ARTICULATION AGREEMENTS BETWEEN BUNKER HILL COMMUNITY COLLEGE AND OTHER ACADEMIC INSTITUTIONS

Under Associate in Science:
A.S. Digital and Computer Forensics Investigations
Champlain College – Computer Forensics and Digital Investigations

Under Associate in Science:
A.S in Culinary Arts
Cape Cod Regional Technical High School – Offering activities to enhance the post-secondary connection.

Cisco Academy Students
John D. O’Bryant School of Mathematics and Science – This collaboration will incorporate specific activities to increase and enhance the post-secondary connection for all high school students participating in Cisco Academy courses.

COURSE DESCRIPTIONS

*The course descriptions below replace the following courses MLT-101; MLT-102; MLT-201; MLT-202; MLT-203; MLT-251; MLT-252 AND MLT-253.

MLT-111 Introduction to Clinical Laboratory Science (2 credits)
This course explores the nature and scope of clinical laboratory work. The primary focus will be on the role of the laboratory in delivery of health care in various settings, emphasizing historical background, types of health care facilities, regulatory agencies affecting laboratory operations, responsibilities, duties and professional conduct expected of clinical laboratory technicians, safety in the laboratory, laboratory mathematics and quality control. A phlebotomy workshop will develop the fundamental skills required to procure and prepare blood specimens for testing. If time permits, a field trip will be scheduled to an area hospital laboratory.

Prerequisite: Admission to CLS Program

MLT-112 Urinalysis (1 credit)
This course explores the principles and procedures of the routine urinalysis as well as the normal and abnormal physiological functions of the renal system. The course consists of didactic sessions and laboratory sessions where normal and abnormal cellular constituents will be reviewed.

Corequisite: Introduction to Clinical Laboratory Science

MLT-211 Hematology and Hemostasis (3 credits)
This course consists exploring the theory and practice of routine hematology. Topics include the collection and handling of clinical specimens, the origin, development, and function of human blood cells in health and disease, hemostasis, and coagulation, automation, and quality control. Routine hematology and coagulation testing will be emphasized.

Prerequisite: Introduction to Clinical Laboratory Science
MLT-212 Medical Microbiology and Lab (4 credits)
This course is a comprehensive study of both theory and practical aspects of clinical microbiology. Emphasis will be placed on the collection and handling of clinical specimens as well as the primary isolation and identification of the most frequently encountered bacterial, pathogenic to humans. Other topics discussed include antimicrobial chemotherapy and host resistance. Other organisms examined include fungi and parasites.

Prerequisites: Introduction to Clinical Laboratory Science, BIO 205

MLT-213 Immunology and Serology (3 credits)
This course introduces the theoretical principles of immunology which involve the structure, function, and interactions of the immune system. The serological techniques useful in the diagnosis of many diseases will be reviewed and performed.

Prerequisites: Introduction to Clinical Laboratory Science

MLT-241 Immunohematology (3 credits)
This course consists of the study of the genetic basis and immunological interaction of the major blood group antigens and antibodies. Topics will include compatibility testing, antibody screening and identification techniques, blood donation, transfusion therapy, record keeping, and quality control techniques.

Prerequisite: Introduction to Clinical Laboratory Science, Immunology and Serology

MLT-242 Clinical Chemistry (3 credits)
The primary focus of the course is the biochemical analysis of blood and body fluids in health and disease. Topics include routine manual and automated testing methods, electrophoresis, molecular techniques, safety practices and quality control.

Prerequisites: Principles of Inorganic Chemistry and Lab Immunology and Serology

MLT-251 Clinical Laboratory Sciences Practicum (12 credits)
This course consists of Practicum experiences at one of the College’s clinical affiliates in which the student acquires knowledge and experiences in laboratory practices and procedures.

Prerequisite: Successful completion of Clinical Laboratory Sciences coursework

The following courses on the indicated pages are marked with a leaf which indicates BHCC’s ongoing efforts to integrate sustainability within curriculum throughout the institution. These courses emphasize environmentally responsible awareness and learning and contribute significantly to students’ understanding and practice of sustainability.

