

# BOR ACADEMIC AND STUDENT AFFAIRS COMMITTEE AGENDA Tuesday, October 1, 2013 – 2:00 p.m. 39 Woodland Street, Hartford, CT 06105 Conference Room 123

1. Approval of Minutes – September 11, 2013

### **CONSENT CALENDAR**

- 2. Termination of Existing Academic Program
  - a. Fine Arts: Studio Art (Option-A) Quinebaug Valley Community College
  - b. Natural Science (MS) Central Connecticut State University
  - c. Technology and Engineering Education (MS) Central Connecticut State University
- 3. Program Modifications
  - a. Paraprofessional Educator (undergraduate certificate) name change Charter Oak State Coll.
  - b. Early Childhood Education (BGS), addition of concentration Eastern CSU

### **ACTION ITEMS**

- 4. Licensure of New Programs
  - a. Health Information Management (AS) Capital Community College
  - b. Health Information Management (AS) -- Middlesex Community College
  - c. Health Information Management (AS) Northwestern CT Community College
  - d. Radiologic Science (AS) Manchester Community College
  - e. STEM Education (MS) Central Connecticut State University
- 5. Licensure and Accreditation of New Programs
  - a. Electronic Health Records Specialist Certificate (Manchester CC)
  - b. Group Exercise Instructor (Undergraduate Certificate) Norwalk CC

### INFORMATION ITEMS

- 6. Updates
- 7. Other business



# CT BOARD OF REGENTS FOR HIGHER EDUCATION

### ACADEMIC & STUDENT AFFAIRS COMMITTEE

Meeting – September 11, 2013 9:30 a.m. – 61 Woodland Street, Hartford

# **DRAFT - MINUTES**

Regents Present: Merle Harris (Chair), Eugene Bell (by conf.), Naomi Cohen, Lawrence DeNardis

Regents Absent: Nick Donofrio, Yvette Melendez, Catherine Smith

Staff Present: David Levinson, Elsa Núñez, Braden Hosch, Maureen McClay, Ernestine Weaver

Other Attendees: Shirley Adams (COSC), Erin Annecherico (TXCC), Kem Barfield (TRCC), Mary

Bencivengo (TXCC, Daisy De Filippis (NVCC), Barbara Douglass (NWCC), Gena Glickman (MCC), Anita Gliniecki (HCC), Grace Jones (TRCC), Allyson Kinney (GWCC), Mark Kosinski (GWCC), Richard Lenoce (MXCC), Steve Minkler

(MXCC), Michael Rooke (TXCC), Fred Rosado (GWCC),

Chair Merle Harris called the meeting to order at 9:40 a.m. She asked for a moment of silence in commemoration of the anniversary of "9/11".

With a quorum not yet present, Information-Update item 9.c. was addressed.

**9.c. Enrollment Management Project.** Dr. Braden Hosch gave an update noting the project was approximately midway and they would begin to see deliverables shortly. There was a meeting with Maguire Associates the following week and they would be addressing the Board of Regents in October. An update report was handed out and Dr. Hosch reviewed the highlights.

A quorum was attained and the agenda returned to order.

- 1. Approval of Minutes from June 7, 2013. There was a motion for approval by Ms. Cohen, seconded by Mr. DeNardis and unanimously approved.
- 2. **CONSENT AGENDA.** The Consent Agenda was **moved for adoption by Ms. Cohen, seconded by Mr. DeNardis and unanimously approved.**

Consent items included:

- 2. a. Termination International Business (BS)-Central Connecticut State University
- 3. Program Modifications
  - a. Gerontology (Undergraduate Certificate, C2) Capital Community College
  - b. Health Office Information Specialist (Undergraduate Certificate, C2) Norwalk CC
  - c. Environmental Science (AS) Middlesex Community College
  - d. Industrial Technology (BS) Central Connecticut State University
    - i. Digital Printing and Graphics Technology
    - ii. Networking Information Technology
  - e. Physical Education (BS) Central Connecticut State University
    - i. Exercise Science

- 4. Extension of Institutional Accreditation
  - a. Northwestern Connecticut Community College

### **ACTION ITEMS**

- 5. Program Modifications
  - a. Dental Assisting (Undergraduate Certificate (C2) Tunxis Community College. Dr. Hosch introduced the program. Dean Michael Rooke thanked the committee for its consideration noting it was somewhat unusual. He observed it was the only public accredited program in the state. It had been revised substantially to concur with changes needed for reaccreditation which will be addressed next year. The main change is sequencing. In order to comply with the reaccreditation standards they need to have an entire class through the full curriculum and, thus, timing was crucial. Changes had gone through their Advisory Board and Allied Health partners.

Comments: They were congratulated for their close to 100% graduation rate. In answer to questions, it was noted 60 to 70 percent go on to pursue an Associate's degree; students come from all parts of the state.

Motion to approve recommendation to the full Board made by Ms. Cohen, seconded by Mr. DeNardis. Unanimously approved.

- 6. Licensure of New Program
  - a. Cyber Security (BS) Charter Oak State College. Dr. Hosch introduced, noting it had been determined that many concentrations should actually be majors this was one of them. Dr. Shirley Adams stated this was a growing area in real demand. Regent Harris questioned if an articulation process had been done as some of the community colleges also had the program. It was to be done.

A motion to approve recommendation to the full Board was made by Mr. DeNardis and seconded by Ms. Cohen. It was unanimously approved.

- 7. Licensure and Accreditation of New Programs
  - a. Network Administrator (Undergraduate Certificate, C2) Gateway Community College Dr. Hosch introduced noting this had been reviewed by Academic Council and meets standards. Dean Kosinski observed Gateway had built relationships in the city with financial and insurance industries, noting particularly their partnership with Knights of Columbus. This certificate will help students move directly into jobs. Professor Allyson Kinney added that they had reached out to their Advisory Board and intern sites with an overwhelmingly positive response. Responding to an observation, the differences between a Networking Certificate and the Network Administrator Certificate was noted, mentioning they are separate paths with the Administrator a more entry-level position. Regent Harris asked about recruitment. Dean Kosinski said there was a fairly large base at the college with many students on the degree path also getting the certificate. Regent Bell asked about work, internships and job placement. A discussion on job counseling and job placement ensued. It was noted the internships have been growing. Regent Bell also noted he hoped job advising could move further into pointing students to actual jobs.

The motion to approve recommendation to the full Board was made by Mr. DeNardis, seconded by Ms. Cohen and unanimously approved.

b. Corporate Media Production (Undergraduate Certificate, C3) – Middlesex Community College

A motion to approved recommendation to Board made by Mr. DeNardis, seconded by Ms. Cohen – unanimously approved after discussion\*.

c. News and Sports Production (Undergraduate Certificate, C3) – Middlesex Community College

A motion to approve recommendation made by Ms. Cohen, seconded by Mr. DeNardis - unanimously approved after discussion\*.

\*Dr. Hosch introduced both programs from Middlesex in the new media area. Dean Minkler noted they were part of the grants and they were charged with creating a Center for New Media that also includes a Corporate Meeting Center. They will have people helping with actual job placement. The programs were endorsed by their Advisory Board of professionals and have strong support from industry. Professor Richard Lenoce observed the goal was initially started to address displaced workers due to jobs going overseas. He noted they address non-traditional students, that the college will be hiring a recruitment and placement person and they have a marketing plan and creative strategies developed. It is designed to feed into a two-year degree program and then a four-year degree. In response to a question it was stated the grant ends in 2015. There will then be an evaluation period with the possibility of leading to an organizational structure and sustainability.

- 8. Institutional Accreditations Dr. Hosch distributed a hand-out summary chart of the four institutional accreditations. However, it was noted the quantification should not substitute for review of the narrative findings. Chart indications noted Housatonic for their planning and evaluation, organization and governance and their faculty, students and resources. Manchester was especially noted for their faculty and their physical and technological resources. Naugatuck Valley was notable in mission and purposes, organization and governance, faculty and students. And, Three Rivers was particularly noted for their organization and governance. It was mentioned the quantification should not substitute for review of the narrative findings. Their presidents then each offered comments.
  - a. Housatonic Community College President Gliniecki stated they were pleased with the outcome, noting the areas of excellence on the summary page. A strategic plan was developed to include follow-up and moving the college forward. Chair Harris remarked on the important use of data and incorporating the Achieving the Dream strategies and assessments. Trustee DeNardis observed their impressive commencement he had attended in the spring. A motion to approve recommendation to the full Board was made by Ms. Cohen, seconded by Mr. DeNardis and unanimously approved.
  - b. Manchester Community College President Glickman thanked the committees and noted the two-year process. They were pleased with the comments from the evaluation team including noting the new center in downtown Manchester. They are making good progress on follow-up items and doing many forward-moving things. A motion to approve recommendation to the full Board was made by Ms. Cohen, seconded by Mr. DeNardis and unanimously approved.
  - c. Naugatuck Valley Community College President De Filippis noted it was a wonderful experience. There was tremendous effort from many people and they were very pleased with the report. The college sees itself as making a contribution to the community and noted the aggressive pursuit of graduation rates. A motion to approve recommendation to the full Board was made by Ms. Cohen, seconded by Mr. DeNardis and unanimously approved.

d. Three Rivers Community College – President Jones commended the report and noted the progress made, also introducing Kim Barfield, chair of the self-study. A motion to approve recommendation to the full Board was made by Mr. DeNardis, seconded by Ms. Cohen and unanimously approved.

Chair Harris remarked on the outstanding reports, especially with the financial circumstances of the colleges and approved pursuit for more collaboration. She noted the needs of advising and use of data collected to guide change were common areas for follow-up. Trustee Cohen stated "mega dittos" – observing it was obvious it really is about the students. She noted Manchester CC's graduation ceremony and thanked all.

### **INFORMATION ITEMS**

- 9. Updates
  - a. Security study proposals. Counsel Ernestine Weaver and Director Ahmed Beermann-Ahmed reported on the security proposal. They reviewed the timeline noting the legislation passed in April and the Request for Proposal went out in May. There were 18 respondents. The committee reviewed all and selected 6 for interviews. Two were chosen for finalists with the committee and Counsel Weaver making the final selection. They mentioned the criteria and the comprehensive plan. The cost will be \$198,000. Funds have now been identified. The final report is due by January 1, 2014 in order to report to the General Assembly. There is also a need to report in conjunction with the Cleary Act and the finalist will be asked to include that. In response to a question, it was explained the Cleary Act is a federal law requiring all to publicize crime statistics on campus and in the community, to be published on the individual websites. It was noted interpretation of data is complicated. However there are fines for not reporting. Mr. Ahmed also mentioned that Eastern Connecticut State University was one of seven in the nation to be a partner in a Homeland Security study.
  - b. Transfer and articulation policy. Dr. Hosch noted the TAP policy was established in March 2012 with an implementation plan in April. The General Education framework was developed and is now in place across the system. A part-time coordinator was engaged and has worked with committees on pathways. The Coordinating Council has reconvened to work out an implementation plan for the next two years. They have developed a plan with four points: 1) an ongoing role for the Coordinating Council to direct process; 2) the faculty committees overarching issues of framework implementation; 3) pathways committees with co-chairs to "train the trainer" will use a common template; 4) a full-time TAP Program Manager is recommended, with a search to be done quickly.

### Adjournment

There was no other business. **A motion to adjourn was made by Ms. Cohen, seconded by Mr. DeNardis and unanimously approved.** The meeting adjourned at 11:42 a.m.

Termination of a program in Fine Arts, with an Option in Studio Art, leading to the Associate of Science (A.S.) degree at Quinebaug Valley Community College

### RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education approve at the request of the institution to terminate a program Fine Arts, with an Option in Studio Art, leading to the Associate of Science (A.S.) degree at Quinebaug Valley Community College

### **BACKGROUND**

Quinebaug Valley Community College has requested to terminate a program in Fine Arts, with an Option in Studio Art, leading to the Associate of Science (A.S.) degree. Termination of an academic program must receive approval from the Board of Regents, following the policy for academic program approval adopted in January 2012.

