT  3 Credits
This course covers fire detection and extinguishing systems of both automatic and manual types. The course covers sprinkler and standpipe systems, inert gases, foam and dry chemicals, temperature and smoke-responsive devices, and alarm and signaling systems. Demonstrations supplement class work.

French

FRE101 ELEMENTARY FRENCH I  3 Credits
This course introduces students to the sounds and structures of French with emphasis on the acquisition of a limited but useful vocabulary and is offered for students with little or no previous knowledge of French. The course is not intended for native speakers or for students who have studied this language within the last three years.

FRE102 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.

FRE201 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.

FRE202 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.

German

GER101 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.

GER102 ELEMENTARY GERMAN II  3 Credits
This course builds upon the skills learned in Elementary German I (GER101) by advancing the language structures, word forms, and vocabulary. Elementary German I and II present a firm foundation for advanced conversational and literature courses in German. The course meets General Education “Humanities” Requirement Area 6. Prerequisite: Elementary German I (GER101). This course is offered in alternate years.

Government

GOV101 GOVERNMENT/POLITICS IN THE US  3 Credits
Beginning with a discussion of American political ideals, this course first looks at the Constitution as a legal expression of those ideals, and then examines formal and informal institutions and forces that converted American ideals into the government of the United States. The course meets General Education “Individual and Society” Requirement Area 2.

GOV103 STATE/Local POLITICS  3 Credits
This course acquaints students with the history and functions of state and local government. 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.

History

HIS101 HISTORY OF WESTERN CIVILIZATION I  3 Credits
This course covers a multi-disciplinary survey of the evolution of Western civilization from its roots in ancient Greece and Rome 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 from reading and writing requirements by placement testing.

HIS102 HISTORY OF WESTERN CIVILIZATION II  3 Credits
This course covers a survey of the major intellectual, social, economic, and political developments in Western civilization since the 17th century. It emphasizes the roots of contemporary institutional and ideological problems. The course meets General Education “World View” Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills II (ENG095), or exemption from reading and writing requirements by placement testing.

HIS111 WORLD CIVILIZATION I  3 Credits
This course examines similarities and differences among the major world civilizations before the modern era. Topics include traditions of governance, art, religion and philosophy, technology, family structure, and everyday life. The course meets General Education “World View” Requirement Area 3. Prerequisite: 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.

HIS112  WORLD CIVILIZATION II  3 Credits
This course examines similarities and differences among the major world civilizations in the modern era. Topics include traditions of governance, art, religion and philosophy, technology, family structure, and everyday life. The course meets General Education “World View” Requirement Area 3. Prerequisite: 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.

HIS151  US HISTORY I  3 Credits
This course traces the growth and development of America from colonial beginnings to the Civil War. The course devotes major attention to the people, critical issues, and significant forces that determined the course of events that shaped our civilization. The course meets General Education “World View” Requirement Area 3.

HIS152  US HISTORY II  3 Credits
This course covers the rise of the United States from the turmoil of the Civil War to superpower status. The course examines the cultural, economic, diplomatic, and political forces that have given the nation its shape. The course meets General Education “World View” Requirement Area 3.

Honors

HON200  HONORS SEMINAR  3 Credits
This interdisciplinary seminar treats a selected theme through perspectives available from the humanities, social, and natural sciences. Presenters and topics differ each semester depending on current student interests and faculty availability. The course is required for all students enrolled in the honors program. Students who are not enrolled in the honors program may be admitted with permission of the instructor.

Hospitality

HRT101  TRAVEL AND TOURISM  3 Credits
This course introduces students to the basic principles of the travel and tourism industry, including its economic, social, and cultural impact upon the modern world. The course provides students with an overview of travel marketing and research, governmental regulations, and current practices in the field.

HRT102  TRAVEL AGENCY OPERATIONS I  3 Credits
This course introduces students to ticketing, tariffs, routing, and scheduling through both manual and automated systems. The course includes communication with clients, specialized agency tasks, hotel and car rentals, railroad reservations, and agency sales reporting.

HRT103  TRAVEL AGENCY OPERATIONS II  3 Credits
A continuation of Travel Agency Operations I (HRT102), this course covers travel trends, geographical routes, and modes of transportation. The course examines service to clients, trip planning, and the relationship of travel to other components of the hospitality industry. Prerequisite: Travel Agency Operations I (HRT102).

HRT104  INTRODUCTION TO HOSPITALITY MANAGEMENT  3 Credits
This course introduces students to the principles of management as they relate to the various aspects of the hospitality industry. It covers the history and theories of management in hotels, motels, restaurants, institutional feeders, and related industries with specific emphasis on planning, organizing, and controlling.

HRT107  TOURISM PLANNING DESTINATION DEVELOPMENT  3 Credits
This course instructs students in the correct use of the key ingredients of tourism development. Topics include industry and business suppliers, the host community, government agencies, and the population of the host community. The course also covers destination infrastructure and super-structure, natural resources, and capital needs in the context of economic and cultural development.

HRT109  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.

HRT111  LODGING OPERATIONS MANAGEMENT I  3 Credits
This course covers 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.

HRT115  FOOD SERVICE OPERATIONS MANAGEMENT I  3 Credits
This course introduces students to a variety of food service operations including restaurants, hotel food services, airline and concessions feeding, business and industry contract feeding operations, and college and school feeding operations. The course focuses on menu development and kitchen management, food purchasing and storage, basic human resource issues, and other pertinent information involved in managing food service operations.

HRT117  HOSPITALITY LAW  3 Credits
This course examines the common and statutory law of the hospitality and tourism industry. The course covers legal aspects of hotel and restaurant operations, employment law, tort liability, civil rights law and American with Disabilities Act compliance are also addressed.

HRT210  FIELD EXPERIENCE 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: Introduction to Hospitality Management (HRT104).

HRT211  LODGING OPERATIONS MANAGEMENT II  3 Credits
This course covers housekeeping and engineering functions in a variety of lodging and in-house food and beverage facilities. In addition, the course covers the Serve Safe Sanitation course for certification.

HRT215  FOOD SERVICE OPERATIONS MANAGEMENT II  3 Credits
This course covers the operations of dining and lounge services as they relate to 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.

HRT219  MEETING/SPECIAL EVENTS PLANNING  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/or special events. The class format requires students to undertake a team project based on
a variety of typical professional specifications. Prerequisite: Introduction to Hospitality Management (HRT104).

**Human Services**

**HSV101  INTRO TO THE HS PROFESSION W/FIELD PRACTICE  3 Credits**
(Formerly HSV151 and PSY151) 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.

**HSV109  PRACTICAL APPLICATION IN COUNSELING  1 Credit**
A one-credit course application to topics in theory in areas of counseling, introductory work in Human Service specialties (Psychiatric Rehabilitation, Adolescence, Adulthood and Aging, Community Health, Substance Abuse Services) and/or Case Management in Human Services. Corequisite: Counseling (PSY115). Prerequisite: Principles of Psychology (PSY101).

**HSV110  PRACTICAL APPLICATION IN HSV SPECIALTY WORK  1 Credit**
A one-credit course application to topics in theory in areas of counseling, introductory work in Human Service specialties (Psychiatric Rehabilitation, Adolescence, Adulthood and Aging, Community Health, Substance Abuse Services) and/or Case Management in Human Services. Corequisite: Intro to Psychiatric Rehabilitation (PSY135). Prerequisite: Counseling (PSY115) and Practical Application in Counseling (HSV109).

**HSV111  PRACTICAL APPLICATION IN HSV CASE MGMT  1 Credit**
A one-credit course application to topics in theory in areas of counseling, introductory work in Human Service specialties (Psychiatric Rehabilitation, Adolescence, Adulthood and Aging, Community Health, Substance Abuse Services) and/or Case Management in Human Services. Corequisite: Intro to Case Management w/Field Practice (HSV118). Prerequisite: Practical Application in HSV Specialty Work (HSV110) and HSV Specialty/Service Courses.

**HSV112  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).

**HSV117  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 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 (PSY115), and Adolescent & Adult Development (PSY124).

**HSV118  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: Students enrolled in the HSV Certificate Specialty. Option should take the Specialty Option introductory courses prior to enrolling in the Case Management class. Those students completing the degree plan without the Certificate Specialty Option must take Counseling (PSY115).

**HSV120  PRACTICUM IN HUMAN SERVICES I  3 Credits**
Practicum experiences in a human services setting to be completed the final semesters of study, including the 90-hour training in the national Family Development Credentialing program. Course runs during fall, spring, and early summer semester and must be started in the fall semester. The department assigns placement settings. Students must make application for placement and enrollment spring semester prior to fall registration. Acceptance into the human services program does not assure permission to enroll in the course or a placement assignment. A Criminal Offense Records Investigation (CORI) is required of all practicum students. For complete course requirements and application procedures, contact the department chair of Early Childhood, Education & Human Services. Upon successful completion of the three courses, the student will be eligible to sit for examination for the Family Development Credential, a national certification for direct line human service workers. Course is graded on a pass/fail scale. HSV120, 121, and 122 are to be taken in sequence beginning in the fall semester and concluding in the first term of the summer semester. Prerequisite: Permission of department chairperson.

**HSV121  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 (CORI) is required of all practicum students. For complete course requirements and application procedures, contact the department chair of Early Childhood, Education & Human Services. Upon successful completion of the three courses, the student will be eligible to sit for examination for the Family Development Credential, a national certification for direct line human service workers. Course is graded on a pass/fail scale. HSV120, 121, and 122 are to be taken in sequence beginning in the fall semester and concluding in the first term of the summer semester. Prerequisite: Permission of department chairperson and Practicum in Human Services I (HSV120).

**HSV122  PRACTICUM IN HUMAN SERVICES III  3 Credits**
Practicum experiences in a human services setting to be completed the final semesters of study, including the 90-hour training in the national Family Development Credentialing program. Course runs during fall, spring, and early summer semester and must be started in the fall semester. The department assigns placement settings. Students must make application for placement and enrollment spring semester prior to fall registration. Acceptance into the human services program does not assure permission to enroll in the course or a placement assignment. A Criminal Offense Records Investigation (CORI) is required of all practicum students. For complete course requirements and application procedures, contact the department chair of Early Childhood, Education & Human Services. Upon successful completion of the three courses, the student will be eligible to sit for examination for the Family Development Credential, a national certification for direct line human service workers. Course is graded on a
pass/fail scale. HSV120, 121, and 122 are to be taken in sequence beginning in the fall semester and concluding in the first term of the summer semester. Prerequisite: Permission of department chairperson and Practicum in Human Service I (HSV120) and Practicum in Human Services II (HSV121).

Humanities

HUM110 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 cross-cultural comparisons with the students’ native cultures. Materials include film, music, and short works of literature. The course meets General Education “Humanities” Requirement Area 6. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption from reading requirement by placement testing.

Italian

ITL101 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. This course is offered in alternate years.

ITL102 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.

ITL201 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.

ITL202 INTERMEDIATE ITALIAN II 3 Credits
A continuation of Intermediate Italian (ITL201) with greater emphasis through speaking, reading, and writing. Prerequisite: Intermediate Italian I (ITL202) or three years of high school Italian.

Japanese

JPN101 ELEMENTARY JAPANESE I 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.

JPN102 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).

Literature

LIT201 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/corequisite: College Writing I (ENG111).

LIT203 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 the 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/corequisite: College Writing I (ENG111).

LIT205 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/corequisite: College Writing I (ENG111).

LIT207 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/corequisite: College Writing I (ENG111).

LIT208 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/corequisite: College Writing I (ENG111).
LIT211  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 selects 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/corequisite: College Writing I (ENG111). 

LIT212  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, Turgenieff, 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/corequisite: College Writing I (ENG111). 

LIT217  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/corequisite: College Writing I (ENG111). 

LIT218  CHILDREN’S LITERATURE II  3 Credits
As follow-up to Children’s Literature I (LIT217), this course focuses on one of the most significant themes in literature, particularly in works written for children and young adults: the search for identity. The course examines full-length works - classics, contemporary novels and works of fantasy - that explore this theme. Discussion topics may include hero-worship, self-reliance, society’s view of the child, the impact of environment, and peer pressure. The course closely examines narrative techniques, especially point of view. The department recommends that students complete Children’s Literature I (LIT217) prior to taking this course. The course meets General Education “Humanities” Requirement Area 6. Pre/corequisite: College Writing I (ENG111). 

LIT219  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/corequisite: College Writing I (ENG111). 

LIT221  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/corequisite: College Writing I (ENG111). 

LIT223  THE 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/corequisite: College Writing I (ENG111). 

LIT224  MIDDLE EAST LITERATURE  3 Credits
This course examines the literature of the Middle East and provides students with an understanding of the impact of religion, tradition, and politics on the lives of people. Students read, analyze, and discuss a variety of letters, historical documents, short stories, and novels in an effort to understand Middle East cultures in their dimensions. The course fulfills a requirement for World Studies Emphasis certification. The course meets General Education “Humanities” Requirement Area 6. Pre/corequisite: College Writing I (ENG111). 

LIT225  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/corequisite: College Writing I (ENG111). 

LIT227  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/corequisite: College Writing I (ENG111). 

Management

MAN105  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: Reading Skills II (RDG095) and Writing Skills I (ENG090) or exemption from reading or writing requirements by placement testing. 

MAN106  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). 

MAN111  PRINCIPLES OF MANAGEMENT  3 Credits
The skills and functions, theories and principles of management are studied in respect to the socio-cultural environment within which a firm operates. An emphasis on decision-making, organizational strategy, planning and system design provides a framework for examining the application of management concepts in the modern business world and the evaluation of organization problems and issues. Prerequisite: Introduction to Business (BUS101) for Business Concentration, Management and Finance options only. A grade of C or better in Academic 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.
MAN112 ORGANIZATIONAL BEHAVIOR/DESIGN 3 Credits
Organizational 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.S. Business Administration students except for the A.S. International Business option. A grade of C or better in Academic 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.

MAN201 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 students final semester. Prerequisite: Principles of Management (MAN111). For Hotel/Restaurant/Travel Management students the prerequisite is Introduction to Hospitality Management (HRT104).

MAN202 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.

MAN207 SMALL BUSINESS MANAGEMENT 3 Credits
This course aids students in the development of a business plan. This course includes information and experiential learning in all the elements of business description, location, target market, competition, promotion, personnel and management, and financial data gathering and presentation.

MAN210 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.

MAN213 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).

MAN217 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).

Mathematics

MAT090 FUNDAMENTALS OF MATH 3 Credits
This course develops a solid base in the principles of arithmetic and the mathematics most relevant to everyday needs. It includes whole numbers, fractions, decimals and their application to ratio, proportion, percent, measurement, and simple geometry. Note: Students earn no credit for this course if they have already received credit for a mathematics course having a higher course number. The course does not satisfy the college math requirement for graduation. Prerequisite: Grade of C or better in Fundamentals of Mathematics (MAT090) or placement.

MAT095 FUNDAMENTALS OF ALGEBRA 3 Credits
This course is an introduction to algebra that includes the study of linear equations and inequalities. Other topics include addition, subtraction, multiplication, and division of polynomials, techniques of factoring, literal equations, and systems of linear equations. The course does not satisfy the college math requirement for graduation. Prerequisite: Grade of C or better in Fundamentals of Mathematics (MAT090) or placement.

MAT100 TOPICS IN CAREER MATH 3 Credits
This course applies basic arithmetic techniques to the following business topics: percentage, trade and cash discounts, merchandising, depreciation, simple and compound interest, and present value. The course covers additional topics that faculty choose from taxes, payroll, statistics, insurance, notes and drafts, installment buying, checking accounts, inventories, costing out, and the metric system. Prerequisite: Grade of C or better in Fundamentals of Mathematics (MAT090) or placement.

MAT133 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.

MAT171 FINITE MATH 3 Credits
Set theory; coordinate systems and graphs; matrices and linear systems; linear programming, and probability are considered in this course. Applications to business and the social sciences are emphasized. This course meets General Education “Quantitative Thought” Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT095).

MAT172 CONTEMPORARY MATH I 3 Credits
This course covers varied mathematical topics that have applications in contemporary society. Topics include number theory (divisibility, Fermat’s Theorem, characterization of primes, Diophantine equations), mathematical systems (base n and modular arithmetic, groups, rings, fields), logic (simple and compound statements, conditionals, symbolic logic, truth tables), and patterns and symmetries (Fibonacci sequence, Golden Ratio, natural and artistic illustrations, fractals). The course encourages students to interpret, analyze, and evaluate from a mathematical perspective. The course meets General Education “Quantitative Thought” Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT095) or placement.
**MAT173  CONTEMPORARY MATH II  3 Credits**
This course covers varied mathematical topics that have applications in contemporary society. Topics include statistics (sampling, measures of central tendency, measures of variation, normal distribution, frequency distributions and histograms), graph theory (modeling, Eulerian and Hamiltonian graphs, directed graphs, optimization procedures), calculators (specialized functions, number patterns, use in problem-solving), consumer math (payroll, investments, financing, budgets) and computers (algorithms, flowcharts, application to the course’s other topics). The course encourages students to interpret, analyze, and evaluate from a mathematical perspective. The course meets General Education “Quantitative Thought” Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT095) or placement.

**MAT181  STATISTICS I  3 Credits**
This course covers statistical concepts and methods. Topics include data organization, averages and variation; elementary probability; binomial, normal, and t-distributions; estimation and hypothesis testing; and linear correlation and regression. The course meets General Education “Quantitative Thought” Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT095) or placement.

**MAT183  STATISTICS I/LAB  4 Credits**
This computer-based course covers statistical concepts and methods. Topics include data organization, averages and variation; elementary probability; binomial, normal, and t-distributions; estimation and hypothesis testing; and linear correlation and regression. The course meets General Education “Quantitative Thought” Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT095) or placement.

**MAT184  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).

**MAT193  TOPICS IN ALGEBRA/TRIGONOMETRY  3 Credits**
This course provides an intensive one-semester survey of topics in algebra and trigonometry. Topics include powers of ten, formulas, graphs, simultaneous equations, logarithms, right triangle trigonometry, vectors, sine waves, and complex numbers. Topics are illustrated by applications from electronics and other fields. Use of scientific calculator is required. Prerequisite: Placement or grade of C or better in Fundamentals of Algebra (MAT095).

**MAT195  COLLEGE ALGEBRA  3 Credits**
This course is a continuation of the study of algebra and covers the following topics: integral and rational exponents, radicals, addition, subtraction, multiplication and division of rational expressions, solving rational and quadratic equations, complex numbers and their application in the solution of quadratic equations, translating and solving word problems and graphs of linear, hyperbolic, exponential and absolute value relations. It also includes an introduction to logarithms with emphasis on exponential equations. The course meets General Education “Quantitative Thought” Requirement Area 4. Prerequisite: Grade of C or better in Fundamentals of Algebra (MAT095) or placement.

**MAT196  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 (MAT195) or placement.

**MAT197  PRECALCULUS  4 Credits**
This course covers the following topics: functions and their graphs, polynomial functions, rational and radical functions, exponential and logarithmic functions, elements of trigonometry and trigonometric functions, analytic geometry, and sequence and series notation. Graphing calculator is required. Prerequisite: Grade of C or better in College Algebra (MAT195) or placement.

**MAT231  CALCULUS FOR MANAGEMENT SCIENCE  4 Credits**
This one-semester course covers topics designed for students in business, economics, and the social sciences. Topics include limits, differentiation and integration of algebraic, exponential and logarithmic functions, optimization, and other applications. Graphing calculator is required. Prerequisite: Grade of C or better in College Algebra (MAT195) or placement.

**MAT281  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).

**MAT282  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.

**MAT283  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.

**MAT285  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).

**MAT291  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
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: Admission into the Cardiac or General Sonography programs.

**MIG102 MEDICAL CODING II**
3 Credits

This course is designed to develop advanced skills in ICD-9 coding. The emphasis is on disease processes by body system. Resource utilization to increase coding accuracy is discussed. Prerequisites: Medical Coding I (NHP101).

**NHP102 MEDICAL CODING II**
3 Credits

This course introduces common diseases, their diagnosis, symptoms, and treatments using a systems approach. Diagnostic testing is discussed. Pharmacological interventions, nomenclature and abbreviations are taught. Prerequisites: Human Biology/Lab (BIO108) and Medical Terminology (NHP180).

**MIG103 CONCEPTS OF MEDICINE**
3 Credits

This course introduces the major medical coding systems. Students learn conventions, guidelines and rules as they apply to hospital and professional coding. Concepts of medical law as applied to patient records handling and coding will be discussed. Students will develop beginning competency with ICD-9 (International Classification of Disease) coding. Prerequisites: Acceptance into the Medical Coding Program; Basic Anatomy/Physiology/Lab (BIO107) or equivalent, Applications/Concepts (CIT110) or equivalent, College Writing I (ENG111) or placement, Concepts of Disease (NHP110), and Medical Terminology (NHP180).

**MIG104 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.

**NHP101 ADVANCED MEDICAL CODING**
3 Credits

Current procedural coding (CPT) used for Health Care Financial Administration Common Procedural Coding (HCPCS) are taught in this course. Students will learn to code office visits, surgical interventions, and other ambulatory procedures using CPT coding, and CMS (formerly HCFA) qualified interventions using the HCPCS coding system. Prerequisites: Human Biology/Lab (BIO108) and Medical Coding II (NHP102).

**MIG105 MEDICAL CODING I**
3 Credits

This course covers the concepts and history of ultrasound physics. The topics include wave propagation, piezoelectric effect, Doppler, transducer construction, static ultrasound principles, real time imaging principles, and color flow imaging. Other topics include quality control and liability issues in the ultrasound lab. Prerequisite: Admission to Cardiac Sonography Program.

**MIG106 INTRODUCTION TO MEDICAL RADIOPHOTY**
2 Credits

This course provides 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 will be stressed. This course consists of a lecture component and hands on component. The student will have the opportunity to use the equipment in the classroom. Prerequisite: Introduction to Medical Radiography (MIG107) or Introduction to Ultrasound (MIG101).

**MIG107 PATIENT CARE FOR MEDICAL IMAGING**
4 Credits

This 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. Corequisites: Introduction to Medical Radiography (MIG107) or Introduction to Ultrasound (MIG101).

**MIG108 ULTRASOUND SCANNING PROTOCOLS AND PATHOLOGY**
3 Credits

This 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 will be stressed. Simulated laboratory sessions offer students an opportunity to return demonstrated techniques. Corequisites: Introduction to Medical Radiography (MIG107) or Introduction to Ultrasound (MIG101).

**MIG109 IMAGING TECHNOLOGY I**
3 Credits

This course covers the concepts and history of ultrasound physics. The topics include wave propagation, piezoelectric effect, Doppler, transducer construction, static ultrasound principles, real time imaging principles, and color flow imaging. Other topics include quality control and liability issues in the ultrasound lab. Prerequisite: Admission to Cardiac Sonography Program.

**MIG110 IMAGING TECHNOLOGY II**
3 Credits

This course covers the concepts and history of ultrasound physics. The topics include wave propagation, piezoelectric effect, Doppler, transducer construction, static ultrasound principles, real time imaging principles, and color flow imaging. Other topics include quality control and liability issues in the ultrasound lab. Prerequisite: Admission to Cardiac Sonography Program.

**MIG111 ECHO I**
3 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).

**MIG119 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).

**MIG120 RADIOLOGIC IMAGING** 2 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: analog and digital image receptors, intensifying screens, latent image formation, processing, filtration and beam restrictors, and technique. Prerequisite: Introduction to Medical Radiography (MIG107).

**MIG121 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).

**MIG122 POSITIONING I** 3 Credits
This course covers basic principles of patient positioning as applied to medical radiography. The course provides both lecture and lab experiences to help students achieve competency in radiographic examination of the chest, abdomen, and upper and lower extremities. Corequisite: Medical Radiography Clinical I (MIG124).

**MIG124 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 and lower extremities. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: Full-time Option – two (2) days/week; Part-time Option – two (2) evenings/week.

**MIG126 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). Corequisite: Medical Radiography Clinical II (MIG128).

**MIG128 MEDICAL RADIOGRAPHY CLINICAL 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: Full-time Option - two (2) days/week; Part-time Option – two (2) evenings/wk. Prerequisite: Medical Radiography Clinical I (MIG124).

**MIG161 INTRODUCTION 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.

**MIG201 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).

**MIG203 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).

**MIG205 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. Corequisite: General Sonography Clinical II (SON123) for General Sonography Option.

**MIG207 ULTRASOUND INSTRUMENTATION II** 2 Credits
This course covers a continuation of the presentation of the physics and instrumentation of ultrasound physics. This hands-on course spends special time on machine set-up, ultrasound artifacts, and the biologic effects of ultrasound. Students also discuss issues related to professional ethics, liability, department relations, procedures, and record keeping. Prerequisite: Echo II (MIG119).

