

BHCC 2002-2003 *College Catalog*

3002-2002

**bunker hill
community
college**

catalog

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 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.*

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1 Associate in Arts Degree: Business Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3	Fulfilled			
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				19	
Concentration Courses:					
Introduction to Business	BUS101	Must be taken first semester		3	
Principles of Accounting I	ACC101			3	
Principles of Psychology	PSY101			3	
Principles of Management	MAN111			3	BUS101
Applications/Concepts	CMP105			3	
Principles of Marketing	MAN105			3	
Macroeconomics	ECO201			3	RDG095, MAT095 or placement
Principles of Accounting II	ACC102			3	ACC101
Microeconomics	ECO202			3	RDG095, MAT095 or placement
Calculus for Management Science	MAT231			4	MAT195
Behavioral Science Elective				3	
Lab Science Elective				4	
Literature Elective				3	ENG095 or ENG111 placement
Literature Elective				3	ENG095 or ENG111 placement
				44	
TOTAL CREDITS				63	

CONCENTRATION OVERVIEW

This concentration is designed and recommended for students who plan to transfer to an upper-level college or university and major in business administration. A bachelor's degree will enhance the competitive status of the student for entry into business-related fields, and graduate work may be of interest as well. Transfer articulation agreements have been reached with many four-year academic institutions in the area; students are encouraged to consult with their advisors.

CAREER OUTLOOK

This concentration, which meets all the requirements of the Commonwealth Transfer Compact, prepares students to transfer to a bachelor's degree-granting college or university as a junior. Potential careers which will vary depending upon the chosen major include: accounting, mid-level management, banking, finance, and insurance. A bachelor's degree is the minimum requirement for entry into these fields, and additional 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.
- Examine management theory and practice and be able to explain basic business methodology and application.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

Associate in Science Degree: Business Administration Program

This program is designed to prepare students for employment and also to enhance the transition of students who wish to pursue upper-level degrees. Transfer articulation agreements have been reached with many of the four-year colleges and universities in the area; students are encouraged to meet with their advisors. A concerted effort will be made to demonstrate how the subject matter relates to the cultures of our diversified student population. Emphasis will be placed on student participation and creating an interactive forum in which to learn.

The Business Administration Department offers five academic options in areas that are in demand, placing our graduates in a competitive state when seeking employment or transferring to an upper-level academic institution. Students will be qualified for entry-level positions within their areas of concentration. Options include: Accounting, International Business, Finance, Management, and Retail Management.

2 Accounting Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Principles of Accounting I	ACC101			3	
Principles of Management	MAN111			3	
College Writing I	ENG111			3	ENG095 or placement
Business Law	BUS201			3	
Principles of Accounting II	ACC102			3	ACC101
Applications/Concepts	CMP105			3	
College Writing II	ENG112			3	ENG111
Organizational Behavior/Design	MAN112	Fall		3	MAN111
Quantitative Thought	From Menu 5			3	MAT095 or placement
Principles of Marketing	MAN105			3	
Career Elective				3	
Intermediate Accounting I	ACC201	Fall		3	ACC102
Modern Civilization	From Menu 4			3	
Federal Income Tax I	ACC203	Fall		3	ACC102
Cost Accounting I	ACC207	Fall		3	ACC102
Scientific View of the World	From Menu 6			4	
Intermediate Accounting II	ACC202	Spring		3	ACC201
Creative Exploration	From Menu 7			3	
Volunteer Income Tax Assistance	ACC205	Spring		3	ACC203
Managerial Accounting I	ACC216	Spring		3	ACC207
TOTAL CREDITS				61	

OPTION OVERVIEW

Computerized applications will be introduced early in the sequence of courses, exposing students to accounting software that is readily used in industry. The Volunteer Income Tax Assistance component of this option allows students the opportunity to interface with the public, preparing tax returns for interested members of the community.

CAREER OUTLOOK

This option is designed to provide students with the necessary skills to enter the workforce at the entry-level in the accounting profession.

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

- Understand all of the variables that are relevant to preparing individual tax returns at 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 a corporation.
- Analyze a set of financial statements to determine the strength or weakness of the business.
- Understand the importance of cash flow within a business and be able to account for its use and source in evaluating the effectiveness of managerial decisions.

3 Finance Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Introduction to Business	BUS101			3	
Principles of Accounting I	ACC101			3	
Applications/Concepts	CMP105			3	
College Writing I	ENG111			3	ENG095 or placement
Quantitative Thought	From Menu 5			3	MAT095 or placement
Principles of Management	MAN111			3	BUS101
Real Estate Law or Estates and Trusts	BUS120 BUS121	Spring		3	
College Writing II	ENG112			3	ENG111
Principles of Accounting II	ACC102			3	ACC101
Oral Communication	ENG171			3	
Macroeconomics	ECO201			3	RDG095, MAT095 or placement
Scientific View of the World	From Menu 6			4	
Investments	ACC111	Spring		3	
Personal Finance	ACC112	Fall		3	
Organizational Behavior & Design	MAN112	Fall		3	MAN111
Microeconomics	ECO202			3	RDG095, MAT095 or placement
Financial Management	ACC210	Spring		3	ACC102
Creative Exploration	From Menu 7			3	
Money and Banking	ACC211	Spring		3	ECO201, ECO202
Mutual Funds Industry	MAN213	Fall		3	ACC102, ACC111
TOTAL CREDITS				61	

OPTION OVERVIEW

This option provides general workforce skills and specialized educational training for entry-level positions in the areas of financial services, investment banking, financial planning, budgeting, and administration.

CAREER OUTLOOK

The option is designed to prepare students 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 strength or weakness 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

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Principles of Accounting I	ACC101			3	
Applications/Concepts	CMP105			3	
College Writing I	ENG111			3	ENG095 or placement
Macroeconomics	ECO201			3	RDG095, MAT095 or placement
Principles of Marketing	MAN105			3	
Principles of Management	MAN111			3	
College Writing II	ENG112			3	ENG111
Quantitative Thought	From Menu 5			3	MAT095 or placement
Business Law	BUS201			3	
Microeconomics	ECO202			3	RDG095, MAT095 or placement
Principles of Accounting II	ACC102			3	ACC101
Scientific View of the World	From Menu 6			4	
Career Elective				3	
International Business	BUS106	Fall		3	ECO201 or ECO202
International Marketing	MAN106	Spring		3	MAN105
Liberal Arts Elective				3	
Cultural Anthropology	SOC109			3	
Creative Exploration	From Menu 7			3	
Money and Banking	ACC211	Spring		3	ECO201, ECO202
Career Elective				3	
TOTAL CREDITS				61	

OPTION OVERVIEW

This option is designed to introduce the principles and concepts of international business operations. Students will examine the significance of a global marketplace impacted by the diverse cultural, political, and legal environments that interface in a dynamic manner. Articulation agreements have been signed with many of the four-year colleges and universities in the area, allowing students an opportunity to transfer in this option. Students are advised to speak with the chairperson of the department for specific information.

CAREER OUTLOOK

Students are encouraged to seek employment with a business conducting international operations that will satisfy 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.

5 Management Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Introduction to Business	BUS101	First semester		3	
Principles of Accounting I	ACC101			3	
College Writing I	ENG111			3	ENG095 or placement
Principles of Marketing	MAN105			3	
Business Law	BUS201			3	
Principles of Management	MAN111			3	BUS101
Principles of Accounting II	ACC102			3	ACC101
College Writing II	ENG112			3	ENG111
Quantitative Thought	From Menu 5			3	MAT095 or placement
Organizational Behavior/Design	MAN112	Fall		3	MAN111
Liberal Arts Elective				3	
Applications/Concepts	CMP105			3	
Macroeconomics	ECO201			3	RDG095, MAT095 or placement
Career Elective				3	
Scientific View of the World	From Menu 6			4	
Career Elective				3	
Creative Exploration	From Menu 7			3	
Financial Management	ACC210	Spring		3	ACC102
Management Seminar	MAN201	Spring		3	MAN111
Career Elective				3	
TOTAL CREDITS				61	

OPTION OVERVIEW

This option is designed to provide students with a solid foundation of managerial principles and concepts that are readily practiced in business. A major focus in the upper-level management courses will be the utilization of the case study approach, allowing students an opportunity to analyze realistic management problems and to make the appropriate recommendations to solve them. Articulation agreements have been signed with many of the four-year colleges and universities in the area, allowing students an opportunity to transfer in this option. Students are advised to speak with the chairperson of the department for specific information.

CAREER OUTLOOK

Students will learn the necessary skills 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 or to resolve conflicts.

6 Accounting Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Accounting I	ACC101			3	
Accounting II	ACC102			3	ACC101
Principles of Management	MAN111			3	
Topics in Career Math	MAT100			3	MAT090 or placement
Intermediate Accounting I	ACC201			3	ACC102
Intermediate Accounting II	ACC202			3	ACC201
TOTAL CREDITS				18	

PROGRAM OVERVIEW

This certificate program is directed at students who feel that a degree program is not a consideration and is intended to prepare 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). This program is also intended to prepare students who are currently employed performing the functions of a bookkeeper and having the desire to enhance their opportunity for growth.

CAREER OUTLOOK

Graduates of this certificate can anticipate qualifying for entry-level accounting or advanced bookkeeping positions. Students may also transfer the courses into the Accounting Option.

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

- Prepare and interpret financial statements, bank reconciliations, and a record a variety of business transactions.
- Understand the nature of receivables, payables, and inventory.
- Understand the depreciation of property, plant, and equipment assets.
- Understand cash vs. accrual accounting.

7 Computer-based Accounting Systems Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Accounting I	ACC101			3	
Accounting II	ACC102			3	ACC101
Peachtree Accounting	ACC105	Spring		3	ACC101; ENG095 & RDG095 or placement
Financial Management	ACC210	Spring		3	ACC101, ACC102
Applications/Concepts or Intro to MS Office	CMP105 CMP133			3	
Systems Analysis/Design	CMP211	Fall		3	CMP105 or permission
Decision Support Using MS Excel	CMP234			3	CMP105 or CMP133
Statistics I	MAT181 or 183			3 - 4	MAT095 or placement
TOTAL CREDITS				24 - 25	

PROGRAM OVERVIEW

This advanced certificate is directed to students who wish to gain technical accounting training. This certificate combines financial accounting and technology training to provide graduates with skills that are directly transferable to the workplace.

CAREER OUTLOOK

Graduates of this program can anticipate qualifying for billing, accounting, or advanced bookkeeping positions that use technology to process accounting data. Students may also transfer the courses into the Management Option in the Associate in Science Business Administration Program.

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

- 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 to ending entries that are necessary to ready the books for the period-ending financial statements.
- Prepare and evaluate financial statements and process and maintain computerized records, accounts, and information.
- Analyze and evaluate revenues, expenses, cash flows, and behavior of cost.
- Identify and describe tools and techniques available for system design and analysis.
- Assay and measure a firm's financial performance and operating efficiency.

8 e-Commerce Marketing Management Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Introduction to Business	BUS101			3	
The Internet	CMP117			3	
Principles of Accounting I	ACC101			3	
Peachtree Accounting	ACC105	Spring		3	ACC101; ENG095 & RDG095 or placement
Principles of Marketing	MAN105			3	BUS101 or concurrent
E-Commerce Marketing Mgmt.	MAN217	Fall		3	MAN105
Project Management	MAN215	Fall		3	MAT095; CMP117
Business Decision Analysis	BUS204	Spring		3	ACC101; CMP117
TOTAL CREDITS				24	

PROGRAM OVERVIEW

The core courses for this certificate program lead students, step-by-step, to an understanding of the business, marketing, and technical issues that drive e-commerce. This certificate provides students with the principles, skills, and knowledge needed in dealing within a small business administration environment. The program provides exposure and hands-on practice on e-commerce marketing, computerized accounting, and business computer applications. Students also develop a strong capacity for decision-making, problem solving, and the ability to organize and manage e-commerce projects effectively.

CAREER OUTLOOK

Graduates of this certificate qualify for entry-level positions dealing with e-commerce projects. All of the credits earned in this certificate can be applied to the Associate in Science degree in Business Administration, Management Option.

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

- Identify how 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.

9 International Business Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
International Business	BUS106	Fall		3	ECO201, 202
Cultural Anthropology	SOC109			3	
Foreign Language I				3	
Foreign Language II				3	
International Marketing	MAN106	Spring		3	MAN105
Courses from Pool (4)				12	
TOTAL CREDITS				27	
THE POOL OF ELECTIVES:					
Export/Import Process	BUS108			3	BUS106
International Business Technology	BUS110			3	CMP105
International Finance	ACC214			3	BUS106, MAT090
Freight Forwarding	BUS112			3	BUS106
International Business Issues	BUS114			3	BUS106
Business Internship	MAN205			3	Chair approval

PROGRAM OVERVIEW

This certificate program is designed for students who are already employed in a business environment and are interested in adding an international dimension to their area of expertise. All students are required to take International Business and International Marketing and are offered the flexibility to choose any four courses from the pool of electives. These choices provide students with a unique opportunity to custom design their curriculum in order to accomplish their educational objectives. Students need to be aware that there are entrance requirements for this certificate in the areas of English, mathematics, and reading.

CAREER OUTLOOK

Students completing this certificate are eligible for entry-level positions in various fields in international business or for continuation in a degree program.

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

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

10 Paralegal Certificate Program

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

PROGRAM OVERVIEW

The Paralegal Certificate Program is designed to introduce students to paralegal practice and procedures. Students will develop paralegal skills and knowledge which will enable them to assist lawyers in conducting research and preparing legal documents.

CAREER OUTLOOK

This certificate program prepares students for careers as a paralegal in law firms, finance, insurance, real estate companies, and government agencies. Completion of this certificate is an advantage in this highly competitive field.

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

- Understand the dynamic 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.

11 Associate in Arts Degree: Communication Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				22	
CONCENTRATION COURSES:					
Journalism I	ENG241			3	ENG095 or placement in ENG111
Mathematics Electives				3	MAT095 or placement
Lab Science Elective				4	
Behavioral Science Elective				3	
Social Science Elective				3	
Elective				3	
Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Literature Elective				3	ENG095 or placement in ENG111
Courses from Pool (4)				12	
				40	
TOTAL CREDITS				62	
THE POOL OF ELECTIVES:					
Principles of Advertising	BUS225			3	
Applications/Concepts	CMP105			3	
Film as Art	FLM101			3	
Oral Communication	ENG171			3	
Intro to Desktop Publishing	GVD220			3	
Introduction to Mass Media	MDT111			3	
Multimedia Tools/Applications	MDT131			3	
Journalism II	ENG242			3	ENG095 or placement in ENG111

A two-semester foreign language sequence is recommended.

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW

This concentration offers a sequence of courses designed for students who plan to transfer to a four-year college or university to major in journalism or media communications. The sequence meets the requirements of the Commonwealth Transfer Compact.

CAREER OUTLOOK

Students who complete this concentration will be prepared to transfer to institutions 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; additional graduate work may be necessary.