### **RATIONALE**

QVCC has decided to terminate this degree program with an option in Studio Art due to low enrollment: A total of 2 students were in the program last year. Students have been switched to fine arts.

The Studio Art degree is redundant as it is identical to the parent Fine Arts degree. it can be terminated immediately.

## **RESOURCES**

No resources are required to make this change.

10/01/13 – BOR-Academic and Student Affairs Committee

Termination of a program in Natural Science leading to a Master of Science (B.S.) degree at Central Connecticut State University

### RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education approve at the request of the institution to terminate a program in Natural Science leading to a Master of Science (M.S.) degree at Central Connecticut State University, with a phase out period until August 31, 2015

### **BACKGROUND**

Central Connecticut State University has requested to terminate a program in Natural Science leading to a Master of Science (M.S.) degree. Termination of an academic program must receive approval from the Board of Regents, following the policy for academic program approval adopted in January 2012.

### **RATIONALE**

The M.S. in Natural Science and the M.S. in Technology and Engineering Education will merge to create a new STEM Education program in an effort to increase enrollment and be offer more relevant programs to certified teachers. Both programs currently prepare in-service teachers in their respective content areas. The creation of a new M.S. in STEM Education for Certified Teachers will enhance teachers' knowledge in and application of the STEM areas (Science, Technology, Engineering, and Mathematics). Graduates of the program will be able to prepare their K-12 students in public and private schools in the STEM practices needed for the future workforce and career opportunities.

Fall Headcount Enrollment and Completions

-	2009-10	2010-11	2011-12	2012-13	2013-14
Fall enrollment	20	9	8	6	5
Completions	9	7	3	4	

### TEACH-OUT STRATEGY

Students currently enrolled in the MS Natural Science program will be able to complete their program; they will be allowed to take courses in their current program as long as they are available. If necessary they will substitute STEM courses offered in the new M.S. in STEM Education program for those that are listed on their planned programs of study. No special resources will be needed to accommodate them.

# **RESOURCES**

No resources are required to make this change.

Termination of a program in Technology and Engineering Education leading to a Master of Science (M.S.) degree at Central Connecticut State University

### RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education approve at the request of the institution to terminate a program in Technology and Engineering Education leading to a Master of Science (M.S.) degree at Central Connecticut State University, with a phase out period until August 31, 2015

# **BACKGROUND**

Central Connecticut State University has requested to terminate a program in Technology and Engineering Education leading to a Master of Science (M.S.) degree. Termination of an academic program must receive approval from the Board of Regents, following the policy for academic program approval adopted in January 2012.

### **RATIONALE**

The M.S. in Natural Science and the M.S. in Technology and Engineering Education will merge to create a new STEM Education program in an effort to increase enrollment and be offer more relevant programs to certified teachers. Both programs currently prepare in-service teachers in their respective content areas. The creation of a new M.S. in STEM Education for Certified Teachers will enhance teachers' knowledge in and application of the STEM areas (Science, Technology, Engineering, and Mathematics). Graduates of the program will be able to prepare their K-12 students in public and private schools in the STEM practices needed for the future workforce and career opportunities.

Fall Headcount Enrollment and Completions

	2009-10	2010-11	2011-12	2012-13	2013-14
Fall enrollment	18	10	12	13	15
Completions	9	8	5	6	

### TEACH OUT STRATEGY

Students currently enrolled in the MS Technology and Engineering Education program will be able to complete their program; they will be allowed to take courses in their current program as long as they are available. If necessary they will substitute STEM courses offered in the new M.S. in STEM Education program for those that are listed on their planned programs of study. Students will still be able to take comprehensive examinations but may elect to do the special project capstone of STEM 595 No special resources will be needed to accommodate them.

### RESOURCES

No resources are required to make this change.

04/10/13 - ConnSCU Academic Council

10/01/13-BOR-Academic and Student Affairs Committee

Modification of a Special Education Paraprofessional program leading to an undergraduate certificate at Charter Oak State College to change the name to Paraprofessional Educator

### RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education approve modification of a Special Education Paraprofessional program leading to an undergraduate certificate at Charter Oak State College to change the name to Paraprofessional Educator

### **BACKGROUND**

Charter Oak State College has requested that the name of its Special Education Paraprofessional program leading to an undergraduate certificate be changed to a Paraprofessional Educator program. This change is requested to more accurately reflect the content of the courses as well as the intent of the course of study.

The Board's program approval policy adopted in January 2012 sets forth an intent for consistency with the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning. These regulations stipulate that modification of accredited programs, including name changes, require approval by the Board of Regents (10a-34-3(c)).

### **RATIONALE**

The Special Education Paraprofessional course of study of five three-credit courses was designed for paraprofessionals who work in a variety of public and private educational settings, including, but not limited to kindergarten classes, general education elementary and secondary programs, special education classrooms and special education schools. Because of the variety of possible settings that a paraprofessional might work in, the courses were developed to include strategies on how to work with students with and without disabilities. The title which included special education was to ensure that potential students would understand that the courses included special education topics as well as general education topics.

The program name "Special Education Paraprofessional," however, has narrowed the number of interested students, as they read the title as only for paraprofessionals who wish to be special education paraprofessionals and does not comprehensively describe program scope and content.

09/18/13 – ConnSCU Academic Council 10/01/13 – BOR-Academic and Student Affairs Committee

Modification of a program in General Studies leading to the Bachelor of General Studies (B.G.S.) degree at Eastern Connecticut State University to license and accredit a separate program in Early Childhood Education leading to the Bachelor of General Studies (B.G.S.) degree

### RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education approve modification of a program in General Studies leading to the Bachelor of General Studies (B.G.S.) degree at Eastern Connecticut State University to license and accredit a separate program in Early Childhood Education leading to the Bachelor of General Studies (B.G.S.) degree for a period of time to coincide with institutional accreditation

### BACKGROUND

Eastern Connecticut State University has requested that the program in General Studies leading to the Bachelor of General Studies (B.G.S.) degree have a major field added for Early Childhood Education. The program would not lead to teacher certification, but has been reviewed by the Connecticut Department of Education and approved under Connecticut General Statutes 10-16p (2). The University would separately maintain its existing program in Early Childhood Education leading to the Bachelor of Science (B.S.) degree that does prepare graduates for certification in the field.

Connecticut General Statutes 10-16p (2) sets additional education requirements for individuals who have primary responsibility for a classroom of children in early childhood education programs accepting state funds or for spaces associated with such program's child day care program or school readiness program. Over time, an increasing proportion of these employees must have certification pursuant to section 10-145b with an endorsement in early childhood education or early childhood special education OR have completed and associate's or bachelor's program approved by the Board of Regents for Higher Education and the State Department of Education (SDE).

Degree and certificate programs offered by public institutions in Connecticut must receive approval to operate through licensure by the Board of Regents and must receive accreditation from the Board of Regents to confer formal awards (CGS 10a-35a).

Staff review of the proposal has determined that the program is consistent with the standards for planning and quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, as required by Board policy.

### **RATIONALE**

Connecticut General Statutes 10-16p (2) sets additional education requirements for individuals who have primary responsibility for a classroom of children in early childhood education programs accepting state funds or for spaces associated with such program's child day care program or school readiness program. Over time, an increasing proportion of these employees must have certification pursuant to section 10-145b with an endorsement in early childhood education or early childhood special education OR have completed and associate's or bachelor's program approved by the Board of Regents for Higher Education and SDE.

As reported to the Academic and Student Affairs Committee in June 2013, SDE conducted a review of programs at Eastern Connecticut State University as well as several community colleges. While modifications of the existing curriculum for community college programs were nonsubstantive, the addition of a curricular track in the general studies degree program for early childhood education as well as the need to track individuals completing it prompts the need to license and accredit the program.

The B.G.S. provides a flexible curriculum for completing a four year college degree for students who are currently in the workforce. The program offers a high quality education in a variety of formats that accommodate the needs of students who have more complex work and family lives than traditional college students. This includes the offering of online, evening, weekend, and off-campus courses. In addition, the B.G.S. program has a long tradition of establishing seamless articulation plans with community colleges, and thus the program will enhance the professional competence of those who currently work, or wish to work, with children from birth to age 5. It will also provide a pathways for those seeking to earn the Early Childhood Teacher Credential (ECTC) awarded by SDE.

The B.G.S. in Early Childhood Education is designed to meet the following goals:

- 1. To help meet state and national mandates that teachers in early childhood education programs hold four year degrees in the coming years.
- 2. To create a model of collaboration among higher education institutions, including articulation agreements with all state community colleges and the development of joint courses and programs with Charter Oak College, so that state resources and personnel can be used more efficiently and effectively.
- 3. To provide an option for in-service or pre-service professionals who hold associate's degree from community colleges in early childhood education to complete their four year degree in minimum time.
- 4. To meet all requirements and standards of the t Early Childhood Teacher Credential program developed by the State Department of Education.
- 5. To meet all requirements and standards for earning a Bachelor of General Studies program at Eastern.
- 6. To provide teacher preparation that has a measurable impact on the competencies and knowledge of birth to three teachers as well as the school readiness of the children they work with.

### CURRENT ENROLLMENTS AND COMPLETIONS

General Studies (B.G.S.) Fall Headcount and Completions

	2008-09	2009-10	2010-1	2011-12	2012-13
Fall Headcount Enrollment	NA	181	176	194	212
Completions	101	116	113	130	155

Source: CSU IR Repository for Fall Headcount, BOR State Completions Database for IPEDS submission

### **CURRICULUM**

The program is designed for students to complete the B.G.S. in early childhood education after completion of an associate's degree. Twenty-four credits of early childhood coursework will be transferred into the program. Most early childhood courses from community colleges have common numbers and content and have been reviewed for NAEYC accreditation. For this reason, graduates of these institutions can automatically transfer in all early childhood coursework, with a grade of C or higher, without needing a review of syllabi by Eastern faculty. Similarly, all required courses offered by Charter Oak—listed in the program outline—will also be transferred without requiring a syllabus review. Students transferring from two year institutions outside the state will be asked to submit syllabi and course work to demonstrate their completion of required Level-A coursework and mastery of the competencies related to these courses. Approximately 24 general education requirements will also be transferred into our program. We will assist community college advisors in recommending courses that will meet ECSU's Liberal Arts Core.

# Learning Outcomes

Graduates of the program will:

- 1. Describe, assess, and apply in their classroom practice important developmental characteristics of preschool aged children, including advanced areas of play development, social and emotional growth, thinking and learning, and dual language development.
- 2. Describe multiple family influences on development, including culture and socioeconomic status, and apply this knowledge to establishing positive relationships and communication with family members and planning culturally sensitive experiences in the classroom.
- 3. Identify multiple methods of assessment of young children, including advanced formative, curriculum-embedded methods and approaches to analyzing and applying classroom assessment data.
- 4. Discuss and implement effective teaching approaches to support learning and development, including advanced techniques in scaffolding play, enhancing language and literacy for dual language learners, and reflecting on one's own teaching and the outcomes of classroom practices.
- 5. Demonstrate and apply advanced knowledge in all disciplines, acquired through a liberal arts course of study, to the design of a challenging and culturally responsive curriculum.
- 6. Describe and acquire the knowledge, skills, and dispositions required to become a committed and ethical professional, including advanced competencies in leadership, advocacy, and the formation of partnerships with families and community agencies.

7. Discuss and apply knowledge of policies and practices in human services, including an advanced understanding of the political, social, and community contexts in which early education programs exist.