**MIG211 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). Corequisite: Echo III (MIG201).

**MIG213 CARDIAC SONOGRAPHY CLINICAL II** 4 Credits
This course covers a continuation of clinical practical experience in echocardiography and...
Further refines students’ skill in the performance of echocardiograms. Under supervision of their clinical instructor and the BHCC clinical coordinator, students enhance their interpretive skills and continue hands-on experience at the clinical sites. Students’ performances are evaluated through clinical competencies in each related echo area. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: four (4) days/week. Prerequisite: Medical Radiography Clinical I (MIG211). Corequisite: Echo IV (MIG215).

MIG215 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 multifacets of an examination including the interpersonal relationships and professional or ethical situations that may arise. Prerequisite: Interpretation II (MIG203).

MIG216 ADVANCED INTERPRETATION SEMINAR 2 Credits
This is an interactive course that provides the cardiac sonography student an opportunity to enhance their cardiac sonography interpretation skills through the use of slides, videos, and CD Rom material of actual case studies. A review of cardiovascular principles and instrumentation will occur and the student will participate in mock registry question segments through the use of ARDMS registry preparation material. Prerequisites: Cardiac Sonography Clinical I (MIG211) and Cardiac Sonography Clinical II (MIG203). Corequisite: Echo IV/Interpretation (MIG215).

MIG217 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. Facetly evaluate students’ performances through clinical competencies in each related echo area. Students gain competency in the performance of echocardiograms. Students also obtain related experience in examinations such as stress echo and transesophageal. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: five (5) days/week. Prerequisite: Cardiac Sonography Clinical II (MIG213).

MIG220 POSITIONING III 3 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 arthograms, myelograms, and arteriograms. Prerequisite: Positioning II (MIG126).

MIG222 MEDICAL RADIOGRAPHY CLINICAL III 4 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: Full-time Option – four (4) days/week; Part-time Option – two (2) evenings/week. Prerequisite: Medical Radiography Clinical II (MIG126).

MIG224 RADIOLOGIC TECHNOLOGY II 3 Credits
Using lecture and lab sessions, this course presents the x-ray circuit in form and function. Topics include, but are not limited to, characteristics of x-rays, wave-particle duality, x-ray production, target interactions, photon interactions with matter, digital and conventional fluoroscopy, and electronic imaging units. Prerequisite: Imaging Technology I (MIG111).

MIG226 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).

MIG227 PHARMACOLOGY OF RADIOGRAPHY 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).

MIG228 MEDICAL RADIOGRAPHY CLINICAL IV 2 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: Full-time Option – three (3) days/week; Part-time Option – two (2) evenings/week. Prerequisite: Medical Radiography Clinical III (MIG222).

MIG230 RADIATION PROTECTION 3 Credits
This course covers an overview of the effects of ionizing radiation on the human body and the principles and techniques that may be used to minimize those effects. The course examines the effects that produce somatic as well as genetic changes. This course stresses methods of limiting and monitoring radiation exposure to personnel, patients, and the general population. Students gain a personal frame of reference regarding the importance of this issue today. Prerequisite: Radiologic Imaging II (MIG226) for day option only. Corequisite: Radiologic Imaging II (MIG226) for evening option.

MIG234 CT/CROSS-SECTIONAL ANATOMY 2 Credits
This course introduces students to CT (Computed 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. Prerequisites: Anatomy/Physiology II/Lab (BIO204).

MIG236 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: Full-time Option – three (3) days/week; Part-time Option – four (4) days/week. Prerequisite: Medical Radiography Clinical IV (MIG228).

MIG238 ADV MEDICAL RADIOGRAPHY SEMINAR 2 Credits
The focus of this capstone course is the transition from student technologist to entry-level technologist. A variety of learning activities, including case studies and a research project, will be utilized to promote critical thinking. The course will also focus on professional development, credentialing, lifelong learning, and cultural competence in the workplace. A review module will prepare students for success on the American Registry of Radiologic Technologists examination. Prerequisites: Radiologic Technology II (MIG224) and Radiologic Imaging II (MIG226).
MIG251  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. Corequisite: PACS Administration I CIT141. Prerequisite: Intro to Diagnostic Imaging and PACS.

MIG299  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.

Music

MUS102  COLLEGE CHORUS  1-3 Credits
This participatory class for students of all cultural and linguistic backgrounds presents musical programs throughout the semester. Choral performances consist of a variety of music from around the world. Students learn vocal techniques, along with rudimentary music reading skills. Students need no previous singing or other musical experience. The department encourages members of this class to participate in all the college chorus performances. Students may repeat this course three times, earning 1 credit for each repetition.

MUS113  JAZZ ENSEMBLE  1-3 Credits
Designed for students with previous experience in music, this course concentrates on application of basic skills of reading, improvisation, and standard performance practices in the small jazz ensemble. Students must audition for admission. Students may repeat this course three times, earning 1 credit for each repetition.

MUS118  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.

MUS119  MUSIC APPRECIATION II  3 Credits
A continuation of the history and development of music, this course presents representative samples of music from the romantic era to the present. It explores music’s relationship to historical events and other art forms of the periods. This course meets General Education “Humanities” Requirement Area 6. Prerequisite: Music Appreciation I (MUS118) or permission of the department chairperson.

MUS122  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 keyboard application, and much creative activity.

MUS129  ROCK & ROLL HISTORY  3 Credits
Beginning with the roots of rock in the rockabilly and blues traditions, continuing through the “classical” rock of the 50’s and 60’s, this course covers all styles of rock, current and past. The course covers listening to and identifying specific idiosyncrasies of various performers that are central to the study. This course meets General Education “Humanities” Requirement Area 6.

MUS131  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.

MUS132  PIANO II  3 Credits
A continuation of Piano I (MUS131), this course emphasizes music reading and expands the repertoire.

MUS135  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).

MUS140  MUSIC FOR CHILDREN  3 Credits
This course is designed for students interested in teaching music at the primary level. Students need not have the ability to read music. The course covers techniques and materials for teaching music to primary-age children. Students leave this course with a repertoire of lesson plans.

Nursing

NUR095  SUCCESS IN NURSING  3 Credits
This introductory course focuses on assisting students to adapt to the upcoming challenges in the nursing curriculum. The course emphasizes test-taking skills, study skills, critical thinking, learning styles, and therapeutic nurse-patient communication and beginning nursing concepts. The course is designed for nursing students accepted to the nursing program in the fall semester and those students planning to apply to the Nursing Program. Course meets: 3 hrs. lecture.

NUR100  DRUG CALCULATION  1 Credit
This course covers the apothecary, metric, and household systems of weights and measures and is designed for students admitted to the Nursing Program. The course focuses on the computation of drug dosages for oral and parenteral medications. It emphasizes the applications of skills necessary to compute dosages for infants, children, and adults and the calculations of intravenous infusions and medications. Class meets: 1 hr. lecture. Prerequisite: Fundamentals of Algebra (MAT095) or placement.

NUR101  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).
NUR111  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).

NUR112  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 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 I/Lab (BIO203), Health Assessment and Basic Skills/Lab (NUR101), Nursing I (NUR111), and Principles of Psychology (PSY101).

NUR211  NURSING III  9 Credits
This course builds upon the concepts in NUR101, NUR111 and NUR112 and includes the nurse’s 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. Course meets: 5 hrs. lecture; 12 hrs. clinical practice in selected health care facilities. Prerequisites: Microbiology/Lab (BIO205), Nursing II (NUR112), and Human Growth/Development (PSY113).

NUR212  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).

NUR213  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

OIM100  PC KEYBOARDING TECHNIQUES  1 Credit
This is an introductory course in College Keyboarding designed for students with little or no keyboarding proficiency as well as those looking to upgrade or refresh their skills. Learning to type properly has never been more important. Using state-of-the-art, hands-on, self-paced software students proceed from basic lessons through accuracy and speed building exercises designed to prepare them for careers requiring keyboarding proficiency. Taught through BHCC’s on-line e.College, students submit hands-on progress reports to the course instructor as they proceed through each lesson. Upon completion of this course students will gain the skill and knowledge necessary to type accurately based on one (1) minute timings at a minimum of 20 WPM with one (1) error or less. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.

OIM101  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 2004. It covers formatting for basic business documents, such as resumes, letters, memorandums, and business reports. The course covers ergonomics, health issues, and computer concepts as related to keyboarding. Note: The department schedules an exemption test each semester for students with previous keyboarding experience. Students should contact the Prior Learning Coordinator in the Center for Self-Directed Learning (CSDL) or department chairperson for more information.

OIM102  MEDICAL COMPUTER APPLICATIONS  3 Credits
This course includes keyboarding instruction with an emphasis on proper technique, speed building, and proofreading. Students learn the correct format for business letters, memorandums, business reports, and medical documents. Students use the Internet for e-mail and job searches. In addition, they create a resume, reference sheet, and cover letter. Note: For Allied Health students or by permission of department chairperson.

OIM106  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/notebooks, 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 the together all the various professional skills using a qualitative approach. Pre/corequisite: Keyboarding: Document General I (OIM101).

OIM110  DOCUMENT GENERATION II  3 Credits
This course assists students in using Word to create common business documents such as business letters, memorandums, reports with footnotes and endnotes, bibliographies, tables of contents, tables, online 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 Computer Essentials (CIT101) or Applications/Concepts (CIT110) or by permission of the department chairperson.

**OIM115 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 oral presentations in class. Personnel from area corporations may participate in class discussions. Prerequisite: Keyboarding: Document Generation I (OIM101) and Concepts/Applications (CIT110).

**OIM130 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 word processing software. Prerequisites: Keyboarding: Document Generation I (OIM101) and Writing Skills II (ENG095).

**OIM170 PROCEDURES FOR THE MEDICAL OFFICE 3 Credits**
This course includes Windows, word processing, medical office procedures, and computerized medical management software. Students create documents commonly used in a medical office as well as job application materials, using templates, macros, and/or merged documents. Concepts covered include interpersonal communications, telecommunications, billing and collections, reimbursement procedures, records management, and mail classification and procedures. Hands-on experience using computerized medical management software provides practice in entering patient information, diagnostic cases, and financial transactions; processing insurance claims; scheduling patient appointments; and generating commonly used reports. Note: For Allied Health students or by permission of department chairperson. Prerequisite: Keyboarding: Document Generation I (OIM101) or Medical Computer Applications (OIM102; formerly OIM142) or any computer applications course or by permission of the department chairperson.

**OIM190 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. Prerequisite: Keyboarding: Document Generation I. (OIM101).

**OIM200 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. Prerequisite: Medical Terminology (NHP180).

**OIM230 ADMINISTRATIVE BUSINESS COMMUNICATION 3 Credits**
This course reinforces written (letters, memos, faxes, e-mail, reports, and resume); verbal (listening, note-taking, telephone messages, voice mail, intercom discussions, and video conferencing); and nonverbal communications (transmission of attitude, facial expressions, hand gestures, and body language). To enhance these skills, students use Internet research to investigate topics related to the office administration field. It includes human relation skills, diversity, cultural sensitivity, and global awareness. This course is offered fall semester only. Prerequisite: Completion of or concurrent with Records and Information Management (OIM1060), Document Generation II (OIM110), Administrative Technology and Procedures (OIM115), and Business Correspondence and Editing (OIM130).

**OIM299 OFFICE AND 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. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisites: Completion of all OIM courses within major including Administrative Information Management II (OIM205) and Administrative Business Communication (OIM230) which are offered fall semester only or by permission of department chairperson.

**Pharmacy Technology**

**PHM100 SURVEY OF PHARMACY 3 Credits**
This course covers an intensive study of the history and culture of the pharmacy profession from pre-historic times to the present day, starting with the ancient civilizations and progressing to modern U.S. practice. In the modern era, this course reviews current pharmacy institutions and practices, providing a thorough look at their history, purpose and function within the profession. The course also covers the historical context, status, and roles of those who practice pharmacy. Prerequisite: Reading Skills II (RDG095) or placement.

**PHM103 COMMUNITY-BASED PHARMACEUTICS 4 Credits**
This course focuses on dispensing functions encountered in a typical community (retail) pharmacy. It emphasizes prescription reading, calculations, preparation, compounding, and dispensing. The laboratory focuses on actual procedures used in a community pharmacy, including the use of pharmacy computer systems, interaction with customers and health care professionals, and proper billing and insurance procedures. The course introduces such retail management issues as inventory management and non-prescription medication sales. Students attend the laboratory component of this course at Holyoke Community College. Pre/corequisites: Applications/Concepts (CIT110) and Math for Meds (PHM130).

**PHM104 INSTITUTIONAL-BASED PHARMACEUTICS 4 Credits**
This course covers the technical procedures required to prepare medications accurately and
safely in an institutional pharmacy setting. Topics include: the hospital environment, the nursing home environment, the home IV care setting, compounding pharmaceuticals, aseptic technique, sterility, parenteral preparations, sterile environments, unit dose drug distribution, floor stock drug distribution, controlled substance distribution, and inventory control. The course stresses the use of pharmacy computer systems covering the following skills: patient profiling, medication order entry, and inventory control. Students attend the laboratory component of this course at Holyoke Community College. Pre/corequisites: Applications/Concepts (GT110) and Math For Meds (PHM130).

PHM111 PHARMACOLOGY I 3 Credits
This course provides a general knowledge of pharmacology, the science of drugs. For each class of drugs, the course explores generic and brand names, indications and contraindications, mechanisms of action, adverse effects, absorption, distribution, metabolism, and excretion. The course covers drugs involved with the peripheral and central nervous systems, neurologic disorders, psychiatric disorders, and the renal system.

PHM112 PHARMACOLOGY II 3 Credits
This course provides a general knowledge of pharmacology, the science of drugs. For each class of drugs, the course explores generic and brand names, indications and contraindications, mechanisms of action, adverse effects, absorption, distribution, metabolism, and excretion. The course covers drugs involved with hemodynamics, the heart, endocrine systems, the immune system, the lungs, the gastrointestinal system, nutrition, infectious diseases, and cancer.

PHM121 PHARMACY LAW/ETHICS 3 Credits
This course covers the federal and state regulation of the practice of pharmacy, issues of liability related to pharmacy, third party reimbursement for pharmacy services, general employer/employee issues, and ethical issues/concerns that arise in the practice of pharmacy. Prerequisite: Reading Skills II (RDG095) or placement.

PHM131 MEDICAL CALCULATIONS 3 Credits
An examination of variety of applied mathematical concepts for those engaged in the development, preparation, dispensing and administration of medicine. Descriptive methods of collecting, organizing, analyzing, interpreting, and presenting numerical medical data are demonstrated and examined. Mathematical reasoning and word problem solving, utilizing medical models and dimensional analysis are intensely explored and developed throughout the course. Mathematical topics include arithmetic review, algebra review, proportions, percentages, conversions, linear functions, tables, graphs, scientific notation, significant figures, factoring, fractional equations, exponential functions, logarithmic functions and calculator use. Medicinal topics include systems of measurement (apothecary, avoirdupois, order interpretation, dilution, concentration, allegation, dosage, scheduling, administration, and flow rate. Prerequisite: MAT090 with a grade of C- or better, or a passing score on the Mathematics Placement Examination.

PHM170 INTRO TO COMP TECH FOR PHARMACY SERVICES 1 Credit
Designed to introduce students entering the pharmacy professions to computer skills that will be essential in their future careers. Students will receive a brief overview and gain experience with computer operating systems and word processing software. In addition, students will gain experience with e-mail, conferencing software, the Internet, list servers, stored drug information sources, community pharmacy systems, institutional pharmacy systems, and automated systems.

PHM211 COMMUNITY PHARMACY PRACTICUM/SEMINAR 5 Credits
Through actual practice, this course brings to culmination-acquired skills and knowledge needed to practice as pharmacy technicians in a community or managed care pharmacy setting. This seminar develops knowledge of and allows demonstration of community pharmacy practice concepts, including good customer relations, prescription interpretation, medication error prevention, pharmacy system inputs, third party payment, and contracted services. Through preceptor-supervised clinical experiences, overseen by pharmacist faculty, students experience patient interaction, medico-legal issues, pharmaceutical compounding, pharmacy computer interaction, prescription dispensing, business marketing, wholesaler purchasing, and inventory control. Pre/corequisites: Community Based Pharmaceutics (PHM103), Pharmacology I (PHM111), and Pharmacy Law/Ethics (PHM121).

PHM212 INSTITUTIONAL PHARMACY PRACTICUM/SEMINAR 5 Credits
Through actual practice, this course brings to culmination acquired skills and knowledge needed to practice as pharmacy technicians in an institutional pharmacy setting such as a hospital or nursing home. This seminar portion concentrates on development of effective communication skills, job-hunting skills and resume preparation. In addition, the seminar covers topics relevant to experiences gained during the clinical rotations. Through preceptor-supervised clinical experiences, overseen by pharmacist faculty, students experience interaction with other health professionals, medico-legal issues, first hand, unit-dose packaging and dispensing, sterile product admixture, large batch compounding, group purchasing, inventory control, and institutional pharmacy computer systems. Pre/corequisites: Community Based Pharmaceutics (PHM103), Pharmacology I (PHM111), and Pharmacy Law/Ethics (PHM121).

Philosophy

PHL101 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.

PHL103 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.

PHL111 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.

PHL113 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

PHY191 INTRODUCTION TO PHYSICS/LAB 4 Credits
This course provides the background for the study of electronics and other technical areas.
Psychology

Topics include classical mechanics, the conservation laws, and electrostatics. This course meets General Education “Science and Technology” Requirement Area 5. Prerequisite: Topics in Algebra/Trigonometry (MAT193).

**PHY201** GENERAL PHYSICS I/LAB 4 Credits
This introductory course covers the principles of physics, using a problem-solving approach. It covers the study of the laws of motion, forces, work and energy, momentum, wave motion, and sound. The course does not satisfy the physics requirement of the Chemical Science or Physics/Engineering concentrations. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: College Algebra (MAT195).

**PHY202** GENERAL PHYSICS II/LAB 4 Credits
This continuation course of General Physics I/Lab covers the following topics: electricity and magnetism, electromagnetic radiation, nature of light, optics, modern physics, and nuclear physics. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: General Physics I/Lab (PHY201).

**PHY251** 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: Calculus I (MAT281).

**PHY252** 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/corequisite: Calculus II (MAT282).

**Portuguese**

**POR101** 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.

**POR102** ELEMENTARY PORTUGUESE II 3 Credits
This continuation course of Elementary Portuguese I (POR101) places greater emphasis on reading skills. The video-based, self-paced course stresses more complex Portuguese structures. The course meets General Education “Humanities” Requirement Area 6. Prerequisite: Elementary Portuguese I (POR101) or one year of high school Portuguese.

**Psychology**

**PSY101** 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 from reading requirement by placement testing.

**PSY102** PSYCHOLOGY FOR BUSINESS & INDUSTRY 3 Credits
This course examines the application of psychological facts to human behavior in business and industry. Personnel selection, placement, and training, people in organizations, man-machine work environment, and consumer psychology are considered.

**PSY103** PSYCHOLOGY OF ADJUSTMENT 3 Credits
This course explores the development and expression of the personality through an examination of processes by which the self-concept is formed. The course surveys the theories of behavioral scientists that have contributed to the study of adjustment. Scientific study of the effects of stress and stress management techniques are included in this curriculum. The course prepares students for advanced study in psychology and places emphasis on critical thinking skills, especially as applied to scientific research. Prerequisite: Principles of Psychology (PSY101) or permission of instructor.

**PSY105** 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.

**PSY107** 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.

**PSY113** HUMAN GROWTH/DEVELOPMENT 3 Credits
This course examines the theories of the biological, social, and psychological development of human beings throughout the life span. Prerequisite: Principles of Psychology (PSY101).

**PSY115** COUNSELING 3 Credits
This course explores theories and practices in counseling individuals and groups. It explores various theoretical approaches to counseling, and provides practical exercises in counseling. This course is restricted to those students enrolled in the Human Services, Education, Early Childhood, Psychology, or Sociology programs or by permission of the department chair of Education, Early Childhood, and Human Services or the department chair of Behavioral Sciences. Prerequisite: Principles of Psychology (PSY101).

**PSY119** 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.

**PSY123** 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. This course is offered through the Center for Self-Directed Learning and External Studies only. Prerequisite: Principles of Psychology (PSY101).
PSY124 ADOLESCENT/ADULT DEVELOPMENT 3 Credits
In this course, students study adolescents and adults in the areas of physical, intellectual and social changes, and their emotional growth and development during life stages of adolescence and adulthood. Prerequisite: Principles of Psychology (PSY101).

PSY127 ABNORMAL PSYCHOLOGY 3 Credits
This advanced course for the serious student of psychology covers the history of mental illness and its treatment, modern classification, diagnosis, the theoretical causes of disorders, and treatments. The range of psychopathology extends from the disorder-free person to adjustment reactions, anxiety disorders, personality disorders, and borderline disorders, to psychosis and major disorders. Prerequisite: Principles of Psychology (PSY101) or permission of instructor.

PSY131 PSYCH OF POPULAR CULTURE 3 Credits
This course is designed to facilitate the development of critical thinking, reading, and writing skills through the psychological study of popular culture. Issues of social psychology, cross-cultural communication, identity development, creativity, violence, and psychological health will be analyzed in a variety of domains of popular culture. Psychological theory and analysis will be applied to youth culture, consumer culture, political campaigns, contemporary music and visual arts, tourism, stand-up comedy, advertising, and the internet. This course meets General Education “Individual and Society” Requirement Area 2.

PSY133 INTRODUCTION 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: Principles of Psychology (PSY101).

Reading

RDG090 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.

RDG095 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

RTH101 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. Corequisites: Modalities of Respiratory Therapy I (RTH111) and Clinical Practice in Respiratory Therapy I (RTH121).

RTH102 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 1 (RTH 101). Corequisites: Modalities of Respiratory Therapy 2 (RTH 112) and Clinical Practice of Respiratory Therapy 2 (RTH122).

RTH111 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. Corequisites: Principles of Respiratory Therapy 1 (RTH101) and Clinical Practice in Respiratory Therapy 1 (RTH121).

RTH112 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 1 (RTH101), Modalities of Respiratory Therapy 1 (RTH111), Clinical Practice in Respiratory Therapy 1 (RTH111). Corequisites: Principles of Respiratory Therapy 2 (RTH102) and Clinical Practice in Respiratory Therapy 2 (RTH122).

RTH121 CLINICAL PRACTICE IN 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. Corequisites: Principles of Respiratory Therapy 1 (RTH101) and Modalities of Respiratory Therapy 1 (RTH111).

RTH122 CLINICAL PRACTICE IN RESPIRATORY THERAPY II 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 hrs. clinical practice in selected health care facilities. Prerequisites: Principles of Respiratory Therapy 1 (RTH101), Modalities of Respiratory Therapy 1 (RTH111), and Clinical Practice in Respiratory Therapy 1 (RTH121). Corequisites: Principles of Respiratory Therapy 2 (RTH102) and Modalities of Respiratory Therapy 2 (RTH112).
RTH132 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, muco 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.

RTH134 CARDIOPULMONARY PHYSIOLOGY 2 Credits
This course is an in-depth study of respiratory physiology and the development, structure and function of the cardiopulmonary system. The physical principles involved in ventilation, control of ventilation and gas transport are also reinforced. Included is an introduction to renal function, acid-base balance, and hemodynamic measurements. Course meets: 2 hours lecture. Prerequisites: Anatomy/Physiology 1/Lab (BIO205).

RTH201 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 2 (RTH102), Modalities of Respiratory Therapy 2 (RTH112), Clinical Practice in Respiratory Therapy 2 (RTH122). Corequisites: Modalities of Respiratory Therapy 3 (RTH201), Clinical Practice in Respiratory Therapy 3 (RTH221) and Cardiopulmonary Disease (RTH232).

RTH202 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 3 (RTH201), Modalities of Respiratory Therapy 3 (RTH211), and Clinical Practice in Respiratory Therapy 3 (RTH221). Corequisites: Modalities of Respiratory Therapy 4 (RTH212) and Clinical Practice of Respiratory Therapy 4 (RTH222).

RTH211 MODALITIES OF RESPIRATORY THERAPY III 3 Credits
This course introduces students to the hands-on maintenance of the natural and artificial airway. Content for the lab course includes the study and application of airway management techniques including the performance of emergency procedures such as endotracheal intubation, suctioning and cuff pressure measuring monitoring. Students will also study the equipment and techniques related to invasive and non-invasive mechanical ventilation, as well as those devices used in the monitoring of these patients. Independent lab study is required. Course meets: 2 hours lecture; 2 hours lab. Prerequisite: Principles of Respiratory Therapy 2 (RTH102), Modalities of Respiratory Therapy 2 (RTH112), Clinical Practice of Respiratory Therapy 2 (RTH122). Corequisites: Modalities of Respiratory Therapy 3 (RTH201), Clinical Practice in Respiratory Therapy 3 (RTH211) and Cardiopulmonary Disease (RTH232).

RTH212 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 3 (RTH201), Modalities of Respiratory Therapy 3 (RTH211), Clinical Practice in Respiratory Therapy 3 (RTH221). Corequisites: Principles of Respiratory Therapy 4 (RTH202), Clinical Practice in Respiratory Therapy 4 (RTH222).