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 a specific market, such as news stories, as well as traditional academic papers.
- Use a computer to compose and edit papers and to conduct Internet research.
- Demonstrate proficiency in critical thinking.
- Understand the dynamic of communication in a global context.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

12 Associate in Science Degree: Graphic Art and Visual Communication Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Typography	GVD103	Fall		3	
Intro to Desktop Publishing	GVD220			3	CMP105 or computer experience
Drawing I	ART109			3	
Color and Design I	GVD101	Fall		3	
College Writing I	ENG111			3	ENG095 or placement
Quantitative Thought	MAT100 or Menu 5			3	MAT090 or placement
Color and Design II	GVD102	Spring		3	GVD101
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Multimedia Applications	MDT131			3	
Graphic Design Applications I	GVD221			3	GVD220
Graphic Design Applications II	GVD222	Spring		3	GVD221
Design Communication I	GVD204	Fall		3	GVD103, GVD220
Design Communication II	GVD214	Spring		3	GVD204
Publication Design	GVD207	Spring		3	GVD204
Design for the World-Wide Web	GVD224			3	GVD220 or MDT131 or CMP208
Introduction to Mass Media	MDT111			3	
Scientific View of the World	From Menu 6			4	
Internship/Portfolio Preparation	GVD216	Spring		3	GVD214
Career Elective				3	
TOTAL CREDITS				61	

Students placing in MAT courses numbering above 100 must enroll into the course in which they placed.

PROGRAM OVERVIEW

The curriculum 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 also take elective courses in options other than their own, as scheduling permits. Courses are offered sequentially and most must be taken in the appropriate semester.

CAREER OUTLOOK

Job opportunities are many and varied in such areas as advertising, communications, marketing, packaging, publishing, and in companies using printed matter 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.
- Understand paper, finishing, printing processes, and the distribution or delivery process.

13 Associate in Science Degree: Media Technology Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Introduction to Mass Media	MDT111			3	
Elements of Video Production	MDT121			3	
Multimedia Tools/Applications	MDT131			3	
Survey of Photography	PHT110	Fall		3	
Quantitative Thought	MAT100 or Menu 5			3	MAT090 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
TV Studio Production	MDT222	Spring		3	MDT121
Basic Audio Production	MDT201	Fall		3	
Digital Video Field Production	MDT223	Fall		3	MDT121, coreq MDT225
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
Media Project Management	MDT122	Fall		3	
Intermediate Audio Production	MDT202	Spring		3	MDT201
Media Internship	MDT216			3	permission
Projects/Video Production	MDT224	Spring		3	MDT222 or MDT223
Intro to Desktop Publishing	GVD220			3	
Digital Video Post Production	MDT225	Fall		3	MDT121, coreq MDT223
Career Elective				3	
TOTAL CREDITS				61	

Career Electives may be any non-required MDT, GVD, PHT course, LIT, ART or THE. Students placing in MAT courses numbering above 100 must enroll in the course in which they placed.

PROGRAM OVERVIEW

This program offers hands-on training in the most widely used mass communications media — video, audio, still photography, and computer-based media. By participating in actual production situations, students develop practical skills in laboratory courses surveying the techniques and approaches of the major media. Courses in theory, organization, and applications complement the lab courses. In addition to basic program requirements, candidates participate in an internship in a commercial setting and take a course in career-related electives appropriate to their career goals.

CAREER OUTLOOK

Students may continue their education in programs leading to a bachelor's degree; BHCC maintains articulation agreements with several four-year colleges. Graduates may also find 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.

14 Associate in Arts: Computer Science Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5	Fulfilled			MAT095 or placement
Scientific View of the World	From Menu 6	Fulfilled			
Creative Exploration	From Menu 7			3	
				15	
CONCENTRATION COURSES:					
Precalculus	MAT197			4	MAT195 or placement
Intro to Computer Science	CMP115			3	
C++ Programming	CMP237			3	MAT197 or MAT193; CMP115 or any programming language
Data Structures	CMP242			3	CMP237
Assembly Language	CMP272	Fall		3	CMP237
Calculus I	MAT281			4	MAT196 or MAT197
College Physics I/Lab	PHY251			4	MAT281 or concurrently
Calculus II	MAT282			4	MAT281
Linear Algebra	MAT291			3	MAT282 or concurrently
College Physics II/Lab	PHY252			4	PHY251, MAT282 or concurrently
Behavioral Science Elective				3	
Social Science Elective				3	
Literature				3	ENG095 or ENG111 placement
Literature				3	ENG095 or ENG111 placement
				47	
TOTAL CREDITS				62	

It is recommended that a college-level math course be taken before or concurrently with CMP115.

CONCENTRATION OVERVIEW

This concentration is designed and recommended for students who plan to transfer to a four-year college or university and major in computer science. Students considering this major should note the strong mathematics requirement.

CAREER OUTLOOK

This concentration, which meets all the requirements of the Commonwealth Transfer Compact, prepares students to transfer to a four-year college or university as a junior. Potential careers in computer science include: systems programmers, applications programmers, and data communications specialists.

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 Assembly code and embed it in C code and vice versa.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

15 Associate in Arts: Computer Information Systems Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4	Fulfilled			
Quantitative Thought	From Menu 5	Fulfilled			MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				16	
CONCENTRATION COURSES:					
Applications/Concepts	CMP105*			3	
Principles of Accounting I	ACC101			3	
Precalculus or Topics in Algebra/Trigonometry	MAT197 or MAT193			3 - 4	MAT195 or placement
Systems Analysis/Design	CMP211	Fall		3	CMP105 or CMP115
C++ Programming	CMP237			3	MAT197 or MAT193; CMP115 or any programming language
Computer Elective**	CMP			3	
Computer Elective**	CMP			3	
Mathematics Elective	MAT			3	
Principles of Accounting II	ACC102			3	ACC101
Microeconomics	ECO202			3	ENG095, MAT095 or placement
Literature				3	ENG095 or placement in ENG111
Macroeconomics	ECO201			3	
Behavioral Science Elective				3	
Lab Science Elective				4	
Literature				3	ENG095 or placement in ENG111
				46 - 47	
TOTAL CREDITS				62 - 63	

CONCENTRATION OVERVIEW

This concentration is designed and recommended for students who plan to transfer to a four-year college or university and major in computer information systems. The program combines both business and computer-related courses that today's businesses demand from their employees. Excellent communication skills are required.

CAREER OUTLOOK

This concentration, which meets all the requirements of the Commonwealth Transfer Compact, prepares students to transfer to a four-year college or university as juniors. Potential job opportunities include systems analyst, business analyst, and data base administrator.

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 is also available through the Weekend College Program.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

* This course may be replaced with CMP115 with departmental permission.

** Recommended computer electives: CMP115, CMP162, CMP165, CMP182, CMP216, CMP 242, CMP268, CMP272, CMP284.

Associate in Science Degree: Computer Technology Program

This program is designed to provide students with entry-level skills in various computer concentrations. Students are required to take the core courses and a cluster of three courses in specific concentrations. Students may also choose two elective courses from relevant disciplines within the college.

Graduates from this program will be qualified for entry-level positions in many businesses and work environments currently relying on network functions.

An elective may be an internship or service learning opportunity.

16 Computer Technology Program Core Curriculum

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Applications/Concepts	CMP105*			3	
College Writing I	ENG111			3	ENG095 or placement
Individual/Society	From Menu 3			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
College Writing II	ENG112			3	ENG111
Introduction to Networks	CMP162			3	CMP105 or CMP115
The Internet	CMP117			3	
Modern Civilization	From Menu 4			3	
Windows Operating Systems	CMP268			3	CMP105 or CMP115
Systems Analysis/Design	CMP211	Fall		3	CMP105 or CMP115
Creative Exploration	From Menu 7			3	
Scientific View of the World	From Menu 6			4	
Visual Basic	CMP216			3	CMP105 or CMP115
Oral Communications	ENG171			3	
Accounting I	ACC101			3	
Elective				3	
Elective				3	
TOTAL CORE CREDITS				52	

*This course may be replaced with CMP115 with departmental permission. An elective may be an internship or service learning opportunity.

17 Internet Web Design and Programming Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
CORE CURRICULUM				52	
Internet Programming I	CMP208			3	CMP117
Internet Programming II	CMP209			3	CMP208
Design for the World Wide Web	GVD224			3	CMP208 or GVD220 or MDT131
TOTAL CREDITS				61	

OPTION OVERVIEW

This option is designed for students who want to be able to design and create web pages.

CAREER OUTLOOK

This option prepares students for entry-level positions in web site design, programming, and implementation.

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

- Design, create, and maintain a web site that meets the needs of a small business.

OPTION OVERVIEW

This option is designed for students who want to have an in-depth knowledge of the Microsoft Office Applications.

CAREER OUTLOOK

Graduates of this option will be qualified for entry-level microcomputer support positions in a variety of businesses and industries.

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

- Pass the MOUS certification exam.
- Use the complete range of Microsoft applications in the most efficient way.

OPTION OVERVIEW

This option is designed for students who want to be able to create a Visual application on a Windows platform.

CAREER OUTLOOK

This option prepares students to become computer programmers responsible for applications programming in a variety of businesses and industries.

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

- Design, implement, and maintain a customized visual application for a small business.

18 Microsoft Applications Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
CORE CURRICULUM				52	
Intro to MS Office	CMP133			3	
Advanced MS Office	CMP233			3	CMP133
PC Hardware	CMP182			3	CMP105 or CMP115
TOTAL CREDITS				61	

19 Visual Programming Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
CORE CURRICULUM				52	
Intermediate Visual Basic	CMP218			3	CMP216
Visual C++	CMP227			3	CMP218
Intermediate Visual C ++	CMP229			3	CMP227
TOTAL CREDITS				61	

20 Computer Technology Network Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Applications/Concepts	CMP105*			3	
College Writing I	ENG111			3	ENG095 or placement
Individual/Society	From Menu 3			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
College Writing II	ENG112			3	ENG111
Introduction to Networks	CMP162			3	CMP105 or CMP115
PC Hardware	CMP182			3	CMP105 or CMP115
The Internet	CMP117			3	
Modern Civilization	From Menu 4			3	
Windows Operating Systems	CMP268			3	CMP105 or CMP115; take with CMP162
Systems Analysis/Design	CMP211	Fall		3	CMP105 or CMP115
Creative Exploration	From Menu 7			3	
Scientific View of the World	From Menu 6			4	
Visual Basic	CMP216			3	CMP105 or CMP115
Oral Communications	ENG171			3	
Organizational Behavior/Design	MAN112			3	
NetWare Administration/Lab	CMP281			4	CMP162; take with CMP268
Windows NT Administration/Lab	CMP282			4	CMP281
Advance Concepts in Packets, Protocols/Devices	CMP283			3	CMP162
TOTAL CREDITS				60	

*This course may be replaced with CMP115 with departmental permission.

OPTION OVERVIEW

This option is designed for students who want to be able to administer a network using Novel or NT.

CAREER OUTLOOK

This option prepares students to become network administrators responsible for day-to-day network operations. Graduates qualify for entry-level networking positions.

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

- Set up and configure a network.
- Set user accounts and profiles in a way that protects the network's integrity and security.
- Have knowledge of the latest versions of NOS.
- Have knowledge of the latest network protocols.

21 Computer Network Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Applications/Concepts	CMP105*			3	
Windows Operating Systems	CMP268			3	CMP105
Introduction to Networks	CMP162			3	CMP105
NetWare Administration/Lab	CMP281			4	CMP162; take with CMP268
PC Hardware	CMP182			3	CMP105 or CMP115
Windows NT Administration/Lab	CMP282			4	CMP281
Advance Concepts in Packets, Protocols/Devices	CMP283			3	CMP162
TOTAL CREDITS				23	

Certificate prerequisites: MAT195 and ENG111 or placement.

*This course may be replaced with CMP115 with departmental permission.

OPTION OVERVIEW

This option is designed for professionals already working in the computer field who want to be able to administer a network using Novel or NT.

CAREER OUTLOOK

This certificate program is designed for professionals already working in the computer field who wish to increase their system knowledge and work with computer networks. It prepares students to become network administrators responsible for the day-to-day network operations. Graduates qualify for entry-level networking positions.

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

- Set up and configure a network.
- Set user accounts and profiles in a way that protects the network's integrity and security.
- Have knowledge of the last versions of NOS.
- Have knowledge of the latest network protocols.

22 Object Oriented Computer Programming and Design Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Intro to Computer Science	CMP115	Semester I		3	
Precalculus or Topics in Algebra/Trigonometry	MAT197 or MAT193	Semester I		3-4	MAT195 or placement
C++ Programming	CMP237	Semester II		3	MAT197 or MAT193; CMP115 or any programming language
Windows Operating Systems	CMP268	Semester II		3	CMP105
Advanced C++/OOP	CMP284	Semester III		3	CMP237
Programming with Java	CMP239	Semester III		3	CMP237
Data Structures	CMP242	Semester IV		3	CMP237
Advanced Java	CMP285	Semester IV		3	CMP239
TOTAL CREDITS				24-25	

OPTION OVERVIEW

This certificate is designed to give to the students in-depth knowledge of Object-Oriented Programming and Design.

CAREER OUTLOOK

This certificate prepares them to be marketable programmers who can analyze complex problems and successfully and efficiently design and implement a viable solution using any of the most common Object Oriented language as well as run it in any of the most commonly used Operating Systems. Graduates qualify for entry level programming positions.

UPON COMPLETION OF THIS PROGRAM

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 sophisticated and efficient code using the latest Object Oriented Programming languages like C++ and Java.
- Work in both Unix and Windows environments.

Associate in Science Degree: Criminal Justice Program

This program offers students two-year career preparation in the criminal justice field, leading to the Associate in Science degree. There are three options to choose from: Criminal Justice, Corrections, and Law Enforcement. The program is also designed for students who plan to transfer to an upper-level college or university and major in Criminal Justice.

23 Criminal Justice Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Introduction to Criminal Justice	CRJ101			3	
Criminal Law	CRJ103			3	
Constitutional Law	CRJ105			3	CRJ101, CRJ103
Principles of Psychology	PSY101			3	
College Writing II	ENG112			3	ENG111
Career Elective				3	CRJ103
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
Career Elective				3	
Principles of Sociology	SOC101			3	
Career Elective				3	
State/Local Politics	GOV103			3	
Criminology	SOC107			3	PSY101 or SOC101
Applications/Concepts	CMP105			3	
Career Elective				3	
Oral Communications	ENG171			3	
Career Elective				3	
C.J. Internship or C.J. Seminar	CRJ251 or CRJ248			3	CRJ103
TOTAL CREDITS				61	

At least one course must be taken from each of the Criminal Justice options as a Career Elective.

OPTION OVERVIEW

This option is designed for students who are interested in law, forensics, case-work, or a general background in the field of criminal justice.

CAREER OUTLOOK

Graduates of this program will have the widest range of career opportunities in various fields of criminal justice. This program with appropriate course selection best prepares students who plan to transfer to a four-year college or university and major in criminal justice or a related field.

At least one course must be taken from each of the Criminal Justice options as a Career Elective.

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

- Demonstrate an understanding of how agencies operate.
- Demonstrate general knowledge of constitutional and criminal law.
- Demonstrate an understanding of the causes of crime in our society.
- Demonstrate general knowledge of the structure, process, and relationship between law enforcement, the courts, and corrections.
- Demonstrate general knowledge of the issues of race, class, and gender in criminal justice.
- Use a computer to access data and information.