Required	l Courses

Course Number and Name	Credits
Associate's Level Courses	15
Introduction to Early Childhood Education	3
Early Language and Literacy Development	3 3 3
Science and Math for Young Children	3
Creative Experiences or Music and Movement	3
Intro to Exceptional Children	3
Program Core Courses	24-25
Child Development (CC or Charter Oak)	3
ECE 261:Methods & Techniques: Infant/Toddler Care (Charter Oak only)	3
ECE 315 Play and Social Development	
or PSY 301 Psychology of Play (Charter Oak)	3-4
ECE 380 Leadership in Early Care and Education	
Or Advanced Leadenship in EC Programs (Chapter Oals)	2
Advanced Leadership in EC Programs (Charter Oak)	3
ECE 390: Advanced Topics in Social and Emotional Development	3
ECE 410: Families, Culture, and Child Development	3 3
ECE 450: Advanced Topics in Cognitive Development	3
ECE 470: Supporting Dual Language Learners in Early Childhood Education	3
Elective Courses in the Field	15
SWK 311 The Social Environ. and Human Behavior	3
SWK 312 Human Behavior in the Social Environment	3
SWK 325 Social Welfare Policy	3
PSY 305 Leadership in Organizations	3
PSY 320 Theories of Personality	3
Other Related/Special Requirements	12
Student Teaching/Clincal Experiences	6
ECE 399: Culminating Practicum and Capstone Course (Charter Oak only)	6
Liberal Arts Curriculum	46
Free Electives	8
Total	120-21

### RESOURCES

No additional resources are needed. Existing full-time faculty or part-time faculty at Eastern will teach the single section of specialized coursework that students will complete each semester and in the summer. Additional credits are in existing courses in the Liberal Arts Core (LAC) or will be transferred in. The number of students expected to enroll in this program will not require additional sections of LAC courses.

# **Faculty**

ECSU has faculty, curriculum, and resources to support existing undergraduate and graduate Early Childhood Education Certification and non-certification programs. This proposed B.G.S. modification uses these existing resources as well as existing expertise and resources available at other ConnSCU schools to provide in-service and pre-service teachers who have an Associate's Degree with a flexible option for earning the Early Childhood Teaching Credential.

### Library

No additional library resources are needed.

Licensure of a program in Health Information Management leading to an Associate of Science (A.S.) degree at Capital Community College

### RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education license a program in Health Information Management leading to an Associate of Science (A.S.) degree at Capital Community College for a period of three years until October 31, 2016

### **BACKGROUND**

Capital Community College has applied for licensure of a program in Health Information Management leading to an Associate of Science (A.S.) degree. The College currently offers 17 programs in health care and allied health fields, including a program in Medical Assisting which already offers some of the foundational courses for Health Information Management.

The proposed program was developed in conjunction with other colleges in the state and development and the first two years of implementation are supported in part by a grant from Connecticut Women's Educational and Legal Fund (CWEALF). The program curriculum has been aligned with proposed programs advanced by Middlesex Community College and Northwestern Connecticut Community College, and the curriculum fully transfers into the bachelor's program in Health Information Management at Charter Oak State College.

Degree programs offered by public institutions in Connecticut must receive approval to operate through licensure by the Board of Regents and must receive accreditation from the Board of Regents to confer degrees (CGS 10a-35a).

Staff review of the proposal has determined that the program is consistent with the standards for planning and quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, as required by Board policy.

### PLANNING ASSESSMENT

### Conformance with institutional mission

The program is consistent with the College's mission and fits within the scope of the College's other offerings in allied health fields.

### Need

The CT Department of Labor projects the number of Medical Records and Health Information Technicians will increase from 1,420 in 2010 to 1,641 in 2020, an increase of 22 positions each year; the annual number of openings is projected at 50 due to growth and net replacement. In 2012, the median salary of current workers in this field was \$39,600, the 25<sup>th</sup> percentile was \$32,000, and the 10<sup>th</sup> percentile is \$27,100 (<u>Careerinfonet.org</u>, SOC = 29.2071).

However, the real intent of the program is to offer the first two years of a bachelor's program that would lead to a career as a Medical and Health Services Manager, for which the educational requirements are a bachelor's degree. The CT Dept. of Labor projects an additional 195 openings in this occupation each year due to growth and net replacement.

# <u>Unnecessary duplication of programs</u>

Programs in these fields exist at present only at the certificate level. Studies of the Connecticut health care workforce project increase educational demands for workers in these fields. Only one program currently exists at the associate's level, and only one completion was awarded in 2011-12.

Completions in Related Fields 2012-13

	Health Informati	ion/Medical	Medical Insura			
	Records Technology/Technician		Specialist	Specialist/Coder		
Institution Name	UG Certificate	Associate's degree	UG Certificate	Associate's degree	Total	
Manchester CC	-	-	15	-	15	
Goodwin College	-	-	9	-	9	
Tunxis CC	-	-	7	-	7	
Charter Oak SC	-	-	4	-	4	
Northwestern CT CC	-	-	3	-	3	
Quinebaug Valley CC	-	-	3	-	3	
Lincoln College of NE	1	1	-	-	2	
Total	1	1	41	-	43	

### Cost effectiveness

The College anticipates revenue in the first year of \$78,081 increasing to \$160,209 in the second year and decreasing to \$147,744 in the third. One grant-funded full-time faculty member will teach in the program; there will also be a full-time administrator, grant-funded for the first two years. Expenses are projected in the first year at \$48,480, decreasing to \$39,371 in the second, and increasing to \$122,810 in the third when the program administrator is no longer grant funded.

These revenue and cost estimates are based upon what appear to be reasonable enrollment projections. In the first year, the college expects 23 students (13 FTE) to enroll, 41 students (23.6 FTE) in the second year, and 41 students (34 FTE) in the third.

# Availability of adequate resources

The College anticipates no new full-time faculty would be hired, but one would be grant-funded and administrator salary and benefits would be supported for the first two years. By the time the administrator salary is no longer covered by external funds in Year 3, program revenue would be sufficient to offset expenses, assuming enrollment projections are met.

# QUALITY ASSESSMENT DESCRIPTION

# Purpose and Objectives

The proposed associate in science degree and certificate in Health Information Management will both prepare graduates for immediate entry into the workplace and also provide a fully articulated pathway from the certificate to the associate degree to the baccalaureate programs at Charter Oak State College. A similar bachelor's concentration is under development at Eastern Connecticut State University.

Health information management career pathways can vary widely by both job and setting. Graduates could code medical records or manage entire health information divisions in government agencies and healthcare facilities. The American Health Information Management Association website offers a comprehensive map of the career trajectories in the field ranging from entry to senior levels in: 1) compliance/risk management, 2) education/communications, 3) informatics/data analysis, 4) IT/Infrastructure, 5) operations (medical records administration), and 6) revenue management (coding and billing)

# Learning outcomes

Graduates of the program will be able to:

- 1. Apply principles as they relate to healthcare privacy, confidentiality, legal and ethical issues.
- 2. Interpret and apply health information policies and procedures to ensure compliance with federal, state and accreditation agency requirements.
- 3. Employ computer-based health information systems while managing existing paper-based health information systems utilizing EMR software.
- 4. Compare and contrast reimbursement methodologies and procedure-based payment systems such as Resource based Relative Value (RBRV) and Evaluation and Management and Ambulatory Payment Classification (APC).
- 5. Evaluate and audit patient records and assign numeric codes for each diagnosis and procedure.
- 6. Apply coding knowledge utilizing coding guidelines from ICD-9-CM, ICD-10, CPT-4 and HCPCS.
- 7. Interpret diagnostic based perspective payment groups such as DRG; recognize the Systematized Nomenclature of Medicine (SNOMED).
- 8. Utilize medical coding software and clinical classification systems as they relate to the human body and disease processes.

- 9. Identify and discuss healthcare delivery fundamentals and the technology used to gather healthcare information in a variety of settings.
- 10. Utilize appropriate terminology including abbreviations related to pathological conditions, diagnostic procedures, surgical interventions, and therapeutic procedures.

### Admission

Admission to the program requires admission to the college, which by regulation is a high school diploma or its equivalent. Additionally, students must demonstrate readiness for college level work as required by course pre-requisites

# **Enrollment Projections**

The College projects an enrollment of 21 (12 FTE) during its first year and anticipates an increase to 41 (24 FTE) students during its third year.

	First Term Yr 1		First Term	Yr 2	First Term Yr 3	
	FT	PT	FT	PT	FT	PT
Internal Transfers	2	2	1	1	1	1
New Students	8	11	9	12	10	10
Continuing	0	0	8	10	7	9
Total Headcount	10	13	18	23	18	20
Total Estimated FTE per Year	13.2		23.6	_	22.4	

### Administration

The program coordinator will have the rank of assistant professor with the minimum qualifications of a master's degree in health information management or a related field from a HIM program accredited by CAHIIM, certification as a Registered Health Information Administrator (RHIA), and one to four years of experience which includes one to two years of experience in the supervision of the work of others. The individual will have a load of 15 contact/credit hours with one release (nine hours a week) for administration.

# Curriculum

The program's curriculum is aligned across the three colleges proposing the program. The total number of credits require for the degree is 64-65, with 18-19 credits in program core courses, 12 credits in related courses, 9 credits of program electives, and 25 credits of general education.

The College plans to seek accreditation from the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) and will evaluate the program based on their program assessment system. Their assessment system considers graduation rates, student performance on certification examinations, job placement and employer satisfaction.

Course Requirements

Course Number and Name	Cr Hrs.
Program Core Courses	18-19
HIM 101 Medical Terminology <sup>1</sup>	3
HIM 102 Introduction to Healthcare Systems	3
HIM 201 Health Information Management Principles	4
ONE course in electronic medical records chosen from:	3
HIM 155 Fundamentals of Clinical Informatics & Electronic Medical Records	
MED 216 Electronic Medical Records Management	
ONE course in introductory medical coding chosen from:	2-3
HIM 205 Medical Coding I	
MED 115 Medical Coding and Billing	
ONE course in advanced medical coding chosen from:	3
HIM 206 Medical Coding II	
MED 215 Advanced Medical Coding	
Other Related/Special Requirements	12
MED 112 Medical Insurance and Billing	
MED 250 Principles of Pharmacology	3
	3
ONE course in computer applications chosen from:	3
CSA 105 Introduction to Software Applications	
CSC 101 Introduction to Computers	3
ONE course in ethics chosen from:	3
PHL 112 Medical Ethics	
PHL 256 Legal & Ethical Issues in HIM	
MED 170 Law and Ethics for Health Professionals	
<b>Directed Electives (Nine Credits)</b>	9
Nine credits chosen from (HIM, MED, BMG, BBG, CSA, CSC, ENG, MAT,	
BIO, HIS) Based on Pathway	
General Education	25
ENG 101 English Composition	3
ENG 102 Literature and Composition	3
Humanities or Art Elective	
PSY 111 General Psychology	3
• ••	4
ONE course in biology chosen from: BIO 110 Principles of the Human Body with Lab	4
•	
BIO 115 Human Biology with Lab MAT 167 Statistics	2
	3
Social Science Elective	3
COM 173 Public Speaking	3
Total	64-65

<sup>1</sup> Cross-listed as MED 125 Medical Terminology and BOT 180 Medical Terminology

# Resource Support

The resources required for this program will include allocation for new faculty, laboratory equipment and new software, and new library resources.

# **Faculty**

One new faculty member will join the current full-time medical assistant program faculty member who will also teach courses in the HIM program.

# Equipment/Software

The College already has computer and science labs, including an HIM lab, for delivery of the program. No additional computer equipment is required to run the HIM program.

Software		Cost
Software License and Professional Services Cost		\$17,280
Monthly Hosting Fee (\$2,500)*		\$27,500
<u> </u>	Total	\$44.780

<sup>\*</sup> Based on 11 months for the first year

# Library Resources

The total estimated cost of library resources to supplement the Health Information Management Associate in Science degree program is \$3,700 (excluding shipping and processing fees). Due to the field's rapidly changing content (and to meet CAHIIM accreditation standards), updated editions of 75% of these titles will need to be acquired annually – costing the institution approximately \$2,775 per year. Updated editions of the remaining 25% will need to be acquired every 5 years – costing the institution approximately \$925.00.