RTH221 CLINICAL PRACTICE IN RESPIRATORY THERAPY III 4 Credits
This course introduces students to the hospital critical care environment. Students will perform techniques and procedures related to patient assessment, airway management and mechanical ventilatory support. Students will demonstrate competence in the provision of invasive and non-invasive ventilation, as well as the proper techniques for monitoring the critically ill patient. Course meets: 16 hours clinical practice in selected health care facilities. Prerequisites: Principles of Respiratory Therapy 2 (RTH102), Modalities of Respiratory Therapy 2 (RTH112), Clinical Practice of Respiratory 2 (RTH122). Corequisites: Principles of Respiratory Therapy 3 (RTH201), Modalities of Respiratory Therapy 3 (RTH211), and Cardiopulmonary Disease (RTH232).

RTH222 CLINICAL PRACTICE IN RESPIRATORY THERAPY IV 4 Credits
This course provides additional exposure to the 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 3 (RTH201), Modalities of Respiratory Therapy 3 (RTH211), and Clinical Practice in Respiratory Therapy 3 (RTH 221). Corequisites: Principles of Respiratory Therapy 4 (RTH202) and Modalities of Respiratory Therapy 4 (RTH212).

RTH232 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). Corequisites: Principles of Respiratory Therapy 3 (RTH201), Modalities of Respiratory Therapy 3 (RTH211), Clinical Practice in Respiratory Therapy 3 (RTH221).

Russian
RUS101 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. Taught by a native speaker, the course offers a unique insight into the life of Russian people. Students will master the Cyrillic alphabet and major pronunciation rules necessary for reading in Russian. No prior knowledge of Russian is required.
Sociology

SOC101 PRINCIPLES OF SOCIOLOGY 3 Credits
This course covers an introduction to the concepts and theories of society and social institutions. The course meets General Education “Individual and Society” Requirement Area 2. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or co-enrollment in integrated courses or exemption from reading requirement by placement testing.

SOC105 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).

SOC106 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.

SOC107 CRIMINOLOGY 3 Credits
This course examines various aspects of crime from the perspective of the sociologist. The course emphasizes social structure/social process theories of social disorganization and crime causation. Other topics include the history of criminology, the nature and extent of crime, the measurement of crime, criminal typologies, public order crime, victims, and victimization. Prerequisite: Principles of Psychology (PSY101) or Principles of Sociology (SOC101).

SOC109 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.

SOC110 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.

SOC111 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.

SOC125 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.

SOC127 SOCIOLOGY OF PREJUDICE & HATE 3 Credits
This course explores issues of color, gender, class, and caste as they exist 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).

SOC129 SOCIOLGY 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

SON113 CROSS-SECTIONAL ANATOMY 4 Credits
This course focuses on detailed cross-sectional anatomy as it relates to sonographic imaging. This study of serial sectional anatomy helps sonographic students gain knowledge of the human body needed for the practical application of ultrasound. In class scanning will occur on a routine basis. Prerequisite: Admission to General Sonography Program. Corequisite: Anatomy/Physiology/Lab II (BIO204).

SON115 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). Corequisite: General Sonography Clinical I (SON112).

SON117 ULTRASOUND SCANNING AND 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: Cross-Sectional Anatomy (SON113). Corequisite: General Sonography Clinical I (SON112).
SON119  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). Corequisite: General Sonography Clinical I (SON121).

SON121  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 5 days a week. Prerequisite: Cross-Sectional Anatomy (SON113). Corequisites: Abdominal Ultrasound (SON115), Ultrasound Scanning and Pathology (SON117), and Subspecialty Sonography/Nerourosonography (SON119).

SON123  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 5 days a week. Prerequisite: General Sonography Clinical I (SON121). Corequisites: Vascular Ultrasound (MIG205).

SON213  DIAGNOSTIC INSTRUMENTATION  2 Credits
This hybrid course is a combination of classroom teaching and an online learning experience. This course continues with the presentation and physics of ultrasound. Special attention is given to the Doppler effect and its relevance in the field of general sonography. Sonographic artifacts, harmonics, contrast agents, bioeffects and safety are covered as well. Review from Ultrasound Instrumentation I is covered in the form of online weekly registry review tests. Prerequisite: Ultrasound Instrumentation (MIG105). Corequisite: General Sonography Clinical III (SON223).

SON215  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 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 Seminar I (SON215). Corequisite: General Sonography Clinical IV (SON225).

SON219  OBSTETRICAL AND 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). Corequisite: General Sonography Clinical III (SON225).

SON221  OBSTETRICAL AND GYNECOLOGICAL SONOGRAPHY II  3 Credits
This course is a continuation of Obstetrical/Gynecological 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). Corequisite: General Sonography Clinical IV (SON225).

SON223  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). Corequisites: Obstetrical and Gynecological Sonography I (SON219), Advanced General Sonography Seminar I (SON215), and Diagnostic Instrumentation (SON223).

SON225  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). Corequisites: Obstetrical and Gynecological Sonography II (SON221) and Advanced General Sonography Seminar II (SON217).

SON227  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).

SON217  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
Spanish

SPN101 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.

SPN102 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.

SPN201 INTERMEDIATE SPANISH I 3 Credits
This course covers a review of basic language skills and emphasizes conversational and reading skills. Prerequisite: Elementary Spanish II (SPN102) or two years of high school Spanish or permission of instructor.

SPN202 INTERMEDIATE SPANISH II 3 Credits
This continuation course of Intermediate Spanish I (SPN201) emphasizes self-expression through speaking, reading, and writing. Prerequisite: Intermediate Spanish II (SPN201) or three years of high school Spanish or permission of instructor.

Surgical Technology

NHP180 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.

SGT105 SURGICAL TECHNOLOGY I 5 Credits
This course covers an introduction to the profession of surgical technology. The course covers principles of aseptic technique, sterilization and disinfection, universal precautions, surgical equipment, and instrumentation in a coordinated class and simulated laboratory setting. An included seminar defines and develops a surgical conscience and professional demeanor. Prerequisites: Writing Skills II (ENG095) and Fundamentals of Math (MAT090).

SGT106 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).

SGT107 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).

SGT109 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.

SGT109A CENTRAL PROCESSING I CLINICAL 2 Credits
During clinical practice at local medical center 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.

SGT110 CENTRAL PROCESSING II 2 Credits
This course introduces high and low temperature sterilization, sterile packaging and storage. The chemistry of Sterilization is presented. Quality control, risk management regulations and recommendations and recommended practices are introduced. Inventory management and principles of purchasing are also introduced. Course meets 2 hrs lecture. Prerequisites: Central Processing I (SGT109), Writing Skills I (ENG090), Fundamentals of Math (MAT090) and Reading Skills I (RDG090).

SGT110A 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.

SGT111 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

THE107 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.

THE108 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).

THE109 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 crew members and are encouraged to audition for roles in the play. Students may repeat this course three times, earning one credit for each repetition.
Vascular Ultrasound

THE111 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 comedic 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.

THE113 VOICE AND MOVEMENT 3 Credits
This course frees the body and voice from habitual tensions and patterns and opens and expands the possibilities for vocal and physical expressiveness. Voice training focuses on the cultivation of a flexible and expressive voice and the development of interpretive skills. Movement focuses on body awareness, control, and flexibility for the stage.

Vascular Ultrasound

VSN111 VASCULAR PRINCIPLES AND INSTRUMENTATION 3 Credits
This course will introduce the student to the field of vascular technology/ultrasound. Topics include the principles of sound, sound transmission and reflection, Doppler principles including spectral display, artifacts, and equipment performance. In addition to the previous mentioned topics, instruction will also include information regarding tissue mechanics, fluid dynamics with attention towards the pressure flow relationship, other testing modalities such as plethysmography, and bioeffects/quality assurance. Prerequisite: Admission into the Vascular Ultrasound Program or permission of Program Director.

VSN113 PERIPHERAL ARTERIAL TESTING 3 Credits
This course will review the anatomy and physiology of the peripheral arterial system. Students will gain knowledge of the scanning/testing protocols for both upper and lower extremities. Instruction will be provided on direct and indirect methods of arterial testing such as Doppler, Spectral Display, color Doppler and Waveform analysis. In addition to learning about exam protocols the student will also be exposed to diagnostic criteria for assessing both normal and pathological findings. The student will also review a range of diagnostic and treatment options in the area of peripheral arterial disease. Prerequisite: Admission into the Vascular Ultrasound Program or permission of Program Director.

VSN217 VASCULAR ULTRASOUND CLINICAL III 3 Credits
This course is a continuation of scanning and testing technique and interpretation of exams. Students will continue to gain knowledge through scanning and testing patients at their clinical site under the supervision of the clinical instructor. The student’s performance shall be evaluated through clinical competencies. It is recommended that this clinical take place on 4 eight hour days per week. Prerequisite: Vascular Ultrasound Clinical I (VSN115) and a verified letter of clinical placement with an appropriate credentialed Vascular Technologist/Sonographer. Corequisites: Peripheral Venous Testing (VSN211) and Cerebrovascular Testing (VSN213).

VSN215 VASCULAR ULTRASOUND CLINICAL II 3 Credits
This course is a continuation of scanning and testing technique and interpretation of exams. Students will continue to gain knowledge through scanning and testing patients. Students will be required to document their findings by writing concise preliminary findings under the direct supervision of their clinical instructor. Students will be expected to make clinical correlations and present findings to the appropriate medical personnel. The student’s performance shall be evaluated through clinical competencies. It is recommended that this clinical take place on 4 eight-hour days. Prerequisite: Vascular Ultrasound Clinical II (VSN215) and a verified letter of clinical placement with an appropriate credentialed Vascular Technologist/Sonographer.

Visual & Media Arts

VMA100 VMA FRESHMAN SEMINAR 1 credit
This interdisciplinary course builds a connection to the aesthetic, historical and intellectual aspects of an artist community and creative work while helping students navigate through some of the logistical hurdles of the first year experience. Students participate in a variety of group activities, discussions and presentations with faculty and visiting artists. Field trips include local galleries/studios and museums. A journal/sketchbook is required. The course is required for all Visual and Media Arts majors. Prerequisites: Writing Skills II (ENG095) and Fundamentals of Math (MAT090).
VMA102  TWO-DIMENSIONAL DESIGN  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 Fundamentals of Math (MAT090).

VMA103  THREE-DIMENSIONAL DESIGN  3 Credits
This course introduces the student to the elements, principles, terminology and materials of Three-Dimensional Design, as well as expands upon the graphic design techniques and principles introduced in Two-Dimensional Design. Students work on problem sequences dealing with modeled and constructed forms, both in relief and free-standing. Other problems introduce students to more conceptual and site-specific approaches to sculpture. There is 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) and Fundamentals of Math (MAT090).

VMA104  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) and Fundamentals of Math (MAT090).

VMA105  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 Fundamentals of Math (MAT090).

VMA111  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 Fundamentals of Math (MAT090).

VMA112  ART HISTORY I  3 Credits
The course is a broad multicultural survey of the art and architecture of Egypt, Rome, Greece, the Near, Mid, and Far East, and Europe, from the Paleolithic Era through the Moyen Age. The course stresses the understanding of art through examining visual concepts such as composition, space, rhythm, symmetry, perspective, and subject matter, as well as its social, political, and cultural contexts. Students will experience and analyze works of art through lectures, written assignments, journal entries, identification and essay exams, presentations, group projects, and visits to museums. The course meets General Education “Humanities” Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Fundamentals of Math (MAT090).

VMA113  ART HISTORY II  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 Fundamentals of Math (MAT090).

VMA114  HISTORY OF GRAPHIC DESIGN  3 Credits
This course critically investigates and explores graphic design and visual communication history, major movements and pivotal artists and designers. This course requires participation of students in lecture and presentation, writing and studio projects, which will build critical thinking and visual skills. The course provides a necessary historical basis for students in the Graphic Design Program in the Visual & Media Arts Department. Prerequisites: Writing Skills II (ENG095) and Fundamentals of Math (MAT090).

VMA115  THE MOVING IMAGE  3 Credits
This course critically investigates and explores the history and technical development of the moving image, including major and influential works, artists, technical advances, and movements in film, television, and digital presentations. This course builds critical thinking and visual skills. The course provides a necessary historical basis for students in the Media Communications Program in the Visual & Media Arts Department. Prerequisites: Writing Skills II (ENG095) and Fundamentals of Math (MAT090).

VMA120  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. The course practices text lettering as an alphabet, while it covers others, such as Roman, Italic, and Chancery cursive, as means of developing an individual style. The course explores simple techniques using colored inks.

VMA122  PAINTING I  3 Credits
This course introduces students in the painting medium of acrylic and/or oil paint. The course places emphasis on drawing, composition, color, value, and material 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 Fundamentals of Math (MAT090).
VMA123 WATERCOLOR 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 Fundamentals of Math (MAT090).

VMA124 PRINTMAKING I 3 Credits
An introduction to a variety of printmaking processes, this course includes woodcut, monotype, engraving, and drypoint. 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 Fundamentals of Math (MAT090).

VMA131 INTRODUCTION TO DESKTOP PUBLISHING 3 Credits
This course introduces students to the fundamental knowledge required to operate Macintosh computers for use in desktop publishing. Students become computer literate by learning the basic principles of desktop publishing. Through an introduction to the word processing program Microsoft Word and the page layout program InDesign, students learn about the production of documents that require the application of those principles. Recommended prerequisite: Applications/Concepts (CIT110) or previous computer experience. Prerequisites: Writing Skills II (ENG095) and Fundamentals of Math (MAT090).

VMA132 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 Fundamentals of Math (MAT090).

VMA141 ELEMENTS OF VIDEO PRODUCTION 3 Credits
This course gives students an overview of the theoretical, aesthetic, and practical elements of digital video pre-production, production, and post-production. Through a series of creative exercises, lectures, and classroom critiques, students will gain an understanding of the fundamental skills required in planning, scripting, directing, shooting, lighting, and editing digital video productions for a variety of purposes and audiences. The course provides a special emphasis on understanding and using visual storytelling techniques to relate information and emotion. Recommended prerequisite: Digital Imaging with Photoshop (VMA105). Prerequisites: Writing Skills II (ENG095) and Fundamentals of Math (MAT090).

VMA151 INTRODUCTION 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 Fundamentals of Math (MAT090).

VMA161 INTRODUCTION 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 Fundamentals of Math (MAT090).

VMA204 DRAWING II 3 Credits
A studio course designed to examine basic vocabulary and drawing skills and concepts in the study of the human form. Using a wide range of drawing media, students work primarily from anatomical drawings and observation of the nude model to gain proficiency with gesture strategies, contour drawing, sighting and measuring, light in relation to planar relationships, and tonal structure of composition. Students develop an understanding of abstraction in relation to figure/ground, scale, positive & negative space, proportion, volume in relationship to light, compositional issues and pictorial unity. There is an emphasis on writing and communication skills for mastery of basic vocabulary, and process of evaluation and critique. Prerequisite: Drawing I (VMA104).

VMA209 PORTFOLIO PRESENTATION SEMINAR 1 credit
This course is required for all Visual & Media Arts students. Students will prepare, review and present a visual portfolio that best reflects the skills, knowledge and level of achievement in their program area. Additionally they will prepare a resume and identify interview skills. Emphasis is on developing a cohesive presentation format of projects reflecting various skills.

VMA222 PAINTING II 3 Credits
This course emphasizes developing students’ personal sense of aesthetics and increasing their awareness of the painting process. Students choose to work in either acrylic or oil paint while exploring color theory, composition, value, and paint application. Class time includes one-on-one instruction and group critiques. Prerequisite: Painting I (VMA122) or permission of instructor.

VMA223 WATERCOLOR II 3 Credits
Focusing on developing one’s personal sense of aesthetics and style, this course explores various techniques used in watercolor. The course places emphasis on creating cohesive, well-composed paintings, while it develops an understanding of the elusive properties of spontaneity and transparency as they relate to the medium of watercolor paint. Prerequisite: Watercolor I (VMA123) or permission of instructor.

VMA244 PRINTMAKING II 3 Credits
A continuation of Printmaking I (VMA124), this course further develops the techniques of drypoint, engraving, woodcut, and monotype while focusing on thematic development and content. The course explores the more complex methods of color printing. It encourages experimentation in a self-motivated workshop environment. Class time includes one-on-one instruction and group critiques. Prerequisite: Printmaking I (VMA124) or permission of instructor.
VMA231  GRAPHIC APPLICATIONS  3 Credits
This course explores the use of the computer as a design tool. Instruction emphasizes the mastery of fundamental computer functions and software operations. It prepares graphic design students in computer software and technology used in graphic design. Students explore the creative potential, solve design and layout problems, and exhibit an understanding of the professional requirements of document preparation and production. The course uses Adobe InDesign and Adobe Illustrator software. Prerequisite: Introduction to Desktop Publishing (VMA131).

VMA232  DESIGN COMMUNICATION I  3 Credits
This course covers examination and interpretation of the elements and principles of design as applied to the practice of graphic design and visual communication. It emphasizes the design process from visualization to production. Students solve design problems with creative solutions that reflect knowledge of basic design. Students use the computer as a tool in facilitating the creative process. Prerequisites: Typography (VMA132) and Introduction to Desktop Publishing (VMA131).

VMA233  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).

VMA234  PUBLICATION DESIGN  3 Credits
This advanced course for graphic arts students covers the design, layout, and format of books. Students design a book with images that is the culmination of all they have learned. This book is included in their portfolio. The course is required of all graphic arts students and is offered spring semester only. Prerequisite: Design Communication I (VMA232) or approval of department chairperson.

VMA241  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 corequisite class, Video Post Production (VMA242), in order to complete a final project counting for both courses. Topics covered include fiction and non-fiction production techniques, including research, script development and interviewing. Discussion of theoretical issues in applied media aesthetics will be an integral and essential part of the class. Prerequisite: Elements of Video Production (VMA141) or permission of instructor. Corequisite: Video Post Production (VMA242).

VMA242  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 corequisite course, Advanced Video Production (VMA241) in order to complete a Final Project counting for both courses. Prerequisite: Elements of Video Production (VMA141) or permission of instructor. Corequisite: Advanced Video Production (VMA241).

VMA243  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. Prerequisite: Advanced Video Production (VMA241) and Video Post Production (VMA242) or permission of instructor.

VMA244  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 pre-production 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).

VMA252  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).

VMA261  DIGITAL PHOTOGRAPHY TECHNIQUES  3 Credits
This course examines professional practices in digital photography. Emphasis is on the continuity of the digital workflow and the production of fine prints. Technical issues of acquisition, image processing, out-put, and archiving will be addressed. Work derives from topical shooting assignments and student-defined projects. Students must have a digital camera with manual exposure control, and preferably one with RAW capture capability. Prerequisite: Digital Imaging with Photoshop (VMA105), Intro to Digital Photography (VMA161), or permission of instructor.

VMA271  DESIGN FOR THE WORLD WIDE WEB  3 Credits
This course addresses the unique design issues involved in creating web pages. Students learn to develop graphics and media, to integrate content and media elements, and to create visually attractive communicative, and effective pages for electronic delivery. The course gives special attention to software applications used in the creation of web page design and graphics. Prerequisite: Digital Imaging with Photoshop (VMA105).
VMA272  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).

VMA273  MOTION GRAPHICS & COMPOSITING  3 Credits
This course will familiarize students with the aesthetic and technical requirements of using digital methods to combine video, photo, graphics, text and other visual elements. Through lecture, demonstration and hands-on projects, students will learn behavior-based animation, transfer modes, particle dynamics and simulation design, stylized title animation, blue screen keying techniques, DVD motion menu design, key framing, and integration with Final Cut Pro and DVD Studio Pro. Prerequisite: Digital Imaging with Photoshop (VMA105).

VMA274  DVD AUTHORING  3 Credits
This course provides students the technical and aesthetic skills needed to design and author professional DVDs. Through lectures and hands-on exercises, students will learn the stages of the DVD authoring process, including initial planning and storyboarding, menus and buttons, design and navigation, and burning and replication. Prerequisites: Digital Imaging with Photoshop (VMA105) and Elements of Video Production (VMA141). Recommended prerequisite: Advanced Video Production (VMA241) and Video Post-Production (VMA242).

VMA299G  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).

VMA299M  MEDIA COMMUNICATION INTERNSHIP  3 Credits
This internship course is dedicated to field experience in a professional job situation and is recommended as a final semester course. Students arrange for placement at an internship site with the departmental supervisor in the semester previous to the actual internship. Site experience requires 120-150 hours, as well as a personal project related to the internship. Prerequisite: Advanced Video Production (VMA241) or permission of department chairperson.
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 here.

The Welcome Back Center is a partnership launched by the Massachusetts Board of Higher Education under the leadership of Chancellor Judith Gill and in conjunction with presidents of Bunker Hill Community College, Massachusetts Bay Community College, Roxbury Community College and the University of Massachusetts at Boston. The Center’s headquarters is located at Bunker Hill Community College’s Charlestown Campus.

Case management services are provided on the campuses of the three community colleges.

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

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

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

For more information, visit the Welcome Back Center in room B206 on the Charlestown Campus, e-mail welcomeback@bhcc.mass.edu or call 617-228-ICAN.
Workforce Development Center, ACT Center and Community Education

The Workforce Development Center
The Workforce Development Center provides customized, hands-on training and consulting services to employees of businesses and organizations in the Greater Boston area. In collaboration with industry experts, the Center designs and develops services to address the unique business needs of each customer. Training topics may include, but are not limited to: basic workplace skills, supervisory skills, leadership, customer service, team building, workplace English as a second language, computer literacy, manufacturing, allied health, food sanitation, criminal justice and occupational Spanish. The Center provides training, either at the worksite or at the College, which is scheduled at the convenience of the organization. Visit the Workforce Development Center in room M107, Charlestown Campus, or call the Center at 617-228-2021.

The ACT Center
The ACT Center is a state-of-the-art training facility that uses computer-based technologies to build the job skills needed for success. Employers and individuals can take advantage of more than 3,000 web-based courses in topic areas such as computer software, time management, customer service, reading, writing and IT Certification. The Center also offers CLEP Dantes and high-stakes testing. Visit the ACT Center in room E222, Charlestown Campus, or call the Center at 617-228-2440.

Community Education
The Office of Community Education at Bunker Hill Community College specializes in providing programs that meet the needs of Greater Boston area residents. These seminars, workshops, noncredit courses and programs help members of the community to keep up with the myriad of changes that affect them every day, at home and on the job. Courses include workforce and career education classes including Home Inspector Pre-licensing, Real Estate Sales, Special Event Planning and Starting Your Own Business. The Office of Community Education offers an affordable way for individuals to learn new skills, prepare for new careers or just to have fun. Current class listings are available online at www.bhcc.mass.edu/CE. For more information, call 617-228-2462 or visit room M107 on the Charlestown Campus.
The Bunker Hill Community College Alumni Association

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 College-wide 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 and support key programs that enhance the College’s mission. The Association also works closely with the BHCC Foundation to raise funds to build the Textbook Assistance Program (T.A.P) and student scholarships.

Through the Association, interested alumni stay actively involved with the College in a variety of ways, such as recruiting prospective students, serving as alumni mentors for students, working on event committees or serving on the Board of Directors or Board of Trustees.

The Bunker Hill Community College Foundation, Inc.

The Bunker Hill Community College Foundation, Inc. is a non-profit 501(c)(3) organization established to obtain resources to support the College, thereby enabling students with diverse educational, ethnic and cultural backgrounds to benefit from a high-quality, affordable, post-secondary education. The mission is realized by building constituencies and obtaining financial resources from groups and individuals including alumni, business, civic and community leaders.

The Foundation Board of Directors is committed to advancing the mission of the College and works to secure private contributions, planned gifts and other donations from individuals and corporations through fundraising events, grant applications and direct solicitation.

The Foundation provides funding for student scholarships, 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.
Bunker Hill Community College Art Gallery
Facilities Rental and Conference Planning

Bunker Hill Community College Art Gallery
The Bunker Hill Community College Art Gallery provides the College and the local community opportunities to view high-caliber art exhibitions, exposure to diverse ideas and artistic media and access to forums with emerging and established Boston-based artists. Through its scheduled programming, the Gallery offers an innovative backdrop to teaching and learning. The Gallery hosts the Annual 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 exhibition schedule showcases artists, gallery talks and interactive workshops, and is designed to reflect the cultural and ethnic diversity of our international College community. Located adjacent to the A300 Auditorium on the Charlestown Campus, the Gallery maintains regular posted hours. Visit www.bhcc.mass.edu for the Gallery’s current, upcoming and archived schedule of events, or call 617-228-2093 for more information.

Facilities Rentals and Conference Planning
Through the Office of Conference Planning and Special Events, the College supports on-site special events for public and private organizations. The College’s central location makes it an ideal site for conferences, seminars, training sessions and receptions.

Bunker Hill Community College offers affordable rates for rental of the facilities as well as competitive pricing for supportive technology, security, maintenance and catering services. Our function and conference facilities accommodate groups of 10 to 400, and our skilled staff is equipped to handle your advanced communication requirements, including teleconferencing, Internet connectivity and comprehensive audio/visual resources. Our facility meets ADA requirements and is easily accessible by public transportation.