24 *Corrections Option*

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Introduction to Criminal Justice	CRJ101			3	
College Writing I	ENG111			3	ENG095 or placement
Criminal Law	CRJ103			3	
Introduction to Corrections	CRJ107			3	
College Writing II	ENG112			3	ENG111
Constitutional Law	CRJ105			3	CRJ101, CRJ103
Quantitative Thought	From Menu 5			3	MAT095 or placement
Rehabilitation of the Offender	CRJ203			3	
Career Elective				3	
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
Principles of Psychology	PSY101			3	
Principles of Sociology	SOC101			3	
State/Local Politics	GOV103			3	
Criminology	SOC107			3	PSY101 or SOC101
Applications/Concepts	CMP105			3	
Career Elective				3	
Community Corrections	CRJ212			3	CRJ103
Oral Communications	ENG171			3	
C.J. Internship or C.J. Seminar	CRJ251 or CRJ248			3	CRJ103
TOTAL CREDITS				61	

OPTION OVERVIEW

This option is designed for those students planning for careers in the fields of corrections and probation.

CAREER OUTLOOK

These fast growing fields have opportunities for correctionS officers and shift supervisors in local jails and houses of correction as well as state prisons. This program offers career enhancement to working professionals and those interested in entry-level positions in corrections and probation.

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

- Demonstrate an understanding of the causes of crime in our society.
- Demonstrate an understanding of the concepts of incarceration, rehabilitation, and community-based programs.
- Demonstrate general knowledge of the impact of incarceration on society and on individuals who are incarcerated.
- Demonstrate general knowledge of the issues of race, class, and gender in criminal justice.
- Use a computer to access data and information.

25 Law Enforcement Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Introduction to Criminal Justice	CRJ101			3	
College Writing I	ENG111			3	ENG095 or placement
Criminal Law	CRJ103			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Principles of Psychology	PSY101			3	
College Writing II	ENG112			3	ENG111
Constitutional Law	CRJ105			3	CRJ101, CRJ103
Criminal Investigation	CRJ108			3	
Scientific View of the World	From Menu 6			4	
Principles of Sociology	SOC101			3	
Evidence/Court Procedures	CRJ202			3	CRJ101, CRJ103
Community Policing	CRJ220			3	CRJ103
State/Local Politics	GOV103			3	
Creative Exploration	From Menu 7			3	
Management for Criminal Justice	CRJ201			3	
Criminology	SOC107			3	PSY101 or SOC101
Applications/Concepts	CMP105			3	
Career Elective				3	
Oral Communications	ENG171			3	
C.J. Internship or C.J. Seminar	CRJ251 or CRJ248			3	CRJ103
TOTAL CREDITS				61	

OPTION OVERVIEW

This option is suited for working law enforcement professionals looking to enhance their careers through academic study.

CAREER OUTLOOK

Graduates of this criminal justice option will be best prepared for careers in local, state, and some federal law enforcement agencies. This option is also suited for working law enforcement professionals looking to enhance their careers through academic study.

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

- Demonstrate general knowledge of the delivery of police services.
- Demonstrate an understanding of the causes of crime in our society.
- Demonstrate general knowledge of the issues of race, class, and gender in criminal justice.
- Use a computer to access data and information.

26 Corrections Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Applications/Concepts	CMP105			3	
Introduction to Criminal Justice	CRJ101			3	
Criminal Law	CRJ103			3	
Introduction to Corrections	CRJ107			3	
Constitutional Law	CRJ105			3	CRJ101, CRJ103
Rehabilitation of the Offender	CRJ203			3	
Community Corrections	CRJ212			3	CRJ103
C.J. Internship or C.J. Seminar	CRJ251 or CRJ248			3	CRJ103 and permission
TOTAL CREDITS				27	

PROGRAM OVERVIEW

This certificate in corrections is designed for students who are already employed in the corrections environment or who are interested in expanding their knowledge in this branch of criminal justice. It will introduce students to the U.S. prison system, highlighting such areas as rehabilitating the offender, community corrections, institution overcrowding, violence in prisons, and an examination of constitutional law.

CAREER OUTLOOK

Students completing this certificate are able to work in the field of corrections in traditional settings as officers or shift supervisors. Students may also apply the credits toward the Associate in Science degree in Criminal Justice, Corrections Option.

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

- Understand concepts of incarceration, rehabilitation, and community-based programs.
- Understand incarceration and the problems facing society and individuals who are incarcerated.
- Demonstrate an understanding of the causes of crime in our society.
- Understand the structure and process by which society responds to the complex problems and issues that confront the American system of justice.
- Understand issues of race, class, and gender in criminal justice.

27 Security Administration Certificate Program (web only)

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Applications/Concepts	CMP105			3	
Intro to Criminal Justice	CRJ101			3	
Criminal Law	CRJ103			3	
Introduction to Security	CRJ106			3	
Constitutional Law	CRJ105			3	CRJ101, CRJ103
Management for Criminal Justice	CRJ201			3	
Issues in Security Management	CRJ218			3	CRJ103
C.J. Internship or C.J. Seminar	CRJ251 or CRJ248			3	CRJ103 and permission
TOTAL CREDITS				27	

PROGRAM OVERVIEW

This certificate program offers training and course work in the growth field of private security. It is designed for those students already employed in the security industry or for those interested in adding this dimension to their area of expertise.

CAREER OUTLOOK

Students completing this program will be eligible for careers as entry-level managers, shift supervisors or internal trainers in the field of private security. Students may also apply the credits towards the Associate in Science degree in Criminal Justice.

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

- Demonstrate an understanding of the workings of private security.
- Demonstrate an understanding of the techniques, management, and forensics of a non-governmental system.
- Demonstrate an understanding of the causes of crime in our society.
- Understand the structure and process by which society responds to the complex problems and issues that confront the American system of justice.
- Understand issues of race, class, and gender in criminal justice.

28 Associate in Science Degree: Culinary Arts Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Food Service Sanitation and Skills	CUL111			2	ENG095, MAT090, RDG095
Introduction to Culinary Arts	CUL115			3	CUL111
Principles of Baking	CUL125			3	CUL111
College Writing I	ENG111			3	ENG095 or Placement
Individual and Society	From Menu 3			3	
Café and Bistro Cuisine	CUL135			3	CUL115, CUL125
Advanced Desserts and Pastries	CUL145			3	CUL115, CUL125
Topics in Career Math	MAT100			3	MAT090
Modern Civilization	From Menu 4			3	
Menu Design and Purchasing	CUL211			2	CUL135; CUL145
Essentials of Food Production	CUL215			3	CUL215
Essentials of Dining Service	CUL225			3	CUL211
College Writing II	ENG112			3	ENG111
Advanced & Ethnic Food Production	CUL235			3	CUL215, CUL225
Food and Beverage Operations	CUL245			3	CUL215, CUL225
Scientific View of the World	From Menu 6			4	
Oral Communication	ENG171			3	
Creative Exploration	From Menu 7			3	
Computer Applications/ Concepts	CMP105			3	
Hospitality Law	HRM102			3	
Personnel Management	MAN210			3	
TOTAL CREDITS				62	

OPTION OVERVIEW

This program option involves an intensive, practical application of skills and decision making demanded by the culinary arts profession. Skills training in this hands-on curriculum is interwoven with operational procedures found in most food production and service venues through the operation of a restaurant on campus and participation in an internship experience. This outcome-based curriculum is based on the American Culinary Federation standards.

CAREER OUTLOOK

Students who complete this option are qualified for a variety of positions in hotels, restaurants, and resorts. These positions typically are in food production, shift supervision, and kitchen management. Students may also choose to transfer to a four-year program in pursuit of their bachelor's degree.

UPON COMPLETION OF THIS OPTION, GRADUATES WILL HAVE:

- Practiced and acquired technical skills in the usage of tools and equipment found in a typical food service/food production setting.
- Acquired the necessary administrative skills common to basic cost control and planning methods found in a typical commercial food service/food production setting.
- Developed conceptual skills through course work relative to planning a successful restaurant operation.

29 Culinary Arts Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Food Service Operation Management	HRT115			3	
Introduction to Hospitality Management	HRT104			3	
Culinary Theory/Skills Proficiency	CUL112			3	
College Writing I	ENG111			3	ENG095 or placement
Advanced Culinary Skills/Applications	CUL120			3	CUL112
Baking	CUL108			3	
Field Experience Internship	HRT210			3	HRT104
Healthy Foods Preparation	CUL104			3	
Applied Food Service Sanitation	CUL114			1	
TOTAL CREDITS				25	

PROGRAM OVERVIEW

This certificate program is designed to provide basic skills and knowledge required for entry-level positions in the food service industry. The two-semester, 25 credit program is scheduled from September through May.

CAREER OUTLOOK

Students who complete the certificate in culinary arts are prepared 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 may also transfer all credits to the Associate of Science degree in Hospitality.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL HAVE:

- Practiced and acquired technical skills in the usage of tools and equipment found in a typical food service/food production setting.
- Acquired the necessary administrative skills common to basic cost control and planning methods found in a typical commercial food service/food production setting.
- Developed conceptual skills through course work relative to planning a successful restaurant operation.

30 Associate in Science Degree: Early Childhood Development Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Child Growth/Development	ECE103*			3	
Program Environments	ECE106			3	
College Writing I	ENG111			3	ENG095 or placement
Issues in Early Childhood Ed.	ECE102			3	
Guidance/Discipline	ECE101			3	ECE103
Curriculum in Early Childhood Ed.	ECE104			3	ECE103
Observing/Recording	ECE117			3	ECE103
College Writing II	ENG112			3	ENG111
Gen Ed Requirement 4				3	
Principles of Psychology	PSY101			3	
Children's Literature I	LIT217			3	ENG095 or placement in ENG111
Topics in Career Math	MAT100			3	MAT090 or placement
Gen Ed Requirement 6				4	
Gen Ed Requirement 7				3	
Families/Community in Early Childhood Education	ECE112			3	3 courses in ECE; ECE103
Practicum in ECE I	ECE120			3	permission
Elective				3	
Special Needs Child in ECE	ECE111			3	3 courses in ECE; ECE103
Practicum in ECE II	ECE121			3	permission
Elective				3	
TOTAL CREDITS				61	

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

Suggested Electives: ECE108, ECE113, ECE115, foreign language or EDU150.

Students who place in math course work above MAT100 may substitute a higher level math course.

Student with credentials from the Council for Early Childhood Professional Recognition as a Child Development Associate (CDA) may apply for six credits in the associate degree program through the Prior Learning Assessment Program (PLAP). See department chair for details.

PROGRAM OVERVIEW

Early childhood development is the study of the growth of the child, the influences of the family upon the child, and environmental pressures upon the family.

CAREER OUTLOOK

Opportunities are available in a variety of settings, including day care centers, preschools, head start programs, family home care, social service organizations, and day camps. Students may also transfer to programs in elementary education, human services work with families and children, or special needs childcare. This program will qualify a student educationally as a teacher and/or lead teacher in the state of Massachusetts. For more information on minimal requirements for employment, contact the chair of the Department of Community and Public Service.

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 his/her work with children by reflecting upon effective practices, collaborating with other professionals in the field.

31 Early Childhood Development Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Issues in Early Childhood Ed.	ECE102			3	
Planning Environments	ECE106			3	
Child Growth/Development	ECE103*			3	
Math Elective	MAT100			3	MAT090 or placement
Principles of Psychology	PSY101			3	
Guidance/Discipline	ECE101			3	
Curriculum in Early Childhood Ed.	ECE104			3	
Observing/Recording	ECE117			3	ECE103
TOTAL CREDITS				27	

* ECE103 was formerly PSY109. Students may not receive credit for both. ECE103 and PSY109.
Students who place in math course work above MAT100 may substitute a higher level math course.

PROGRAM OVERVIEW

This certificate will qualify a student educationally as a teacher and/or lead teacher in the state of Massachusetts. A student will have to meet additional experiential requirements by working in a licensed childcare program during or after meeting the educational requirements for teacher and/or lead teacher certification.

CAREER OUTLOOK

This program will qualify a student educationally as a teacher's aide in the state of Massachusetts. For more information on minimal requirements for employment, contact the chair of the Department of Community and Public Service.

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 his/her work with children by reflecting upon effective practices, collaborating with other professionals in the field.

32 Associate in Arts Degree: Education Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society		fulfilled			
Modern Civilization		fulfilled			
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				16	
CONCENTRATION COURSES:					
Principle of Psychology	PSY101			3	
Child Growth/Development or Adolescent/Adult Development	ECE103* or PSY124			3	PSY101
Applications/Concepts	CMP105			3	
Oral Communications	ENG171			3	
World Civilization I	HIS111			3	
World Civilization II	HIS112			3	
US History I or US History II	HIS151 or HIS152			3	
Children's Literature or Elective	LIT217			3	ENG095 or placement in ENG111
Literature Elective**				3	ENG095 or placement in ENG111
Literature Elective**				3	ENG095 or placement in ENG111
Mathematics Elective				3	
Lab Science Elective				4	
Elective				3	
Elective				3	
Elective				3	
				46	
TOTAL CREDITS				62	

CONCENTRATION OVERVIEW

This concentration is developed for those students seeking a bachelor's degree (B.S. or B.A.) in education or liberal arts upon transfer to a four-year university. Students interested in pursuing entry-level work in childcare should follow the A.S. in Early Childhood Development degree to assure certification by the Massachusetts Office of Child Care Services. See the department chair of Community and Public Services for more information.

CAREER OUTLOOK

This concentration, which meets all the requirements of the Commonwealth Transfer Compact, prepares students to transfer to a four-year college or university as a junior. Potential teaching careers include: teacher aid; early elementary, later elementary, middle school and high school teaching; preschool and kindergarten teaching; and special education teaching. A bachelor's degree is the minimum requirement for entry into these fields, and additional graduate work will 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 also earn a World Studies Certificate simultaneously. See page 106.

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

**Literature Options: LIT203 & 204, LIT205 & 206, or LIT211 & 212. Suggested Electives: foreign language, EDU140 or EDU150 (tutoring).

33 Associate in Science Degree: Electronics Technology Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5	fulfilled			MAT095 or placement
Scientific View of the World	From Menu 6	fulfilled			
Creative Exploration	From Menu 7			3	
				15	
CONCENTRATION COURSES:					
Topics in Algebra /Trigonometry	MAT193	Fall		3	MAT095 or placement; substitute MAT195 & MAT197
DC Circuit Theory/Lab	ETT101	Fall		4	MAT193 or concurrently
AC Circuit Theory/Lab	ETT104	Spring		4	ETT101
Introduction to Computer Systems	ETT105			3	MAT095 or concurrently substitute CMP105 or CMP115
Programming for Electronic Technology	ETT107			3	ETT105, substitute CMP216 or CMP237
Electronics I	ETT151	Spring		4	ETT101, ETT104 or concurrently
Digital Theory/Lab	ETT155	Fall		4	MAT095 or concurrently
Electronics II/Lab	ETT202	Fall		4	ETT151
Logic Circuits/Lab	ETT205	Fall		4	ETT153, ETT155
Digital Telecommunications/Lab	ETT252	Spring		4	ETT202, ETT205
Microprocessor Theory/Lab	ETT255	Spring		4	ETT205
Introductory Physics/Lab	PHY191			4	MAT193 substitute PHY201
Computer Repair/Lab	ETT257	Spring		4	ETT205
				49	
TOTAL CREDITS				64	

PROGRAM OVERVIEW

This program is designed to prepare students to become electronics technicians or field service technicians in computer or telecommunications areas.