Licensure of a program in Health Information Management leading to an Associate of Science (A.S.) degree at Middlesex Community College

### RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education license a program in Health Information Management leading to an Associate of Science (A.S.) degree at Middlesex Community College for a period of three years until October 31, 2016

### **BACKGROUND**

Middlesex College has applied for licensure of a program in Health Information Management leading to an Associate of Science (A.S.) degree. The College currently offers four degree programs and four certificate programs in health care and allied health fields.

The proposed program was developed as part of a Trade Adjustment Assistance Community College & Career Training (TAACCCT) to develop health and life sciences programs at community colleges in the state. The program curriculum has been aligned with proposed programs advanced by Capital Community College and Middlesex Community College, and the curriculum fully transfers into the bachelor's program in Health Information Management at Charter Oak State College.

Degree programs offered by public institutions in Connecticut must receive approval to operate through licensure by the Board of Regents and must receive accreditation from the Board of Regents to confer degrees (CGS 10a-35a).

Staff review of the proposal has determined that the program is consistent with the standards for planning and quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, as required by Board policy.

### PLANNING ASSESSMENT

### Conformance with institutional mission

The program is consistent with the College's mission and fits within the scope of the College's other offerings in allied health fields.

### Need

The CT Department of Labor projects the number of Medical Records and Health Information Technicians will increase from 1,420 in 2010 to 1,641 in 2020, an increase of 22 positions each year; the annual number of openings is projected at 50 due to growth and net replacement. In 2012, the median salary of current workers in this field was \$39,600, the 25<sup>th</sup> percentile was \$32,000, and the 10<sup>th</sup> percentile is \$27,100 (<u>Careerinfonet.org</u>, SOC = 29.2071).

However, the real intent of the program is to offer the first two years of a bachelor's program that would lead to a career as a Medical and Health Services Manager, for which the educational requirements are a bachelor's degree. The CT Dept. of Labor projects an additional 195 openings in this occupation each year due to growth and net replacement.

# <u>Unnecessary duplication of programs</u>

Programs in these fields exist at present only at the certificate level. Studies of the Connecticut health care workforce project increase educational demands for workers in these fields. Only one program currently exists at the associate's level, and only one completion was awarded in 2011-12.

Completions in Related Fields 2012-13

	Health Informat	ion/Medical	Medical Insura		
	Records Technology/Technician		Specialist	Total	
Institution Name	UG Certificate	Associate's degree	UG Certificate	Associate's degree	Total
Manchester CC	-	-	15	-	15
Goodwin College	-	-	9	-	9
Tunxis CC	-	-	7	-	7
Charter Oak SC	-	-	4	-	4
Northwestern CT CC	-	-	3	-	3
Quinebaug Valley CC	-	-	3	-	3
Lincoln College of NE	1	1	-	-	2
Total	1	1	41	-	43

### Cost effectiveness

The College anticipates revenue in the first year of \$21,384 increasing to \$98,161 in the second year and \$129,870 in the third. Total expenses are projected in the first year at \$12,300, increasing to \$455,072 in the second, and \$48,958 in the third.

These revenue and cost estimates are based upon what appear to be reasonable enrollment projections. In the first year, the college expects 23 students (13 FTE) to enroll, 41 students (23.6 FTE) in the second year, and 41 students (34 FTE) in the third.

# Availability of adequate resources

The College anticipates some costs would be incurred but they would be supported by tuition revenue. Release time will be given to a full-time faculty member to administer the program; costs to cover this release are budgeted at \$6,500 in the first year, \$13,752 in the second, and \$14,441 in the third. Adjunct faculty costs will be nothing in the first year, but increase to \$23,000 - \$24,000 in the second and third years. Supplies and library resources represent annual expenses of \$2,500 - \$3,500 annually. Indirect costs are estimated at \$3,250 - \$6,950 a year. Availability of adequate resources is dependent upon meeting enrollment projections.

# QUALITY ASSESSMENT DESCRIPTION

# Purpose and Objectives

The proposed associate in science degree and certificate in Health Information Management will both prepare graduates for immediate entry into the workplace and also provide a fully articulated pathway from the certificate to the associate degree to the baccalaureate programs at Charter Oak State College. A similar bachelor's concentration is under development at Eastern Connecticut State University.

Health information management career pathways can vary widely by both job and setting. Graduates could code medical records or manage entire health information divisions in government agencies and healthcare facilities. The American Health Information Management Association website offers a comprehensive map of the career trajectories in the field ranging from entry to senior levels in: 1) compliance/risk management, 2) education/communications, 3) informatics/data analysis, 4) IT/Infrastructure, 5) operations (medical records administration), and 6) revenue management (coding and billing)

# Learning outcomes

Graduates of the program will be able to:

- 1. Apply principles as they relate to healthcare privacy, confidentiality, legal and ethical issues.
- 2. Interpret and apply health information policies and procedures to ensure compliance with federal, state and accreditation agency requirements.
- 3. Employ computer-based health information systems while managing existing paper-based health information systems utilizing EMR software.
- 4. Compare and contrast reimbursement methodologies and procedure-based payment systems such as Resource based Relative Value (RBRV) and Evaluation and Management and Ambulatory Payment Classification (APC).
- 5. Evaluate and audit patient records and assign numeric codes for each diagnosis and procedure.
- Apply coding knowledge utilizing coding guidelines from ICD-9-CM, ICD-10, CPT-4 and HCPCS.
- 7. Interpret diagnostic based perspective payment groups such as DRG; recognize the Systematized Nomenclature of Medicine (SNOMED).
- 8. Utilize medical coding software and clinical classification systems as they relate to the human body and disease processes.

- 9. Identify and discuss healthcare delivery fundamentals and the technology used to gather healthcare information in a variety of settings.
- 10. Utilize appropriate terminology including abbreviations related to pathological conditions, diagnostic procedures, surgical interventions, and therapeutic procedures.

### Admission

Admission to the program requires admission to the college, which by regulation is a high school diploma or its equivalent. Additionally, students must demonstrate readiness for college level work as required by course pre-requisites

# **Enrollment Projections**

The College projects an enrollment of 21 (12 FTE) during its first year and anticipates an increase to 41 (24 FTE) students during its third year.

	First Term Yr 1		First Term Yr 2		First Term Yr 3	
	FT	PT	FT	PT	FT	PT
Internal Transfers	5	1	2	1	3	1
New Students	6	6	7	6	10	4
Continuing	0	0	9	5	12	8
Total Headcount	11	7	18	12	25	13
Total Estimated FTE per Year	16.3		27	7.0	34	1.8

### Administration

Professor Donna Hylton will coordinate the program. She is the Program Coordinator for the Information Systems degree program, serves as faculty advisor to the College's Computer Club, was co-chair of the College's NEASC Self-Study Committee, and has extensive experience in curriculum development. The program coordinator will receive 3 credits of release time in the first year and 6 and subsequent years.

# Curriculum

The program's curriculum is aligned across the three colleges proposing the program. The total number of credits require for the degree is 64-65, with 18-19 credits in program core courses, 12 credits in related courses, 9 credits of program electives, and 25 credits of general education.

The College plans to seek accreditation from the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) and will evaluate the program based on their program assessment system. Their assessment system considers graduation rates, student performance on certification examinations, job placement and employer satisfaction.

Course Requirements

Course Number and Name	Cr Hrs.
Program Core Courses	18-19
HIM 101 Medical Terminology <sup>1</sup>	3
HIM 102 Introduction to Healthcare Systems	3
HIM 201 Health Information Management Principles	4
ONE course in electronic medical records chosen from:	3
HIM 155 Fundamentals of Clinical Informatics & Electronic Medical Records	
MED 216 Electronic Medical Records Management	
ONE course in introductory medical coding chosen from:	2-3
HIM 205 Medical Coding I	
MED 115 Medical Coding and Billing	
ONE course in advanced medical coding chosen from:	3
HIM 206 Medical Coding II	
MED 215 Advanced Medical Coding	
Other Related/Special Requirements	12
MED 112 Medical Insurance and Billing	
MED 250 Principles of Pharmacology	3
	3
ONE course in computer applications chosen from:	3
CSA 105 Introduction to Software Applications	
CSC 101 Introduction to Computers	3
ONE course in ethics chosen from:	3
PHL 112 Medical Ethics	
PHL 256 Legal & Ethical Issues in HIM	
MED 170 Law and Ethics for Health Professionals	
<b>Directed Electives (Nine Credits)</b>	9
Nine credits chosen from (HIM, MED, BMG, BBG, CSA, CSC, ENG, MAT,	
BIO, HIS) Based on Pathway	
General Education	25
ENG 101 English Composition	3
ENG 102 Literature and Composition	3
Humanities or Art Elective	
PSY 111 General Psychology	3
• ••	4
ONE course in biology chosen from: BIO 110 Principles of the Human Body with Lab	4
•	
BIO 115 Human Biology with Lab MAT 167 Statistics	2
	3
Social Science Elective	3
COM 173 Public Speaking	3
Total	64-65

<sup>1</sup> Cross-listed as MED 125 Medical Terminology and BOT 180 Medical Terminology

# Resource Support

The resources required for this program will include allocation for new faculty, laboratory equipment and new software, and new library resources.

# Faculty

The program coordinator is a full-time faculty member and will teach in the program:

Donna Hylton, Professor, Program Coordinator for Information Systems degree program M.S. in Computer Information Technology, Central Connecticut State University Specializations: MIS

Adjunct faculty hired to teach in the program must have a master's degree in appropriate discipline; national certifications preferred.

# Equipment/Software

The College has sufficient physical and computer resources to deliver the program.

Licensure of a program in Health Information Management leading to an Associate of Science (A.S.) degree at Northwestern Connecticut Community College

# RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education license a program in Health Information Management leading to an Associate of Science (A.S.) degree at Northwestern Connecticut Community College for a period of three years until October 31, 2016

# **BACKGROUND**

Northwestern Community College has applied for licensure of a program in Health Information Management leading to an Associate of Science (A.S.) degree. The College currently offers seven degree programs and six certificate programs in health care and allied health fields, including a program in Medical Assisting which already offers some of the foundational courses for Health Information Management.

The proposed program was developed in conjunction with other colleges in the state and development and the first two years of implementation are supported in part by a grant from Connecticut Women's Educational and Legal Fund (CWEALF). The program curriculum has been aligned with proposed programs advanced by Capital Community College and Middlesex Community College, and the curriculum fully transfers into the bachelor's program in Health Information Management at Charter Oak State College.

Degree programs offered by public institutions in Connecticut must receive approval to operate through licensure by the Board of Regents and must receive accreditation from the Board of Regents to confer degrees (CGS 10a-35a).

Staff review of the proposal has determined that the program is consistent with the standards for planning and quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, as required by Board policy.

### PLANNING ASSESSMENT

### Conformance with institutional mission

The program is consistent with the College's mission and fits within the scope of the College's other offerings in allied health fields.

### Need

The CT Department of Labor projects the number of Medical Records and Health Information Technicians will increase from 1,420 in 2010 to 1,641 in 2020, an increase of 22 positions each year; the annual number of openings is projected at 50 due to growth and net replacement. In 2012, the median salary of current workers in this field was \$39,600, the 25<sup>th</sup> percentile was \$32,000, and the 10<sup>th</sup> percentile is \$27,100 (<u>Careerinfonet.org</u>, SOC = 29.2071).

However, the real intent of the program is to offer the first two years of a bachelor's program that would lead to a career as a Medical and Health Services Manager, for which the educational requirements are a bachelor's degree. The CT Dept. of Labor projects an additional 195 openings in this occupation each year due to growth and net replacement.