A professional staff coordinator works with the College catering service, campus police, maintenance staff and other College personnel to provide convenient, one-stop shopping and the very best possible customer service. Ample, free parking is available during the evenings and on weekends. For more information, visit the Office of Conference Planning and Special Events in room B303A on the Charlestown Campus, or call 617-228-2017.
Administration, Faculty and Staff

EXECUTIVE DIVISION

Mary L. Fifield
President
Executive Division
B.A. Clarke College; M.F.A. Pratt Institute, New York;
Ph.D. Saint Louis University

Jesse M. Thompson
Executive Vice President & Chief Financial Officer
Administration
A.A. Mott Community College; B.A. Eastern Michigan
University; M.S. Central Michigan University;
M.A. University of Michigan

Charles Abasa-Nyarko
Vice President
Academic Affairs
B.A. University of Ghana; M.A. Brigham Young University;
Ph.D. University of South Carolina

Subrina S. Taylor
Vice President
Student Services & Enrollment Management
B.A., M.S. University of Southern Mississippi;
Ed.D. Temple University

Emily Dibble
Executive Dean
Institutional Effectiveness
A.B. Smith College; M.A. University of Pennsylvania;
Ph.D. University of Washington

Pelonomi K. Khumoetsile-Taylor
Director
Diversity & Inclusion
A.S. Greater Hartford Community College; B.S. Wesleyan
University; J.D. University of California at Berkeley Boalt
Hall School of Law; Ph.D Brandeis University

Daniel M. Lam
Executive Director
Boston Welcome Back Center
Th.B. Alliance Bible Seminary; B.A. Toccoa Falls Bible
College; M.A. Wheaton College; M.Ed. Georgia State
University; Ed.D. Highland University

Laura L. Montgomery
Director
Art Gallery
B.A. UMass Boston; M.F.A. Mass. College of Art

Steven A. Roller
Director
Grants Development
B.A., M.A. University of Chicago

DIVISION OF ACADEMIC AFFAIRS

Charles Abasa-Nyarko
Vice President
Academic Affairs
B.A. University of Ghana; M.A. Brigham Young University;
Ph.D. University of South Carolina

Judith D. Burnett
Dean
Chelsea Campus
R.T. Northeastern University; M.Ed. Antioch University;

Robert Flynn
Acting Dean
Academic Support & College Pathway Programs
B.A., M.A. Boston University

S. Leonard Mhlaba
Dean
Arts & Sciences
B.S. S.U.N.Y at New Paltz; M.Ed. UMass Amherst;
Ph.D. Northeastern University

Roxanne E. Mihal
Dean
Nurse Education & Health Professions
A.S. Laboure Junior College; B.S.N. Southeastern Massachusetts
University, M.S.N. MGH Institute of Health Professions

Elizabeth Pabon
Project Manager
Pathway Technology Campus at Villa Victoria
B.A. Bridgewater State College

William T. Sakamoto
Dean
BHConline/Weekend College
B.A. Dartmouth College; M.Ed. Cambridge College

Diane M. Smith
Director
Library & Information Center
A.A. Northern Essex Community College;
B.A. University of Southern California; M.Ed. UMass Boston;
M.L.I.S. Syracuse University

Bogusia Wojciechowska
Interim Dean
Professional Studies
B.A. , M.A. Warwick University;
Ph.D. University of Kent at Canterbury, England

DIVISION OF STUDENT SERVICES & ENROLLMENT MANAGEMENT

Subrina S. Taylor
Vice President
Student Services & Enrollment Management
B.A., M.S. University of Southern Mississippi;
Ed.D. Temple University

Janice M. Bonanno
Dean
Student Affairs
A.A. North Shore Community College;
B.A. Boston State College; M.Ed. UMass Amherst

Debra A. Boyer
Registrar/Director
Enrollment Services
A.A. Bunker Hill Community College;
B.S. Chadwick University

Anne K. Brown
Director
Advising/Counseling & Assessment
B.S. University of Rhode Island; M.A. Saint Joseph College;
J.D. Northeastern University

Susan M. Sullivan
Director
Financial Aid Office
B.S. Salem State College
DIVISION OF ADMINISTRATION

Jesse M. Thompson
Executive Vice President & Chief Financial Officer
Administration
A.A. Mott Community College; B.A. Eastern Michigan University; M.S. Central Michigan University; M.A. University of Michigan

Molly B. Ambrose
Executive Director
Human Resources & Labor Relations
A.B. Le Moyne College; M.S. Case Western Reserve University; M.B.A. Syracuse University

Carolyn R. Assa
Executive Director
Communications & Marketing
B.A. UMass Amherst; M.A. Emerson College

Linda M. Ballerini
Director
Grants Management
A.S. Bunker Hill Community College; B.S. Salem State College

Jeffrey L. Ginsberg
Director
Fiscal Affairs & Central Services
B.A. Colorado State University; M.P.A. Suffolk University

James A. Juliano
Director
Public Safety
B.A. Boston College

Beverly M. Lewis
Bursar
Student Payment Office
B.A. Northeastern University; M.B.A. Cambridge College

Joseph E. Steffano
Director
Facilities Management & Engineering Services
B.S., M.S. Northeastern University; M.B.A. Boston College

Weusi A. Tafawa
Comptroller
Business Office
FCCA, Certified Accountant, UK; ACIB, Chartered Institute of Bankers, UK; M.B.A. Suffolk University

Les E. Warren
Executive Director
Workforce Development Center
B.S. Salem State College; C.S.S. Harvard University

OFFICE OF GRANTS DEVELOPMENT

Steven A. Roller
Director
Grants Development
B.A., M.A. University of Chicago

OFFICE OF INSTITUTIONAL EFFECTIVENESS

Emily Dibble
Executive Dean
Institutional Effectiveness
A.B. Smith College; M.A. University of Pennsylvania; Ph.D. University of Washington

Lori A. Catallozzi
Director of Learning Communities
Institutional Effectiveness
A.B. Smith College; M.F.A. University of Pittsburgh

OFFICE OF DIVERSITY AND INCLUSION

Pelonomi K. Khumoetsile-Taylor
Director
Diversity & Inclusion
A.S. Greater Hartford Community College; B.S. Wesleyan University; J.D. University of California at Berkeley Boalt Hall School of Law; Ph.D Brandeis University

OFFICE OF THE BOSTON WELCOME BACK CENTER

Daniel M. Lam
Executive Director
Boston Welcome Back Center
Th.B. Alliance Bible Seminary; B.A. Toccoa Falls Bible College; M.A. Wheaton College; M.Ed. Georgia State University; Ed.D. Highland University

PROFESSIONAL STAFF AND FACULTY

Charles Abasa-Nyarko
Vice President
Academic Affairs
B.A. University of Ghana; M.A. Brigham Young University; Ph.D. University of South Carolina

Judith M. Agnes
Assistant Professor
Nurse Education Department
B.S.N. Mass College of Pharmacy; M.S.N. Salem State College

Christian C. Agunuwamba
Associate Professor
Mathematics Department
B.S. University of Nigeria; M.S., Ph.D. University of Wales, U.K.

Milagros M. Aherrera
Staff Associate
Human Resources
Certificate in Hotel Management, Ecole de Roches; B.S. St. Scholastica's College, Philippines

Phyllis Akillian
Professor
Visual & Media Arts Department

Patricia A. Alexander
Professor
Medical Imaging Program
B.S. Wheelock College; Ed.M. Harvard University; R.T. (R.) (A.R.R.T.)

Rebecca A. Alleyn-Holtzclaw
Professor
Allied Health Certificate Programs
B.S. Boston State College; M.S. Boston University; C.A.G.S Boston College

Gloria A. Aluise
Professor
English Department
B.A.; M.A. S.U.N.Y. Albany; J.D. New England School of Law; L.L.M. Boston University Law School

Molly B. Ambrose
Executive Director
Human Resources & Labor Relations
A.B. Le Moyne College; M.S. Case Western Reserve University; M.B.A. Syracuse University

Denise E. Ameena
Coordinator
Health Services
A.S. Laboure Junior College; B.S. Salem State College
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department/Program</th>
<th>Education Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faeizeh M. Amini</td>
<td>Prior Learning Coordinator</td>
<td>Center for Self-Directed Learning</td>
<td>B.S. Suffolk University</td>
</tr>
<tr>
<td>Mizuho Arai</td>
<td>Assistant Professor</td>
<td>Behavioral Science Department</td>
<td>A.A. Wayo Women’s Junior College; B.A. Regis College; M.S., Ph.D. Boston University</td>
</tr>
<tr>
<td>Carolyn A. Assa</td>
<td>Executive Director</td>
<td>Communications &amp; Marketing</td>
<td>B.A. UMass Amherst; M.A. Emerson College</td>
</tr>
<tr>
<td>Karen E. Atkinson</td>
<td>Assistant Professor</td>
<td>Science Department</td>
<td>B.A. Wellesley College; Ph.D. Northeastern University</td>
</tr>
<tr>
<td>Mustafa Azeem</td>
<td>Recruitment Counselor</td>
<td>Admissions &amp; Transfer Office</td>
<td>A.A. Bunker Hill Community College; B.A. UMass Boston</td>
</tr>
<tr>
<td>Shahira Badran</td>
<td>Assistant Professor</td>
<td>Science Department</td>
<td>B.S. University of Cairo, Egypt; M.S. University of Basel, Switzerland</td>
</tr>
<tr>
<td>Linda M. Ballerini</td>
<td>Director</td>
<td>Grants Management</td>
<td>A.S. Bunker Hill Community College; B.S. Salem State College</td>
</tr>
<tr>
<td>Deborah Barrett</td>
<td>Coordinator of Student Assessment</td>
<td>Advising Counseling &amp; Assessment</td>
<td>B.A. Boston University; M.A. Simmons College; M.Ed. UMass Lowell</td>
</tr>
<tr>
<td>Mary Beth W. Barton</td>
<td>Professor</td>
<td>Hospitality Department</td>
<td>A.S., B.S. Johnson &amp; Wales University</td>
</tr>
<tr>
<td>Irene Bascunana-Jay</td>
<td>Director of Community Education</td>
<td>Workforce Development Center</td>
<td>B.A. Universidad La Complutense; B.S. University of Maryland; M.B.A. The George Washington University</td>
</tr>
<tr>
<td>Aurora B. Bautista</td>
<td>Professor</td>
<td>Behavioral Science Department</td>
<td>B.A., Ph.D. University of Philippines; M.A. New School of Social Research</td>
</tr>
<tr>
<td>Scott S. Benjamin</td>
<td>Professor</td>
<td>Science Department</td>
<td>B.S. U.S.N.Y. at Oswego; M.S. University of New Hampshire</td>
</tr>
<tr>
<td>Linda A. Bergmann</td>
<td>Professor</td>
<td>Office &amp; Information Management Department</td>
<td>B.S. Salem State College; M.A. University of Northern Colorado</td>
</tr>
<tr>
<td>Akram H. Bhuaya</td>
<td>Professor</td>
<td>Information Technology for Business &amp; Industry Department</td>
<td>M.Sc. University of Dhaka; M.S. Tufts University; E.E. (Post-Masters) Northeastern University</td>
</tr>
<tr>
<td>Kerry A. Bisbee</td>
<td>Assistant Coordinator</td>
<td>Student Activities</td>
<td>B.A. UMass Dartmouth</td>
</tr>
<tr>
<td>Janice M. Bonanno</td>
<td>Dean</td>
<td>Student Affairs</td>
<td>A.A. North Shore Community College; B.A. Boston State College; M.Ed. UMass Amherst</td>
</tr>
<tr>
<td>Toni F. Borge</td>
<td>Special Programs Coordinator</td>
<td>Adult Basic Education Program</td>
<td>B.S., M.Ed. UMass Amherst</td>
</tr>
<tr>
<td>Richard W. Boulware</td>
<td>Professor &amp; Chairperson</td>
<td>Criminal Justice Department</td>
<td>B.A. Boston University; J.D. Suffolk University</td>
</tr>
<tr>
<td>Margaret Bovill-Hawkins</td>
<td>Director</td>
<td>Student Success Program</td>
<td>M.Ed. Cambridge College</td>
</tr>
<tr>
<td>Debra A. Boyer</td>
<td>Registrar/Director</td>
<td>Enrollment Services</td>
<td>A.A. Bunker Hill Community College; B.S. Chadwick University</td>
</tr>
<tr>
<td>Patricia A. Brady</td>
<td>Director of Publications</td>
<td>Communications &amp; Marketing</td>
<td>B.A. UMass Boston; M.A. University of Connecticut</td>
</tr>
<tr>
<td>Karen Brennan</td>
<td>Interim Special Events Assistant</td>
<td>Conference Planning &amp; Special Events</td>
<td>A.S. Bunker Hill Community College</td>
</tr>
<tr>
<td>Becky K. Briggs</td>
<td>Professor &amp; Chairperson</td>
<td>Office &amp; Information Management Department</td>
<td>B.S. University of Pittsburgh; M.Ed. Indiana University of Pennsylvania; Ed.D. Northern Illinois University</td>
</tr>
<tr>
<td>Anne K. Brown</td>
<td>Director</td>
<td>Advising Counseling &amp; Assessment</td>
<td>B.S. University of Rhode Island; M.A. Saint Joseph College; J.D. Northeastern University</td>
</tr>
<tr>
<td>Irene Bascunana-Jay</td>
<td>Coordinator of College Graphics</td>
<td>Graphic Design &amp; Creative Services</td>
<td>B.F.A. Brigham Young University</td>
</tr>
<tr>
<td>Judith D. Burnett</td>
<td>Dean</td>
<td>Chelsea Campus</td>
<td>R.T. Northeastern University; M.Ed. Antioch University; R.T. (R.) (A.R.R.T.)</td>
</tr>
<tr>
<td>Jill H. Burrill</td>
<td>Professor</td>
<td>English Department</td>
<td>B.A. University of Missouri; M.Ed. Cambridge College</td>
</tr>
<tr>
<td>Mary Beth R. Butler</td>
<td>Career Placement Counselor</td>
<td>Allied Health Certificate Programs</td>
<td>A.A. Bunker Hill Community College; M.Ed. Cambridge College</td>
</tr>
<tr>
<td>Robert T. Carlson</td>
<td>Professor</td>
<td>Mathematics Department</td>
<td>B.A. Salem State College; M.A. University of Michigan</td>
</tr>
<tr>
<td>Christopher A. Carter</td>
<td>Language Lab Coordinator</td>
<td>Coordinator of Learning Resources</td>
<td>Center for Self-Directed Learning</td>
</tr>
</tbody>
</table>
Administration, Faculty and Staff

Lori A. Catallozzi
Director of Learning Communities
Institutional Effectiveness
A.B. Smith College; M.F.A. University of Pittsburgh

Shirley Cassara
Professor
Behavioral Science Department
B.A. Bard College; M.A. New York University;
Ed.D. UMass Amherst

Sharon Caulfield
Special Programs Coordinator (Tech Prep Program)
Academic Support & College Pathways Programs
B.S. Jackson State University; M.B.A. Babson College

Kathleen Cedrone Vaccaro
Professor
Office & Information Management Department
B.S., M.Ed. Boston University

Roger E. Celis
Associate Professor
Foreign Language & Humanities Department
B.A., M.A., Ph.D. University of Washington

Arthur M. Centanni
Professor
Criminal Justice Department
B.A. Boston State College;
M.B.A. Northeastern University; MCJ, MCP Boston University

Kim Chaban Griffith
Staff Assistant
Institutional Advancement
B.A. UMass Amherst

Jack P. Chan
Special Programs Coordinator
Workforce Development Center
B.S. Syracuse University

Richard H. Chiasson
Professor & Chairperson
Foreign Language & Humanities Department
B.A., M.A. UMass Boston;
Certificate d’Etudes, University of Paris

John A. Chirichielo
Staff Assistant
Chelsea Campus

Thomas J. Chuda
Professor
Criminal Justice Department
B.S., M.S. Northeastern University; M.S. Kansas State University; Paralegal Certificate Northeastern University

Ian W. Churchill
Web & eMarketing Manager
Communications & Marketing
B.A. Tufts University; M.S. Marlboro College

Allison Cohn
Educational Case Manager (Academic Counselor)
Boston Welcome Back Center
B.A. Clark University; M.P.H. Tulane University

Jennifer A. Cohn
Assistant Professor
English Department
B.A. Stonehill College; M.A. Simmons College

Patricia H. Colella
Professor
English Department
B.A. Lowell State College; B.A. UMass Lowell; M.A. Northeastern University; C.A.G.S. Boston University

Cecile Corona
Associate Professor
English Department
B.A. Syracuse University; M.A. New York University

Bryan Craven
Assistant Professor
Information Technology for Business & Industry Department
AA. North Shore Community College;
B.S., B.A. Salem State College

Daniel Crocker
Public Services Librarian
Coordinator of Library Services
Library & Information Center
B.A. Hampshire College; M.S. Simmons College

Patrick Crozier
Perkins Coordinator
Professional Studies
A.S., B.S. Northeastern University;
M.Ed., Ed.D. Boston University

Donna S. Cummings
Professor
Business Administration Department
B.S. Suffolk University

Geraldine M. Curley
Learning Specialist
Center for Self-Directed Learning
A.A. Bunker Hill Community College; B.S. Tufts University; M.Ed. Cambridge College

Samer Darwish
Assistant Professor
Mathematics Department
B.S. S.U.N.Y. of Technology; M.S. Salem State College

Margaret G.M. Day
Educational Case Manager
(Academic Counselor)
Boston Welcome Back Center
B.S. Union College; M.S.W. Boston College

Maria Rachel de Paula Gomes Gauthier
Coordinator of
International Student Admissions
International Center
B.A. Pernambuco State Federal University; M.B.A. Salem State College

Beth A. Deare
Professor
English Department
B.A. Northeastern University; M.A. Teachers College, Columbia University

Hariklia M. Delta
Professor
Computer Information Technology Department
B.S. Aristotelio University of Thessaloniki, Greece;
M.S., C.A.G.S. Northeastern University

Michael D’Entremont
Associate Professor
ESL Department
B.A. Northeastern University;
M.A. University of Mississippi;
Ed.M. Boston University

Donna J. DeSimone
Director
Center for Self-Directed Learning
A.A. Bunker Hill Community College;
B.A. UMass Boston; M.Ed. UMass Lowell

Mark A. Diamond
Professor & Chairperson
Visual & Media Arts Department
B.S. Empire State College; M.Ed. UMass Boston
Emily Dibble  
Executive Dean  
Institutional Effectiveness  
A.B. Smith College; M.A. University of Pennsylvania; Ph.D. University of Washington  

James S. Dilday  
Professor  
Criminal Justice Department  
B.A. Howard University; J.D. Boston University  

Susan T. Dole  
Senior Academic Counselor  
Advising/Counseling & Assessment  
A.A. Bunker Hill Community College; B.A., M.A. Tufts University  

David N. Dow  
Senior Academic Counselor  
Advising/Counseling & Assessment  
A.A. North Shore Community College; M.Ed. Cambridge College  

Kamihal Drummond  
Acting Director  
Offender Reentry Program  
Academic Support & College Pathways Program  
B.A. Brandeis University; M.S. Assumption College  

Michael G. Dubson  
Assistant Professor  
English Department  
A.A. Parkland College; B.A., M.A. UMass Boston  

Judith Dunphy  
Telecommunications Manager  
Fiscal Affairs & Central Services  
A.S. DTP Certificate, Bunker Hill Community College  

Elizabeth Dunphy  
Assistant Professor  
Science Department  
B.A. Wellesley College; Ph.D. University of Washington  

Mario Elias  
Coordinator of Instructional Support/Distance Education  
BHCConline/Weekend College  

Liya Escalera  
Assistant Director of Learning Communities  
Institutional Effectiveness  
B.A. Stonehill College; M.A. Simmons College  

Mohamed J. Farah  
Financial Aid Counselor  
Financial Aid Office  
A.S. Bunker Hill Community College; B.S. UMass Boston  

Clifford A. Fernandez  
Professor  
Business Administration Department  
A.A. Bunker Hill Community College; B.S. Suffolk University  

Mary L. Fifield  
President  
Executive Division  
B.A. Clarke College; M.F.A. Pratt Institute, New York; Ph.D. Saint Louis University  

Cory A. Finn  
Assistant Professor & Program Director  
Diagnostic Medical Sonography  
Medical Imaging Program  
A.S. Labouré College; B.S. UMass Boston  

Kevin R. Finnigan  
Professor  
English Department  
B.A., M.A. University of New Hampshire  

Robert Fleagle  
Assistant Professor  
Nurse Education Department  
B.S. Lesley College; B.S.N. UMass Boston; M.S.N. Northeastern University  

Robert Flynn  
Acting Dean  
Academic Support & College Pathways Programs  
B.A., M.A. Boston University  

Mary T. Folan  
Professor & Co-Chairperson  
Nurse Education Department  
B.S. Boston College; M.S.N. University of Florida; C.A.G.S. Harvard University; C.A.G.S. MGH Institute for Health Professions  

Benjamin Floman  
TOEFL Tutor (Staff Assistant)  
Center for Self-Directed Learning  
B.A. University of Connecticut  

Cynthia A. Fong  
Professor  
ESL Department  
B.A. Stanford University; M.A. University of California, Los Angeles  

Arthur F. Fournier  
Professor  
ESL Department  
B.A. Boston College; M.A. University of Illinois  

Deborah P. Fuller  
Professor  
English Department  
B.A. Boston College; M.A. University of Michigan  

Michelle Gagnon  
Associate Professor/Program Director  
Medical Imaging Program  
B.S. UMass Lowell  

Jeffrey L. Ginsberg  
Director  
Fiscal Affairs & Central Services  
B.A. Colorado State University; M.P.A. Suffolk University  

Jesse V. Gordon  
Senior Staff Assistant-Lending Services  
Library & Information Center  
B.S. Tufts University; M.L.I.S. Simmons College  

Judith A. Graham  
Staff Associate  
Chelsea Campus  
B.A. Bridgewater State College  

C. David Grayer  
Professor  
Business Administration Department  
B.A., J.D. Howard University  

Rose B. Grayer  
Professor  
ESL Department  
B.A. Howard University; M.A. Simmons College  

G. William Griffin  
Professor  
Science Department  
B.S. UMass Lowell; Ph.D. Tufts University  

Nicole E. Guilmette  
Associate Professor  
Science Department  
B.S. Boston College; M.S., Ph.D. Boston University
Sharda A. Gupta  
Professor  
Business Administration Department  
B.A. Delhi University; M.A. Delhi School of Economics;  
M.S., Ph.D. Purdue University

Adele A. Hamblett  
Professor  
Mathematics Department  
B.S. S.U.N.Y. at Stony Brook; M.Ed. Northeastern University

Amparo Hernandez-Folch  
Professor  
Mathematics Department  
B.A. University of Puerto Rico; M.Ed. University of Florida

Caryn S. Hirsch  
Director  
Graphic Design & Creative Services  
B.A. Rutgers University

William L. Hoover  
Assistant Professor  
Science Department  
B.S. Youngstown State University; M.D. Spartan Health Sciences University

Hilaire Jean-Gilles  
ACT Center Coordinator  
Workforce Development Center  
A.S. Bunker Hill Community College, B.S. UMass Boston

Nada Jecmenica  
Academic Counselor  
Advising/Counseling & Assessment  
B.A., M.Ed. Cambridge College

Biljana D. John  
Associate Professor  
Information Technology for Business & Industry Department  
B.A. University of Skopje, Macedonia; M.A. Boston State College

Christine M. Johnsen  
Associate Professor  
Nurse Education Department  
A.S.N., B.S. Excelsior College; M.S.N. Northeastern University; M.PH. Columbia University

Lloyd Sheldon Johnson  
Professor  
Behavioral Science Department  
B.A. Wayne State University; M.Ed. Antioch University

Christopher Z. Jones  
Coordinator of Athletics  
Student Affairs  
A.A. Bunker Hill Community College;  
B.S. Johnson C. Smith University

James A. Juliano  
Director  
Public Safety  
B.A. Boston College

Helmut Kahler  
Professor  
Hospitality Department  
A.S. Newbury College; B.A., M.Ed. Johann Wolfgang Goethe University, Germany

Abdul K. Kalokoh  
Learning Specialist  
Center for Self-Directed Learning  
A.S. New York City Community College;  
B.S. S.U.N.Y. at Albany

George Kelley  
Assistant Professor  
Hospitality Department  
A.S. Bunker Hill Community College; B.A. UMass Boston

Lori Keough  
Assistant Professor  
Nurse Education Department  
A.S., A.S.N. Community College of Rhode Island;  
B.S.N., M.Ed. Rhode Island College; M.S.N. UMass Boston

Jacqueline Kerstner  
Professor  
ESL Department  
B.A. University of Delaware; M.Ed. Boston University;  
Certificate in Liberal Arts, University of Copenhagen

Rasheed Khalid  
Assistant Professor  
Science Department  
B.S. Government T.I. College Rabwah, Pakistan;  
M.S. Punjab University, Lahore, Pakistan

Pelonomi K. Khumoetsile-Taylor  
Director  
Diversity & Inclusion  
A.S. Greater Hartford Community College; B.S. Wesleyan University; J.D. University of California at Berkeley Boalt Hall School of Law; Ph.D Brandeis University

Jacqueline L. Kiddy  
Coordinator  
Career Center  
A.A. North Shore Community College;  
M.Ed. Cambridge College; L.M.H.C., L.R.C.