CAREER OUTLOOK

Graduates of this program are eligible for positions found in industry and government where telecommunications, semiconductor, or computer equipment is manufactured or utilized. Extensive laboratory work, coupled with a thorough background in electronic theory, readies the student for employment and advancement in the field of electronics. Students also have the opportunity to transfer to four-year programs in engineering technology.

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

- Analyze, design, and build basic Analog and Digital circuits.
- Test and troubleshoot circuits using standard electronic test equipment.
- Utilize Digital Storage Oscilloscopes and Logic Analyzers in testing and debugging microprocessor-based system.

34 Electronics Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111	Fall		3	ENG095 or placement
Topics in Algebra/ Trigonometry	MAT193	Fall		3	MAT095
DC Circuit Theory/Lab	ETT101	Fall		4	MAT193 or concurrently
Digital Theory/Lab	ETT155	Fall		4	MAT095 or concurrently
Introduction to Physics/Lab	PHY191	Spring		4	MAT193, substitute PHY201
AC Circuit Theory/Lab	ETT104	Spring		4	ETT101
Programming for Electronics Technology	ETT107	Spring		3	ETT105, substitute CMP216 or CMP237
Semiconductor Devices/Lab	ETT1151	Spring		4	ETT104, or ETT101 concurrently
TOTAL CREDITS				29	

PROGRAM OVERVIEW

A twenty-nine (29) credit intensive certificate program, providing five hundred (500) hours of computer electronics, is offered each year. The program is scheduled to run days or evenings concurrently with the school year. The program prepares students for work in the computer electronics field.

CAREER OUTLOOK

For students wishing to strengthen their backgrounds in mathematics and electronics, the certificate program offers a preparation to enter an Associate in Science degree program in Electronics Technology. Transfer to the associate degree program is an option for those students completing the certificate program with a minimum of a 2.00 cumulative grade point average.

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

- Analyze and measure DC and AC voltages and current in basic electrical circuits using standard electronic test equipment.
- Build and test basic Digital circuits.

35 Electronics Certificate Program, ESL Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
ESL for Electronics I	ESL061	Fall		3	permission
Topics in Algebra/ Trigonometry	MAT193	Fall		3	MAT095 or placement
DC Circuit Theory/Lab	ETT101	Fall		4	MAT193 or concurrently
AC Circuit Theory/Lab	ETT104	Fall		4	ETT101
Electronics I	ETT151	Spring		4	ETT104 or concurrently
Digital Theory/Lab	ETT155	Spring		4	MAT095 or concurrently
ESL for Electronics II	ESL062	Spring		3	ESL061
ESL for Entering the Workplace I	ESL063	Spring		1	
TOTAL CREDITS				26	

PROGRAM OVERVIEW

This program is designed to teach immigrant students the English and technical skills needed for entry-level positions in the electronics industry. The nineteen (19) credits earned in the mathematics and electronics courses in this program can be used toward an Associate in Science degree in Electronics Technology.

CAREER OUTLOOK

Careers requiring a background in basic electronics theory and applications are numerous and growing. Graduates of this program qualify for a variety of positions in the electronics industry. The director of the program assists students with job placement in the greater Boston area.

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

- Identify electronic components and repair printed circuit board.
- Read and interpret circuit schematics.
- Use algebra and trigonometry to analyze circuits.
- Use multimeters and oscilloscopes to make electrical measurements.
- Analyze and troubleshoot DC and AC circuits.
- Design, analyze, and troubleshoot digital circuits.
- Read and understand technical documentation.
- Prepare a resume and seek and assess job opportunities in the electronics industry.

36 Microcomputer Support Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
DC Circuit Theory/Lab	ETT101	Fall		4	MAT193 or concurrently
Digital Theory/Lab	ETT155	Fall		4	MAT095 or concurrently
Intro to Computer Systems	ETT105	Fall		3	MAT095 or concurrently substitute CMP105 or CMP115
Topics in Algebra/ Trigonometry	MAT193	Fall		3	MAT095 or placement
College Writing I	ENG111	Fall		3	ENG095 or placement
PC Hardware	CMP182	Spring		3	CMP105 or CMP115
Micro Operating Systems	CMP270	Spring		3	CMP105
Elective				3	
TOTAL CREDITS				26	

The Career Elective may be chosen from the following courses: CMP162, ETT104, ETT107.

PROGRAM OVERVIEW

This certificate program prepares students in microcomputer hardware set-up and installation, software installation, and installation and replacement of internal components and peripherals. Students completing this certificate program will have a basic knowledge of electricity theory, laboratory experience with electronic devices, and hands-on experience with microcomputers. By their choices of second semester electives, students may tailor the program to emphasize different aspects of computer use and micro-applications.

CAREER OUTLOOK

Appropriate selection of electives will also allow a student completing this certificate program to continue on to the Associate in Science degree in Electronics Technology.

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

- Install and set up PCs in an institutional environment.
- Upgrade software and hardware in PCs.
- Do system trouble shooting and provide user support for office PC systems.

37 Associate in Arts Degree: English Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration		fulfilled			
				19	
CONCENTRATION COURSES:					
Seminar and Internship for Writing Tutors	ENG115			1 - 4	Referral or permission of instructor
Literature Course				3	ENG095 or placement in ENG111
Literature Course				3	ENG095 or placement in ENG111
Literature Course				3	ENG095 or placement in ENG111
Literature Course				3	ENG095 or placement in ENG111
English Elective				3	
Foreign Language Elective				3	
Foreign Language Elective				3	
Behavioral Science Elective				3	
Social Science Elective				3	
Mathematics Electives				3	MAT095 or placement
Lab Science Elective				4	
Elective				3	
Elective				3	
				41 - 44	
TOTAL CREDITS				60 - 63	

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW

This concentration is designed for any student who wishes to transfer to a four-year college or university. Students who select this concentration may be particularly interested in pursuing a career in teaching or journalism. However, this concentration would be of value in any career in which good communication skills are fundamental to success. This sequence meets all requirements of the Commonwealth Transfer Compact.

CAREER OUTLOOK

Upon completing this sequence, students will be prepared to transfer to four-year institutions that prepare students for careers in teaching, journalism, public relations, and media communications. A bachelor's degree and teaching certificate are required to pursue a teaching career. A bachelor's degree in English is a minimum requirement for beginning work in careers such as publishing, advertising, public relations, and journalism. Graduate work may also be required to advance in some of these fields.

UPON COMPLETION OF THIS CONCENTRATION, GRADUATES WILL:

- Have demonstrated competence as a writer.
- Be able to write for a variety of purposes, adapting to various audiences.
- Have demonstrated proficiency in critical thinking.
- Have a basic understanding of a language other than English.
- Have developed strong interpersonal communication skills.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

38 Associate in Arts Degree: Fine Arts Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7	fulfilled			
				19	
CONCENTRATION COURSES:					
Drawing I	ART109			3	
Painting I	ART111			3	
Behavioral Science Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Drawing II	ART110	Spring		3	ART109
Painting II	ART112	Spring		3	ART111
Art Appreciation I or II	ART114 or ART115			3	
Mathematics Elective				3	MAT095 or placement
Lab Science Elective				4	
Social Science Elective				3	
Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Courses from the Pool (2):				6	
				43	
TOTAL CREDITS				62	
THE POOL OF ELECTIVES:					
Water Color I	ART105			3	
Printmaking I	ART117			3	
Calligraphy	ART217	Spring		3	
Basic Photography	PHT101			3	

CONCENTRATION OVERVIEW

This concentration, which meets all the requirements of the Commonwealth Transfer Compact, is recommended for students who plan to transfer to a four-year institution offering a fine arts degree.

CAREER OUTLOOK

This concentration, which meets all the requirements of the Commonwealth Transfer Compact, prepares students to transfer to a bachelor's degree-granting college or university as a junior. Potential careers in the visual arts which will vary depending upon 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, and additional graduate work may be necessary as well.

UPON COMPLETION OF THIS CONCENTRATION, GRADUATES WILL:

- Have developed a portfolio in preparation for transfer to a four-year college or university.
- Have demonstrated proficiency in the techniques of drawing and painting.
- Have a basic understanding of color theory.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

39 Associate in Science Degree: Fire Protection and Safety Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
College Algebra	MAT195			3	MAT095 or placement
Principles of Sociology	SOC101			3	
Inspections/Fire Prevention	FPS101			3	
Fire Protection/Safety	FPS103			3	
College Writing II	ENG112			3	ENG111
Building Construction for Fire	FPS105			3	
Hydraulics/Fire Protection	FPS205			3	
Hazardous Materials	FPS208			3	
Fire Codes/Standards	FPS211			3	
Modern Civilization	From Menu 4			3	
Fire Protection Systems/Equipment	FPS212			3	
Chemical Science I/Lab	CHM110			4	MAT095, ENG095 or placement
Applications/Concepts	CMP105			3	
Oral Communications	ENG171			3	
Career Elective				3	
Creative Exploration	From Menu 7			3	
Career Elective				3	
Behavioral Science Elective				3	
Elective				3	
TOTAL CREDITS				61	

Choose two of these three Career Elective options: FPS107, 207, or 209.

PROGRAM OVERVIEW

This program offers practical and technical instruction for potential fire fighters and in-service fire fighters wishing to upgrade their career status. Education gained through an associate degree in fire protection and safety leads to higher scores on promotional examinations. The textbooks used for the associate degree at Bunker Hill Community College and 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

Careers include opportunities in municipal, state and federal agencies, industry, and insurance companies. This program also offers instruction for fire fighters who wish to upgrade their career status and for students who wish to transfer to an upper-level college or university in pursuit of a bachelor's degree in fire protection and safety.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL:

- Understand the principles of fire protection and safety.
- Be prepared to be a fire company officer.
- Understand the principles of arson investigation.
- Be familiar with inspections for fire prevention.
- Be prepared to take promotional civil service fire exams.

40 Associate in Arts Degree: Foreign Language Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4	fulfilled			
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7	fulfilled			
				16	
CONCENTRATION COURSES:					
First Foreign Language (Intermediate Proficiency)				3	
History of Western Civilization I	HIS101			3	
Elective				3	
First Foreign Language (Intermediate Proficiency)				3	
History of Western Civilization II	HIS102			3	
Elective				3	
Mathematics Elective				3	
Second Foreign Language (Elementary Proficiency)				3	
Masterpieces of World Literature I	LIT211			3	ENG095 or placement in ENG111
Elective				3	
Second Foreign Language (Elementary Proficiency)				3	
Lab Science Elective				4	
Behavioral Science Elective				3	
Masterpieces of World Literature II	LIT212			3	ENG095 or placement in ENG111
Elective				3	
				46	
TOTAL CREDITS				62	

CONCENTRATION OVERVIEW

This concentration offers a sequence of courses designed for students who plan to transfer to an upper-level college or university in order to major in a foreign language. The course sequence meets all the requirements of the Commonwealth Transfer Compact.

CAREER OUTLOOK

Students with degrees in a foreign language are often eligible for careers that require bilingual skills.

UPON COMPLETION OF THIS CONCENTRATION, GRADUATES WILL:

- Demonstrate the basic skills for understanding and speaking a foreign language.
- Be able to read and comprehend simple readings in a foreign language.
- Be able express in writing their thoughts and ideas in an uncomplicated manner in a foreign language.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

41 Associate in Arts Degree: General Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				22	
CONCENTRATION COURSES:					
Behavioral Science Elective				3	
Social Science Elective				3	
Mathematics Elective				3	
Lab Science Elective				4	
Literature Electives				3	ENG095 or placement in ENG111
Literature Electives				3	ENG095 or placement in ENG111
Elective				3	
Elective				3	
Elective				3	
Elective				3	
Elective				3	
Elective				3	
				40	
TOTAL CREDITS				62	

CONCENTRATION OVERVIEW

The General Transfer Concentration, which meets all the requirements of the Commonwealth Transfer Compact, is designed for students who have not yet chosen a concentration and prepares students to transfer to a bachelor's degree-granting college or university as a junior. Students are encouraged to take electives in disciplines in which they may major at a four-year institution.

CAREER OUTLOOK

Potential careers will vary depending upon the chosen major. A bachelor's degree is usually the minimum requirement for entry into most fields, and additional graduate work may be necessary.

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 is also available through the Weekend College Program.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

Students are encouraged to consult with their intended transfer institution to determine appropriate electives. A two-semester language sequence is recommended.

Associate in Science Degree: Medical Imaging Program



The Medical Imaging Department offers three different associate in science degree options, as well as an advanced standing certificate program in diagnostic medical sonography.

The three associate in science degree options are:

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

Advanced standing is available for registered or licensed radiologic technologists, nuclear medicine technologists, and cardiac sonographers. Students take their general education courses concurrently with the Medical Imaging Option courses. Clinical learning experiences are introduced in the first semester of the first year for Medical Radiography day students. The Cardiac Sonography Option's clinical component begins in the second year. Inability to meet clinical objectives or obtaining numerical course grade of less than 80 constitutes failure in that course. Students may apply for readmission to the program the next time the course is offered. Readmission will be considered on a space available basis. Upon successful completion of the program students are eligible to sit for the appropriate national registry examination. Criminal Offender Record Information (CORI) checks are required prior

to participation in the clinical component of Medical Imaging courses in accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 5 172-178 and regulations pursuant to these statutes. Admission to the Medical Imaging 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, please see the department chairperson.

All Medical Imaging Options are accredited programs. Please see BHCC accreditation statements on the inside cover of this catalog. The curriculum offers the students an overview of both fields in the first semester of the first year.

ADMISSION CRITERIA FOR THE ASSOCIATE IN SCIENCE DEGREE OPTIONS:

Students must apply to the program through the Enrollment Services Center, and:

1. Possess a high school diploma or GED certificate.
2. Complete the following courses with a grade of C or better:
 - Two years of high school algebra or equivalent.
 - One year of high school biology, chemistry or physics with lab or equivalent.
3. Take computerized placement tests (CPT).
4. Place in MAT095 or above, and complete MAT095 before first semester of program.
5. Pass the college science test.
6. Attend one MANDATORY information session.
7. Show evidence of good physical and emotional health as indicated by a physician's recommendation.
8. Qualified applicants may be asked to complete an interview process conducted by academic and clinical faculty.

All students in Medical Imaging Associate Degree Options will be enrolled in the common core their first semester.