# <u>Unnecessary duplication of programs</u>

Programs in these fields exist at present only at the certificate level. Studies of the Connecticut health care workforce project increase educational demands for workers in these fields. Only one program currently exists at the associate's level, and only one completion was awarded in 2011-12.

Completions in Related Fields 2012-13

	Health Informati Records Technolo		Medical Insura Specialist		
Institution Name	UG Certificate	Associate's degree	UG Certificate	Associate's degree	Total
Manchester CC	-	-	15	-	15
Goodwin College	-	-	9	-	9
Tunxis CC	-	-	7	-	7
Charter Oak SC	-	-	4	-	4
Northwestern CT CC	-	-	3	-	3
Quinebaug Valley CC	-	-	3	-	3
Lincoln College of NE	1	1	-	-	2
Total	1	1	41	-	43

### Cost effectiveness

The College anticipates revenue in the first year of \$50,714 increasing to \$106,130 in the second year and decreasing to \$100,388 in the third. An existing full-time administrator will serve as program coordinator at 0.10 FTE. Expenses are projected in the first year at \$20,524, decreasing to \$19,599 in the second, and staying flat in the third.

These revenue and cost estimates are based upon what appear to be reasonable enrollment projections. In the first year, the college expects 23 students (13 FTE) to enroll, 41 students (23.6 FTE) in the second year, and 41 students (34 FTE) in the third.

# Availability of adequate resources

The College anticipates no new full-time faculty would be needed because of existing faculty resources in the Medical Assisting Program; the cost attributed to the full-time administrator (0.1 FTE) is \$5,832 annually, with no inflationary adjustment. Costs for two part-time faculty each year are estimated to cost \$16,824, with no inflationary adjustment. Costs for library resources will be \$3,700 in the first year and \$2,775 annually thereafter. Availability of adequate resources is dependent upon meeting enrollment projections.

# QUALITY ASSESSMENT DESCRIPTION

# Purpose and Objectives

The proposed associate in science degree and certificate in Health Information Management will both prepare graduates for immediate entry into the workplace and also provide a fully articulated pathway from the certificate to the associate degree to the baccalaureate programs at Charter Oak State College. A similar bachelor's concentration is under development at Eastern Connecticut State University.

Health information management career pathways can vary widely by both job and setting. Graduates could code medical records or manage entire health information divisions in government agencies and healthcare facilities. The American Health Information Management Association website offers a comprehensive map of the career trajectories in the field ranging from entry to senior levels in: 1) compliance/risk management, 2) education/communications, 3) informatics/data analysis, 4) IT/Infrastructure, 5) operations (medical records administration), and 6) revenue management (coding and billing)

### Learning outcomes

Graduates of the program will be able to:

- 1. Apply principles as they relate to healthcare privacy, confidentiality, legal and ethical issues.
- 2. Interpret and apply health information policies and procedures to ensure compliance with federal, state and accreditation agency requirements.
- 3. Employ computer-based health information systems while managing existing paper-based health information systems utilizing EMR software.
- 4. Compare and contrast reimbursement methodologies and procedure-based payment systems such as Resource based Relative Value (RBRV) and Evaluation and Management and Ambulatory Payment Classification (APC).
- 5. Evaluate and audit patient records and assign numeric codes for each diagnosis and procedure.
- Apply coding knowledge utilizing coding guidelines from ICD-9-CM, ICD-10, CPT-4 and HCPCS.
- 7. Interpret diagnostic based perspective payment groups such as DRG; recognize the Systematized Nomenclature of Medicine (SNOMED).
- 8. Utilize medical coding software and clinical classification systems as they relate to the human body and disease processes.
- 9. Identify and discuss healthcare delivery fundamentals and the technology used to gather healthcare information in a variety of settings.

10. Utilize appropriate terminology including abbreviations related to pathological conditions, diagnostic procedures, surgical interventions, and therapeutic procedures.

### Admission

Admission to the program requires admission to the college, which by regulation is a high school diploma or its equivalent. Additionally, students must demonstrate readiness for college level work as required by course pre-requisites

# **Enrollment Projections**

The College projects an enrollment of 21 (12 FTE) during its first year and anticipates an increase to 41 (24 FTE) students during its third year.

	First Term Yr 1		First Term Yr 2		First Term Yr 3	
	FT	PT	FT	PT	FT	PT
Internal Transfers	2	2	1	1	1	1
New Students	8	11	9	12	10	10
Continuing	0	0	8	10	7	9
Total Headcount	10	13	18	23	18	20
Total Estimated FTE per Year	13.2		23.6		22.4	

# Administration

The program coordinator will have the minimum qualifications of a master's degree in health information management or a related field from a HIM program accredited by CAHIIM, certification as a Registered Health Information Administrator (RHIA), and one to four years of experience which includes one to two years of experience in the supervision of the work of others. The individual will have a load of 15 contact/credit hours with one release (nine hours a week) for administration.

# Curriculum

The program's curriculum is aligned across the three colleges proposing the program. The total number of credits require for the degree is 64-65, with 18-19 credits in program core courses, 12 credits in related courses, 9 credits of program electives, and 25 credits of general education.

The College plans to seek accreditation from the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) and will evaluate the program based on their program assessment system. Their assessment system considers graduation rates, student performance on certification examinations, job placement and employer satisfaction.

Course Requirements

Course Number and Name	Cr Hrs.
Program Core Courses	18-19
HIM 101 Medical Terminology <sup>1</sup>	3
HIM 102 Introduction to Healthcare Systems	3
HIM 201 Health Information Management Principles	4
ONE course in electronic medical records chosen from:	3
HIM 155 Fundamentals of Clinical Informatics & Electronic Medical Records	
MED 216 Electronic Medical Records Management	
ONE course in introductory medical coding chosen from:	2-3
HIM 205 Medical Coding I	
MED 115 Medical Coding and Billing	
ONE course in advanced medical coding chosen from:	3
HIM 206 Medical Coding II	
MED 215 Advanced Medical Coding	
Other Related/Special Requirements	12
MED 112 Medical Insurance and Billing	
MED 250 Principles of Pharmacology	3
	3
ONE course in computer applications chosen from:	3
CSA 105 Introduction to Software Applications	
CSC 101 Introduction to Computers	3
ONE course in ethics chosen from:	3
PHL 112 Medical Ethics	
PHL 256 Legal & Ethical Issues in HIM	
MED 170 Law and Ethics for Health Professionals	
<b>Directed Electives (Nine Credits)</b>	9
Nine credits chosen from (HIM, MED, BMG, BBG, CSA, CSC, ENG, MAT,	
BIO, HIS) Based on Pathway	
General Education	25
ENG 101 English Composition	3
ENG 101 English Composition ENG 102 Literature and Composition	
Humanities or Art Elective	3
PSY 111 General Psychology	3
• ••	4
ONE course in biology chosen from: BIO 110 Principles of the Human Body with Lab	4
•	
BIO 115 Human Biology with Lab MAT 167 Statistics	2
	3
Social Science Elective	3
COM 173 Public Speaking	3
Total	64-65

<sup>1</sup> Cross-listed as MED 125 Medical Terminology and BOT 180 Medical Terminology

# Resource Support

The resources required for this program will include allocation for new faculty, laboratory equipment and new software, and new library resources.

# **Faculty**

The program coordinator is a full-time faculty member and will teach in the program:

Jane O'Grady, Assistant Professor Ed.D., St Joseph's College of Maine Other qualifying credentials: RN, CMA, CPC, EMR/EHR

Adjunct faculty must be qualified through professional preparation and experience, scholarship and/or teaching competencies and practice experience. Adjunct faculty must have a master's degree in Health Information Management or a related field.

# Equipment/Software

The College has sufficient physical and computer resources to deliver the program.

# Library Resources

The total estimated cost of library resources to supplement the Health Information Management Associate in Science degree program is \$3,700 (excluding shipping and processing fees). Due to the field's rapidly changing content (and to meet CAHIIM accreditation standards), updated editions of 75% of these titles will need to be acquired annually – costing the institution approximately \$2,775 per year. Updated editions of the remaining 25% will need to be acquired every 5 years – costing the institution approximately \$925.00.

Licensure of a program in Radiologic Science leading to an Associate of Science (A.S.) degree at Manchester Community College

### MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education license a program in Radiologic Science leading to an Associate of Science (A.S.) degree at Manchester Community College for a period of three years until October 31, 2016

### **BACKGROUND**

Manchester Community College has applied for licensure of a program in Radiologic Science leading to an Associate of Science (A.S.) degree. The College currently offers six degree programs and seven certificate programs in health care and allied health fields.

The proposed program was developed as part of a Trade Adjustment Assistance Community College & Career Training (TAACCCT) to develop health and life sciences programs at community colleges in the state and represents a collaboration with Hartford Hospital in moving its accredited program in Radiologic Technology to a higher education institution. Hartford Hospital has a pre-existing relationship with Manchester Community College, and will provide clinical placement sites for students in the program.

Degree programs offered by public institutions in Connecticut must receive approval to operate through licensure by the Board of Regents and must receive accreditation from the Board of Regents to confer degrees (CGS 10a-35a).

Staff review of the proposal has determined that the program is consistent with the standards for planning and quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, as required by Board policy.

### PLANNING ASSESSMENT

### Conformance with institutional mission

The program is consistent with the College's mission and fits within the scope of the College's other offerings in allied health fields.

### Need

The CT Department of Labor projects the number of Radiologic Technologists and Technicians will increase from 2,409 in 2010 to 2,985 in 2020, an increase of 58 positions each year; the annual number of openings is projected at 95 due to growth and net replacement. In 2012, the median salary of current workers in this field in Connecticut was \$62,400, the 25<sup>th</sup> percentile was \$53,600, and the 10<sup>th</sup> percentile is \$47,900 (<u>Careerinfonet.org</u>, SOC = 29.2039).

# Unnecessary duplication of programs

Five related program exit in Connecticut at the Associate's degree level at Capital Community College, Middlesex Community College, Gateway Community College, Naugatuck Valley Community College, and St. Vincent's College.

Associate's Degree Completions in Radiography-Related Fields

	1 0 .					
Program	Institution	2008-09	2009-10	2010-11	2011-12	2012-13
Radiography	Gateway	17	23	18	21	17
	St. Vincent's College	14	16	14	13	16
Radiologic Technology	Capital	16	17	14	19	14
	Middlesex	12	15	13	12	8
	Naugatuck Valley	18	17	17	13	13
Radiation Therapy	Gateway	7	7	5	8	4
Grand Total		84	95	81	86	72

Capital Community College is 1.2 miles from Hartford Hospital where clinical placements would be conducted for students in the proposed program at Manchester Community College. Conversely, students at Capital Community College are placed in part at Manchester Memorial Hospital. Capital Community College expressed some concern with the availability of clinical sites, and Manchester Community College has responded with the information provided in the appendix.

# Cost effectiveness

The College anticipates revenue in the first year of \$189,760 increasing to \$367,780 in the second and subsequent years. One grant-funded full-time faculty member will teach in the program; there will also be a full-time administrator, grant-funded for the first two years. Expenses are projected in the first year at \$206,439, increasing to \$244,144 in the second and subsequent years.

These revenue and cost estimates are based upon what appear to be ambitious enrollment projections, although such enrollments may be feasible given the program's history at Hartford Hospital. The College projects an enrollment of 65 students (45 FTE) during its first year and anticipates an increase to 85 (65 FTE) students during its second and subsequent years

# Availability of adequate resources

The program will be funded by Manchester Community College with some initial funding available through the Health and Life Sciences Initiative Grant. Sudents would pay tuition and fees to the college and the college would pay Hartford Hospital and other clinical sites per the usual contracts for clinical training. The college would also support administrative functions of the program.