Anne Marie Killilea  
Assistant Professor  
Nurse Education Department  
B.S. Saint Anselm College; M.S.N. Regis College

Linda J. King  
Staff Assistant  
President's Office  
A.S. Bunker Hill Community College

Richard Klayman  
Professor & Chairperson  
History & Government Department  
B.A. Northeastern University; M.A. Boston College;  
Ph.D. University of New Hampshire

Kenneth M. Kozikowski  
Director of Technology Support Services  
Information Services  
B.S. Assumption College

Daniel M. Lam  
Executive Director  
Boston Welcome Back Center  
Th.B. Alliance Bible Seminary; B.A. Toccoa Falls Bible College; M.A. Wheaton College;  
M.Ed. Georgia State University; Ed.D. Highland University

Julie K. Lambert  
Learning Specialist  
Center for Self-Directed Learning  
B.A. S.U.N.Y. at Binghamton; M.Ed. Lesley College

Deborah A. Latina  
Assistant Professor  
Allied Health Certificate Programs  
B.S. Northeastern University

Maria Leite  
Systems Administrator  
Information Services  
B.A. UMass Boston

Beverly M. Lewis  
Bursar  
Student Payment Office  
B.A. Northeastern University; M.B.M. Cambridge College
Benjamin Lim  
Assistive Technology Educator  
(Disabilities Counselor)  
Disabilities Support Services  
B.A., M.S. Salem State College

Judy B. Lindamood  
Professor & Chairperson  
Early Childhood Education & Human Services Department  
B.S., M.S. Ohio State University; Ed.D. Teachers College,  
Columbia University

LaVasha M. Lobbins  
Special Programs Coordinator  
Workforce Development Center  
B.S. University of Central Florida

Andrea Lyons  
Associate Professor & Chairperson  
Information Technology for Business & Industry Department  
B.S. Southern Massachusetts University; M.S. Rivier College;  
M.B.A. Suffolk University

Shirley A. MacKenzie  
Professor  
Mathematics Department  
B.A. Tufts University; M.S. Brown University

Jayne MacPherson  
Associate Professor  
Surgical Technology Certificate Program  
B.S. Purdue University; Certificate in Surgical Technology,  
Lesley University; M.S. Framingham State College

Carmen C. Magana  
Assistant Professor  
Center for Self-Directed Learning  
B.A. Boston University

Lauren Maguire  
Assistant Professor  
Hospitality Department  
B.S. Northeastern University; M.Ed. UMass Boston

Thomas R. Mahoney  
Evening Supervisor  
Tutoring & Academic Support Center  
B.A., M.A. Boston College

Joanne E. Manville  
Professor  
Mathematics Department  
B.A. Emmanuel College; M.A.T. Cornell University;  
Ed.D. Boston University

Kathryn L. Mapstone  
Assistant Professor  
History & Government Department  
B.S. Springfield College; M.A., Ph.D. Boston College

Betsy V. Mariere  
International Student Advisor  
(Senior Community Outreach Counselor)  
International Center  
B.A. Ohio Wesleyan University; M.Ed. University of Houston

Marylee Marra  
Professor  
Nurse Education Department  
B.S. Boston State College; M.S. UMass Boston

Nancy W. Martignetti  
Academic Associate  
Professional Studies  
B.A. UMass Boston

Alessandro G. Massaro  
Professor & Chairperson  
ESL Department  
B.A. UMass Amherst; M.Ed. Boston University

David R. Massey  
Professor  
Computer Information Technology Department  
B.A. Harvard College; M.A. Ohio University;  
Ph.D. Boston University

Stephanie A. McCormick  
International Student Advisor  
(Senior Community Outreach Counselor)  
International Center  
B.A. Regis College; M.Ed. Bridgewater State College

Luana L. McCuish  
Assistant Professor  
English Department  
B.S., M.A. Salem State College

Sandra J. McDonald  
Financial Aid Counselor  
Financial Aid Office  
A.S. Bunker Hill Community College

Courtenay R. McGlynn  
Professor  
Visual & Media Arts Department  
B.F.A. Rhode Island School of Design;  
M.Ed. UMass Boston

Timothy M. McLaughlin  
Professor & Chairperson  
English Department  
B.S., M.A. Eastern Michigan University

Erin Marie McLaughlin  
Assistant Professor  
Medical Imaging Program  
A.S. Bunker Hill Community College; B.S. Curry College

Erin Meaghan McLaughlin  
Assistant Professor  
Nurse Education Department  
A.S. Bunker Hill Community College;  
B.S.N., M.S.N. UMass Boston

R. Michael McSweeney  
Professor  
History & Government Department  
B.A. UMass Amherst; M.A. Carnegie-Mellon University

Anna M. Melloni  
Professor  
Nurse Education Department  
B.A. Simmons College; M.S. Boston University

S. Leonard Mhlaba  
Dean  
Arts & Sciences  
B.S. S.U.N.Y at New Paltz; M.Ed. UMass Amherst;  
Ph.D. Northeastern University

Roxanne E. Mihal  
Dean  
Nurse Education & Health Professions  
A.S. Laboure Junior College;  
B.S.N. Southeastern Massachusetts University;  
M.S.N. MGH Institute of Health Professions

James W. Miller  
Professor & Chairperson  
Hospitality Department  
B.S. Northeastern University; B.S. UMass Amherst;  
M.B.A. UMass Boston

Donna M. Misrati  
Professor & Chairperson  
Medical Imaging Program  
B.S. Boston University; M.B.A. UMass Boston; R.T. (R.) (C.T.)

Paul E. Moda  
Coordinator  
Student Activities  
B.S. Elmira College; M.A. Emerson College
Casey H. Moffatt  
Coordination of Student Retention  
Student Affairs  
B.S. Armstrong Atlantic State University

Dawn M. Monahan  
Nursing Laboratory Coordinator  
Nurse Education Department  
B.S.N. Emmanuel College

Laura L. Montgomery  
Director  
Art Gallery  
B.A. UMass Boston; M.F.A. Mass. College of Art

Karen Moss  
Staff Assistant (Case Manager-Mathematics & Science Power Line Program)  
Workforce Development Center  
B.S. Montana State University

Charles W. Murphy  
Professor  
Business Administration Department  
B.S. Bentley College; M.B.A. Northeastern University

Kiruba Murugiah  
Assistant Professor  
Mathematics Department  
A.A. Bunker Hill Community College; B.S. Boston University; M.A. Columbia University

Champa S. Nagage  
Assistant Comptroller  
Business Office  
M.B.A. University of Sri Jayawardenepura, Sri Lanka

Mei L. Ngan  
Senior Staff Assistant  
Workforce Development Center  
B.A.A. UMass Dartmouth

Kalimah A. Nur  
Professor & Chairperson  
Business Administration Department  
B.S. Boston State College; M.B.A. Boston University

Barry O’Brien  
Academic Counselor  
Adult Basic Education Program  
A.S. Bunker Hill Community College; A.A. Inter-Americana University; B.A., B.S. UMass Boston

Natalie A. Oliveri  
Professor  
English Department  
B.A. College of Notre Dame of Maryland; M.A. University of Virginia; M.Ed. Boston University

Svetlana U. Ordian  
Librarian  
Library & Information Center  
B.A. Samarkand State University, Uzbekistan; M.S. Simmons College

Craig V. Organek  
Senior Financial Aid Counselor  
Financial Aid Office  
B.A. S.U.N.Y. at Albany; M.Ed. UMass Lowell

Elizabeth Pabon  
Project Manager  
Pathway Technology Campus at Villa Victoria  
B.A. Bridgewater State College

Nicholas B. Parkas  
Special Programs Coordinator  
Audio/Visual Department  
B.S. Boston State College

Douglas A. Pastel  
Professor  
Visual & Media Arts Department  
B.A. Harvard University; M.A. S.U.N.Y. at Buffalo

Elana Peled  
Associate Professor  
English Department  
B.A. Hebrew University of Jerusalem; M.A. San Francisco State University; Ed.M., Ed.D. Harvard University

Lori E. Penne  
Coordinator  
Tutoring & Academic Support Center  
B.S., B.A., M.B.A. Suffolk University

Demetra Phair  
Associate Professor  
Nurse Education Department  
A.S. Northern Essex Community College; B.S., M.S. UMass Lowell

Richard J. Pishkin  
Staff Associate, Auxiliary Services  
Business Office  
B.S., M.B.A., M.S. Suffolk University

Gary J. Presto  
Academic Associate  
Arts & Sciences  
B.A. Boston College

Robin L. Preston  
Payroll Manager  
Parroll Department  
A.S. Bunker Hill Community College; B.S.B.A., Suffolk University; Graduate Certificate in Human Resource Management, Northeastern University

Maria Kathleen Puente  
Associate Professor  
Behavioral Science Department  
B.A., M.A. Ateneo de Manila University

Michael T. Puopolo  
Professor & Chairperson  
Computer Information Technology Department  
B.S. Boston College; M.B.A. Babson College

Diane J. Puopolo  
Professor  
Computer Information Technology Department  
B.S. Salem State College; M.S. Lesley College

Hao T. Quach  
Science Laboratory Coordinator  
Science Department  
B.S. Saigon University of Sciences

Argentine Ramirez  
Career Development Counselor  
Career Center  
AA. North Shore Community College; B.A. Salem State College; M.A. UMass Boston

Y. V. Rao  
Professor & Chairperson  
Mathematics Department  
B.S., M.S., Ph.D. Osmania University

John P. Reeves  
Professor & Chairperson  
Behavioral Science Department  
B.A. San Francisco State College; M.A., Ed.D. Brigham Young University

Andres R. Reyes  
Professor  
ESL Department  
B.A. University of Philippines; M.A. School of International Training
Arland J. Richmond  
Director  
Information Services  
B.S., M.A.T., Ph.D. Boston College; M.A. Boston University

Paul A. Righi  
Manager, Buildings & Grounds  
Facilities Management  
B.S., M.Ed. Boston University

Mary P. Riordan  
Professor  
Nurse Education Department  
B.S.N., M.S.N. Boston College

Paul E. Rivers  
Professor  
Business Administration Department  
B.A. UMass Lowell; B.S. UMass Amherst;  
M.B.A. Suffolk University

Jimmie L. Roberts  
Academic Counselor  
Admissions & Transfer Office  
B.A., M.A. Austin Peay State University

Diane M. Rocchetto  
Professor  
ESL Department  
B.A. Boston University; M.A. UMass Boston

James J. Rogash  
Professor  
English Department  
B.A., M.A. Bridgewater State College;  
M.S. Syracuse University

Steven A. Roller  
Director  
Grants Development  
B.A., M.A. University of Chicago

Jane S. Roman  
Professor & Chairperson  
Surgical Technology Certificate Program  
B.A. Goddard College; M.Ed. Cambridge College

Pamela Rose  
Clinical Coordinator for  
Nurse Education & Allied Health Certificate Programs  
Nurse Education & Health Professions  
B.S.N. Boston University

Barbara Rosenberg  
Special Programs Coordinator  
Workforce Development Center  
B.A. Tufts University

Jennifer D. Rosser  
Professor  
English Department  
B.A. The College of Wooster;  
M.A. George Washington University

Margaret O. Rubino  
Assistant Registrar  
Enrollment Services  
A.A. Bunker Hill Community College;  
B.S. Framingham State College;  
M.Ed. Cambridge College

Kristine Ruggiero  
Assistant Professor  
Nurse Education Department  
B.S. Fairfield University; M.S.N. Yale University

MaryAnn Ryan  
Special Programs Coordinator  
Allied Health Certificate Programs  
B.A. University of Portland

William T. Sakamoto  
Dean  
bhccOnline/Weekend College  
B.A. Dartmouth College; M.Ed. Cambridge College

Lucius A. Salisbury III  
Professor  
English Department  
B.A. New College; M.A. Boston University

Joseph Sanchez  
Academic Advisor  
Adult Basic Education Program  
B.A. Boston State College

Irene A. Sancineto  
Professor  
Mathematics Department  
B.A., M.A.T. Bridgewater State College

Lee Santos Silva  
Assistant Professor  
English Department  
B.A. Hampton University; M.A. Duke University

Sara L. Satham  
Academic Counselor  
Advising/Counseling & Assessment  
B.A. M.A. Ball State University

Sharon Schaff  
Internship Coordinator  
Career Center  
B.A. Carleton College

Mark Schernwetter  
Associate Professor  
Behavioral Science Department  
B.A. Clark University; M.Ed., Ed.D. Harvard University

Pamela Schmidt  
Professor  
Early Childhood Education & Human Services Department  
B.A. UMass Boston; M.Ed. Antioch University

Andrea F. Schwartz  
Coordinator  
Disabilities Support Services  
B.S., M.S. Salem State College; L.M.H.C.

Michelle A. Schweitzer  
Professor  
ESL Department  
B.S., S.U.C. at Buffalo; M.A. Boston University

Lawrence S. Scott  
Professor  
Behavioral Science Department  
B.A. Guilford College; M.A. DePauw University;  
Ph.D. Boston University

Elizabeth Seabury  
Associate Professor  
ESL Department  
B.A. University of Vermont; M.Ed. Boston University

Yazdan Shaghaghi  
Online Technical Specialist (Distance Education)  
bhccOnline/Weekend College  
B.S. Northeastern University; M.A. Boston University

Charles A. Shairs  
Senior Special Programs Coordinator  
bhccOnline/Weekend College  
B.S. Salem State College

Mark A. Sheehan  
Professor  
Business Administration Department  
B.A. UMass Amherst; M.I.M. American Graduate  
School of International Management
Administration, Faculty and Staff

Patricia Short  
Career Development Counselor  
Career Center  
B.A. Tulane University  

Alan H. Shute  
Professor  
ESL Department  
B.S. University of Oregon; M.A. Monterey Institute of International Studies  

Adele M. Sicuso  
Coordinator College Graphics  
Graphic Design & Creative Services  
Certificate in Graphic Design, Salem State College; A.A. Chamberlayne Junior College; B.A. Regis College  

Malakia C. Silcott  
Academic Counselor  
Advising/Counseling & Assessment  
B.A. Oberlin College; M.S. Northeastern University  

Diane M. Smith  
Director  
Library & Information Center  
A.A. Northern Essex Community College; B.A. University of Southern California; M.Ed. UMass Boston; M.L.I.S. Syracuse University  

Lawrence V. Sousa  
Learning Specialist  
Center for Self-Directed Learning  
A.A. North Shore Community College; B.A. Boston State College; M.Ed. Cambridge College  

Barbara A. Spracklin  
Assistant Professor  
Nurse Education Department  
B.S.N. Emmanuel College; M.S.N. University of Phoenix  

Robert L. Steeper  
Professor & Chairperson  
Science Department  
B.S. Western Michigan University; M.S. University of Michigan  

Joseph E. Steffano  
Director  
Facilities Management & Engineering Services  
B.S., M.S. Northeastern University; M.B.A. Boston College  

Yvette M. Straughter  
Professor  
Mathematics Department  
B.S. Boston College; M.Ed. Boston State College  

Susan M. Sullivan  
Director  
Financial Aid Office  
B.S. Salem State College  

Tzu-Ming Sun  
Database Administrator  
Information Services  
M.D. Taipei Medical College  

Weusi A. Tafawa  
Comptroller  
Business Office  
FCCA, Certified Accountant, UK; ACIB, Chartered Institute of Bankers, UK; M.B.A. Suffolk University  

Vilma M. Tafawa  
Executive Director  
International Center  
B.A. University of Jos, Nigeria; M.Ed. University of Papua New Guinea  

Sharonne F. Taitt  
Academic Counselor  
Student Success Program  
B.A. University of the West Indies; M.S. Simmons College  

Subrina S. Taylor  
Vice President  
Student Services & Enrollment Management  
B.A., M.S. University of Southern Mississippi; Ed.D. Temple University  

Barbara G. Taylor  
Professor  
Science Department  
B.S. University of Maryland; M.Ed. Boston University  

Jesse M. Thompson  
Executive Vice President & Chief Financial Officer  
Administration  
A.A. Mott Community College; B.A. Eastern Michigan University; M.S. Central Michigan University; M.A. University of Michigan  

Elizabeth Tobin  
Associate Professor  
Nurse Education Department  
A.S. Mass Bay Community College; B.S.N. Boston College; M.S. UMass Worcester  

Barbara A. Ton Ferullo  
Professor  
Mathematics Department  
B.A., M.Ed. Tufts University; M.Ed. Northeastern University; M.S. University of Lowell  

Alexander Torgov  
Learning Specialist  
Center for Self-Directed Learning  
B.A., M.A. University of Haifa, Israel  

Donald W. Tracia  
Coordinator  
Teaching, Learning & Instructional Technology Center  
B.S. Bowling Green State University; M.Ed. University of Oklahoma  

Kathleen Tracy  
Associate Dean  
Nurse Education & Health Professions  
B.S., M.S. Boston University; M.Ph., Harvard University  

Anna Tsakarissianos  
Professor  
Information Technology for Business & Industry Department  
B.S. Panteios School of Political Science; M.P.A. Boston State College; M.Ed., C.A.G.S. Boston University; Internet Technology-Webmaster Certificate, Northeastern University  

Katie L. Turner  
Coordinator of Online Student Support Services  
BHC Online/Weekend College  
A.A. Bunker Hill Community College; B.A. Wellesley College  

Nelson O. Velez  
Director of Network Operations  
Information Services  
B.S. UMass Dartmouth  

Paula K. Velluto  
Professor  
Computer Information Technology Department  
B.S. Babson College  

Evisa Velo  
Staff Assistant, Institutional Research  
Institutional Effectiveness  
A.S. Bunker Hill Community College
Administration, Faculty and Staff

Louise Vrande
Staff Associate
Human Resources
B.S. Kent State University; M.A. University of North Carolina at Chapel Hill

Susan L. Walling
Senior-Special Programs Coordinator
Allied Health Certificate Programs
B.A. Northwestern University; M.Ed. Catholic University

Deborah A. Walsh
Associate Professor & Program Director/Chairperson
Respiratory Therapy Program
A.S. Laboure College; B.S. Bridgewater State College; M.A. University of Rhode Island

Renee L. Walwyn
Associate Professor
Nurse Education Department
B.S.N. Boston University; M.Ed. Catholic University

Eve Marie M. Ward
Professor
Nurse Education Department
B.A. Simmons College; M.S.N., C.N.M. Yale University

Les E. Warren
Executive Director
Workforce Development Center
B.S. Salem State College; C.S.S. Harvard University

Christopher R. Watson
Assistant Professor
Mathematics Department
A.S. Mount Wachusett Community College; B.S. Fitchburg State College; M.S. Tufts University

Howard Frank Weiner
Associate Professor
Nurse Education Department
B.A. Boston College; B.S. Salem State College; M.S. Ohio University; M.S. Northeastern University

Kevin Wery
Director
Conference Planning & Special Events
B.A. University of Wisconsin, Madison; M.A. Tufts University

Deborah J. Westaway
Professor & Co-Chairperson
Nurse Education Department
B.S.N. Boston University; M.S.N. UMass Boston

Bogusia Wojciechowska
Interim Dean
Professional Studies
B.A. M.A. Warwick University; Ph.D. University of Kent at Canterbury, England

Guixia Yin
Assistant Professor
English Department
B.A. Beijing Foreign Studies University; Ed.M. Boston University

Dawn L. Zapata
Project Manager; RATEC Center for IT
Professional Studies
B.A. University of Illinois; M.A. Harvard University

SUPPORT STAFF

Mirna V. Abarca
Laboratory Technician II
Science Department
B.S. University of El Salvador

Maureen A. Almeida
Bayer III
Business Office

Marcelo Almeida
EDP Systems Analyst IV
Information Services

Jacalyn Angelo
Clerk VI
Enrollment Services

Luisa A. Arias
Clerk III
Adult Basic Education Program

Beverly Ballerini
Clerk V
Professional Studies

Robert A. Barrows
Campus Police Officer II
Public Safety

Sabrina Bass
Technical Assistant II
Center for Self-Directed Learning
A.A. Bunker Hill Community College

Mohamed Bazir
Motor Truck Driver
Chelsea Campus

Deborah A. Bernard
Clerk V
Enrollment Services

Rosa Birden
Clerk III
Enrollment Services

Judith A. Blouin
Clerk V
Enrollment Services

M. Boucher
EDP Systems Analyst III
Information Services

Bernard Boudreau
Painter II
Facilities Management

Linda L. Brown
Clerk IV
Enrollment Services

James F. Burns
Help Desk Coordinator
Information Services

Marite I. Buynevich
Accountant V
Business Office

Leonard Cardarelli
Maintenance Working Supervisor
Facilities Management

Suzanne M. Carozza
Clerk V
International Center

Annmarie J. Catino
Administrative Assistant II
Enrollment Services

Julia Cerra
Administrative Assistant I
Student Activities

Vincent Choufa
Technical Assistant III
Information Services

Isma'il M. Chowdury
Accountant II
Payroll Department

Kenny Chung
Audio/Visual Equipment Technician II
Audio/Visual Department

Pamela M. Cinelli
Administrative Assistant II
Academic Affairs

Cajou Clark
Campus Police Officer I
Public Safety

Anthony F. Cobuccio
Graphic Arts Technician II
Central Services

Eugenia Colindres
Clerk IV
Adult Basic Education Program

Celine Conte
Campus Police Officer I
Public Safety
Administration, Faculty and Staff

Donna M. Copello  
Clerk V  
Enrollment Services

Omar E. Cruz  
Maintainer I  
Facilities Management

Debra Daveiga  
Offset Duplicating Machine Operator II  
Central Services

Camilla D. Davis  
Administrative Assistant II  
Academic Affairs

Joseph A. DeCristoforo  
Head of Grounds Service Section  
Facilities Management

Marie DeMeo  
Clerk IV  
Medical Imaging Program

Francesca A. DeSimone  
Administrative Assistant II  
Chelsea Campus

Joyce A. DiChristoforo  
Accountant I  
Payroll Office

Dorothy DiGiovanni  
Steam Fireman II  
Facilities Management

Mei-Hua Driscoll  
Clerk IV  
BHConline/Weekend College

Ernest R. Duarte  
Steam Fireman II  
Facilities Management

Margaret M. Duff  
Offset Duplicating Machine Operator II  
Central Services

Jamar T. Dumas  
Campus Police Officer I  
Public Safety

Robert Dykens  
Plumber/Steamfitter II  
Facilities Management

Ruth A. Fierro  
Campus Police Officer I  
Public Safety

Antoinette Flanagan  
Accountant IV (Floater)  
Human Resources

Jean M. Fopian0  
Accountant II  
Payroll Office

Stephen J. Fopian0  
Maintainer I  
Facilities Management

Marilou Y. Fornari  
Accountant IV  
Student Payment Office

Sandra L. Gaeta  
Administrative Assistant II  
Human Resources

Maureen C. Galizio  
Telephone Operator II  
Enrollment Services

Deborah I. Gardner  
Accountant III  
Business Office

John Giacalone  
Audio/Visual Equipment Technician II  
Audio/Visual Department

Richard R. Gibeault  
2nd Class Power Plant Engineer  
Facilities Management

Ryan J. Giddings  
Maintainer I  
Facilities Management

Barry Goldman  
Maintainer I  
Facilities Management

Ruth J. Goodwin  
Graphic Arts Technician I  
Graphic Design & Creative Services

Cecilia M. Granados  
Clerk IV  
Chelsea Campus

Naida R. Greene  
Clerk IV  
Financial Aid Office

Marie Griffin  
EDP Systems Analyst IV  
Information Services

Kevin J. Hanley  
Reproduction Services Supervisor  
Central Services

Jane Hubbard  
Clerk IV  
Enrollment Services

Sandra L. Lloyd  
Accountant II  
Business Office

Richard V. Martins  
Administrative Assistant II  
Community Education

Christiane Maziarz  
Clerk V  
Arts & Sciences

Brian J. McGonagle  
Carpenter I  
Facilities Management

Sofya Mitelman  
EDP Systems Analyst IV  
Institutional Effectiveness

Tony Q. Ngo  
Technical Assistant III  
Chelsea Campus

Phuong Thao Nguyen  
Administrative Assistant I  
Financial Aid Office

Chi H. Nguyen  
Administrative Assistant I  
Student Affairs
Hong-Anh Nguyen  
Clerk IV  
Career Center  
A.S. Bunker Hill Community College

Kieu Nguyen  
EDP Systems Analyst I  
Teaching, Learning & Instructional Technology Center  
A.S. Bunker Hill Community College

Kenneth B. Nies  
EDP Systems Analyst III  
Information Services  
B.S. Northeastern University; M.A. University of Wisconsin

Mark A. Norton  
Technical Assistant III  
Information Services  
A.S. Bunker Hill Community College