42 Medical Imaging Program Common Curriculum

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Medical Imaging Seminar	MIG107	Fall		1	
Patient Care in Medical Imaging	MIG109	Fall		4	coreq: MIG107
Anatomy/Physiology I/Lab	BIO203	Fall		4	BIO101
TOTAL CORE CREDITS				9	

43 Cardiac Sonography Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
CORE CURRICULUM				9	
College Algebra	MAT195	Fall		3	MAT095 or placement
Ultrasound Instrumentation	MIG105	Fall		3	
Anatomy/Physiology II/Lab	BIO204	Spring		4	BIO203
Echo I	MIG112	Spring		3	MIG107
Interpretation I	MIG115	Spring		4	MIG109
College Writing I	ENG111	Spring		3	ENG095 or placement
Vascular Ultrasound	MIG205	Summer I		3	MIG119
Echo II	MIG119	Summer I		3	MIG112
College Writing II	ENG112	Summer I		3	ENG111
Elective: Behavioral Science		Summer II		3	
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
Clinical I	MIG211	Fall		3	MIG119, coreq MIG201
Clinical II	MIG213	Spring		4	MIG211, coreq MIG215
Echo IV/Interpretation	MIG215	Spring		4	MIG203
Application/Concepts	CMP105	Spring		3	
Clinical III	MIG217	Summer		4	MIG213
TOTAL CREDITS				70	

OPTION OVERVIEW

Cardiac sonography is imaging of the human heart with soundwaves. A sonographer is one who utilizes the equipment that produces soundwaves, obtains an image, and provides the physician with diagnostic information for treatment.

CAREER OUTLOOK

Employment in hospitals, HMOs, clinics, doctors' offices, mobile units, community health agencies, industrial x-ray, equipment/film companies, and as an application specialist sales representative are possible options.

UPON COMPLETION OF THIS OPTION, GRADUATES WILL:

- 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.

44 Medical Radiography Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
CORE CURRICULUM				9	
Positioning I	MIG122	Fall		3	coreq MIG124
Clinical I	MIG124	Fall		2	
Imaging Pathology	MIG232	Fall		3	
Anatomy/Physiology II/Lab	BIO204	Spring		4	BIO203
Medical Imaging I	MIG120	Spring		3	MIG107
Medical Imaging Technology I	MIG111	Spring		3	MAT095 or placement
Positioning II	MIG126	Spring		3	MIG122, coreq MIG218
Clinical II	MIG128	Spring		2	MIG124
Clinical III	MIG222	Summer		3	MIG128
College Writing I	ENG111	Summer II		3	ENG095
Elective: Behavioral Science		Summer II		3	
Positioning III	MIG220	Fall		3	MIG126
Clinical IV	MIG228	Fall		3	MIG222
Medical Imaging Technology II	MIG224	Fall		4	MIG111
Medical Imaging II	MIG226	Fall		4	MIG120
College Writing II	ENG112	Fall		3	ENG111
College Algebra	MAT195	Spring		3	MAT095
Radiation Protection	MIG230	Spring		3	MIG226
Clinical V	MIG236	Spring		3	MIG228
CT/Cross Sectional Anatomy	MIG234	Spring		3	BIO203, BIO204, or permission of instructor
Application/Concepts	CMP105	Spring		3	
TOTAL CREDITS				73	

OPTION OVERVIEW

A radiographer performs diagnostic examinations on patients, by using radiographs, which are film records of internal structures of the body produced by x-rays. The field of radiography includes radiography, computed tomography (CT) scan, magnetic resonance imaging (MRI), mammography, and cardiovascular and interventional technology.

CAREER OUTLOOK

Employment opportunities may be found in hospitals, HMOs, clinics, doctors' offices, mobile units, community health agencies, industrial x-ray, and equipment/film companies.

UPON COMPLETION OF THIS OPTION, GRADUATES WILL:

- Possess the general knowledge and technical skills required to perform procedures and imaging examinations as entry-level Radiologic Technologists.
- Be eligible to apply to take the American Registry of Radiologic Technologists Registry Examination and the State of Massachusetts Licensing Examination for Radiologic Technologists.
- Understand the importance of lifelong continuing education in the field of Medical Imaging Technology.
- Be positioned to pursue further studies in advanced areas of Medical Imaging, such as Special Procedures, CT, and MRI.

45 Medical Radiography Part-time Evening Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Medical Imaging Seminar	MIG107	Fall		1	
Patient Care in Medical Imaging	MIG109	Fall		4	
College Writing I	ENG111	Fall		3	ENG095 or placement
College Algebra	MAT195	Fall		3	MAT095 or placement
Medical Imaging Technology I	MIG111	Spring		3	MAT095 or placement
Medical Imaging I	MIG120	Spring		3	MIG107
College Writing II	ENG112	Spring		3	ENG111
Medical Imaging Technology II	MIG224	Summer		4	MIG111
Elective: Behavioral Science		Summer		3	
Application/Concepts	CMP105	Summer		3	
Medical Imaging II	MIG226	Fall		4	MIG120
Anatomy/Physiology I/Lab	BIO203	Fall		4	BIO101
Radiation Protection	MIG230	Fall		3	coreq MIG226
Positioning I	MIG122	Spring		3	coreq MIG124
Anatomy/Physiology II/Lab	BIO204	Spring		4	BIO203
Clinical I	MIG124	Spring		2	
Positioning II	MIG126	Summer		3	MIG122, coreq MIG128
Imaging Pathology	MIG232	Summer		3	
Clinical II	MIG128	Summer		2	MIG124
Positioning III	MIG220	Fall		3	MIG126
Clinical III	MIG222	Fall		3	MIG128
Clinical IV	MIG228	Spring (day)		3	MIG222
CT/Cross Sectional Anatomy	MIG234	Fall		3	BIO203, BIO204 or permission of instructor
Clinical V	MIG236	Summer (day)		3	MIG228
TOTAL CREDITS:				73	

OPTION OVERVIEW

A radiographer performs diagnostic examinations on patients, by using radiographs, which are film records of internal structures of the body produced by x-rays. The field of radiography includes radiography, computed tomography (CT) scan, magnetic resonance imaging (MRI), mammography, and cardiovascular and interventional technology.

CAREER OUTLOOK

Employment opportunities may be found in hospitals, HMOs, clinics, doctors' offices, mobile units, community health agencies, industrial x-ray, and equipment/film companies.

UPON COMPLETION OF THIS OPTION, GRADUATES WILL:

- Possess the general knowledge and technical skills required to perform procedures and imaging examinations as entry-level Radiologic Technologists.
- Be eligible to apply to take the American Registry of Radiologic Technologists Registry Examination and the State of Massachusetts Licensing Examination for Radiologic Technologists.
- Understand the importance of lifelong continuing education in the field of Medical Imaging Technology.
- Be positioned to pursue further studies in advanced areas of Medical Imaging, such as Special Procedures, CT, and MRI.

46 Diagnostic Medical Sonography Certificate Program (Ultrasound)

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Physics/Instrumentation	DMS101	Fall		4	
Cross-sectional Anatomy	DMS102	Fall		3	
Abdominal Ultrasound Techniques	DMS103	Fall		4	
Clinical Practicum I	DMS104	Fall		3	coreq DMS101
Clinical Practicum II	DMS105	Spring		3	coreq DMS106
Obstetrical/ Gynecological Ultrasound	DMS106	Spring		5	DMS101
Sonographic Subspecialties	DMS107	Spring		4	
Clinical Practicum III	DMS108	Summer		3	DMS105
TOTAL CREDITS				29	

PROGRAM OVERVIEW

This is a one-year certificate program in general diagnostic medical sonography, designed to provide comprehensive instruction and clinical experience to those individuals who are pursuing a career and registry-status in diagnostic medical sonography. This program covers: ultrasound physics, abdominal sonography, obstetrical and gynecological sonography, sonographic subspecialties, and cross-sectional anatomy.

CAREER OUTLOOK

This certificate program is open to individuals who have completed two years of training from an AMA approved school, e.g., radiology, nuclear medicine, physical therapy, nursing, respiratory therapy; individuals with a bachelor's degree; individuals currently working in the field who wish to enhance their knowledge of sonography; or individuals who have their own clinical site but want to pursue formalized didactic education.

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).

Associate in Science Degree: Nursing Program



This program is designed to prepare men and women to become nurses at the associate degree level and provide eligibility to take the NCLEX-RN (National Council Licensure Exam for Registered Nurses). The Nursing program is accredited by the National League for Nursing Accrediting Commission (N.L.N.A.C.) 61 Broadway, NY, NY, 10006, 212-363-5555, ext. 153, and approved by the Massachusetts Board of Registration in Nursing. The curriculum offers general education courses concurrently with nursing courses to provide a sound theoretical base for the practice of nursing. Clinical learning experiences are introduced in the first semester and continued throughout the program. The program curriculum begins with the fall semester.

A numerical grade of 75 or higher must be earned in all nursing courses and a grade of C or higher in all science and general education courses. Failure to meet clinical objectives or 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 will be 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). CORI checks are required prior to participation in the clinical component of nursing courses in accordance with the Criminal Records Information

Act: Mass. General Laws, Chapter 6 § 172-178 and regulations pursuant to these statutes. Admission to the nursing program does not guarantee clinical placement. The outcome of the CORI may impact the student's ability to participate in the clinical experience. Individuals with previous court convictions must also meet eligibility requirements of the Massachusetts Board of Nursing Registration for licensure. For further information, please see the department chair.

This is a full-time two and one half-year program. Day and evening options are available.

Advanced standing is available for qualified LPNs applying to the day and evening options by challenging Nursing I.

STUDENTS MUST APPLY TO THE PROGRAM THROUGH ENROLLMENT SERVICES AND:

1. Possess a high school diploma or GED certificate.
2. Complete the following courses with a grade of C or better:
 - One year of high school biology with lab or one semester of college biology with a lab.
 - One year of high school chemistry with lab or one semester of college chemistry with a lab.
 - MAT095 Fundamentals of Algebra or placement.
 - BIO203 Anatomy & Physiology I (Credits for Anatomy and Physiology that were earned more than five (5) years prior to enrollment in the nursing clinical sequence will not be accepted).
 - ENG111 College Writing I.
 - NUR100 Drug Calculations (must be accepted into the Nursing Program prior to enrollment in this course).
3. Achieve a reading level of 10th grade or higher on the computerized placement test (CPT).
4. Pass the Nursing Admission Test.
5. Attend one mandatory information session.

Acceptance into the Nursing Program is determined after evaluation of an applicant's record by Enrollment Services and the Nurse Education Department Admissions Committee.

47 Nursing Program: Day Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
PREREQUISITE COURSES:					
College Writing I	ENG111			3	ENG095 or placement
Anatomy/Physiology/Lab I*	BIO203			4	**see below
Drug Calculation	NUR100			1	MAT095 or placement
Program Curriculum:					
Anatomy/Physiology/Lab II	BIO204	Fall		4	BIO203
Principles of Psychology	PSY101	Fall		3	
Physical Assessment/Basic Skills	NUR101	Fall		2	NUR100
Nursing I +	NUR111	Fall		7	NUR100
Human Growth/Development	PSY113	Spring		3	PSY101
College Writing II	ENG112	Spring		3	ENG111
Nursing II++	NUR112	Spring		10	NUR101, NUR111
Microbiology/Lab	BIO205	Fall		4	BIO195 or BIO203
Quantitative Thought	Menu 5	Fall		3	MAT095
Nursing III++	NUR211	Fall		9	NUR112
Principles of Sociology	SOC101	Spring		3	
Nursing IV++	NUR212	Spring		9	NUR211
Nursing Seminar	NUR213	Spring		1	NUR211
TOTAL CREDITS				69	

* Credits that were earned more than 5 years prior to enrollment in the nursing clinical sequence will not be accepted.

** Principles of Biology I/Lab (BIO101) or General Biology I/Lab (BIO195) or admission to an allied health degree program.

+ Clinical Practice one day or evening per week.

++ Clinical Practice two days or evenings per week.

A numerical grade of 75 or higher must be earned in all nursing courses and a grade of C or higher in all science and general education courses. Failure to meet clinical objectives or obtain a numerical course grade of 75 or better constitutes failure in that course.

CAREER OUTLOOK

Employment in hospitals, long-term care facilities, HMOs, clinics, doctors' offices, and other community health agencies. Salary Range: \$40,000 - \$50,000 annually.

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

- Deliver holistic nursing care in a variety of health settings.
- Adapt nursing care as needed for a multi-cultural, diverse client population.
- Collaborate and function effectively as a member of an interdisciplinary team.
- Delegate nursing responsibilities to appropriate health care providers.
- Apply principles of teaching and learning in the delivery of nursing care.

48 Nursing Program: Evening Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
PREREQUISITE COURSES:					
College Writing I	ENG111			3	ENG095 or placement
Anatomy/Physiology/Lab I*	BIO203			4	**see below
Drug Calculation	NUR100			1	MAT095 or placement
PROGRAM CURRICULUM:					
Anatomy/Physiology/Lab II	BIO204	Fall		4	BIO203
Principles of Psychology	PSY101	Fall		3	
Physical Assessment/Basic Skills	NUR101	Fall		2	NUR100
Nursing I+	NUR111	Fall		7	NUR100
Human Growth/Development	PSY113	Spring		3	PSY101
College Writing II	ENG112	Spring		3	ENG111
Nursing II++	NUR112	Spring		10	NUR101, NUR111
Microbiology/Lab	BIO205	Fall		4	BIO195 or BIO203
Quantitative Thought	Menu 5	Fall		3	MAT095
Nursing III++	NUR211	Fall		9	NUR112
Principles of Sociology	SOC101	Spring		3	
Nursing IV++	NUR212	Spring		9	NUR211
Nursing Seminar	NUR213	Spring		1	NUR211
TOTAL CREDITS				69	

* Credits that were earned more than 5 years prior to enrollment in the nursing clinical sequence will not be accepted.

** Principles of Biology I/Lab (BIO101) or General Biology I/Lab (BIO195) or admission to an allied health degree program.

+ Clinical Practice one day or evening per week.

++ Clinical Practice two days or evenings per week.

A numerical grade of 75 or higher must be earned in all nursing courses and a grade of C or higher in all science and general education courses. Failure to meet clinical objectives or obtain a numerical course grade of 75 or better constitutes failure in that course.

CAREER OUTLOOK

Employment in hospitals, long-term care facilities, HMOs, clinics, doctors' offices, and other community health agencies. Salary Range: \$40,000 - \$50,000 annually.

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

- Deliver holistic nursing care in a variety of health settings.
- Adapt nursing care as needed for a multi-cultural, diverse client population.
- Collaborate and function effectively as a member of an interdisciplinary team.
- Delegate nursing responsibilities to appropriate health care providers.
- Apply principles of teaching and learning in the delivery of nursing care.