# QUALITY ASSESSMENT DESCRIPTION

# Purpose and Objectives

The proposed Radiography and Radiologic Science Program will provide students with the necessary academic and clinical knowledge to function as competent radiographers and radiation therapists, who are eligible to achieve A.R.R.T. certification and gain employment in the community and region. The program will have tracks in radiography and radiation therapy and must be pursued full-time during the day. Graduates of the program will be eligible to take the national certification examination for Radiography or Radiation Therapy. Upon passing the examination, the graduates will be eligible to work as licensed Radiographer or Radiation Therapist in the United States and Canada.

Hartford Hospital has had a certificate program for many decades, but approached Manchester Community College approximately two years ago to develop a program that would lead to an associate's degree, as required for certification through the AART beginning in 2015. Manchester Community College's existing expertise and experience in allied health education will provide for easy transfer the program from the hospital to the college. Students would fulfill general education, science and specialty courses at the college and continue clinical competency training through Hartford Hospital and other existing clinical sites, including Midstate Medical Center, CCMC, and Jefferson Radiology

## Learning outcomes

Upon completion of the Radiation Therapy tract of the program, graduates will:

- 1. Provide the profession and the community with trained qualified therapists.
- 2. Be competent in radiation therapy knowledge that promotes critical thinking, problem solving and communication skills.
- 3. Demonstrate quality patient care skills including professionalism and ethical behaviors as specified in the ARRT Code of Ethics.
- 4. Possess the skills necessary to be competent entry level Radiation Therapy professionals.

Upon completion of the Radiography tract of the program, graduates will:

- 1. Obtain certification as Radiographers by passing the American Registry of Radiologic Technologists certification exam on the 1st attempt.
- 2. Be competent in the performance of entry-level radiographic procedures.
- 3. Exhibit the ethical and professional behaviors appropriate of a health care professional.
- 4. Communicate professionally when interacting with patients, families and medical professionals.

- 5. Integrate critical thinking and problem solving skills into the performance of radiographic procedures
- 6. Possess the skills in current imaging procedures and technology that are necessary to gain employment in the field of Radiography.

Hartford Hospital's Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) and has the primary mission of providing students with the necessary academic and clinical knowledge to function as competent practitioners who are eligible to achieve national certification and gain employment in the community and region. Upon certification, graduates are eligible for state licensure in many states. JRCERT requires extensive reporting and assessment of the outcomes of the program. The College will pursue this accreditation upon transfer of the program.

### Admission

Admission to the program is selective, based upon previous educational attainment in high school or college and requires a separate application and interview with an admissions committee. Students must have a minimum 2.5 GPA for admission and must maintain a 2.5 GPA in core courses and 3.0 in clinical courses. Upon completion of all program requirements, students will be eligible for certification by the American Registry of Radiologic Technologists (ARRT) and state licensure.

# **Enrollment Projections**

The College projects an enrollment of 65 (45 FTE) during its first year and anticipates an increase to 85 (65 FTE) students during its second and subsequent years.

	First Term Yr 1		First Term Yr 2		First Term Yr 3	
	FT	PT	FT	PT	FT	PT
Internal Transfers	5	10	5	5	5	5
New Students	20	30	20	30	20	30
Continuing	0	0	20	5	20	5
Total Headcount	25	40	45	40	45	40
Total Estimated FTE per Year	4	-5	65		6	55

# Administration

The programs will retain their directors as employed by Hartford Hospital during the transition of the programs to the college. During the 2013-2014 academic year, there will be no first year students, and only the second year students will be completing the program under the Hartford Hospital accreditation. The radiography program director is currently Pamela M. Cooke, M.Ed.,R.T.(R)(M). Pam holds a Master of Education degree from Cambridge College, a Bachelor of Science degree from the University of Hartford, and is certified by the American Registry of Radiologic Technologists in Radiography with advanced certification in Mammography. She has been employed for 23 years by Hartford Hospital and has served as Director of the Radiography Program since 1993.

The Radiation Therapy program director is Nora Uricchio, M.Ed.,R.T.(R)(T). Nora holds a master of Education degree from Cambridge College and is certified by the American Registry of Radiologic Technologist in Radiography and Radiation Therapy. She has been employed for

25 years by Hartford Hospital and has served as Director of the Radiography Program since 1996. Additionally there are part time faculty, clinical coordinators and clinical faculty who support the programs.

Once the program is transferred to the college, the college would search for a full-time program director of Radiologic Science and additional part time faculty as needed to support the program using the same structure as is currently used to support the other accredited health careers programs at the college.

## Curriculum

The Radiologic Science A.S. degree program will provide students with the knowledge and skill set necessary for certification and entry-level practice as Registered Technologists in Radiography or Radiation Therapy. Students in this program will complete a total of 64 credits. 40 credits will be in core Radiography courses, 18 credits will supply the necessary foundation in math, physics, English communication, and human structure and function. Six additional general education credits will be taken to fulfill the degree requirement. Students will participate in supervised clinical education rotations at approved radiology facilities to obtain the required clinical competency.

Course Requirements

Course Number and Name	Credits
Radiography Track Core Courses	40
RAD* 118 Patient Care in Radiography I	1
RAD* 119 Patient Care in Radiography II	2
RAD* 116 Radiographic Imaging I	3
RAD* 107 Radiologic Procedures I	3
RAD* 222 Radiation Biology & Protection	2
RAD* 197 Clinical Radiology I	1
RAD* 126 Radiographic Imaging II	2
RAD* 195 Radiologic Procedures II	3
RAD* 198 Clinical Radiology II	1
RAD* 136 Radiographic Imaging III	2
RAD* 196 Radiologic Procedures III	2
RAD* 255 Medical Radiation Physics I	2
RAD* 257 Medical Radiation Physics II	2
RAD* 199 Clinical Radiology III	1
RAD* 207 Radiographic Procedures IV	2
RAD* 297 Clinical Radiology IV	2
RAD* 217 Radiology Seminar	2
RAD* 100 Introduction to Radiography	1
RAD* 220 Advanced Imaging Procedures I	2
RAD* 221 Advanced Imaging Procedures II	2
RAD* 260 Radiographic Pathology	2
Radiation Therapy Track Courses	
RAD* 118 Patient Care in Radiography I	1
RAD* 119 Patient Care in Radiography II	2
Principles and Practice of Radiation Therapy I	2

Foundations of Radiation Therapy	1
RAD* 222 Radiation Biology & Protection	2
Clinical Radiation Therapy I	1
Principles and Practice of Radiation Therapy II	2
Fundamentals of Radiation Therapy	1
Clinical Radiation Therapy II	1
Radiation Therapy Imaging	2
Radiation Therapy Operation	2 2
RAD* 255 Medical Radiation Physics I	2
Treatment Planning I	2
Clinical Radiation Therapy III	1
Oncologic Pathology	2
Clinical Radiation Therapy IV	2
Principles and Practice of Radiation Therapy III	2
Treatment Planning II	1
Clinical Radiation Oncology I	2
Clinical Radiation Oncology II	2
Computer Application in Radiation Therapy, Radiation Therapy Physics,	7
Principles and Practice of Radiation Therapy IV, Seminars in	
Radiation Therapy	
Core Course Prerequisites Common to Both Tracks	24
ENG* 101 English Composition	3
COM* 173 Public Speaking	3
MAT* 138 Intermediate Algebra/MAT* 186 Precalculus	3
BIO* 211 Human Anatomy and Physiology I	4
BIO* 212 Human Anatomy and Physiology II	4
HLT* XXX Medical Terminology	1
PSY* 111 General Psychology	3
ART* XXX Art Elective	3
Total Credits	64

## Resource Support

The resources required for this program will include allocation for new faculty, laboratory equipment and new software, and new library resources.

#### **Faculty**

At least one full time program coordinator will be hired for the program in Year 2, after the transition of the program to the college is complete. Initially the Health and Life Science Initiative Grant will support this position.

Full-time faculty (employed by Hartford Hospital) will teach 35% of core program credits in the first year of the program, after the transition to the college, the program director will teach approximately 30% of the courses in the program. The remaining credits in the program are taught by full- and part-time MCC faculty. The ratio of full to part time faculty will vary with each semester.

Adjunct faculty teaching the core Radiography and Radiation Therapy courses, minimally have certification in Radiologic Technology and at least 2 years full-time professional experience working in their respective fields. The college requires a Master's degree or equivalent, exceptions may be made if the faculty member has experience and expertise in a specific clinical specialty area.

Faculty teaching in the program will be:

Pamela Cooke, Program Director (full-time) M.Ed. Cambridge College ARRT Certification 22 years teaching experience, 19 years as program director

Nancy Benusis, Didactic/Clinical Instructor (part-time) Currently pursuing B.S. through Charter Oak College R.T.R. Certification (ARRT) ARRT Certification 27 years teaching experience

Marinella Russell, Clinical Instructor (part-time) R.T.R. Certification (ARRT) ARRT Certification 18 years teaching experience Clinical instruction

Gerald Ceniglio, Didactic/Clinical Coordinator (full time)
B.S Cambridge College
ARRT certification
17 years in Math and physics instructor

Elizabeth Quental, Clinical instructor A.S Gateway Community College ARRT certification 10 years clinical instruction

Nora Uricchio, Program Director (full-time) M.Ed. Cambridge College ARRT Certification 22 years teaching experience 17 years as program director

#### Equipment/Software

The following resources are available on the Hartford Hospital campus. These resources would be available to the college for use during the transition of the program. Agreements to continue to use these spaces and equipment will be negotiated after program approval.

One dedicated classroom with two computers, a printer, a projector and whiteboard, a non-energized diagnostic radiographic unit, a non-energized mammography unit, a variety of tissue-equivalent imaging phantoms, numerous film/screen and computed radiography image receptors, one anatomical torso model, one fully articulated human skeleton and a variety of individual bones.

For the Radiation Therapy students, there is a virtual environment in Radiation Therapy at the hospital which houses a computerized treatment planning system. The program is fortunate to have use of the radiographic equipment in Hartford Hospital's Radiology Department for labs and simulations.

The college will use existing classroom and laboratory space at the college in addition to the above mentioned spaces to accommodate the program.

### Library Resources

A library collection of Radiographic Imaging books will be needed.

# APPENDIX

# Clinical education settings

Program / Clinical Location	Town
Capital Community College	
ECHN Evergreen Imaging Center	South Windsor, CT
Jefferson X-Ray Group – Avon	Avon, CT
Jefferson X-Ray Group – West Hartford	West Hartford, CT
Jefferson X-Ray Group – Wethersfield	Wethersfield, CT
Manchester Memorial Hospital	Manchester, CT
Rockville General Hospital	Vernon, CT
Saint Francis Hospital and Medical Center	Hartford, CT
Hartford Hospital	
Connecticut Children's Medical Center	Hartford, CT
Connecticut Children's Medical Center – Glastonbury Satellite Office	Glastonbury, CT
Hartford Hospital	Hartford, CT
Jefferson Radiologic, P.C.	Hartford, CT
MidState Medical Center	Meriden, CT
Middlesex Community College	
Middlesex Hospital Outpatient Center	Middletown, CT
Middlesex Hospital-Middlesex Medical Center	Marlborough, CT
Middlesex Medical Center, Shoreline	Essex, CT
Orthopedic Associates of Middletown	Middletown, CT
Radiology Associates of Middletown, P.C.	Guilford, CT



September 16, 2013

Dr. Gena Glickman Manchester Community College Great Path Manchester, CT 06045

Dear Dr. Glickman,

We are writing in support of the transfer of sponsorships of Hartford Hospital's Radiography and Radiation Therapy programs to Manchester Community College. Due to budgetary constraints, Hartford Hospital will no longer sponsor the programs after July 2014. These programs have had a long history of providing high quality radiologic science practitioners to the region for many years, and we feel it is imperative that there be a continued avenue for us to serve the employment needs of the hospitals and other healthcare facilities in the state and region.