Anne M. O’Hara  
Clerk IV  
Business Office

Elena M. O’Leary  
Personnel Analyst I  
Human Resources

Oscar E. Pena  
Laboratory Technician I  
Science Department  
B.S. Wentworth Institute of Technology

Long B. Pham  
Technical Assistant III  
Center for Self-Directed Learning  
A.S. Bunker Hill Community College

Magalie Pierre  
Clerk V  
Academic Affairs

Robert S. Pieri  
EDP Systems Analyst I  
Information Services  
A.S. Bunker Hill Community College

Nancy K. Pitchford  
Clerk V  
Nurse Education Department  
A.S. Bunker Hill Community College

Jose Portillo  
Maintainer II  
Facilities Management

Therese A. Pullum  
EDP Systems Analyst I  
Distance Learning-BHCConline/Weekend College  
A.S. Bunker Hill Community College; B.S. UMass Lowell

Sandra A. Reich  
Receiving Teller II  
Student Payment Office

Eric D. Richards  
Accountant III  
Business Office  
A.S. Bunker Hill Community College; B.S. UMass Boston

Aida E. Rivera  
Administrative Assistant II  
President’s Office  
A.S. Roxbury Community College

Yoel E. Rodriguez  
EDP Systems Analyst II  
Information Services  
A.A. Bunker Hill Community College

Scott J. Rosenbaum  
Campus Police Officer I  
Public Safety  
A.S. Bunker Hill Community College

Joan A. Rossi  
Clerk IV  
Student Activities  
A.S. Lasell College

Theresa N. Ross Traficante  
Electronic Computer Operator II  
Information Services

Debra D. Rowe  
Buyer II  
Business Office

Stephen C. Roy  
Clerk IV  
Enrollment Services  
A.S. Bunker Hill Community College

Lorraine C. Sacco  
Clerk V  
Health Services  
Certificate in Paralegal, Bunker Hill Community College

Raymond Samms  
Campus Police Officer I  
Public Safety

Patrick M. Scarr  
Campus Police Officer I  
Public Safety  
B.S. Boston State College

Helen M. Sekenski  
Clerk V  
Chelsea Campus

Charles J. Sidlowski  
Maintainer II  
Chelsea Campus

Edwin L. Silva  
EDP Systems Analyst II  
Information Services  
A.S. Bunker Hill Community College

Jose Silva  
EDP Systems Analyst III  
Center for Self-Directed Learning

Elva Singal  
Laboratory Technician I  
Science Department  
B.A. National University of Engineering, Lima Peru

David Sperandio  
Motor Truck Driver  
Chelsea Campus

Laura A. St. John  
Clerk IV  
Public Safety  
A.S. Bunker Hill Community College

Enzo Surin  
Library Assistant III  
Library & Information Center  
B.A Framingham State College

Lloyd R. Swanson  
Accountant II  
Payroll Office

Mary L. Sweeney  
Accountant V  
Business Office  
Certificate, Burdett Business School

Rosemary Toy  
Clerk III  
Financial Aid Office

Jane Trullo  
Clerk V  
Facilities Management  
A.A. Ashworth College

Giuseppe A. Vazzino  
Painter I  
Facilities Management

Patricia S. Wasson  
Administrative Assistant II  
BHCConline/Weekend College  
B.S. Northeastern University

Celcia D. Weaver  
Receiving Teller II  
Student Payment Office

Vincente White  
Storeroom Clerk IV  
Central Services  
A.S. Bunker Hill Community College; B.S. Salem State College

Latonya S. Wiggins  
Clerk V  
Nurse Education & Health Professions

Christopher E. Wilkins  
3rd Class Power Plant Engineer  
Facilities Management

Mary B. Williams  
Graphic Arts Technician I  
Central Services

Tatyana Zadorskaya  
Receiving Teller I  
Student Payment Office

Mary Zingariello  
Clerk IV  
Admissions & Transfer Office
Adjunct Faculty*

Mark Adams, Medical Imaging
Lynne Anderson, ESL
Andrew Armata, Business
Michael Aymie, ESL
Melissa Baker, English
Glen Barnes, Science
Deborah Barrett, ESL
Brian Barry, Business
Piotr Bartkiewicz, Visual Media Arts
Susan Battis, Office Management
Marcia Bentley, English
Joseph Bentley, Business
Abdelkader Berrahmoun, Language
Jessica Bethoney, Humanities
Alka Bhaskar, Early Childhood Education
King James Bigelow, Music
Loretta Bolger, English
R. Brent Bonah, English
Michael Bonanno, Government & History
Robert Bonds, English
Katherine Braun, Theatre
Lisa Brewster, English
George Brooker, Business
Frederick Brown, English
James Brown, Mathematics
Alice Brown-Legrand, Behavioral Science
Frank Bruno, Criminal Justice
Christopher Buckley, Business
Dennis Burke, Science
Rita Butterfield, Behavioral Science
Brian Byrnes, Behavioral Science

John Cahill, English
Paul Camacho, Behavioral Science/Business
Donald Carbone, Business
Leo Carey, CIT/ITBI
William Carrow, Mathematics
Christopher Carter, English
Joan Casalotto, Medical Imaging
Matthew Casey, ESL
Sharon Casper, ESL
Catherine Catizone, Mathematics
Giuseppa Cefalu, Science
Carole Center, English
Jose Chaves, Business
Wilson Chen, Mathematics
Natalya Chernyak, DMS
Vincent Chiachio, CIT/ITBI
Elizabeth Chiasson, English
Charles Chisholm, Mathematics
Margaret Cifuni, Nursing
Ronald Clark, ESL
Douglas Clifford, English/Humanities
Sandra Clyne, Behavioral Science
Lisa Collette, Mathematics
Leonard Connolly, Mathematics
Lawreen Connors, Mathematics
Anne Conoletto Schultz, ESL
Charles Cook, English
Frances Cook, ESL
Helen Cowen, Allied Health
David Cox, Science
Cynthia Cummings, Government & History

Richard Cunney, Business
Donald Cyr, CIT/ITBI
Kevin Daley, Business
William Davidge, CIT/ITBI
Bernadette Davidson, Early Childhood Education
Marsha Dean, ESL
Dennis Deeb, Government & History
David Del Rossi, Business
Diane Delehanty, Early Childhood Education
Angela Desilva, Nursing
Gary Devino (Vinokurov), ESL
Indralakshmi Din-Dayal, Language
Joseph Dipoli, Business
Maurice Donovan, English
Maria Doucette, Business
Cynthia Duda, English
Gary Duehr, Visual Media Arts/English
Brendan Duffy, English
Robert Durant, Mathematics
Nancy Egan-Tricomi, ESL
F John Farrenkopf, Mathematics
Richard Feinberg, Government & History
Eileen Feldman, ESL
Linda Ferragamo, ESL
Steven Fierimonte, Mathematics
Ron Fionte, Business
Arana Fireheart, CIT/ITBI/Visual Media Arts
Albert Flanders, Mathematics
George Florentine, Business
Peter Forbes, English

Kim Frashure, Science
Gretchen Gallagher, ESL
Linda Garrity, Nursing
Sheri Garzelli, Allied Health/Behavioral Science
Kimberly Giampietro, Criminal Justice
David Govoni, ESL
Rita Greco, Science
Russell Green, English
Leonard Greene, Business
Michael Greenwald, Surgical Technology/Science
Katherine Gustafson, Mathematics
Nickolai Guyetsky, Art
Joseph Hanegan, English
Nisa Harrison, Mathematics
William Hart, Government & History
Marion Hernandez, English
William Hibbard, ESL
Joanne Holdridge, ESL
George Holland, Mathematics
Thomas Hooper, English
Alfred Hoose, Music
Harriet Hutchinson, Language
Lawrence Iamello, Mathematics
Mark Isola, English
Ruth Ivers, English
Danielle Jacques, Theatre
Marika Jamacochian, Medical Imaging
Bruce Joziatis, Medical Imaging
Rosalind Kaplan, ESL
Anatoli Kaploun, Mathematics
Ronald Karasczkiewicz, Business
Carolyn Kelley, English
George Kelley, Hospitality
Peter Kellihir, Science
Ruth Khowais, English
Jerald King, Science
Amelia Leary, Office Management
Carl Webster, Business
Tracie McLaughlin, ESL
Michelle Mekler, Business
Catherine Perry, Business
John Piantedosi, Behavioral Science
Sharon L. Reiter, English
Ronald Rice, Behavioral Science
Joseph Rotondi, Business
Dennis Sass, Mathematics
Keith Schaller, Science
Mary Shatzer, Language
Kathleen White, Behavioral Science
Jason Zabel, Mathematics
Shelley Stoll, ESL
Grace Turecek, ESL
Mildred Wigon, Behavioral Science
Margaret Witham, English/ESL
Raymond Wong, Behavioral Science
Gennadiy Yablovskiy, Mathematics
James Zaks, Mathematics

Caroline Amoroso, Government & History
Gabrielle Amos, Business
Julie Lamberti, English
Kurt Lancaster, Theatre
Bruce Lapierre, Science
Pamela Laquidara, Government & History
John Meagher, English
D. Mehlenbacher, Mathematics
Kenneth Melillo, Mathematics
Maria Mendes, ESL
Christine Metherall, Hospitality
Rhoda Morris, Science
Barbara Morrison, English
Brian Murdoch, Behavioral Science
Genevieve Neely, English
Glenn Newman, Mathematics
Hoa Nguyen, ESL
Aminda Nicoloro, English
Michael Nicoloro, Mathematics
Stan Nikkel, Government & History
Claire Niven-Blowers, Behavioral Science
Anne Noel, Surgical Technology
Linda O’Connell, English
Joel Ohren, English
Patricia Pabian, English
Nick Palky, Business
Jeffrey Pearlman, Government & History
Anita Pearson, ESL
Anthony Pecci, English
Joseph Pettigrew, ESL

Victoriya Malkina-Miller, Mathematics
Anne Manion, Science
James Mann, English
Hassan Mansaray, ESL
Carl Mason, English
James McCann, CIT/ITBI/Business
John McMahon, Medical Imaging
Kyla McSweeney, Early Childhood Education
Mary Meader, Government & History
John Meagher, English
D. Mehlenbacher, Mathematics
Kenneth Melillo, Mathematics
Maria Mendes, ESL
Christine Metherall, Hospitality
Rhoda Morris, Science
Barbara Morrison, English
Brian Murdoch, Behavioral Science
Genevieve Neely, English
Glenn Newman, Mathematics
Hoa Nguyen, ESL
Aminda Nicoloro, English
Michael Nicoloro, Mathematics
Stan Nikkel, Government & History
Claire Niven-Blowers, Behavioral Science
Anne Noel, Surgical Technology
Linda O’Connell, English
Joel Ohren, English
Patricia Pabian, English
Nick Palky, Business
Jeffrey Pearlman, Government & History
Anita Pearson, ESL
Anthony Pecci, English
Joseph Pettigrew, ESL

John Piantedosi, Behavioral Science
Lonnie Pidell, English
Richard Ponticelli, Mathematics
Catherine Puopolo, CIT/ITBI
Serajulhuq Quazi, English
Raul Quintanilla, Mathematics
Marielle Racicot (Bentley), Language
Tara Rao, Mathematics
Harry Regis, Mathematics
Maria Rizzo-Laface, Business
William Roarke, Business
Ralph Roche, English
Mark Rotondo, Mathematics
Rose Rubin, Early Childhood Education
Rita Rzezuski, Early Childhood Education
John Schlesinger, Mathematics
Ines Schultz, English/ESL/Language
Stefan Scott, Behavioral Science
Marilyn Scrizzi, Business/English
Jozef Shahbazian, Mathematics
Gwendolyn Shelton, English
Xianmei Shen, ESL
Stephen Shore, CIT/ITBI
Priscilla Shute, English
Craig Silvestri, Business
Stephen Slaner, Behavioral Science
Michelle Smith, ESL
Otilia Smith, Language
Mary Smith, Mathematics
David Soll, Government & History
William Soper, Science
Raymond Spencer, Science
William B Stewart, CIT/ITBI
Shelley Stoll, ESL

Paul Sullivan, Business
Erik Sullivan, English
Linda Sutliff, English
Richard Sweeney, Business
Joseph Tarello, Science
Paul Tortolani, Government & History
Patrick Truman, Mathematics
Angela Tsikitis, Business
Dan Tucker, ESL
Gerald Tully, Criminal Justice
Judith Tully, Mathematics
Robin Tyler, English
Anne Umansky, English
Bill Vanderbeck, English
Albert Vasile, English
Donald Veitch, English
Jennifer Vienneck, English
Stephen Wachman, Science
Yao Wang, Mathematics
Carl Weinstein, Allied Health
John Westfield, ESL
Kathleen White, English
Mildred Wigon, Behavioral Science
Margaret Witham, English/ESL
Raymond Wong, Behavioral Science
Gennadiy Yablovskiy, Mathematics
James Zaks, Mathematics

*Fall 2007 Adjunct Faculty with contractual seniority
Program Advisory Committees

**ALLIED HEALTH**
Laurie Bloom, R.N.
*Education Nursing Specialist*
Beth Israel Deaconess Medical Center

Terry Egan, R.M.A.
*Supervisor, Medical Assistants*
MGH-Bulfinch Medical Associates

Erika Evangelista
*Staffing Consultant*
Alternate Solutions, Inc.

Kathy Field
*Volunteer Services*
East Boston Neighborhood Health Center

Diane Gillis, RN
*Director of Nursing Education & Training*
Hebrew Rehabilitation Center

Sheila Golden-Baker, R.N.
*Clinical Educator*
Center for Clinical & Professional Development
Massachusetts General Hospital

Christine Healey
*Operations Manager*
Beth Israel Deaconess Medical Center, Health Care Associates

Melissa Hubbard
*Volunteer Services*
Tufts-New England Medical Center

Ann Kennedy, R.N.
*Nurse Manager*
Massachusetts General Hospital

Cheryl Merrill, R.N.
*Director of Nursing*
Boston Medical Center

Charlotte Messinger, R.N.
*Nursing Staff Development*
Brigham & Women’s Hospital

Linda Micciche
*Staffing Specialist*
Bulfinch Temporary Services
Partners Health Care Systems, Inc.

Leanne Sasso-Lusso
*Volunteer Services*
East Boston Neighborhood Health Center

Beverly Sober
*Manager, Workforce Development & Youth Programs*
Brigham & Women’s Hospital

Nancy Walsh, RN
*Administrator*
Don Orione Home

**BUSINESS ADMINISTRATION**
Jean-Francis Beaudet
*Branch Manager*
Kuhne & Nagel

Sam Cron
*Director of Human Resources*
Stop & Shop Supermarket Co.

Paul Fleming
*Human Resources Manager*
Stop & Shop Supermarket Co.

Eugene Gabe
*Bentley College*

Ron Karascziewicz
*Internal Revenue Service*

Cleo Lenardo
*Robert Half Associate Inc./Account Temps*

Ivelisse Pena
*Human Resource Associate*
Eastern Bank

**COMPUTER INFORMATION TECHNOLOGY**
Alan Graham
*Senior Forensic Auditor*
ATF Boston

Gerry Tully
*Adjunct Professor*
Bunker Hill Community College

Dana Leccese
*Assistant Attorney General*
Commonwealth of Massachusetts

Jamie L’Heureux
*Project Manager*
G & H International Services

Dan Dickerman
*Technical Advisor to the Director*
Electronic Crimes Program
IRS Criminal Investigation Unit

**CRIMINAL JUSTICE**
Andrea Cabral
Sheriff
Suffolk County Sheriff’s Office

Kenneth Daddabbo
Massachusetts Minority State Police Officer’s Association, Inc.

Ed Geary
*Public Affairs Officer*
Suffolk County Sheriff’s Office

Jack Greene
*Dean, College of Criminal Justice*
Northeastern University

Charles M. Horsley
*Superintendent, Boston Police Academy*
Boston Police, Bureau of Professional Development

Martha Patnaude, CPP
*Security Consultant*
American Alarm & Communication

Kathy Tate
*Assistant Chief Probation Officer*
Suffolk Superior Court

Steve Tompkins
*Director of Communications & External Affairs*
Suffolk County Sheriff’s Office

**EARLY CHILDHOOD, EDUCATION & HUMAN SERVICES**
Nkechima Andalcio
*Life Focus Center*

Patricia Cronin
*Director*
Catholic Charities Center

Gayle Crump Swaby
*Program Director*
Dimock Street Community Health Center

Rosario Dominguez
*Director of Programs*
Community Servings

Craig Fletcher
*Director*
Walnut Street Center

Carmen Alicia Flores
*Caseworker*
Cambridge Health Alliance

Daphne Germain
*Recruitment & Community Partnership Coordinator*
Big Sisters of Boston

Cindy Hickey
*Executive Director*
Somerville Council on Aging

Jean Jeune
*Cambridge Haitian Services*

Anne Kelley
*Director of Volunteer Services*

Anne Kelley
*Fernald Center & Metro Region Services*

Kristina McCarthy
*Director*
Walnut Street Center

Marie Puggi
*Director of Activities*
Triangle Inc.
Program Advisory Committees

Carolyn Rodrigues  
After School Program Director  
DHSP Fitzgerald Community School

Audry Russo  
Recreational Director  
Neville Center

Heather Scarles  
Family Services Coordinator  
Center for Families of North Cambridge

Denise Thorud  
Assistant Program Director & Volunteer Coordinator  
Sancta Maria Windsor House

HOSPITALITY

Tom Barton  
Corporate Chef  
Sebastian’s Catering at the World Trade Center

Art Canter  
President  
Massachusetts Lodging Association

Albert D’Addario  
Senior Chef Instructor  
Newbury College

Andrew Duymovic  
General Manager  
Holiday Inn Select

Janet Glennon  
Director of Employment Services  
Marriott Employment Center

Daniel Kenney  
Executive Chef  
Langham Hotel

Marie Keough  
Director of Sales & Marketing  
Residence Inn by Marriott

Rick Lofria  
Director of Sales & Marketing  
Millenium Bostonian Hotel

Rebecca Moesinger  
Chef/Owner  
Konditor Meister Fine Pastries

Patrick Moscaritolo  
President & CEO  
Greater Boston Convention & Visitors Bureau

Maureen Muckian  
Director of Event Services  
Seaport Hotel

Charles Murphy  
Director of Sales  
U.S. Foodservice Co.

Lee Napoli  
President & Founder  
Women’s Pastry Guild

Susan Simon  
Human Resources Supervisor  
Harvard University Dining Services

Chris Spinazzola  
Owner/General Manager  
Funway Cafe

INFORMATION TECHNOLOGY FOR BUSINESS

Mark Gosselin  
Manager, Network Appliance Development  
NetScout Systems, Inc.

David Hart  
Executive Vice President and Chief Technology Officer  
NIS – Network Information Systems

Steve McCormick  
Markets Technology Infrastructure Server Hosting Operations

Dawn Maxey  
Senior Network Technician  
Brown Rudnick LLP

John Pasqualetto  
VP Speech Technologies Product Management  
Fidelity Investment Systems Company

Mont Phelps  
CEO  
Netivity Solutions Inc.

Phil Stathas  
Director, Information Technology  
Thermo Electron Corporation

MEDICAL RADIOGRAPHY

Victoria Albano  
Educational Coordinator  
Boston Veterans Medical Center

Elizabeth Grady, R.T.(R.)  
Diagnostic Manager  
Beth Israel Deaconess Hospital

Carl Patturelli  
Education Coordinator  
Brigham & Women’s Hospital

Susan Simon  
Human Resources Supervisor  
Harvard University Dining Services

Chris Spinazzola  
Owner/General Manager  
Funway Cafe

INFORMATION TECHNOLOGY FOR BUSINESS

Mark Gosselin  
Manager, Network  
Appliance Development  
NetScout Systems, Inc.

David Hart  
Executive Vice President and Chief Technology Officer  
NIS – Network Information Systems

Steve McCormick  
Markets Technology Infrastructure  
Server Hosting Operations

Dawn Maxey  
Senior Network Technician  
Brown Rudnick LLP

John Pasqualetto  
VP Speech Technologies Product Management  
Fidelity Investment Systems Company

Mont Phelps  
CEO  
Netivity Solutions Inc.

Phil Stathas  
Director, Information Technology  
Thermo Electron Corporation

MEDICAL RADIOGRAPHY

Victoria Albano  
Educational Coordinator  
Boston Veterans Medical Center

Elizabeth Grady, R.T.(R.)  
Diagnostic Manager  
Beth Israel Deaconess Hospital

Carl Patturelli  
Education Coordinator  
Brigham & Women’s Hospital

Susan Simon  
Human Resources Supervisor  
Harvard University Dining Services

Chris Spinazzola  
Owner/General Manager  
Funway Cafe

INFORMATION TECHNOLOGY FOR BUSINESS

Mark Gosselin  
Manager, Network Appliance Development  
NetScout Systems, Inc.

David Hart  
Executive Vice President and Chief Technology Officer  
NIS – Network Information Systems

Steve McCormick  
Markets Technology Infrastructure Server Hosting Operations

Dawn Maxey  
Senior Network Technician  
Brown Rudnick LLP

John Pasqualetto  
VP Speech Technologies Product Management  
Fidelity Investment Systems Company

Mont Phelps  
CEO  
Netivity Solutions Inc.

Phil Stathas  
Director, Information Technology  
Thermo Electron Corporation

MEDICAL RADIOGRAPHY

Victoria Albano  
Educational Coordinator  
Boston Veterans Medical Center

Elizabeth Grady, R.T.(R.)  
Diagnostic Manager  
Beth Israel Deaconess Hospital

Carl Patturelli  
Education Coordinator  
Brigham & Women’s Hospital

Susan Simon  
Human Resources Supervisor  
Harvard University Dining Services

Chris Spinazzola  
Owner/General Manager  
Funway Cafe

INFORMATION TECHNOLOGY FOR BUSINESS

Mark Gosselin  
Manager, Network Appliance Development  
NetScout Systems, Inc.

David Hart  
Executive Vice President and Chief Technology Officer  
NIS – Network Information Systems

Steve McCormick  
Markets Technology Infrastructure Server Hosting Operations

Dawn Maxey  
Senior Network Technician  
Brown Rudnick LLP

John Pasqualetto  
VP Speech Technologies Product Management  
Fidelity Investment Systems Company

Mont Phelps  
CEO  
Netivity Solutions Inc.

Phil Stathas  
Director, Information Technology  
Thermo Electron Corporation

MEDICAL RADIOGRAPHY

Victoria Albano  
Educational Coordinator  
Boston Veterans Medical Center

Elizabeth Grady, R.T.(R.)  
Diagnostic Manager  
Beth Israel Deaconess Hospital

Carl Patturelli  
Education Coordinator  
Brigham & Women’s Hospital

Susan Simon  
Human Resources Supervisor  
Harvard University Dining Services

Chris Spinazzola  
Owner/General Manager  
Funway Cafe

INFORMATION TECHNOLOGY FOR BUSINESS

Mark Gosselin  
Manager, Network Appliance Development  
NetScout Systems, Inc.

David Hart  
Executive Vice President and Chief Technology Officer  
NIS – Network Information Systems

Steve McCormick  
Markets Technology Infrastructure Server Hosting Operations

Dawn Maxey  
Senior Network Technician  
Brown Rudnick LLP

John Pasqualetto  
VP Speech Technologies Product Management  
Fidelity Investment Systems Company

Mont Phelps  
CEO  
Netivity Solutions Inc.

Phil Stathas  
Director, Information Technology  
Thermo Electron Corporation

MEDICAL RADIOGRAPHY

Victoria Albano  
Educational Coordinator  
Boston Veterans Medical Center

Elizabeth Grady, R.T.(R.)  
Diagnostic Manager  
Beth Israel Deaconess Hospital

Carl Patturelli  
Education Coordinator  
Brigham & Women’s Hospital

Susan Simon  
Human Resources Supervisor  
Harvard University Dining Services

Chris Spinazzola  
Owner/General Manager  
Funway Cafe

INFORMATION TECHNOLOGY FOR BUSINESS

Mark Gosselin  
Manager, Network Appliance Development  
NetScout Systems, Inc.