49 Pharmacy Technology Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Basic Anatomy/Physiology/Lab	BIO107	Fall		4	MAT090, RDG095, ENG095 or placement
College Writing I	ENG111	Fall		3	ENG095 or placement
Survey of Pharmacy	PHM100	Fall only		3	RDG095 or placement
Pharmacy Law/Ethics	PHM121	Fall only		3	RDG095 or placement
Math for Meds	PHM130	Fall		2	MAT095 or placement
Application/Concepts	CMP105	Spring		3	
College Writing II	ENG112	Spring		3	ENG111
Community-Based Pharmaceutics	PHM103	Spring only		4	CMP105, PHM130 or either concurrently
Medical Terminology	OIM180	Spring		3	
Principles of Psychology or Principles of Sociology	PSY101 or SOC101			3	
Microbiology	BIO205	Fall		4	BIO195 or BIO203
Institutional-Based Pharmaceutics	PHM104	Fall only		4	CMP105, PHM130 or either concurrently
Pharmacology I	PHM111	Fall only		3	
Community Pharmacy Practicum/Seminar	PHM 211	Fall only		5	PHM103, PHM111 and PHM121 or either concurrently
Chemical Science I	CHM110	Spring		4	MAT095, ENG095
Pharmacology II	PHM112	Spring only		3	PHM111
Institutional Pharmacy Practicum/Seminar	PHM212	Spring only		5	PHM111, PHM121 and PHM103 or concurrently
Behavioral Science Elective		Spring		3	
TOTAL CREDITS				62	

A joint program between BHCC and Holyoke Community College, this is a distance-learning program in which all the pharmacy (PHM) courses are taught by live video-conference from Holyoke Community College. Students only 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, and utilizing computer and robotic systems in the preparation, dispensing, and billing of medications.

CAREER OUTLOOK

Job opportunities for trained pharmacy technicians, particularly those with a formal education, are on the rise and are available in a variety of settings, including hospital, military, nursing home, community, and industrial pharmacies. It is predicted that the demand for well-trained, educated pharmacy technicians will continue to exceed the available supply. In addition, there are many alternative paths that a graduate could pursue 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.

50 Patient Care Assistant Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Principles of Clinical Practice	AHE110			3	
Patient Care Skills	AHE111			3	
CNA Practicum	AHE106			1	AHE110, AHE111
Health Employment Issues	AHE104			3	
Advanced Clinical Skills	AHE201			3	AHE110, AHE111
Practicum/Patient Care Asst.	AHE204			3	AHE110, AHE111
Computer or Office Administration course				3	
Electives				6	
TOTAL CREDITS				25	
ESL Option:					
Principles of Clinical Practice	AHE110			3	
Patient Care Skills	AHE111			3	
CNA Practicum	AHE106			1	AHE110, AHE111
Health Employment Issues	AHE104			3	
ESL/Allied Health	ESL051			6	
Advanced Clinical Skills	AHE201			3	AHE110, AHE111
Practicum/Patient Care Asst.	AHE204			3	AHE110, AHE111
Computer or Office Adm. course				3	
TOTAL CREDITS				25	

Special considerations for all Allied Health Certificate Programs: attendance at a program information session, malpractice and health insurance, physical examination, and immunization forms.

Criminal Offender Record Information (CORI) checks are required 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, please see the department chairperson.

A grade of B- must be maintained in AHE110 and AHE111 in order to continue in the second semester.

PROGRAM OVERVIEW

Students receive the education and training they need to deliver direct patient care through classroom teaching, lab practice, and actual clinical experience in hospitals and long-term care facilities. This certificate program trains students for a variety of entry-level positions in health care, while allowing them to take prerequisite courses for the Nursing, Medical Imaging, Surgical Technology, or other related programs.

CAREER OUTLOOK

Students are prepared for employment in hospitals, clinics, chronic care facilities, and the home environment as multi-skilled workers, patients care technicians, patient care associates, medical aides, certified nursing assistants, and home health aides. Graduates receive a BHCC certificate, State Nurse Aide and Home Health Aide Certification, and are trained in CPR and phlebotomy.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL HAVE:

- Achieved competency in direct patient care, including phlebotomy and EKG.
- Achieved basic computer skills.

51 Medical Assistant Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Principles of Clinical Practice	AHE110			3	
Medical Assisting Skills	AHE112			3	
Health Employment Issues	AHE104			3	
Advanced Clinical Skills	AHE201			3	AHE110, AHE112
Practicum/Medical Asst.	AHE205			3	AHE110, AHE112
Computer or Office Adm. Course				3	
Procedures for the Medical Office	OIM114			3	
Elective				3	
TOTAL CREDITS				24	
ESL Option:					
Principles of Clinical Practice	AHE110			3	
Medical Assisting Skills	AHE112			3	
Health Employment Issues	AHE104			3	
ESL for Allied Health	ESL051			6	
Advanced Clinical Skills	AHE201			3	AHE110, AHE112
Practicum/Medical Asst.	AHE205			3	AHE110, AHE112
Computer or Office Adm. Course				3	
TOTAL CREDITS				24	

Special considerations for all Allied Health Certificate Programs: attendance at a program information session, malpractice and health insurance, physical examination, and immunization forms.

Criminal Offender Record Information (CORI) checks are required 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, please see the department chairperson.

A grade of B- must be maintained in AHE110 and AHE112 in order to continue in the second semester.

PROGRAM OVERVIEW

Medical assistants learn to function as members of a health care delivery team and to perform administrative and clinical duties. They are prepared for employment in hospitals, clinics, health maintenance organizations, and physicians' offices as multi-skilled workers, medical assistants, medical aides, clinical assistants, and clinical practice assistants. CPR, EKG, and phlebotomy training are included.

CAREER OUTLOOK

Students are prepared 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 and Home Health Aide Certification, and are trained in CPR and phlebotomy.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL HAVE:

- Achieved competency in assisting with the examination and treatment of patients in combined clinical/administrative areas, phlebotomy, and EKG.
- Achieved computer and medical office skills.

52 Medical Lab Assistant Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Principles of Clinical Practice	AHE110			3	
Medical Lab Skills	AHE114			3	ENG095, RDG095, MAT095 or placement
Health Employment Issues	AHE104			3	
Medical Lab Techniques	AHE203			3	AHE110, AHE114
Practicum/Lab Assistant	AHE207			3	AHE110, AHE114
College Writing I	ENG111			3	ENG095 or placement
Principles of Biology/Lab I	BIO101			4	MAT090, ENG095, RDG095 or placement
Chemical Science/Lab I	CHM110			4	MAT095, ENG095 or placement
Computer or Office Adm. Course				3	
TOTAL CREDITS				29	

Special considerations for all Allied Health Certificate Programs: attendance at a program information session, malpractice and health insurance, physical examination, and immunization forms.

Criminal Offender Record Information (CORI) checks are required 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, please see the department chairperson.

A grade of B- must be maintained in AHE110 and AHE114 in order to continue in the second semester.

PROGRAM OVERVIEW

Medical lab assistants are trained to perform basic and routine laboratory procedures.

CAREER OUTLOOK

Students are prepared for employment assisting laboratory technicians in labs, hospitals, clinics, health maintenance organizations, and doctors' offices as multi-skilled workers and lab assistants. CPR, EKG, and phlebotomy training are included.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL:

- Be competent in basic and routine laboratory procedures, phlebotomy, and EKG.
- Possess basic computer skills.

53 Phlebotomy Technician Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Principles of Clinical Practice	AHE110			3	
Phlebotomy Skills	AHE113			3	ENG090, RDG090, MAT090 or placement
Health Employment Issues	AHE104			3	
Phlebotomy Theory	AHE202			3	AHE113
Practicum/Phlebotomy Tech	AHE206			3	AHE110, AHE113
Computer or Office Administration Course				3	
Electives				6	
TOTAL CREDITS				24	
ESL OPTION:					
Principles of Clinical Practice	AHE110			3	
Phlebotomy Skills	AHE113			3	ENG090, MAT090, RDG090 or placement
Health Employment Issues	AHE104			3	
Phlebotomy Theory	AHE202			3	AHE113
Practicum/Phlebotomy Tech.	AHE206			3	AHE110, AHE113
ESL/Allied Health	ESL051			6	
Computer or Office Adm. Course				3	
TOTAL CREDITS				24	

PROGRAM OVERVIEW

Phlebotomy technicians are trained to perform blood collection by venipuncture and are introduced to basic laboratory techniques.

CAREER OUTLOOK

Students are prepared for employment in hospitals, clinics, chronic care facilities, health maintenance organizations, and physicians' offices as multi-skilled workers and phlebotomy technicians. CPR and EKG training are included.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL:

- Be competent in venipuncture and EKG.
- Possess basic computer skills.

Special considerations for all Allied Health Certificate Programs: attendance at a program information session, malpractice and health insurance, physical examination, and immunization forms.

Criminal Offender Record Information (CORI) checks are required 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, please see the department chairperson.

A grade of B- must be maintained in AHE110 and AHE113 in order to continue in the second semester.

54 **Surgical Technology Certificate Program**

This is a full-time, 11 month certificate program offered at the Chelsea Campus. It prepares students through classroom teaching, lab observation and practice, and actual clinical experience in the operating rooms of Boston area hospitals. Surgical technologists are integral members of the surgical team who work closely with surgeons, anesthesiologists, registered nurses, and other surgical personnel delivering patient care in the operating room. Surgical technologists handle the instruments, supplies, and equipment necessary during the surgical procedure. They understand the procedures being performed and anticipate the needs of the surgeon. They have the necessary knowledge and ability to provide quality patient care during the operative procedure and maintain sterile technique. Students spend two days per week in the area hospitals during the spring

semester and work full-time during June and July. A grade of C must be maintained in all of the surgical technology courses. Criminal Offender Record Information (CORI) checks are required prior to participation in the clinical component of surgical technology courses in accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 § 172-178 and regulations pursuant to these statutes. Admission to the surgical technology 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, please see the department chairperson.

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing	ENG111	Fall		3	ENG095 or placement
Principles of Psychology	PSY101	Fall		3	
Basic Anatomy/Physiology/Lab	BIO107*	Fall		4	
Surgical Technology I	SGT105	Fall		5	ENG095, MAT095 or placement
Human Growth/Development	PSY113	Spring		3	PSY101
Surgical Technology II	SGT106	Spring		8	SGT105, BIO107
Surgical Technology III	SGT107	Summer		3	SGT106
TOTAL CREDITS				29	

Admission Criteria is as follows: Apply through the Enrollment Services Center; High School diploma or GED; College Placement Tests (CPTs) must place into ENG111 and MAT095.

*BIO107 is designed specifically for Surgical Technology. Students who wish to transfer should take BIO203 and BIO204.

CAREER OUTLOOK

The prospect for jobs is very good at the present time. Hospitals are hiring more surgical technologists as the cost of health care rises. Salaries start at approximately \$30,000 and progress to \$35,000 with experience. Graduates of the program should plan to take their 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.

55 Central Processing Certificate Program (Sterile Processing and Distribution Management)

The Central Processing Technician Certificate program is a part-time evening program designed for working students. It prepares students to enter this expanding field as Registered Central Processing Technicians. Students experience a varied curriculum, which blend clinical skills and business concepts, preparing graduates to rapidly assume a leadership role within the profession. The course of study includes computer competency, accounting, medical terminology, central processing functions, central processing skills, and regulations. Criminal Offender Record Information (CORI) checks are required prior to participation in the clinical

component of surgical technology courses in accordance with the Criminal Records Information Act: Mass. General Laws, Chapter 6 § 172-178 and regulations pursuant to these statutes. Admission to the surgical technology 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, please see the department chairperson.

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Central Processing I	SGT109	Fall		4	RDG095, ENG095, MAT095 or placement
Medical Terminology	OIM180	Fall		3	
Central Processing II	SGT110	Spring		4	SGT109, OIM180
Applications/Concepts	CMP105	Spring		3	
Central Processing Clinical	SGT111	Summer		2	SGT109
Central Processing IV	SGT112	Fall		4	SGT110, SGT111
Principles of Accounting	ACC101	Fall		3	
TOTAL CREDITS:				23	

CAREER OUTLOOK

Technicians perform duties in one or more of the functional areas of materials management, supply, and processing and distribution. This body of knowledge is referred to as Central Processing Technology. Positions in Central Processing Technology are most often in healthcare facilities and industry, with starting salaries in the range of \$11 to \$17 dollars per hour. Students are prepared for advanced responsibilities within the profession, and job prospects are excellent.

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

- Apply to take 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.

56 Associate in Arts Degree: History and Government Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3	fulfilled			
Modern Civilization	From Menu 4	fulfilled			
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				16	
CONCENTRATION COURSES:					
History of Western Civilization I or World Civilization I	HIS101 or HIS111			3	
History of Western Civilization II or World Civilization II	HIS102 or HIS112			3	Choose sequential course
State/Local Politics	GOV103			3	
Government/Politics in US	GOV101			3	
US History I	HIS151			3	
US History II	HIS152			3	
Foreign Language Elective				3	
Foreign Language Elective				3	
Literature in America I or Masterpieces of World Lit. I	LIT203 or LIT211			3	ENG095 or placement in ENG111
Literature in America II or Masterpieces of World Lit. II	LIT204 or LIT212			3	ENG095 or placement in ENG111 choose sequential course
Behavioral Science Elective				3	
Mathematics Elective				3	
Lab Science Elective				4	
Elective				3	
Elective				3	
				46	
TOTAL CREDITS				62	

CONCENTRATION OVERVIEW

This concentration is designed for students who plan to transfer to a four-year college or university and provides students who expect to major in history or government with the foundation for their advanced studies.

CAREER OUTLOOK

This concentration, which meets all the requirements of the Commonwealth Transfer Compact, prepares students to transfer to a bachelor's degree-granting college or university as a junior. This program would be an 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, and additional graduate work may be necessary as well.

UPON COMPLETION OF THIS CONCENTRATION, GRADUATES WILL:

- 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 also earn a World Studies Certificate simultaneously. See page 106.

Recommended electives: GEO101, GOV101, GOV103, HIS211, HIS213, ECO201, ECO202, PHL111.

57 **World Studies Certificate Program**



PROGRAM OVERVIEW

Students enrolling in associate in arts degrees can obtain a World Studies certificate without any additional coursework through careful selection of general education and elective courses needed to fulfill their degree requirements. The World Studies certificate is an additional credential that students can obtain to demonstrate that they have acquired the knowledge, skills, and competencies needed to live and work in a globally interdependent world. In order to obtain the certificate, students must complete a total of five courses from the World Studies certificate menu. The common objective of courses is to foster the ability to appreciate, analyze, and deal constructively with historical or contemporary experiences of diversity in the United States and all other parts of the world. The certificate menu includes courses in the areas of history, sociology, geography, science, religion, language, and literature.

CAREER OUTLOOK

The World Studies certificate would be an asset to students planning to transfer to a bachelor's degree-granting college or university with a major in international studies, geography, history, literature, languages, education, classics, sociology, anthropology, religion, or any regional studies program such as Middle East Studies. It would also enhance students' future employability, as leaders from business, government, non-profit organizations, and education express the need for employees who have an understanding of world issues and who are capable of working within a multicultural environment.

UPON COMPLETION OF THIS CERTIFICATE, IN ADDITION TO THE 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.