The current economic climate is causing hospital-based programs in the state to close, with three of the four radiography programs closing by September 2014. This will undoubtedly create a deficit in the number of radiographers available to fill the staffing vacancies in the state.

We believe that MCC would be an ideal location for the programs for a number of reasons. The college has an excellent reputation in the community and has had a long-standing relationship with Hartford Hospital for other health career programs such as surgical technology and respiratory care. Many of our students have completed their prerequisite courses at MCC, and we have found these students to be very well prepared for success in the program.

Manchester, as a location, is ideal. It is close to Hartford Hospital and the program's other clinical sites, while not requiring students to come into the city for their classes. At this time, Windham Hospital has the only radiography program in the state east of the river, and Gateway Community College is the only other radiation therapy program in the state. Having the programs at MCC would better serve the educational needs of people in the central and eastern portions of our state.

Please don't hesitate to contact either one of us for further information or to answer any questions you may have.

Thank you for your time and consideration,

Pam Cooke, Radiography Program Director (860) 972-3955 pamela.cooke@hhchealth.org

Nora Uricchio, Radiation Therapy Program Director (860) 972-3956 nora.uricchio@hhchealth.org

#### **ITEM**

Licensure of a program in Science, Technology, Engineering, and Mathematics (STEM) Education leading to a Master of Science (M.S.) degree at Central Connecticut State University

## RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education license a program in Science, Technology, Engineering, and Mathematics (STEM) Education leading to a Master of Science (M.S.) degree at Central Connecticut State University for a period of three years until October 31, 2016

### **BACKGROUND**

Central Connecticut State University (CCSU) has applied for licensure of a program in Science, Technology, Engineering, and Mathematics (STEM) Education leading to a Master of Science (M.S.) degree. The University currently offers 14 master's programs in education and nine master's programs in STEM fields. The proposed program will actually replace two existing programs – a M.S. in Natural Science and a M.S. in Technology & Engineering Education, which will be terminated in conjunction with acceptance of this proposal.

Degree programs offered by public institutions in Connecticut must receive approval to operate through licensure by the Board of Regents and must receive accreditation from the Board of Regents to confer degrees (CGS 10a-35a).

Staff review of the proposal has determined that the program is consistent with the standards for planning and quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, as required by Board policy.

#### PLANNING ASSESSMENT

## Conformance with institutional mission

The program is consistent with the College's mission and fits within the scope of the College's other offerings in education and STEM fields.

#### Need

The CT Department of Education identifies teachers in STEM fields as shortage areas on an annual basis. Better preparation of qualified teachers in these areas is a critical state need.

## Unnecessary duplication of programs

Eastern Connecticut State University and Southern Connecticut State University both offer programs in Science Education at the master's level. The ongoing shortage of teachers in these fields, plus the replacement of the two legacy programs in Natural Science and Technology and Engineering Education with the new STEM Education program suggests addition of the proposed program would not constitute unnecessary duplication.

Institution	Program	2008-09	2009-10	2010-11	2011-12	2012-13
CCSU	Natural Science	10	9	7	3	4
	Technology & Eng. Educ.	3	9	8	5	6
ECSU	Science Education	2	3	2	1	0
SCSU	Science Education	6	10	8	7	5

#### Cost effectiveness

The College anticipates revenue in the first year of \$31,861 increasing to \$36,607 in the second year and \$42,067 in the third. These students, however would be those typically enrolling the programs in Natural Science and Technology and Engineering Education that are being phased out. Faculty costs, however, will remain constant, and no new net costs would be incurred. Assuming the enrollments in the legacy programs can be maintained or increased, the program is anticipated to be revenue/cost neutral.

## Availability of adequate resources

The College anticipates no new full-time faculty would be hired and does not indicate new equipment or facilities would be required to launch the program.

## QUALITY ASSESSMENT DESCRIPTION

### Purpose and Objectives

The proposed master's program in STEM Education will provide K-12 teachers with the skills necessary to move away from the traditional way of teaching discrete subjects towards a more comprehensive way of addressing the science, engineering, and mathematics disciplines. They will demonstrate these STEM skills and practices by applying them to real world and community or school problems and issues as they examine and focus on strategies to develop possible solutions based on research and analysis. Likewise, the master's candidate will learn how to integrate each component into the K-12 curriculum to provide their students with creative and innovative problem solving and applications. As the K-12 teachers acquire the skills and practices of STEM, they will learn to use them in their instruction to prepare their students for college skills and career readiness.

The newly released 2013 draft of the Next Generation Science Standards (NGSS) gives a statement about college and career readiness (CCR) as based on the National Research Council's A Framework for K-12 Science Education (2012). A group of experts in the scientific disciplines, science education, and workforce readiness met to develop this draft. They took into account the Common Core State Standards (CCSS) in Mathematics and ELA/Literacy and acknowledged the unique nature of science and its role in the future of our economy and society.

In-service teachers/students graduating with a Master's degree in STEM at CCSU will enhance their abilities to deliver trans-disciplinary curriculum to K-12 students in order to meet the challenge of preparing youth for future workforce skills. As is the case with Master's degrees in general, the STEM degree would not lead to cross-endorsement certification through the State Department of Education.

### Learning outcomes

Graduates of the program will be able to:

- 1. Integrate and apply the practices of scientists and engineers into curriculum, instruction, and assessment for use in the classroom
- 2. Demonstrate understanding and application of the role of inquiry in curriculum, instruction, and assessment
- 3. Integrate the crosscutting concepts of STEM into curriculum, instruction, and assessment
- 4. Apply disciplinary core ideas of STEM into curriculum, instruction, and assessment for use in the classroom
- 5. Construct a research plan and carry out independent research on a STEM topic

### **Admission**

The MS STEM Program for certified teachers is open to PK-12 certified teachers who hold a bachelor's degree from a regionally accredited institution of higher education. Applicants must have a minimum undergraduate GPA of 2.70 on a 4.00 point scale (where A is 4.00), or its equivalent, and be in good standing (3.00 GPA) in all post-baccalaureate course work. Teachers who do not teach one or more of the STEM disciplines (science, technology education, engineering education, or math) may be required to take additional content courses.

## **Enrollment Projections**

The College projects an enrollment of 12 (9.3 FTE) during its first year and anticipates an increase to 29 (15.8 FTE) students during its third year.

	First Term Yr 1		First Term Yr 2		First Term Yr 3	
	FT	FT PT		PT	FT	PT
Internal Transfers	0	0	0	0	0	0
New Students	2	10	2	8	0	7
Continuing	0	0	2	10	2	18
Total Headcount	2	10	4	18	4	25
Total Estimated FTE per Year	9.33		13	3.5	15	5.8

#### Administration

Marsha Bednarski, Professor of Science Education, Arts and Sciences, will co-coordinate the program with James Delaura, Professor and chair of the Department of Technology and Engineering Education. Dr. Bednarski presently receives 3 FTE load credits for coordination of science education and the MS in Natural Science and anticipates receiving the same 3 credits of release time; no additional load credits will be needed. Similarly, no additional load credits will be requested by the co-coordinator, the department chair of the Department of Technology and Engineering Education, who presently receives load credit for chairing the department per University contract. Students will be assigned advisers from each of the departments (Physics and Earth Sciences and Technology and Engineering Education), coordinated by Dr. Bednarski and Dr. Delaura.

## Curriculum

There are twenty-four core courses, two electives, and a Capstone course. Courses are sequenced in a three year cycle. (See appendix A.)

As a trans-disciplinary program, all courses address and align with National and/or CT state content standards in each discipline: Science, Technology, Engineering, and Math, and the Common Core for Mathematics.

Courses in STEM Education attempt to transform the typical teacher-centered classroom that focuses on the discrete teaching of individual subjects, by encouraging a curriculum and classroom instruction that is driven by problem-solving, discovery, exploratory learning, and requires active engagement in a situation that involves all disciplines in order to find its solution. The courses in the program cumulatively include the eight practices of science and engineering outlined in the Framework of K-12 Science Education (2012) and the most recent Technology Education Standards. Math and Engineering skills and practices are also included in these science and engineering practices and are used as a way of addressing problem-solving, discovery, exploratory learning, and active engagement in situations to form solutions. Teachers will demonstrate their active engagement by applying these skills and practices in their classrooms in the development of curriculum, instruction, and assessment focused on current issues, both in the world and in their own communities. This will be particularly evident in in their special project capstone when their action research projects will need to be focused on real classroom issues that involve their students. The teachers will be required to apply the STEM principles into their classrooms, starting with a problem statement, implementing an intervention, and studying its effects.

### Course Requirements

Course Number and Name	Credits
Program Core Courses	24
STEM 501: Applying Mathematical Concepts	3
STEM 506: Problem-Based Learning in STEM	3
STEM 517: Robotics Applications for STEM	3
STEM 520: STEM Practices in the Physical Sciences	3
STEM 521: Engineering Design in STEM Education	3
STEM 530: STEM Practices in the Earth/Space Sciences	3
STEM 540: STEM Practices in the Life Sciences	3
STEM 598: Research in STEM Education	3
Elective Courses in the Field Any 500 level Science, Technology Education, Engineering Education, or Math course OR SCI 580: Special Topics	3
Other Related/Special Requirements	
500 level Math content course as approved by adviser	3
Capstone	
STEM 595: Action Research in STEM Education	3
Total	33

### Resource Support

The resources required for this program will include allocation for new faculty, laboratory equipment and new software, and new library resources.

#### *Faculty*

Current full-time faculty teaching in the program will be:

Marsha Bednarski, Professor, Coordinator of Science Education

Ph.D., University of Connecticut

Specializations: Science Education, K-12

James Delaura, Professor, Dept. Chair Technology and Engineering Education

Ed.D., University of Northern Colorado

Specializations: Technology & Engineering Education K-12

Patrick Foster, Professor

Ph.D., University of Missouri

Specializations: Technology & Engineering Education K-12

Shelly Jones, Assistant Professor

Ph.D., Illinois State University

Specializations: Mathematics Education

David Sianez, Associate Professor

Ph.D., Virginia Polytechnic Institute and State University Specializations: Technology & Engineering Education K-12

Michele Dischino, Associate Professor Ph.D., University of Pennsylvania Specializations: Bioengineering

Jeff Thomas, Assistant Professor Ph.D., Teachers College, Columbia University Specializations: Science Education, 6-12

Wendy Ku, Adjunct Professor Ph.D., The Ohio State University Specializations: Engineering Design

## Equipment/Software and Library Resources

No additional resources will be needed for this program. Current resources used for the M.S. in Natural Science: Science Education and the M.S. in Technology Education will be used in the new STEM Education program.

#### **ITEM**

Licensure and accreditation of an Electronic Health Records Specialist program leading to an undergraduate certificate (21 credits) at Manchester Community College

#### RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education license and accredit an Electronic Health Records Specialist program leading to an undergraduate certificate at Manchester Community College for a period of time concurrent with institutional accreditation

## Background

Manchester Community College has applied for licensure and accreditation of an Electronic Health Records Specialist program leading to an undergraduate certificate (21 credits). The College currently offers six degree programs and seven certificate programs in health care and allied health fields. The proposed program provides training for entry-level positions as a medical records or health information technician and provides a strong and transparent educational ladder to the College's Business Office Technology associate's degree programs.

The proposed program was developed as part of a Trade Adjustment Assistance Community College & Career Training (TAACCCT) to develop health and life sciences programs at community colleges in the state.

Degree and certificate programs offered by public institutions in Connecticut must receive approval to operate through licensure by the Board of Regents and must receive accreditation from the Board of Regents to confer degrees (CGS 10a-35a).

Staff review of the proposal has determined that the program is consistent with the standards for planning and quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, as required by Board policy.

#### PLANNING ASSESSMENT

#### Conformance with institutional mission

The program is consistent with the College's mission and fits within the scope of the College's other offerings in allied health fields.