David Hart  
Executive Vice President and Chief Technology Officer  
NIS – Network Information Systems

Steve McCormick  
Markets Technology Infrastructure Server Hosting Operations

Dawn Maxey  
Senior Network Technician  
Brown Rudnick LLP

John Pasqualetto  
VP Speech Technologies Product Management  
Fidelity Investment Systems Company

Mont Phelps  
CEO  
Netivity Solutions Inc.
Program Advisory Committees

Carol Covell
Director of Nursing
Mass Eye & Ear Infirmary

Diane Hanley
Director, Nursing Program
Dana-Farber Cancer Institute

Cheryl Merrill, M.S.N., R.N.
Director, Nursing Program & Quality Assurance
Boston Medical Center

Denise Rab-Wilson
Director of Nursing
Erich Lindeman Center

Donna Sinclair
Administrative Director of Nursing
Mount Auburn Hospital

Margaret Singer, R.N.
Administrative Director of Nursing
Department of Veterans Affairs Hospital

OFFICE & INFORMATION MANAGEMENT

Gary Bernklow
Billing Manager, Cardiology
Mass. General Physicians Organization

Sharon Boyd
Administrative Secretary
MGH Nuclear Cardiology

Arifa Kapadia
Manager, Division of Nephrology
Children’s Hospital

Susan Reddy
Administrative Assistant
Cambridge Family & Children’s Services

Theresa Koegel
Employment Representative
Children’s Hospital

Fatima Kouskous
Student Representative
Bunker Hill Community College

Cheryl Laroche
Office of the President
Museum of Science

Stephanie Lin
Senior Recruiter
Museum of Science

Kathy Lovell
Manager
MetLife

Harold Mellor
Senior Recruiting Manager
Boston Globe

Megan M. Moore
Recruiter
Biogen Idec

Jonathan Rossall
Initial Response Coordinator
Catholic Charities

Abigail Soto-Colon
Review & Authorization Supervisor
Commonwealth of Massachusetts
Mass. Commission Against Discrimination

Joseph Tomaski
Client Service Manager
Spherion Staffing Group

Lisa Vigliotta
Assistant Director, Human Resources
Suffolk University

SURGICAL TECHNOLOGY

Marion Frehan
Nurse Manager
Massachusetts General Hospital

Michael Greenwald, MD
Private Practice
Brookline, MA

Charlotte Gugliemi
Perioperative Educator
Beth Israel Deaconess Hospital

Robert Harvey
Director of Sales and Marketing
Pappas Surgical

Marsha Hopkins
Nurse Manager
Boston Veteran’s Administration Medical Center

Eileen Lane
Manager, Medical Coding
Massachusetts General Hospital

Richard Levine
Employment Specialist
Jamaica Plain Development Association

Jane Wylan
Perioperative Nurse Educator
Brigham and Woman’s Hospital

VISUAL & MEDIA ARTS

Aidria Astravas
Manager
Future Media Concepts - Boston

Thomas Blazej
Director
Graphic Communications Division
Office of the Secretary of the Commonwealth

Linda Brown
Professor/Director
Foundation Program
New England School of Art and Design

Paul Ciccone
Vice President
Hanson Printing

Patrick Gaspar
Senior Editor
Broadstreet Productions

Michael Kiely
Client Services
Cramer Productions

Lucy Milne
Assistant Director
Educational Media Center
Boston University Medical Campus

Kay Ransdell
Dean of Admissions
Massachusetts College of Art

Charles Roberts
Professor
Media Communications
Fitchburg State College
Directions to BHCC Campuses and Satellite Locations

Directions to the Charlestown Campus
250 New Rutherford Ave.
Boston, Massachusetts 02129-2995
Telephone: 617-228-2000 / TTY: 617-228-2051

BY PUBLIC TRANSPORTATION
Bunker Hill Community College is conveniently located at the MBTA Rapid Transit Orange Line’s Community College Station. Connections to the Orange Line can be made at MBTA subway stations throughout the system. Follow the Rapid Transit System maps posted in each station depicting the Forest Hills-Oak Grove (Orange) Line. Take the train to the Community College Station. The campus front door is only steps from the station exit (see the MBTA map on page 187). For more information on transit schedules and station accessibility, contact the MBTA at 617-222-3200 or visit www.mbta.com.

BY CAR
From the North and West Via I-95 (Route 128); I-93
Follow I-95/128 to Exit 37A (Route I-93 South to Boston). From the North, follow I-93 South to Exit 28. Pass through Sullivan Square and proceed straight onto New Rutherford Avenue. The Hood Dairy will be on the right as you proceed on New Rutherford Avenue and shortly after, Bunker Hill Community College will also be on the right. Enter on the College’s perimeter road and follow signs to Student Parking (Lots #1 & #2).

From Route 2 & Memorial Drive
Follow Route 2 to signs for Cambridge and Memorial Drive. Take Memorial Drive East along the Charles River past Harvard University. Enter “Memorial Drive East” underpass and continue past MIT. Continue on Memorial Drive along Charles River. Bear right as road curves over water and then to the left onto Edwin Land Boulevard (toward Charlestown). Continue on Land Boulevard past Royal Sonesta Hotel (on the right) and straight ahead across major intersection (traffic lights) onto the Gilmore Bridge. At the end of bridge, turn right at traffic lights and take first right again into the BHCC Student Parking Lot entrance. At stop sign turn right or left, and proceed to BHCC Student Parking (Lots #1 & #2).

Via I-90 (Massachusetts Turnpike)
Follow I-90 East to Exit 18 (Allston-Cambridge). After toll plaza, follow ramp directions to “Cambridge.” At the traffic light, go straight across intersection and across the bridge over the Charles River. At the end of the bridge, take right at traffic lights onto Memorial Drive. Enter “Memorial Drive East” underpass and continue past MIT. Continue on Memorial Drive along Charles River. Bear right as road curves over water (toward Charlestown) and then to the left onto Edwin Land Boulevard. Continue on Land Boulevard past Royal Sonesta Hotel (on the right) and straight ahead across major intersection (traffic lights) onto the Gilmore Bridge. At the end of bridge, turn right at traffic lights and take first right again into BHCC Student parking lot entrance. At stop sign turn right or left, and proceed to BHCC Student Parking (Lots #1 & #2).

Via Route 3 North and the Southeast Expressway (I-93 North)
Follow Expressway through the Liberty (South Station) Tunnel. Continue past the TD Banknorth Garden and take Exit 28. At the bottom of the ramp, take right onto Washington Street. At the next light take another right onto New Rutherford Avenue. As you pass the Hood Dairy plant, Bunker Hill Community College is on the right. Enter via perimeter road and follow signs to Student Parking (Lots #1 & #2).

From the Northeast Via Tobin (Mystic River) Bridge - Route 1 South
Coming off the bridge, bear right and follow signs for “Charlestown/Rutherford Avenue.” At the traffic light, take a left turn into the far right lane onto New Rutherford Avenue that will bring you to Austin Street. Take a left at the U-turn before the traffic light to reverse direction on New Rutherford Avenue (Bunker Hill Community College will be visible on the far right). After the U-turn, the BHCC Student Parking Lot entrance will be on the right. Take first right into BHCC student parking lot entrance. At stop sign turn right or left, and proceed to BHCC Student Parking (Lots #1 & #2).
Directions to BHCC

175 Hawthorne St., Bellingham Square
Chelsea, Massachusetts 02150-2917
Telephone: 617-228-2100 / TTY: 617-228-3377

BY PUBLIC TRANSPORTATION
All of the following MBTA bus routes stop right in front of the BHCC Chelsea Campus in Bellingham Square, Chelsea:

- BUS ROUTE 111 runs between Haymarket Station (Green/Orange Lines) and Woodlawn.
- BUS ROUTE 112 runs between Maverick Station (Blue Line) and Wellington Station (Orange Line).
- BUS ROUTES 114/116/117 run between Maverick Station (Blue Line) and Wonderland Station (Blue Line).
- The MBTA Commuter Rail has a Chelsea stop at the corner of Arlington and Sixth Streets.

For more information on transit schedules, contact the MBTA at 617-222-3200 or visit www.mbta.com.

BY CAR
From the South Via Route 3 North & Southeast Expressway (I-93 North)
Follow Expressway through South Station area and onto the Central Artery. Take “Route 1 North” exit and proceed through tunnel onto the Tobin (Mystic River) Bridge. Take the second Chelsea exit (Fourth Street), which will put you on Fourth Street. Go straight on Fourth Street past Chestnut Street and Broadway. Take a left onto Hawthorne Street. The Chelsea Campus is approximately 200 yards on the right at 175 Hawthorne Street.

From the North Via Route 1 South
Take Route 1 South toward Boston to Chelsea. Exit at “Route 16 West” (Everett/Somerville). Take left at lights onto Webster Ave, then right onto Broadway. At blinking arrows, take right at City Hall Avenue, bear right to stop sign, then take sharp left to Chelsea Center. Proceed through set of lights and back onto Broadway. Take a left on Fourth Street and at stop sign, take left onto Hawthorne Street. The Chelsea Campus is approximately 200 yards on the right at 175 Hawthorne Street.

Via Route 16 East (Revere Beach Parkway)
From I-93 South take “Exit 31 East” (Revere). Follow Route 16 East approximately 3 miles. Take a right at Chelsea Stadium onto Everett Avenue. Proceed straight and under Tobin Bridge. Continue through lights to stop sign at Park Street. Take Left. Continue straight one block, bear left onto Hawthorne Street. The College is approximately 500 yards ahead on the right.

From Revere and Lynn, Massachusetts
Take Route 16 West (Revere Beach Parkway) and take “Broadway/Chelsea” exit. At blinking arrows, take right at City Hall Avenue, bear right to stop sign, then take sharp left to Chelsea Center. Proceed through set of lights and back onto Broadway. Take a left on Fourth Street and at stop sign, take left onto Hawthorne Street. The Chelsea Campus is approximately 200 yards on the right at 175 Hawthorne Street.

Directions to the Cambridge Satellite
Cambridge Rindge and Latin School (CRLS)
459 Broadway
Cambridge, Massachusetts 02138-4192
Telephone: 617-228-2408

BY PUBLIC TRANSPORTATION
- Take the bus to Harvard Square from Lechmere Station on the Green Line. The bus will go directly up Cambridge Street. Get off at the stop in front of CRLS.
- Take the MBTA Red Line to the Harvard Square stop. Get off the train and walk to the Harvard Yard; walk diagonally through the yard toward the Broadway entrance. Walk down Broadway approximately an eighth of a mile; CRLS is on the left.

For more information on transit schedules, contact the MBTA at 617-222-3200 or visit www.mbta.com.

BY CAR
The Cambridge Satellite is located at Cambridge Rindge and Latin School (CRLS), 459 Broadway. The building is located between Cambridge Street and Broadway, adjacent to the public library. Traveling down Cambridge Street toward Harvard Square, take a left on Ellery Street; the entrance to the CRLS parking garage is approximately 200 yards up on the right. Traveling down Broadway toward Harvard Square, take a right onto Dana Street; go to the end, and take a left onto Cambridge Street; then take the first left onto Ellery Street; the entrance to the CRLS parking garage is approximately 200 yards up on the right.

Directions to the East Boston Satellite
East Boston Neighborhood Health Center
Education & Training Institute
155 Addison Street
East Boston, MA 02128
Telephone: 617-568-6444

BY PUBLIC TRANSPORTATION
Take the MBTA Blue Line to Maverick Square. At street-level and take MBTA Bus Route 120/Orient Heights. Exit bus at Wordsworth Street. Take first right onto Saratoga Street. Take first left onto Addison Street.
Directions to BHCC

BY CAR

From Boston/I-93
Follow signs to Logan Airport. Once you approach the Airport follow signs to Route 1-A. Keep to the left on the ramp (do not take Bennington Street exit) follow Revere/Lynn signs. Continue in right lane you will see a large Storage Company to your left; move to the right hand lane and at the end of the stone wall, will be Danilchuk Autobody - take that right onto Addison Street and follow the road until you see a brick building on your right, #155 Addison Street. NOTE: from the hours of 4 p.m. - 7 p.m. this exit can only be used by residents of Addison Street. For an alternate route: At the first set of lights (beyond Addison exit) turn right onto Boardman Street. At stop sign take a right onto Saratoga Street. Take second right onto Addison Street.

From the Ted Williams Tunnel
Stay to the left at Tunnel exit follow Rt. 1A signs. Keep to the left on the ramp (DO NOT take Bennington Street exit) follow Revere/Lynn signs. Follow directions above for Boston/Route 93.

From Route 1A South
Follow Route 1S to Route 60E. Follow the signs to the Airport and Sumner Tunnel; continue to Route 1A (McClellan Highway). Stay in left lane. Take left at light at Madonna Shrine onto Boardman Street. Continue to end of Boardman. At stop sign take first right onto Saratoga Street. Take second right onto Addison Street.

Directions to the Revere Satellite
Revere High School
101 School Street
Revere, Massachusetts 02151
Telephone: 617-228-3340

BY PUBLIC TRANSPORTATION
Via bus from Wellington Station (Orange Line), take the No. 110 bus and get off at 27 Central Avenue. For more information on transit schedules, contact the MBTA at 617-222-3200 or visit www.mbta.com.

BY CAR
From Route 1, take Route 16 East to “Revere Beach/Revere-Lynn” and go East/Southeast to Route 107 N Broadway to “Revere/Chelsea.” Turn right on Beach Street and left on School Street.

Directions to the Somerville Satellite
Mystic Activity Center
535 Mystic Avenue
Somerville, Massachusetts 02145
Telephone: 617-228-2408

BY PUBLIC TRANSPORTATION
• Via bus from Sullivan Square MBTA Station in Somerville, or from West Medford and Medford Square, take the No. 95 bus and get off at the Mystic Activity Center.
• Via MBTA connect to the Orange Line toward Oak Grove. Exit at Sullivan Station and change to the No. 95 bus (see above).
For more information on transit schedules, contact the MBTA at 617-222-3200 or visit www.mbta.com.

Directions to the South End Satellite
Inquilinos Boricuas en Acción (IBA)/Villa Victoria
405 Shawmut Avenue
Boston, MA 02118
Telephone: 617-927-1707

BY PUBLIC TRANSPORTATION
Green Line: Exit at Copley Station. Exit and walk east on Dartmouth Street to Tremont Street. Cross Tremont Street and continue east on West Dedham Street. (Dartmouth becomes West Dedham). Walk east for one block on West Dedham, and take a right onto Shawmut Avenue. IBA is two blocks up Shawmut, on the right. (Located on the corner of Shawmut Avenue and West Brookline Street).

Orange Line: Exit at Bay Bay/South End Station. Exit and walk east on Dartmouth Street to Tremont Street. Cross Tremont Street and continue east on West Dedham Street. (Dartmouth becomes West Dedham). Walk east for one block on West Dedham, and take a right onto Shawmut Avenue. IBA is two blocks up Shawmut, on the right. (Located on the corner of Shawmut Avenue and West Brookline Street).

BY CAR
South East Expressway to East Berkley Street exit. Go straight down East Berkley, and at the second set of lights take a left onto Washington Street. Go straight and at the second set of lights, take a right onto West Dedham Street. At the stop sign, take a left onto Shawmut. Go two blocks to #405 Shawmut, on the corner of West Brookline and Shawmut.

Parking
There is non-residential street parking on Shawmut Avenue between West Dedham and West Brookline Streets as well as along West Brookline between Shawmut Avenue and Washington Street. There are “Visitor Spots” on Shawmut between Upton Street and Union Park, as well as on Upton and Union Park themselves. Keep in mind that parking in the South End is a challenge (especially on a weekend). There are two garages within walking distance: one is on Dartmouth Street diagonally across from theBack Bay/South End station. The other is at the intersection of Harrison Avenue and East Brookline Street and is part of University Hospital.
ALL BUILDINGS MAY BE ACCESSED VIA THE 2nd FLOOR WHICH IS THE COLLEGE’S MAIN FLOOR.
Glossary of Academic Terms

A.A. - ASSOCIATE IN ARTS - An undergraduate degree of at least 60 credits awarded upon successful completion of a program of study in liberal arts and sciences that prepares students to transfer to a baccalaureate institution.

A.S. - ASSOCIATE IN SCIENCE - An undergraduate degree of at least 60 credits awarded upon successful completion of a program of study in an applied subject area, such as computers, electronics, or health that prepares students to enter the work force.

ACADEMIC ADVISOR - College staff member responsible for providing guidance in course and/or program-related issues.

ACADEMIC TERM (SEMESTER) - Fall, spring and summer weeks when classes are in session. The fall and spring semesters are approximately 16 weeks long. The summer semester usually has three sessions varying in length from five to twelve weeks.

ACADEMIC YEAR - Fall, spring, and summer semesters, generally from early September to mid-August.

ADD A COURSE - To enroll in additional courses after registration is complete, accomplished through the Registrar's Office.

ADMINISTRATION - College staff members responsible for management and supervision.

ALUMNI - Graduates, in the plural.

ARTICULATION AGREEMENT - A formal agreement between Bunker Hill Community College and a four-year college or university which eases students' transfer to that institution.

AUDIT - To take a course under an agreement which does not result in a final grade of A, B, C, etc. Generally involves regular attendance and participation, but limits graded activities, such as exams; requires full payment of tuition.

CAREER PROGRAM - A specialized degree designed to equip a student with the skills and educational background needed for employment in a specific field, such as business administration, criminal justice, etc.

CERTIFICATE PROGRAM - An academic program of study in a specific field intended for occupational training, upgrading, or retraining, generally 30 credits or less in duration. A certificate is awarded upon successful completion of the program.

COMMENCEMENT - Graduation.

CO-REQUISITE - A course requirement that is taken concurrently with another course.

CREDIT COURSE - An academic course numbered 100 or above in the college catalog which may be applied toward completion of a degree or certificate. (See also Developmental Course).

CREDIT HOUR - A standard measure of the amount of instructional time required to successfully complete a course. For example, ENG111, College Writing I, is a 3 credit hour course, which means that it meets for 3 hours each week for one semester.

CURRICULUM - A set of courses focused in a particular field, e.g. accounting, criminal justice, early childhood.

DEAN - A member of the administrative staff responsible for supervision and management of a particular division of the college.

DEGREE PROGRAM - At Bunker Hill Community College, an Associate in Arts or Associate in Science program of study requiring 60 credits or more for completion.

DEVELOPMENTAL COURSE - A basic skill development course numbered below 100 in the college catalog which carries college credit but does not count toward the requirements for graduation.

DROP - To cancel registration in a course. It may be accomplished only during the schedule adjustment period as specified on the academic calendar and is processed through the Registrar's Office.

ELECTIVE - A course in a program of study which may be selected from a variety of courses in the designated discipline and is numbered above 100.

FACULTY - Members of college staff who teach.

FEES - Charges by the college for specific services to students.

FINANCIAL AID - Funding from various sources provided to students to assist in defraying expenses of college (See Financial Aid section of this catalog).

FREE APPLICATION FOR FEDERAL STUDENT AID (FAFSA) - A required standardized application that includes detailed financial data and is used to determine eligibility for all financial aid programs.

FULL-TIME (STUDENT) - Student registered for 12 or more credits in the fall or spring semester or six (6) credits in the summer.

GED - General Educational Development (high school equivalency diploma).

GENERAL EDUCATION - A common core of courses required of all students that provides for the acquisition of core skills and knowledge necessary in a literate citizenry.

G.P.A. (CUMULATIVE G.P.A.) - Grade point average, used to compute student academic standing.

MATRICULATION - Formal application to and acceptance in a degree or certificate program.

MID-TERM - The point midway through an academic term.

PART-TIME (STUDENT) - Student enrolled for 11 credits or fewer in the fall or spring semester.

PLA - PRIOR LEARNING ASSESSMENT - A program through which students may earn credit for college-level learning acquired through non-collegiate experiences such as employment, military training, community service, and volunteer activities.

PREREQUISITE - Skill or course required for entry into a course or program of study.

TRANSFER GUIDELINES - Informal documents suggesting courses to be taken at Bunker Hill Community College for most effective transfer to a four-year college or university.

TRANSFER PROGRAM - A degree program designed for students who plan to continue their academic careers beyond the associate degree level through transfer to a four-year college or university.

TRANSCRIPT - Permanent record of students' academic grades; available through the Registrar's Office.

TUITION - Charges by the college to a student for registration in credit courses.

WITHDRAWAL FROM COLLEGE - The formal process of notifying the college of the decision to discontinue attending all classes.

WITHDRAWAL FROM A COURSE - The formal process of notifying the college of the decision to discontinue attending a course.

WITHDRAWAL FROM A COURSE - The formal process of notifying the college of the decision to discontinue attending a course.
Index