57 World Studies Certificate Program

CHOOSE FIVE COURSES FROM THREE OF THE FOLLOWING AREAS:	COURSE TITLE	COURSE #	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
AREA I: LANGUAGES	Arabic	ARB			3	
	French	FRE			3	
	Spanish	SPN			3	
	Portuguese	POR			3	
	Mandarin	CHN			3	
	Japanese	JPN			3	
	AREA II: LITERATURE	Literature in America I	LIT203			3
Literature in America II		LIT204			3	ENG095 or placement in ENG111
Masterpieces of World Literature I		LIT211			3	ENG095 or placement in ENG111
Masterpieces of World Literature II		LIT212			3	ENG095 or placement in ENG111
African Literature		LIT219			3	ENG095 or placement in ENG111
Latin American Literature		LIT221			3	ENG095 or placement in ENG111
Immigrant Experience in Literature		LIT223			3	ENG095 or placement in ENG111
Middle Eastern Literature		LIT512			3	ENG095 or placement in ENG111
AREA III: HISTORY		Middle Eastern History	HIS			3
	History of Western Civilization I	HIS101			3	
	History of Western Civilization II	HIS102			3	
	World Civilization I	HIS111			3	
	World Civilization II	HIS112			3	
	US History I	HIS151			3	
	US History II	HIS152			3	
AREA IV: SOCIOLOGY	Cultural Anthropology	SOC109			3	
	Contemporary Middle East	SOC			3	
	Area V: Geography					
	World Regional Geography	GEO101			3	
AREA VI: RELIGION	World Religions	PHL111			3	
	Middle East Religions	PHL			3	
AREA VII: SCIENCE	Environmental Science/Lab	ENV105			4	MAT090, RDG095, ENG095 or placem.
	TOTAL CREDITS				15 - 16	

Associate in Science Degree: Hotel/Restaurant/Travel Program

The program in Hospitality includes options in Hotel and Restaurant Management and Travel and Tourism Management. Students will be exposed to a variety of "industry-oriented" learning settings and a variety of teaching and learning environments that place students in positions

that reflect the unique environment of the hospitality industry. There continues to be a great demand for well trained graduates, with opportunities to advance both personally and professionally based upon a combination of technical and critical thinking skills.

58 Hotel/Restaurant Management Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Intro to Hospitality Mgt.	HRT104			3	
Lodging Operations Mgt. I	HRT111	Fall		3	
Food Service Operations Mgt. I	HRT115	Fall		3	
Hospitality Marketing Mgt.	HRT109	Fall		3	
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
College Algebra	MAT195			3	MAT095 or placement
Lodging Operations Mgt. II	HRT211	Spring		3	
Scientific View of the World	From Menu 6			4	
Food Service Operations Mgt. II	HRT215	Spring		3	
Accounting I	ACC101			3	
Accounting II	ACC102			3	ACC101
Culinary Theory/Skills Proficiency	CUL112	Fall		3	
Applications/Concepts	CMP105			3	
Modern Civilization	From Menu 4			3	
Business Law	BUS201			3	
Meeting/Special Events Planning	HRT219	Spring		3	HRT104
Management Seminar	MAN201	Spring		3	HRT104
Field Experience Internship	HRT210			3	HRT104
Creative Exploration	From Menu 7			3	
TOTAL CREDITS				64	

OPTION OVERVIEW

The focus of this option is on skills training and decision making in such crucial areas as guest services, human resources, and hotel and restaurant operations. Students will be exposed to a variety of teaching methods leading to a better understanding and reflection on the importance of the tourism industry as an economic growth vehicle and also as method of working with a culturally diverse workforce.

CAREER OUTLOOK

Students who choose to enter the hospitality industry work force are prepared for many supervisory and managerial positions and also for management training programs in nationally recognized hotels and restaurants. For students who transfer to a four-year program, Bunker Hill Community College has a strong articulation base with a number of programs at area colleges and universities.

UPON COMPLETION OF THIS OPTION, GRADUATES WILL HAVE:

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

59 Travel and Tourism Management Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Intro to Hospitality Management	HRT104			3	
Travel and Tourism	HRT101	Fall		3	
Travel Agency Operations I	HRT102	Fall		3	
Accounting I	ACC101			3	
College Writing II	ENG112			3	ENG111
College Algebra	MAT195			3	MAT095 or placement
Travel Agency Operations II	HRT103	Spring		3	HRT102
Accounting II	ACC102			3	ACC101
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Hospitality Marketing Mgt.	HRT109	Fall		3	
Business Law	BUS201			3	
Applications/Concepts	CMP105			3	
Field Experience Internship	HRT210			3	HRT104
Scientific View of the World	From Menu 6			4	
Meeting/Special Events Planning	HRT219	Spring		3	HRT104
Tourism Planning/Destination Dev.	HRT107	Spring		3	
Management Seminar	MAN201	Spring		3	HRT104
Creative Exploration	From Menu 7			3	
TOTAL CREDITS				61	

OPTION OVERVIEW

The foundation of this option is based upon the ever-increasing career opportunities being developed in relation to regional, national, and international tourism development. Course offerings have been formulated to provide a broad-based introduction to the key areas of opportunity with the tourism industry. Students will be exposed to a variety of teaching methods leading to a better understanding of the tourism industry as an economic growth vehicle and also a method of working with a culturally diverse workforce.

CAREER OUTLOOK

Students who complete this option are qualified for a variety of positions in the travel and tourism industry. These positions include front line guest service and ticketing, ground support, and steward positions for major airline companies, travel agencies, and for tour companies. Students may also transfer to a four-year program to complete their bachelor's degree.

UPON COMPLETION OF THIS OPTION, GRADUATES WILL HAVE:

- Acquired technical skills in usage of the Sabre travel agency software.
- Acquired administrative skills in basic business bookkeeping procedure, business cost controls, planning and coordinating tours, and writing basic traveler itineraries.

60 **Travel and Tourism Management Certificate Program**

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Intro to Hospitality Management	HRT104			3	
Travel and Tourism	HRT101	Fall		3	
Travel Agency Operations I	HRT102	Fall		3	
Applications/Concepts	CMP105			3	
College Writing I	ENG111			3	ENG095 or placement
Tourism Planning/Destination Dev.	HRT107	Spring		3	
Travel Agency Operations II	HRT103	Spring		3	HRT102
Field Experience Internship	HRT210			3	HRT104
total credits				24	

PROGRAM OVERVIEW

The foundation of this program is based upon the wide range of career opportunities developing in relation to the increase in regional, national, and international emphasis on tourism development. Course offerings have been formulated to provide a broad-based introduction to the key topical areas of the tourism industry. Students will be exposed to a variety of teaching methods leading to a better understanding of the tourism industry as an economic growth vehicle and also a method of working with a culturally diverse workforce.

Students who complete the certificate requirements may use all earned credits towards a degree in Travel and Tourism Management.

CAREER OUTLOOK

Graduates are qualified to fill a variety of entry positions in the travel and tourism industry, including travel agencies, tour guides, local, regional, and state agencies, as well as a variety of hotel industry positions. Students may also transfer all credits to the Associate in Science degree in travel and tourism.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL HAVE:

- Acquired technical skills in usage of the Sabre travel agency software.
- Acquired administrative skills in basic business bookkeeping procedure, business cost controls, planning and coordinating tours, and writing basic traveler itineraries.

61 Associate in Arts Degree: Human Services Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
General Education:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society		fulfilled			
Modern Civilization		fulfilled			
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				16	
CONCENTRATION COURSES:					
Principles of Psychology	PSY101			3	
Human Services Profession	HSV151			3	
Principles of Sociology	SOC101			3	
Literature Elective				3	ENG095 or placement in ENG111
Government/Politics in the US or State/Local Politics	GOV101 GOV103			3	
Child Growth/Development and Adolescent/Adult Development or Human Growth/Development and an Elective*	ECE103** PSY124 or PSY113			6	PSY101
Addiction	HSV155			3	
Counseling/Interviewing Techniques	PSY115			3	PSY101
Multicultural Issues	HSV156			3	PSY101, HSV151
Statistics I or Statistics I/Lab	MAT181 or 183			3	MAT095 or placement
Urban Sociology	SOC105			3	SOC101
Social Science Elective				3	
Lab Science Elective				4	
Human Services Internship I	HSV160			3	permission
Literature Elective				3	ENG095 or placement in ENG111
Human Services Internship II	HSV161			3	permission
				52	
TOTAL CREDITS				68	

*Choose one pair: ECE103/PSY124 or PSY113/Elective.

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

CONCENTRATION OVERVIEW

This concentration, which meets all the requirements of the Commonwealth Transfer Compact, is developed for those students seeking a bachelor's degree in Social Work, or master's degree in Human Services upon transfer to a four-year university. Students interested in pursuing entry-level work in human services should follow the A.S. in Human Services degree.

CAREER OUTLOOK

Potential careers include 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 CONCENTRATION , GRADUATES WILL BE ABLE TO:

- Enter an entry level position in several areas of social service work.
- Provide services such as referral, advocacy, and casework to clients.
- Describe the nature of the complex social service system in this country with emphasis on local and state interaction and federal supports.
- Participate in the dynamics of agency networking within the human services system of a local community.
- Describe and demonstrate skill in the administration of work within a social service organization as well as the administrative financing of human service work.
- Describe in detail the psychological and sociological structures underlying the individual within the system of society.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

62 Associate in Science Degree: Human Services Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
Principles of Psychology	PSY101			3	
College Writing I	ENG111			3	ENG095 or placement
Human Services Profession	HSV151			3	
Applications/Concepts	CMP105			3	
College Writing II	ENG112			3	ENG111
Principles of Sociology	SOC101			3	
Government/Politics in the US or State/Local Politics	GOV101 or GOV103			3	
Child Growth/Development and Adolescent/Adult Development or Human Growth/Development and an Elective*	ECE103 PSY124 or PSY113			6	PSY101
Addiction	HSV155			3	PSY101
Counseling/Interviewing Techniques	PSY115			3	PSY101
Creative Exploration	From Menu 7			3	
Topics in Career Math	MAT100			3	MAT090
Human Services Internship I	HSV160			3	permission
Scientific View of the World	From Menu 6			4	
Multicultural Issues	HSV156			3	PSY101, HSV151
Urban Sociology	SOC105			3	SOC101
Elective				6	
Human Services Internship II	HSV161			3	permission
TOTAL CREDITS				61	

* Choose one pair: ECE103/PSY124 or PSY113/Elective.

Students may not receive credit for ECE103, PSY124 and PSY113 to meet degree elective requirements. Suggested electives are a foreign language or EDU150 tutoring.

Students who place in math course work above MAT100 may substitute a higher level math course.

PROGRAM OVERVIEW

This curriculum is intended to prepare students as assistants and paraprofessionals in careers that direct the delivery of services to people.

CAREER OUTLOOK

The careers include 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:

- Enter an entry level position in several areas of social service work.
- Provide services such as referral, advocacy, and casework to clients.
- Describe the nature of the complex social service system in this country with emphasis on local and state interaction and federal supports.
- Participate in the dynamics of agency networking within the human services system of a local community.
- Describe and demonstrate skill in the administration of work within a social service organization as well as the administrative financing of human service work.
- Describe in detail the psychological and sociological structures underlying the individual within the system of society.

63 Associate in Arts Degree: Mathematics Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5	fulfilled			MAT095 or placement
Scientific View of the World	From Menu 6	fulfilled			
Creative Exploration	From Menu 7			3	
				15	
CONCENTRATION COURSES:					
Calculus I	MAT281			4	MAT196 or MAT197
Calculus II	MAT282			4	MAT281
Calculus III	MAT283			4	MAT282
Calculus IV	MAT284			4	MAT283
Linear Algebra	MAT291			3	MAT282 or concurrently
College Physics /Lab	PHY251			4	MAT281 or concurrently
College Physics II/Lab	PHY252			4	PHY251, MAT282 or concurrently
Computer Elective				3	
Behavioral Science Elective				3	
Literature Electives				3	ENG095 or placement in ENG111
Social Science Elective				3	
Literature Electives				3	ENG095 or placement in ENG111
Elective				3	
				45	
TOTAL CREDITS				60	

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW

After completing this concentration, students will be prepared to transfer into a four-year college or university bachelor's degree program as a mathematics major. After transferring, students will study to become more proficient in areas such as calculus, analysis, discrete mathematics, and number theory.

CAREER OUTLOOK

Most entry-level employment opportunities in industry require a minimum of a Bachelor of Science or Bachelor of Arts degree. Professional positions in education and research fields usually require a minimum of a master's degree. The courses meet all the 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 also earn a World Studies Certificate simultaneously. See page 106.

64 Associate in Arts Degree: Physics/Engineering Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5	fulfilled			MAT095 or placement
Scientific View of the World	From Menu 6	fulfilled			
Creative Exploration	From Menu 7			3	
				15	
CONCENTRATION COURSES:					
College Physics I/Lab	PHY251			4	MAT281 or concurrently
College Physics II/Lab	PHY252			4	PHY251, MAT282 or concurrently
Calculus I	MAT281			4	MAT196 or MAT197
Calculus II	MAT282			4	MAT281
Calculus III	MAT283			4	MAT282
Calculus IV	MAT284			4	MAT283
Linear Algebra	MAT291			3	MAT282 or concurrently
General Chemistry I/Lab	CHM201			4	MAT195
General Chemistry II/Lab	CHM202			4	CHM201
Behavioral Science Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Computer Elective				3	
Social Science Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
				50	
TOTAL CREDITS				65	

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW

After completing this concentration, a student will be prepared to transfer into a four-year college or university as a physical science, physics, or engineering major. After transferring, he or she will develop a course of study to become proficient in one or more of the divisions of the physical sciences: i.e. nuclear physics, astrophysics, optics, or electrical engineering.

CAREER OUTLOOK

Entry-level employment opportunities in physical science such as lab technicians usually require a minimum of a bachelor's degree in physical science. Professional positions such as engineers, researchers, or college instructors usually require a minimum of a master's degree. The courses meet all the requirements of the Commonwealth Transfer Compact.

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

- Be familiar with basic physics principles.
- Be able to analyze and create solutions for problems involving physics principles.
- Apply mathematics techniques in scientific problem solving.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

65 Associate in Arts Degree: Music Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7	fulfilled			
				19	
CONCENTRATION COURSES:					
Music Appreciation I	MUS118	Fall		3	
Foundations of Music	MUS122	Fall		3	
Social Science Elective				3	
Mathematics Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Music Appreciation II	MUS119	Spring		3	MUS118
Theory of Harmony	MUS123	Spring		3	MUS122
Behavioral Science Elective				3	
Lab Science Elective				4	
Electronic Music I	MUS137			3	
Music in the United States	MUS151			3	
Literature Elective				3	ENG095 or placement in ENG111
Music Elective				3	
Music Elective				3	
				43	
TOTAL CREDITS				62	

CONCENTRATION OVERVIEW

This concentration is an intensive study of the foundations of music theory, history, and practice. It will provide the student with either the necessary background for transfer as a music major to a four-year degree program, or help the student develop skills in music for his or her personal enrichment.

CAREER OUTLOOK

This concentration will help prepare the student for an entry-level position in the music field. Depending on the electives chosen, the student may start work toward a career in music education, performance, or music management. Completion of the degree program will prepare students for transfer to a four-year college for additional musical training or for employment in a variety of musical fields.

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 also earn a World Studies Certificate simultaneously. See page 106.