Page 162
皆さんBIO-196: General Biology II (3 credits)

Page 165
皆さんCIT-113: Information Technology Problem Solving (3 credits)
Page 169
✏ CIT-250: Collaboration, Communication and Integration in MS Office Applications (3 credits)

Page 176
✏ ECE-102: Issues in Early Childhood Education (3 credits)
✏ ECE-103: Child Growth and Development (3 credits)
✏ ECE-104: Curriculum in Early Childhood Education (3 credits)
✏ ECE-106: Program Environments Early Childhood Education (3 credits)

Page 177
✏ ECE-110: Science Concepts & Learning for Children (3 credits)
✏ ECE-112: Families and Community in Early Childhood Education (3 credits)
✏ ECE-113: Child Care Administration I (3 credits)

Page 181
✏ ESL-099: Academic Writing III (3 credits)

Page 182
✏ ENV-105: Environmental Science I/ Lab (4 credits)
✏ ENV-106: Environmental Science II/ Lab (4 credits)
✏ ENV-120: Tropical Field Studies (4 credits)

Page 191
✏ MAT-181: Statistics I (3 credits)

Page 201
✏ PSY-101: Principles of Psychology (3 credits)

ACCREDITATION STATEMENTS

Associate in Science Degree: Medical Laboratory Technician: (Updated Statement)
The Program is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS), 5600 North River Rd. Suite 720, Rosemont, IL 60018, telephone 773 714 8880. Graduates of the Program are eligible to take national certification exams.

DEGREE AND CERTIFICATE PROGRAMS
Page 54
Under Associate in Arts Degrees, grid #88: Physics/Engineering Concentration should read Physics Concentration.

Page 55
Under Associate in Science Degrees, grid #55: Medical Laboratory Science Program should read Medical Laboratory Technician Program.

Page 74A

Page 74B

Page 74C

Page 136
In the footnote at the bottom of the Associate in Science Degree: Fire Protection and Safety Program the wording is incorrect. The correct wording is:
Choose two career electives if FPS 111 has been completed. If FPS 111 has been waived, choose three career electives from the following career electives: FPS-121, FPS-125, FPS-127, FPS-137 and FPS-221, FPS-225 and FPS-227.

Page 138
In the footnote at the bottom of the Fire Protection and Safety Certificate Program the wording is incorrect. The correct wording is:
Choose one career elective if FPS 111 has been completed. FPS 111 has been waived, choose two career electives from the following career electives: FPS-121, FPS-125, FPS-127, FPS-137, FPS-221, FPS-225 and FPS-227.

GENERAL EDUCATION REQUIREMENTS

Under Area 3: PHL-113 (Religions of the Middle East) has been dropped. HIS-101 History of Western Civilization I has been added.

Under Area 5: ENV-511 Sustainability and Resource Conservation has been added
**PROGRAM OVERVIEW**

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

**CAREER OUTLOOK**

Graduates completing this certificate may find employment in information support services departments in firms large and small as well as other companies specializing in personal computer maintenance support.

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

- Describe, remove, and replace select components of desktop and laptop personal computers; upgrade components based on customer needs and perform preventive maintenance and troubleshooting
- Understand the basics of the most common desktop Office applications
- Explain, install, and navigate the most common personal computer operating systems; upgrade components based on customer needs and perform preventive maintenance and troubleshooting
- Demonstrate good communication skills and professional behavior while working with customers
- Qualify to take the COMPTIA A+ Essentials Certification Examination
- Qualify to take the NETWORK+ Certification Examination

**PC Hardware Support Specialist Certificate**

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COURSE NUMBER</th>
<th>SEMESTER TAKEN</th>
<th>CREDITS</th>
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<tr>
<td>Computer Applications &amp; Concepts</td>
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<td>Introduction to Networking</td>
<td>CIT162</td>
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<tr>
<td>Windows Operating Systems</td>
<td>CIT268</td>
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<td>Help Desk Techniques</td>
<td>CIT230</td>
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<tr>
<td>PC Keyboarding Techniques</td>
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<td><strong>TOTAL CREDITS</strong></td>
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OPTIONAL COURSES: CIT299, MAN107, MAN204, CPT503, CPT505, CPT507
**Microsoft Applications Support Specialist Certificate**

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<td>Introduction to MS Office Applications</td>
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<td>Advance MS Office Applications</td>
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<td>Collaboration, Communication &amp; Integration</td>
<td>CIT250</td>
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<td>Help Desk Techniques</td>
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Optional courses: CIT299, MAN107, MAN204, CPT521, CPT523, CPT525

**Program Overview**

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

**Career Outlook**

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

**Upon completion of this certificate, graduates will be able to:**

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

This is a “fast-track” CCNA Certificate program designed for those students interested in pursuing a career as a Cisco Systems Networking Specialist. All coursework is offered through the internationally recognized Cisco Systems Networking Academy. Recommended non-credit industry certification courses offered through the College’s Community Education Office are optional, but will greatly enhance employment prospects. The CIT internship and entrepreneurship courses are also optional.

## CAREER OUTLOOK

Graduates completing this certificate may find employment in information support services departments in organizations large and small as networking support specialists.

### CISCO CCNA Certificate

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<thead>
<tr>
<th>COURSE TITLE</th>
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<td>Routers &amp; Routing Basics</td>
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TOTAL CREDITS: 16

OPTIONAL COURSES: CIT299, MAN107, MAN294, CPT515, CPT517

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