For a complete directory of Academic Programs, General Education Requirements and Elective Courses, refer to the fold-out section in the back of this publication. Academic Programs begin on page 56.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to Benefit Statement</td>
<td>13</td>
</tr>
<tr>
<td>Absence Due to Religious Beliefs</td>
<td>40</td>
</tr>
<tr>
<td>Academic Advising</td>
<td>32</td>
</tr>
<tr>
<td>Academic Calendar</td>
<td>4</td>
</tr>
<tr>
<td>Academic Information</td>
<td>32</td>
</tr>
<tr>
<td>Academic Policy and Procedure</td>
<td>40</td>
</tr>
<tr>
<td>Academic Probation</td>
<td>43</td>
</tr>
<tr>
<td>Academic Resources &amp; Support</td>
<td>35</td>
</tr>
<tr>
<td>Academic Standing</td>
<td>43</td>
</tr>
<tr>
<td>Academic Suspension</td>
<td>44</td>
</tr>
<tr>
<td>ACT Center</td>
<td>184</td>
</tr>
<tr>
<td>Adding a Course</td>
<td>41</td>
</tr>
<tr>
<td>Administration, Faculty, and Staff</td>
<td>187-201</td>
</tr>
<tr>
<td>Admissions (see Enrollment Services)</td>
<td></td>
</tr>
<tr>
<td>Adult Basic Education Program (ABE)</td>
<td>11, 37</td>
</tr>
<tr>
<td>Advising/Counseling</td>
<td>32, 47</td>
</tr>
<tr>
<td>Advisory Committees</td>
<td>202-204</td>
</tr>
<tr>
<td>Affirmative Action/Equal Opportunity</td>
<td>45</td>
</tr>
<tr>
<td>Alternative Learning</td>
<td>37</td>
</tr>
<tr>
<td>Appeals Process</td>
<td>27, 44</td>
</tr>
<tr>
<td>Articulation Agreements</td>
<td>33-34</td>
</tr>
<tr>
<td>Assessment</td>
<td>32</td>
</tr>
<tr>
<td>Assistive Technology</td>
<td>11</td>
</tr>
<tr>
<td>Athletics</td>
<td>51</td>
</tr>
<tr>
<td>Attendance</td>
<td>41</td>
</tr>
<tr>
<td>Auditing a Course</td>
<td>41</td>
</tr>
<tr>
<td>BHCCOnline</td>
<td>38</td>
</tr>
<tr>
<td>BHCC Alumni Association</td>
<td>185</td>
</tr>
<tr>
<td>BHCC Art Gallery</td>
<td>186</td>
</tr>
<tr>
<td>BHCC Board of Trustees</td>
<td>3</td>
</tr>
<tr>
<td>BHCC Commonwealth Honors Program</td>
<td>53</td>
</tr>
<tr>
<td>BHCC Foundation, Inc.</td>
<td>185</td>
</tr>
<tr>
<td>BHCC Goals</td>
<td>2</td>
</tr>
<tr>
<td>BHCC Institutional Values</td>
<td>8</td>
</tr>
<tr>
<td>BHCC Vision</td>
<td>8</td>
</tr>
<tr>
<td>Bookstore</td>
<td>11, 51</td>
</tr>
<tr>
<td>Boston Welcome Back Center</td>
<td>183</td>
</tr>
<tr>
<td>Cambridge Satellite</td>
<td>12</td>
</tr>
<tr>
<td>Career Center</td>
<td>49</td>
</tr>
<tr>
<td>Center for Self-Directed Learning</td>
<td>45</td>
</tr>
<tr>
<td>Change of Grades</td>
<td>41</td>
</tr>
<tr>
<td>Charlestown Campus Map</td>
<td>209</td>
</tr>
<tr>
<td>Chelsea Campus</td>
<td>10</td>
</tr>
<tr>
<td>Clinical Experience Responsibilities</td>
<td>41</td>
</tr>
<tr>
<td>Code of Behavior</td>
<td>40</td>
</tr>
<tr>
<td>College-Level Examination Program</td>
<td>37</td>
</tr>
<tr>
<td>College Connection</td>
<td>36</td>
</tr>
<tr>
<td>College Profile</td>
<td>9</td>
</tr>
<tr>
<td>Commonwealth Transfer Compact</td>
<td>33</td>
</tr>
<tr>
<td>Community Education</td>
<td>184</td>
</tr>
<tr>
<td>CORI - Criminal Offender</td>
<td>15</td>
</tr>
<tr>
<td>Cost of Attendance</td>
<td>22</td>
</tr>
<tr>
<td>Course Descriptions (listed in alphabetical order according to course prefix)</td>
<td>138-182</td>
</tr>
<tr>
<td>Course Load</td>
<td>41</td>
</tr>
<tr>
<td>Course Objectives and Requirements</td>
<td>32</td>
</tr>
<tr>
<td>Course Prerequisites</td>
<td>41</td>
</tr>
<tr>
<td>Course Withdraw</td>
<td>44</td>
</tr>
<tr>
<td>Credit by Departmental Exams</td>
<td>38</td>
</tr>
<tr>
<td>Curriculum Year</td>
<td>15</td>
</tr>
<tr>
<td>Day Care/Child Care</td>
<td>11, 51</td>
</tr>
<tr>
<td>Dean’s List</td>
<td>41</td>
</tr>
<tr>
<td>Degree and Certificate Programs (complete list and index)</td>
<td>55-137</td>
</tr>
<tr>
<td>Degrees, Second and Subsequent</td>
<td>33</td>
</tr>
<tr>
<td>Directions to BHCC Locations</td>
<td>205</td>
</tr>
<tr>
<td>Directory Information</td>
<td>46</td>
</tr>
<tr>
<td>Disability Support Services</td>
<td>49</td>
</tr>
<tr>
<td>Distance Education</td>
<td>38</td>
</tr>
<tr>
<td>Dropping a Course</td>
<td>41</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>41</td>
</tr>
<tr>
<td>Transfer Compact</td>
<td>33</td>
</tr>
<tr>
<td>East Boston Satellite</td>
<td>12</td>
</tr>
<tr>
<td>Educational Records</td>
<td>45</td>
</tr>
<tr>
<td>Elective Courses see fold-out section in the back of this publication</td>
<td>51</td>
</tr>
<tr>
<td>Employment</td>
<td>27</td>
</tr>
<tr>
<td>Enrollment, Steps for</td>
<td>16-17</td>
</tr>
<tr>
<td>Enrollment Services</td>
<td>13, 47</td>
</tr>
<tr>
<td>Evening Services</td>
<td>49</td>
</tr>
<tr>
<td>Facilities Rental</td>
<td>45</td>
</tr>
<tr>
<td>&amp; Conference Planning</td>
<td>186</td>
</tr>
<tr>
<td>Fees</td>
<td>22</td>
</tr>
<tr>
<td>Final Examination Schedule</td>
<td>41</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>25</td>
</tr>
<tr>
<td>Food Services</td>
<td>51</td>
</tr>
<tr>
<td>General Education Requirements</td>
<td>54</td>
</tr>
<tr>
<td>also see fold-out section in the back of this publication</td>
<td></td>
</tr>
<tr>
<td>General Services</td>
<td>51</td>
</tr>
<tr>
<td>Glossary of Academic Terms</td>
<td>34</td>
</tr>
<tr>
<td>Grade Point Average</td>
<td>42</td>
</tr>
<tr>
<td>Grading and Notation System</td>
<td>42</td>
</tr>
<tr>
<td>Graduation Information</td>
<td>33</td>
</tr>
<tr>
<td>Graduation with Honors</td>
<td>42</td>
</tr>
<tr>
<td>Grants</td>
<td>27</td>
</tr>
<tr>
<td>Hazing</td>
<td>51</td>
</tr>
<tr>
<td>Health Services</td>
<td>49</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>22, 24</td>
</tr>
<tr>
<td>Homeschooling Policy</td>
<td>13</td>
</tr>
<tr>
<td>Home Study</td>
<td>39</td>
</tr>
<tr>
<td>I-20</td>
<td>14, 16</td>
</tr>
<tr>
<td>Immunization Policy</td>
<td>15</td>
</tr>
<tr>
<td>Institutional Policy Statements</td>
<td>45</td>
</tr>
<tr>
<td>Instructional Media Support</td>
<td>51</td>
</tr>
<tr>
<td>International Center</td>
<td>48</td>
</tr>
<tr>
<td>International Student Admissions</td>
<td>14</td>
</tr>
<tr>
<td>Joint Admission Programs</td>
<td>15, 18, 19, 21</td>
</tr>
<tr>
<td>Kids to College</td>
<td>21</td>
</tr>
<tr>
<td>Learning Communities</td>
<td>52</td>
</tr>
<tr>
<td>Library</td>
<td>11, 35</td>
</tr>
<tr>
<td>Massachusetts Board of Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>Massachusetts Educational Opportunity Program (MEOP)</td>
<td>21</td>
</tr>
<tr>
<td>MBTA Subway Map</td>
<td>208</td>
</tr>
<tr>
<td>Mid-Year Admission</td>
<td>14</td>
</tr>
<tr>
<td>Mission Statements</td>
<td>7</td>
</tr>
<tr>
<td>Multi-Purpose, Multi-Media Language Lab</td>
<td>38</td>
</tr>
<tr>
<td>Non-Degree Students</td>
<td>14</td>
</tr>
<tr>
<td>Online Services</td>
<td>47</td>
</tr>
<tr>
<td>Outstanding Financial Obligations</td>
<td>24</td>
</tr>
<tr>
<td>Parking</td>
<td>51</td>
</tr>
<tr>
<td>Payment</td>
<td>23</td>
</tr>
<tr>
<td>Prior Learning Assessment (PLA)</td>
<td>37</td>
</tr>
<tr>
<td>Program Changes</td>
<td>43</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>15</td>
</tr>
<tr>
<td>Programs of Study</td>
<td>54</td>
</tr>
<tr>
<td>Progress Reports</td>
<td>43</td>
</tr>
<tr>
<td>Public Transportation</td>
<td>51, 205</td>
</tr>
<tr>
<td>Quality Point System</td>
<td>42</td>
</tr>
<tr>
<td>Readmission Policy</td>
<td>14</td>
</tr>
<tr>
<td>Refund Policy</td>
<td>24</td>
</tr>
<tr>
<td>Repeating a Course</td>
<td>43</td>
</tr>
<tr>
<td>Residency Tuition</td>
<td>23</td>
</tr>
<tr>
<td>Revere Satellite</td>
<td>12</td>
</tr>
<tr>
<td>Satisfactory Academic Progress</td>
<td>43</td>
</tr>
<tr>
<td>Scholarships &amp; Awards</td>
<td>28-31</td>
</tr>
<tr>
<td>Security</td>
<td>51</td>
</tr>
<tr>
<td>Sexual Harassment</td>
<td>46</td>
</tr>
<tr>
<td>Somerville Satellite</td>
<td>12</td>
</tr>
<tr>
<td>SORI - Sexual Offender</td>
<td></td>
</tr>
<tr>
<td>Registry Information</td>
<td>15</td>
</tr>
<tr>
<td>South End Satellite</td>
<td>12</td>
</tr>
<tr>
<td>Special Cost Courses</td>
<td>23</td>
</tr>
<tr>
<td>Statement on Inclusion</td>
<td>8</td>
</tr>
<tr>
<td>Student Activities and Athletics</td>
<td>50</td>
</tr>
<tr>
<td>Student Clubs and Organizations</td>
<td>50-51</td>
</tr>
<tr>
<td>Student Handbook</td>
<td>51</td>
</tr>
<tr>
<td>Student Learning Outcomes</td>
<td></td>
</tr>
<tr>
<td>Assessment Program (SLOAP)</td>
<td>54</td>
</tr>
<tr>
<td>Student Lounges</td>
<td>11, 51</td>
</tr>
<tr>
<td>Student Right-To-Know</td>
<td>46</td>
</tr>
<tr>
<td>Student Success Program</td>
<td>36</td>
</tr>
<tr>
<td>Study Abroad Opportunities</td>
<td>31, 32</td>
</tr>
<tr>
<td>Suspension</td>
<td>44</td>
</tr>
<tr>
<td>Tech Prep</td>
<td>21</td>
</tr>
<tr>
<td>Technology Support/ Academic Computing</td>
<td>36</td>
</tr>
<tr>
<td>Television Courses, Interactive</td>
<td>39</td>
</tr>
<tr>
<td>Transfer Applicants</td>
<td>14</td>
</tr>
<tr>
<td>Transfer Counseling</td>
<td>48</td>
</tr>
<tr>
<td>Transfer Information</td>
<td>20, 33</td>
</tr>
<tr>
<td>Tuition Advantage Program</td>
<td>15</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>22</td>
</tr>
<tr>
<td>Tuition Waivers</td>
<td>24</td>
</tr>
<tr>
<td>Tutoring &amp; Academic Support Center (TASC)</td>
<td>11, 35</td>
</tr>
<tr>
<td>Veterans’ Benefits</td>
<td>24</td>
</tr>
<tr>
<td>Weekend College</td>
<td>39</td>
</tr>
<tr>
<td>Withdrawal from the College</td>
<td>25, 44</td>
</tr>
<tr>
<td>Withdrawal from a Course</td>
<td>44</td>
</tr>
<tr>
<td>Workforce Development Center</td>
<td>184</td>
</tr>
<tr>
<td>Writing Place</td>
<td>36</td>
</tr>
</tbody>
</table>
## Associate Degree and Certificate Programs

Academic programs offered by BHCC begin on page 56. They are organized alphabetically by academic subject. Below is a listing of all academic programs organized alphabetically by degree. Refer to the page number listed below for the program of interest. *Refer to this fold-out section at the back of this publication for General Education Requirements and Elective Courses.*

### Associate in Arts Degrees*

<table>
<thead>
<tr>
<th>GRID #</th>
<th>PROGRAM</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Business Concentration</td>
<td>56</td>
</tr>
<tr>
<td>74</td>
<td>Chemical Science Concentration</td>
<td>132</td>
</tr>
<tr>
<td>10</td>
<td>Communication Concentration</td>
<td>65</td>
</tr>
<tr>
<td>11</td>
<td>Computer Information Systems Concentration</td>
<td>66</td>
</tr>
<tr>
<td>12</td>
<td>Computer Science Concentration</td>
<td>67</td>
</tr>
<tr>
<td>31</td>
<td>Education Concentration</td>
<td>85</td>
</tr>
<tr>
<td>35</td>
<td>English Concentration</td>
<td>89</td>
</tr>
<tr>
<td>77</td>
<td>Fine Arts Concentration</td>
<td>135</td>
</tr>
<tr>
<td>37</td>
<td>Foreign Language Concentration</td>
<td>91</td>
</tr>
<tr>
<td>38</td>
<td>General Concentration</td>
<td>92</td>
</tr>
<tr>
<td>56</td>
<td>History and Government Concentration</td>
<td>112</td>
</tr>
<tr>
<td>64</td>
<td>Mathematics Concentration</td>
<td>121</td>
</tr>
<tr>
<td>65</td>
<td>Music Concentration</td>
<td>122</td>
</tr>
<tr>
<td>70</td>
<td>Physics/Engineering Concentration</td>
<td>128</td>
</tr>
<tr>
<td>71</td>
<td>Psychology Concentration</td>
<td>129</td>
</tr>
<tr>
<td>75</td>
<td>Sociology Concentration</td>
<td>133</td>
</tr>
<tr>
<td>76</td>
<td>Theatre Concentration</td>
<td>134</td>
</tr>
<tr>
<td>57</td>
<td>World Studies Emphasis*</td>
<td>114</td>
</tr>
</tbody>
</table>

*Students enrolling in any A.A. degree program can earn World Studies Emphasis certification simultaneously.*

### Associate in Science Degrees

<table>
<thead>
<tr>
<th>GRID #</th>
<th>PROGRAM</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>Biological Science Program</td>
<td>130</td>
</tr>
<tr>
<td>73</td>
<td>Biotechnology Option</td>
<td>131</td>
</tr>
<tr>
<td>2</td>
<td>Business Administration Program</td>
<td>57</td>
</tr>
<tr>
<td>3</td>
<td>Finance Option</td>
<td>58</td>
</tr>
<tr>
<td>4</td>
<td>International Business Option</td>
<td>59</td>
</tr>
<tr>
<td>5</td>
<td>Management Option</td>
<td>60</td>
</tr>
<tr>
<td>13</td>
<td>Computer Information Technology</td>
<td>68</td>
</tr>
<tr>
<td>14</td>
<td>Computer Science Transfer Option</td>
<td>68</td>
</tr>
<tr>
<td>15</td>
<td>Database Programming and Administration Option</td>
<td>69</td>
</tr>
</tbody>
</table>

### Computers: Information Technology for Business and Industry

<table>
<thead>
<tr>
<th>GRID #</th>
<th>PROGRAM</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Computer Support Specialist Option</td>
<td>73</td>
</tr>
<tr>
<td>20</td>
<td>Network Technology and Administration Option</td>
<td>74</td>
</tr>
<tr>
<td>21</td>
<td>Web Development Option</td>
<td>75</td>
</tr>
<tr>
<td>25</td>
<td>Criminal Justice Program</td>
<td>79</td>
</tr>
<tr>
<td>27</td>
<td>Culinary Arts Program</td>
<td>81</td>
</tr>
<tr>
<td>29</td>
<td>Early Childhood Development Program</td>
<td>83</td>
</tr>
<tr>
<td>32</td>
<td>Electric Power Utility Program</td>
<td>86</td>
</tr>
<tr>
<td>33</td>
<td>Biomedical Engineering Option</td>
<td>87</td>
</tr>
<tr>
<td>34</td>
<td>Engineering Transfer Option</td>
<td>88</td>
</tr>
<tr>
<td>36</td>
<td>Fire Protection and Safety Program</td>
<td>90</td>
</tr>
<tr>
<td>58</td>
<td>Hotel/Restaurant Management Option</td>
<td>115</td>
</tr>
<tr>
<td>59</td>
<td>Travel and Tourism Management Option</td>
<td>116</td>
</tr>
<tr>
<td>61</td>
<td>Human Services Program</td>
<td>118</td>
</tr>
<tr>
<td>39</td>
<td>Cardiac Sonography Option</td>
<td>94</td>
</tr>
<tr>
<td>40</td>
<td>General Sonography Option</td>
<td>95</td>
</tr>
<tr>
<td>41</td>
<td>Medical Radiography Option</td>
<td>96</td>
</tr>
<tr>
<td>42</td>
<td>Medical Radiography Part-time Evening Option</td>
<td>97</td>
</tr>
<tr>
<td>45</td>
<td>Nursing Program</td>
<td>100</td>
</tr>
<tr>
<td>46</td>
<td>Nursing Program: Day/Evening Option</td>
<td>101</td>
</tr>
<tr>
<td>47</td>
<td>Nursing Program: Weekend Option</td>
<td>102</td>
</tr>
<tr>
<td>66</td>
<td>Administrative Information Management Option</td>
<td>124</td>
</tr>
<tr>
<td>67</td>
<td>Medical Information Management Option</td>
<td>125</td>
</tr>
<tr>
<td>48</td>
<td>Pharmacy Technology Program</td>
<td>103</td>
</tr>
<tr>
<td>49</td>
<td>Respiratory Therapy Program</td>
<td>104</td>
</tr>
<tr>
<td>78</td>
<td>Graphic Design Program</td>
<td>136</td>
</tr>
<tr>
<td>79</td>
<td>Media Communications Program</td>
<td>137</td>
</tr>
</tbody>
</table>

### Certificate Programs

<table>
<thead>
<tr>
<th>GRID #</th>
<th>PROGRAM</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Medical Assistant</td>
<td>105</td>
</tr>
<tr>
<td>51</td>
<td>Medical Lab Assistant</td>
<td>107</td>
</tr>
<tr>
<td>52</td>
<td>Patient Care Technician</td>
<td>108</td>
</tr>
<tr>
<td>53</td>
<td>Phlebotomy Technician</td>
<td>109</td>
</tr>
<tr>
<td>6</td>
<td>Accounting Information</td>
<td>61</td>
</tr>
<tr>
<td>7</td>
<td>e-Commerce Marketing Management</td>
<td>82</td>
</tr>
<tr>
<td>8</td>
<td>International Business</td>
<td>83</td>
</tr>
<tr>
<td>9</td>
<td>Paralegal</td>
<td>84</td>
</tr>
<tr>
<td>15</td>
<td>Computer Forensics</td>
<td>70</td>
</tr>
<tr>
<td>16</td>
<td>Database Programming and Administration</td>
<td>71</td>
</tr>
<tr>
<td>17</td>
<td>Excel Applications Support Specialist</td>
<td>71</td>
</tr>
<tr>
<td>18</td>
<td>Object Oriented Computer Programming and Design</td>
<td>72</td>
</tr>
<tr>
<td>22</td>
<td>Computer Support Specialist</td>
<td>76</td>
</tr>
<tr>
<td>23</td>
<td>Network Technology and Administration</td>
<td>77</td>
</tr>
<tr>
<td>24</td>
<td>Web Development</td>
<td>78</td>
</tr>
<tr>
<td>26</td>
<td>Law Enforcement</td>
<td>80</td>
</tr>
<tr>
<td>50</td>
<td>Medical Coding</td>
<td>106</td>
</tr>
<tr>
<td>43</td>
<td>PACS Administration</td>
<td>98</td>
</tr>
<tr>
<td>44</td>
<td>Vascular Sonography</td>
<td>99</td>
</tr>
<tr>
<td>68</td>
<td>Information Management Specialist</td>
<td>126</td>
</tr>
<tr>
<td>69</td>
<td>Medical Information Management Assistant</td>
<td>127</td>
</tr>
<tr>
<td>54</td>
<td>Central Processing (Sterile Processing and Distribution Management)</td>
<td>110</td>
</tr>
<tr>
<td>55</td>
<td>Surgical Technology</td>
<td>111</td>
</tr>
<tr>
<td>60</td>
<td>Travel and Tourism Management</td>
<td>117</td>
</tr>
</tbody>
</table>
Elective Courses

Electives provide students with flexibility in their programs of study. The elective categories help students make choices beyond the required courses for their respective programs. Liberal Arts Electives include not only those categorized as Liberal Arts Electives but also the Science/Lab Science, Social Science and Behavioral Science Electives. Career Electives are courses in the student’s major field or related field approved by the department chair or program coordinator.

<table>
<thead>
<tr>
<th>LIBERAL ARTS ELECTIVES</th>
<th>LAB SCIENCE ELECTIVES</th>
<th>SOCIAL SCIENCE ELECTIVES</th>
<th>BEHAVIORAL SCIENCE ELECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTIVE</td>
<td>DEPARTMENT:</td>
<td>ELECTIVE</td>
<td>DEPARTMENT:</td>
</tr>
<tr>
<td>VMA Art</td>
<td>Communication</td>
<td>PHY Physics</td>
<td>Mathematics &amp; Physics</td>
</tr>
<tr>
<td>VMA Photography</td>
<td>Communication</td>
<td>AST Astronomy</td>
<td>Science</td>
</tr>
<tr>
<td>FLM Film</td>
<td>English</td>
<td>BIO Biology*</td>
<td>Science</td>
</tr>
<tr>
<td>HUM Humanities</td>
<td>English</td>
<td>CHM Chemistry</td>
<td>Science</td>
</tr>
<tr>
<td>LIT Literature</td>
<td>English</td>
<td>ENV Enviro. Science</td>
<td>Science</td>
</tr>
<tr>
<td>ENG English</td>
<td>English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRE French</td>
<td>Foreign Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GER German</td>
<td>Foreign Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITL Italian</td>
<td>Foreign Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS Music</td>
<td>Foreign Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POR Portuguese</td>
<td>Foreign Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPN Spanish</td>
<td>Foreign Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THE Theatre</td>
<td>Foreign Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIS101</td>
<td>History/Gov’t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIS102</td>
<td>History/Gov’t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHL Philosophy</td>
<td>History/Gov’t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HON Honors</td>
<td>Interdisciplinary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT Mathematics</td>
<td>Mathematics &amp; Physics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*BIO111 does not qualify as a Lab Science Elective
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. & Politics in US  PSY131 Psychology of Popular Culture
GOV103 State & Local Politics  SOC101 Principles of Sociology
PSY101 Principles of Psychology  SOC109 Cultural Anthropology
PSY107 Group Dynamics

REQUIREMENT 3: World View
This requirement area involves a study of social, cultural, economic, ethical and political issues from a historical and global perspective. The modern global system is examined in the context of the significant forces, places and events which have, over time, determined the course and development of modern civilization. Students will learn to understand and appreciate diverse perspectives in order to critically evaluate potential resolutions to conflicts in our multicultural world.

Area 3:
ECO201 Macroeconomics  HIS151 US History I
ECO202 Microeconomics  HIS152 US History II
GEO101 World Regional Geography  VMA111 Intro to Mass Media
HIS102 History of Western Civ II  PHL111 World Religions
HIS111 World Civilization I  PHL113 Religions of Middle East
HIS112 World Civilization II

REQUIREMENT 4: Quantitative Thought
In this requirement area, students will apply computational methods, generate 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:
MAT171 Finite Math  MAT181 Statistics I
MAT172 Contemporary Math I  MAT183 Statistics and Lab
MAT173 Contemporary Math II  MAT195 College Algebra

REQUIREMENT 5: Science and Technology
In this requirement area, students will use scientific methods of inquiry to investigate the ideas, laws, and theories used to explain the physical universe, its life forms and its natural phenomena. Students will study the interrelationships between science and technology and how advances in science and technology have impacted the global community, the environment, and the quality of life.

Area 5:
AST102 Astronomy/Lab  BIO120 Intro to Biotechnology
BIO101 Principles of Biology I/Lab  BIO195 General Biology I/Lab
BIO108 Human Biology/Lab  ENV105 Environmental Science I/Lab
BIO115 Nutrition Science/Lab

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, aesthetic, moral, spiritual and philosophical dimensions of the human condition.

Area 6:
FLM101 Film as Art  VMA104 Drawing I
FLM102 American Cinema  VMA112 Art History I
HUM110 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 & Roll History  VMA161 Intro to Digital Photography
THE107 Acting I  All 102 Level Language Courses
Publication Design:
Caryn Hirsch, Director of Graphic Design and Creative Services
Simeen Brown, Coordinator of College Graphics

Photographers:
Ian W. Churchill, Web and eMarketing Manager
Mario Elias, Coordinator of Instructional Support/Distance Education
Ruth J. Goodwin, Graphic Arts Technician
Nicholas B. Parkas, Special Programs Coordinator
Bill Horsman, Claude M. Jaynes

Content Contributors:
Charles Abasa-Nyarko, Molly B. Ambrose, Carolyn R. Assa, Janice M. Bonanno, Richard W. Boulware, Debra A. Boyer, Jeanne-Marie Boylan,
Joan H. Brenner, Becky K. Briggs, Anne K. Brown, Judith D. Burnett, Richard H. Chiasson, Mark A. Diamond, Emily Dibble, David N. Dow,
Mary L. Fifield, Robert Flynn, Mary Folan, Sandra L. Gaeta, Ruth J. Goodwin, Judith A. Graham, Pelonomi K. Khomoetsile-Taylor, Linda J. King,
Daniel M. Lam, Beverly M. Lewis, Judy Lindamood, Andrea Lyons, Shirley A. MacKenzie, Alessandro G. Massaro, Timothy M. McLaughlin,
R. Michael McSweeney, Roxanne E. Mihal, S. Leonard Mhlaba, James W. Miller, Donna M. Misrati, Paul E. Moda, Laura L. Montgomery,
Jimmie Roberts, Kalimah A. Nur, Elena M. O'Leary, Kevin Pallister, Michael T. Puopolo, John P. Reeves, Jane S. Roman, Margaret O. Rubino,
William T. Sakamoto, Lucius A. Salisbury III, Diane M. Smith, Robert L. Steeper, Susan M. Sullivan, Vilma M. Tafawa, Weusi A. Tafawa,
Jesse M. Thompson, Susan L. Walling, Deborah A. Walsh, Les E. Warren, Kevin Wery, Deborah J. Westaway, Bogusia Wojciechowska.

Accreditation Statements:
Bunker Hill Community College is accredited by the New England Association of Schools and Colleges, Inc., through its Commission on
Institutions of Higher Education. Inquiries regarding accreditation status by the New England Association should be directed to the
administrative staff of the institution. Individuals may also contact: Commission on Institutions of Higher Education, New England Association
of Schools and Colleges, 209 Burlington Road, Bedford, MA 01730-1433 (telephone: 781-271-0022; fax: 781-271-0950; e-mail: che@neasc.org;
URL: http://www.neasc.org).

The Nursing Program is accredited by the National League for Nursing Accrediting Commission (N.L.N.A.C.), 61 Broadway, 33rd Floor, New York,
NY 10006 (telephone: 212-363-5555, ext. 153; fax: 212-812-0390; e-mail: nlnac@nlnac.org; URL: http://www.nlnac.org) and approved by the
Massachusetts Board of Registration in Nursing, 239 Causeway Street, Suite 500, 5th Floor, Boston, MA 02114 (telephone: 617-973-0800;
fax: 1-800-414-0168; URL: http://www.state.ma.us/reg/boards/nnr/).

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

The Surgical Technology Program, General Sonography Program, Cardiac Sonography Program, and the Respiratory Therapy Program are
accredited by the Commission on Accreditation of Allied Health Education Programs (C.A.A.H.E.P.), 35 East Wacker Drive, Suite 700,
Chicago, IL 60601-2208 (telephone: 312-553-9355; fax: 312-553-9616; e-mail: caahep@caahep.org; URL: http://www.CAAHEP.org).
Committee on Accreditation for Respiratory Care, (C.O.A.R.C.), 1248 Harwood Road, Bedford, TX 76021 (telephone: 817-283-2835;
fax: 817-354-8519. The Certified Nurse Assistant Program is accredited by the Massachusetts Department of Public Health, Nurse Aide Registry,
MDPH/Division of Health Care Quality, 10 West Street, 5th Floor, Boston, MA 02111-1212 (telephone: 617-753-8144; fax: 617-753-8096;
URL: http://www.state.ma.us/dph/).

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.
Charlestown Campus
Chelsea Campus
Cambridge Satellite
East Boston Satellite
Revere Satellite
Somerville Satellite
South End Satellite

www.bhcc.mass.edu