Associate in Science Degree: Office and Information Management Program

ASSOCIATE IN SCIENCE DEGREE

OFFICE AND INFORMATION MANAGEMENT PROGRAM

The Office and Information Management Program offers two degree options: Administrative Information Management and Medical Information Management. Each option is designed 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. Software programs taught include: Microsoft Word, Access, Excel, PowerPoint, and Outlook, as well as e-mail and the Internet. Students who plan to transfer to a four-year business administration or information management program should contact the Office and Information Management Department for more information.

OFFICE AND INFORMATION MANAGEMENT CERTIFICATE PROGRAMS

The Office and Information Management Department offers two short-term certificate programs that train students for a variety of entry-level positions within office administration: Medical Information Management Assistant and Information Management Specialist. The majority of the credits earned in either certificate can be applied to the two-year degree programs within the department.

Students with previous keyboarding training may take the Keyboarding Exemption Exam, which is given every semester. For test dates and information about the process to follow, students should contact the Office and Information Management Department chairperson or the Advising/Counseling Office.



66 Administrative Information Management Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society		fulfilled			
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				19	
CORE COURSES:					
Keyboarding/Intro to MS Word	OIM101			3	
Admin Information Management I	OIM105			3	
Applications/Concepts	CMP105			3	
Group Dynamics	PSY107			3	
MS Word Business Apps	OIM110			3	OIM101, CMP105
Business Correspondence/Editing	OIM130	Fall only		3	OIM101
Introduction to MS Office	CMP133			3	
Admin Information Mgmt II	OIM205	Fall only		3	OIM105
Advanced MS Office	CMP233			3	CMP133
Admin Business Communication	OIM230	Fall only		3	ENG111
Office/Info. Mgmt Internship	OIM280	Spring only		3	All core courses
Career Electives (3)				9	
				42	
TOTAL CREDITS				61	

Career Electives: ACC101, 102, 112; BUS101, 106, 110, 120, 122, 123, 124, 201, 202; CMP117, 127, 162, 208; ENG171; GVD101, 103, 220, 221, 222; MDT131; or MAN111, 112.

OPTION OVERVIEW

This option develops computer, human relations, and organizational skills. In addition to core requirements, students choose three career electives from a wide array of business, communications, computer, desktop publishing, and legal courses. This specialization allows students to further enhance their skills and be more marketable within their area of interest. An internship within a business setting during the last spring semester of the program reinforces the skills learned.

CAREER OUTLOOK

Job opportunities are excellent within a wide range of businesses, corporations, and government agencies. Depending upon the area of specialization chosen, graduates will 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. This program or portions of this program may also be appropriate for individuals seeking retraining, upgrading computer or management skills, or seeking MOUS certification.

UPON COMPLETION OF THIS OPTION, GRADUATES WILL:

- 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.
- Have demonstrated proficiency in office operations and communication mediums.

67 Medical Information Management Option

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society		fulfilled			
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World		fulfilled			
Creative Exploration	From Menu 7			3	
				15	
CORE COURSES:					
Keyboarding/Intro to MS Word	OIM101			3	
Admin Information Management I	OIM105			3	
Applications/Concepts	CMP105			3	
Medical Terminology	OIM180			3	
MS Word Business Apps	OIM110			3	OIM101, CMP105
Business Correspondence/Editing	OIM130	Fall only		3	OIM101
Introduction to MS Office	CMP133			3	
Medical Information Mgmt	OIM190	Spring only		3	OIM101
Third-Party Billing/Coding	OIM200	Evening only		3	OIM180
Advanced MS Office	CMP233			3	CMP133
Admin Information Management II	OIM205*	Fall only		3	OIM105
Principles of Biology I/Lab or Nutrition Science/Lab	BIO101 BIO115			4	MAT090, RDG095, ENG095 or placement
Admin Business Communication	OIM230*	Fall only		3	ENG111
Group Dynamics	PSY107			3	
Office/Info Mgmt Internship	OIM280	Spring only		3	All core courses
				46	
TOTAL CREDITS				61	

* OIM205 and OIM230 should be taken concurrently.

OPTION OVERVIEW

The Medical Information Management option of the Office and Information Management Program Associate in Science degree 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, a leading business productivity software package and third-party billing and coding. An internship within a medical office setting during the last spring semester of the program reinforces the skills learned.

CAREER OUTLOOK

Job opportunities exist within physicians' and dentists' offices, clinics, HMOs, community health agencies, long-term care facilities, and hospitals, as well as 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, medical office managers, patient service representatives, and medical administrative assistants. At-home opportunities are also available for 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.

68 Medical Information Management Assistant Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Keyboarding/Intro to MS Word	OIM101			3	
Medical Terminology	OIM180			3	
Medical Information Mgmt	OIM190	Spring only		3	OIM101
Applications/Concepts	CMP105			3	
MS Word Business Apps	OIM110			3	OIM101, CMP105
Business Correspondence/Editing	OIM130	Fall only		3	OIM101
Introduction to MS Office	CMP133			3	OED101
Third-Party Billing/Coding	OIM200	Evening only		3	
TOTAL CREDITS				27	

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 Medical Information Management option of the associate in science degree.

CAREER OUTLOOK

Job opportunities exist within physicians' and dentists' offices, clinics, HMOs, community health agencies, long-term care facilities, and hospitals, as well as 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. At-home opportunities are also available for 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.

69 Information Management Specialist Certificate Program

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
College Writing I	ENG111			3	ENG095 or placement
Mathematics	MAT			3	placement
Keyboarding/Intro to MS Word	OIM101			3	
Admin. Information Management I	OIM105			3	
Applications/Concepts	CMP105			3	
MS Word Business Applications	OIM110			3	OIM101, CMP105
Business Correspondence/Editing	OIM130	Fall only		3	OIM101
Introduction to MS Office	CMP133			3	
Career or Core Elective (1)				3	
TOTAL CREDITS				27	

Career Electives: ACC101, 102, 112; BUS101, 106, 110, 120, 122, 123, 124, 201, 202; CMP117, 127, 162, 208; ENG171; GVD101, 103, 220, 221, 222; MDT131; or MAN111, 112.

PROGRAM OVERVIEW

This option offers hands-on training using the most current computer applications to develop the practical skills necessary to work in an office and leads to a certificate in Information Management.

CAREER OUTLOOK

Graduates will qualify for entry-level positions such as receptionists, data-entry clerks, information processing specialists, office assistants, or customer service representatives within a wide variety of businesses and corporations. All course requirements for this certificate may be applied to any of the two-year degree programs in Office Administration.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL:

- Demonstrate proficiency in computer operations and software applications.
- Use the complete range of Microsoft applications in the most efficient way.
- Have demonstrated proficiency in office operations and communication mediums.

70 Associate in Arts Degree: Psychology Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3	fulfilled			
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				19	
CONCENTRATION COURSES:					
Principles of Psychology	PSY101			3	
Principles of Sociology	SOC101			3	
Human Growth/Development	PSY113			3	PSY101
Mathematics Elective				3	
Lab Science Elective				4	
Literature Elective				3	ENG095 or placement in ENG111
Psychology of Adjustment	PSY103				PSY101
Social Science Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Elective				3	
Elective				3	
Elective				3	
Elective				3	
Elective				3	
				43	
TOTAL CREDITS				62	

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

Students are encouraged to take a computer course.

CONCENTRATION OVERVIEW

A concentration in psychology is a recommended sequence of courses designed to prepare a student for transfer to a four-year college with the option of a major in the behavioral sciences.

CAREER OUTLOOK

Entry-level positions in the general field of psychology are not available without a bachelor's degree. In general, positions require the minimum of a master's degree. This concentration meets all the requirements of the Commonwealth Transfer Compact.

UPON COMPLETION OF THIS CONCENTRATION, GRADUATES WILL:

- Be able to describe the characteristics of the major psychological theories.
- Be familiar with current perspectives regarding the relationship between the mind and body.
- Be familiar with the current schools of psychotherapy.
- Be able to describe the biological, cognitive, affective, and emotional stages of human development throughout the life span.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

71 Associate In Arts Degree: Biological Science Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	MAT195			3	MAT095 or placement
Scientific View of the World	From Menu 6	fulfilled			
Creative Exploration	From Menu 7			3	
				18	
CONCENTRATION COURSES:					
General Biology I/Lab	BIO195			4	ENG095, MAT095, RDG095
General Biology II/Lab	BIO196			4	BIO195
General Chemistry I/Lab	CHM201			4	MAT195
General Chemistry II/Lab	CHM202			4	CHM201
General Physics/Lab I	PHY201			4	MAT195
General Physics/Lab II	PHY202			4	PHY201
Cell Biology/Lab	BIO207			4	BIO195, CHM201
Behavioral Science Elective				3	
Social Science Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Precalculus	MAT197			4	MAT195
Literature Elective				3	ENG095 or placement in ENG111
Courses from Pool (1)				3 - 4	
TOTAL CREDITS				65 - 66	
POOL OF ELECTIVES:					
Applications/Concepts	CMP105			3	
Microbiology/Lab	BIO205			4	BIO195
Statistics I/Lab	MAT183			4	MAT095 or placement
Calculus I	MAT281			4	MAT196 or MAT197
Honors Seminar	HON200			3	permission

Students may substitute Calculus based College Physics I and II (PHY251 and PHY252) for PHY201 and PHY202. Note: Principles of Biology I and II (BIO101, BIO102) and Chemical Science I and II (CHM110 and CHM111) CANNOT be used to satisfy the requirements of this program.

CONCENTRATION OVERVIEW

After completing this concentration, students will be prepared to transfer into a four-year college or university bachelor's degree program as a biology major. After transferring, students will develop a course of study to become proficient in one or more of the divisions of the biological sciences: i.e. physiology, ecology, cell biology, biotechnology, genetics, botany, zoology, microbiology, paleontology, biochemistry, immunobiology, marine biology, wildlife conservation. Students planning to transfer into a pre-medical, pre-veterinary, pre-dental, pharmacy, or chiropractic degree program should also enroll in the Biological Science Concentration.

CAREER OUTLOOK

Entry-level employment opportunities in biology such as research assistant or field technician usually require a minimum of a bachelor's degree in the biological sciences. Professional positions such as researcher or college biology instructor usually require a minimum of a master's degree in the biological sciences. This program of study meets all the requirements of the Commonwealth Transfer Compact.

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

- Use currently accepted biological concepts to investigate problems and ideas presented in advanced biological study.
- Use biological concepts to evaluate his or her own science related concerns such as personal health or careers in science.
- Use laboratory technology, equipment, and techniques to critically and safely investigate scientific problems using proper scientific methods.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

72 Associate in Arts Degree: Chemical Science Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought		fulfilled			MAT095 or placement
Scientific View of the World		fulfilled			
Creative Exploration	From Menu 7			3	
				15	
CONCENTRATION COURSES:					
Precalculus	MAT197			3	MAT195
Calculus I	MAT281			4	MAT196 or MAT197
Calculus II	MAT282			4	MAT281
General Chemistry I/Lab	CHM201			4	MAT195
General Chemistry II/Lab	CHM202			4	CHM201
College Physics I/Lab	PHY251			4	MAT281 or concurrently
College Physics II/Lab	PHY252			4	PHY251, MAT282 or concurrently
Social Science Elective				3	
Behavioral Science Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Literature Elective				3	ENG095 or placement in ENG111
Courses from Pool (2):				6 - 8	
				45 - 47	
TOTAL CREDITS				60 - 62	
POOL OF ELECTIVES:					
Applications/Concepts	CMP105			3	
Statistics I/Lab	MAT183			4	MAT095 or placement
Calculus III	MAT283			4	MAT282
Honors Seminar	HON200			3	permission

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW

After completing this concentration, a student will be prepared to transfer into a four-year college or university bachelor's degree program as a chemistry major. After transferring, he or she will 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.

CAREER OUTLOOK

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 of study meets all the 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 his or her own science related concerns such as personal health or careers in science.
- Use laboratory technology, equipment, and techniques to critically and safely investigate scientific problems using proper scientific methods.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.

73 Associate in Arts Degree: Sociology Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3	fulfilled			
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5	fulfilled			MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7			3	
				16	
CONCENTRATION COURSES:					
Principles of Psychology	PSY101			3	
Principles of Sociology	SOC101			3	
Statistics I	MAT181			3	MAT095 or placement
Cultural Anthropology	SOC109			3	
Mathematics Elective				3	
Lab Science Elective				4	
Elective				3	
Community Problems or Urban Sociology	SOC103 SOC105			3	SOC101, SOC109 or permission
Literature Elective				3	ENG095 or placement in ENG111
Social Science Elective				3	
Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Foreign Language Elective				3	
Foreign Language Elective				3	
Elective				3	
				46	
TOTAL CREDITS				62	

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW

A concentration in sociology is a recommended sequence of courses designed to prepare a student for transfer to a four-year college with the option of a major in the behavioral sciences.

CAREER OUTLOOK

Entry-level positions with a two-year concentration are available in the general field of human services. However, career opportunities in sociology and /or social work require at least a bachelor's degree and usually a minimum of a master's degree. The courses meet all the 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 also earn a World Studies Certificate simultaneously. See page 106.

74 Associate in Arts Degree: Theatre Concentration

COURSE TITLE	COURSE NUMBER	SEMESTER TAKEN	GRADE	CREDITS	PREREQUISITES
GENERAL EDUCATION COURSES:					
College Writing I	ENG111			3	ENG095 or placement
College Writing II	ENG112			3	ENG111
Individual/Society	From Menu 3			3	
Modern Civilization	From Menu 4			3	
Quantitative Thought	From Menu 5			3	MAT095 or placement
Scientific View of the World	From Menu 6			4	
Creative Exploration	From Menu 7	fulfilled			
				19	
CONCENTRATION COURSES:					
Acting	THE107			3	
Play Production Workshop	THE109			3	
Oral Communications	ENG171			3	
Theatre Elective				3	
Social Science Elective				3	
Electives				3	
Mathematics Elective				3	
Humanities Elective				3	
Literature Elective				3	ENG095 or placement in ENG111
Theatre Elective				3	
Humanities Elective				3	
Lab Science Elective				4	
Literature Elective				3	ENG095 or placement in ENG111
Electives				3	
				43	
TOTAL CREDITS				62	

Students should select sequence courses from General Education Electives, e.g. HIS101 - HIS102.

CONCENTRATION OVERVIEW

The Theatre Concentration is a recommended sequence of courses designed for the serious student of theatre who wishes to prepare for admission to a four-year college or university. It is recommended that students complete requirements for the associate degree and transfer to a four-year institution for the bachelor's degree. Students with this concentration could seek one of the following majors in a four-year college: theatre arts, theatre education (elementary or secondary), early childhood education, literature/drama, public speaking, or communication.

CAREER OUTLOOK

Students with a strong theatre background are able to pursue 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, teaching (elementary and secondary), communication, and literature. This concentration meets all the requirements of the Commonwealth Transfer Compact.

UPON COMPLETION OF THIS PROGRAM, GRADUATES WILL:

- Be familiar with the components necessary to produce a play.
- Have knowledge of theatre history and literature.
- Have practical experience in producing a play from planning to performing.

Students enrolling in this degree program can also earn a World Studies Certificate simultaneously. See page 106.