#### Need

The CT Department of Labor projects the number of Medical Records and Health Information Technicians will increase from 1,420 in 2010 to 1,641 in 2020, an increase of 22 positions each year; the annual number of openings is projected at 50 due to growth and net replacement. In 2012, the median salary of current workers in this field was \$39,600, the 25<sup>th</sup> percentile was \$32,000, and the 10<sup>th</sup> percentile is \$27,100 (<u>Careerinfonet.org</u>, SOC = 29.2071).

## Unnecessary duplication of programs

Programs in these fields exist at present only at the certificate level. Studies of the Connecticut health care workforce project increase educational demands for workers in these fields. Only one program currently exists at the associate's level, and only one completion was awarded in 2011-12.

Completions in Related Fields 2012-13

_	Health Informat	ion/Medical	Medical Insura		
	Records Technolo	gy/Technician	Specialist/	Total	
Institution Name	UG Certificate	Associate's degree	UG Certificate	Associate's degree	TOlai
Manchester CC	-	-	15	-	15
Goodwin College	-	-	9	-	9
Tunxis CC	-	-	7	-	7
Charter Oak SC	-	-	4	-	4
Northwestern CT CC	-	-	3	-	3
Quinebaug Valley CC	-	-	3	-	3
Lincoln College of NE	1	1	-	-	2
Total	1	1	41	-	43

### Cost effectiveness

The College anticipates no new full-time faculty would be hired, but would reassign a full-time faculty member to administer the program at 0.10 FTE, costing \$6,000 in the first year. Six workload units for instruction delivered by part-time faculty would cost \$8,412 in the first year. Indirect costs are budgeted as \$6,975 (\$930/FTE) in the first year. Costs are estimated to increase 5% annually.

### Availability of adequate resources

The College anticipates revenue in the first year of \$28,550 increasing to \$76,340 in the second year and decreasing to \$85,960 in the third. Expenses are projected in the first year at \$21,387, increasing to \$33,732 and \$39,139 in the third.

These revenue and cost estimates are based upon what appear to be reasonable enrollment projections. In the first year, the college expects 15 students (10 FTE) to enroll, 35 students (22.5 FTE) in the second year, and 40 students (25 FTE) in the third.

## QUALITY ASSESSMENT DESCRIPTION

### Purpose and Objectives

The Electronic Health Records Specialist certificate is a streamlined hands-on program designed for quick entry into the workforce. The total number of credits required for certificate completion is 21. Seven courses are required and a one-year timeframe is estimated for program completion. Upon completion of the program, students will work with MCC's Career Services for job placement.

An entry-level Electronic Health Records Specialist works in the medical office, clinic, or information services/medical records division(s) of a hospital. Local industry research with employers has indicated that health information support positions are in demand and hard to fill due to a lack of trained applicants. These include but are not limited to the following job titles: Health Information Technician, Medical Records Technician, Medical Records Clerk, HIM Associate, Release of Information Coordinator, Data Quality Specialist, and Data Integrity Specialist. The primary role of this employee is to maintain, collect, analyze and secure health information. Upon completion of this certificate, graduates elect to take a national credentialing exam to become a Certified Electronic Health Record Specialist (CEHRS) via National Health Career Association (NHA).

### Learning outcomes

Graduates of this program will:

- 1. Demonstrate advanced keyboarding speed and accuracy using industry accepted methods
- 2. Demonstrate competency in the use of standard medical office equipment including bar code and scanning devices
- 3. Use the common features and functions of specialized EHR applications
- 4. Review electronic health records for timeliness, completeness, accuracy, and appropriateness of health data
- 5. Protect health information for confidentiality, authorized release of information, and data security
- 6. Demonstrate professionalism and positive work habits necessary for success in today's medical office

#### Admission

Admission to the program requires admission to the college, which by regulation is a high school diploma or its equivalent. To meet prerequisites for some of the 200-level courses, students must demonstrate eligibility for English 101.

## **Enrollment Projections**

The College projects an enrollment of 21 (12 FTE) during its first year and anticipates an increase to 41 (24 FTE) students during its third year.

## Projected Enrollment

	First Term Yr 1		First Term Yr 2		First Term Yr 3	
	FT	PT	FT	PT	FT	PT
Internal Transfers	0	5	0	5	0	5
New Students	5	5	5	10	5	15
Continuing	0	0	5	10	5	10
Total Headcount	5	10	10	25	10	30
Total Estimated FTE per Year	10		22.5		20	

#### <u>Administration</u>

The Co-Chairs of the Information Management Technology Department will be responsible for the administration of the program under the direction of the two Division Directors (Math, Science and Health Careers Division and the Business, Engineering and Technology Division). This would be done through the re-assigned time allotted to Department Chairs.

#### Curriculum

The coursework involved in this certificate includes a wide variety of exams, quizzes and projects. This hands-on certificate utilizes a computer lab for 15 out of 21 credits. Students will demonstrate proficiency through hands-on labs, software simulations, integrated projects and course capstones.

Course Requirements

Program Core Courses		Credits
BOT 111 Keyboarding for Info Pro I		3
BOT 112 Keyboarding for Info Pro II		3
BOT 180 Medical Terminology		3
BOT 181 Medical Coding I		3
BOT 282 Medical Admin Procedures		3
BOT 288 Medical Practice Management Software Apps		3
BOT 291 Electronic Medical Records		3
	Total	21

## Resource Support

This certificate will be accomplished with minimal cost. No new full-time resources are required. The costs involved with this program include hiring part-time faculty to teach one additional course and the addition of part-time staff support to expand the Business Office Technology independent lab hours. A license to use a virtual EHR software simulation as part of the course work will be highly beneficial to students and will cost approximately \$1600 per year. The students participating in the certificate will be full or part-time and will take approximately 10 credits each semester for two semesters. The certificate is targeted to training students for placement in directly into entry-level positions in the workforce in 2 semesters.

## **Faculty**

About two-thirds of courses will be taught by adjunct faculty. All adjunct faculty members hold a master's degree or equivalent. Full-time faculty teaching in the program will be:

Carla Adams, Assistant Professor, Business Office Technology and Co-Department Chair, Information Management Technology Department M.S., Suffolk University

Specializations: Computer Applications: Office and Productivity Speech Recognition Business Etiquette Office Communication and Management Keyboarding

Susan Barzottini, Associate Professor and Co-Department Chair, Information Management Technology Department M.B.A., University of Connecticut

Specializations: Application Development System Design Business Requirements Analysis IT/IS Operations and Management Project Management Financial Accounting Business Communications

## Equipment/Software

The American Health Information Management Association (AHIMA) has created a Virtual Lab which is an Internet-based software lab for health information management (HIM) education. It features multiple software applications and lab lessons specifically designed for educational purposes. One full-year subscription of the Virtual Lab for an institution with 1-40 students costs \$1,650. Students would be required to purchase individual access codes for an additional cost. The annual subscription to the Virtual Lab, post-grant, would be absorbed by the Division budget. There will be no additional special resources for the program.

### Library Resources

The total estimated cost of library resources to supplement the Health Information Management Associate in Science degree program is \$3,700 (excluding shipping and processing fees). Due to the field's rapidly changing content (and to meet CAHIIM accreditation standards), updated editions of 75% of these titles will need to be acquired annually – costing the institution approximately \$2,775 per year. Updated editions of the remaining 25% will need to be acquired every 5 years – costing the institution approximately \$925.00.

#### **ITEM**

Licensure and accreditation of a Group Exercise Instructor program leading to an undergraduate certificate (30 credits) at Norwalk Community College

## RECOMMENDED MOTION FOR FULL BOARD

RESOLVED: That the Board of Regents for Higher Education license and accredit a Group Exercise Instructor program leading to an undergraduate certificate at Norwalk Community College for a period of time concurrent with institutional accreditation

#### **BACKGROUND**

Norwalk Community College (NCC) has applied for licensure and accreditation of a Group Exercise Instructor program leading to an undergraduate certificate (30 credits). The College currently offers associate's degree programs in Exercise Science as well Recreation and Leisure Studies, plus a certificate in Recreation and Leisure Studies. The proposed program will prepare the student for the American College of Sports Medicine (ACSM) Group Exercise Instructor Certification, which is not eligible for state or professional licensure.

Degree and certificate programs offered by public institutions in Connecticut must receive approval to operate through licensure by the Board of Regents and must receive accreditation from the Board of Regents to confer degrees (CGS 10a-35a).

Staff review of the proposal has determined that the program is consistent with the standards for planning and quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, as required by Board policy.

#### PLANNING ASSESSMENT

#### Conformance with institutional mission

The program is consistent with the College's mission and fits within the scope of the College's other offerings in allied health fields.

#### Need

The CT Department of Labor projects the number of Fitness Trainer and Aerobics Instructors will increase from 4,060 in 2010 to 4,889 in 2020, an increase of 83 positions each year; the annual number of openings is projected at 148 due to growth and net replacement, making it one of Connecticut's so-called "hot jobs." In 2012, the median salary of current workers in this field was \$37,900, the 25<sup>th</sup> percentile was \$22,600, and the 10<sup>th</sup> percentile is \$18,800 (Careerinfonet.org, SOC = 39.9031).

### Unnecessary duplication of programs

Only two programs at collegiate institutions exist in the state.

#### Completions in Related Fields 2012-13

Program	College	2008-09	2009-10	2010-11	2011-12	2012-13
Fitness	Gateway	0	0	0	1	2
Specialist	Manchester	0	0	0	1	3
	Total	0	0	0	2	5

Branford Hall Career Institute and the National Personal Training Institute offer certificate programs, although completions are not readily available and clearly do not meet demand.

#### Cost effectiveness

The College anticipates no new full-time faculty would be hired, but part-time costs would be \$5,700 a year and increase to \$11,500 in subsequent years Library and equipment are estimated at \$500 to \$1,150 to supplement budgets for the existing Exercise Science program.

## Availability of adequate resources

The College anticipates revenue in the first year of \$40,600 increasing to \$78,800 in the second year and decreasing to \$103,600 in the third. Expenses are projected in the first year at \$6,200, increasing to \$12,300 and \$12,650 in the third.

These revenue and cost estimates are based upon what appear to be ambitious enrollment projections. In the first year, the college expects 25 students to enroll, 70 students in the second year, and 95 students in the third.

## QUALITY ASSESSMENT DESCRIPTION

## Purpose and Objectives

The Group Exercise Instructor Certificate at Norwalk Community College is designed to provide fundamental and theoretical knowledge as well as practical skills necessary to assume the role of a group exercise instructor in commercial or clinical exercise settings. The certificate will integrate up-to-date guidelines and recommendations into the curriculum to meet specific job tasks of a group exercise instructor, including but not limited to: class design, leadership and motivation, general exercise testing and prescription and studio management. Graduates of the certificate will demonstrate sound communication skills, life-long learning, safe and effective exercise programming and compassion for those they work with. This certificate will also prepare the student for the American College of Sports Medicine's Group Exercise Instructor Certification Exam.

This certificate program is closely associated with the Exercise Science degree program at the College. The only courses unique to the Group Exercise Instructor Certificate are HPE 212 Group Exercise Instruction I and HPE 213 Group Exercise Instruction II. This will allow for those students interested in pursuing careers as a health-fitness professional to also enter the workforce as a group exercise instructor with the addition of the two aforementioned courses. Similarly, core and elective curriculum for this certificate are closely aligned with the requirements of other associate degree programs in allied health that are already offered at the College.

The certificate program will act as a terminal certificate that will lead to group fitness employment for graduates. Based on their own merits, and articulation agreements existing with other colleges, individual courses would transfer accordingly. Since there are currently no Group Exercise Instructor Certificate Programs offered at four-year institutions in the state of Connecticut, there is the possibility of four-year students to reverse matriculate to the College for Group Exercise Instructor training. Additionally, any individual interested in sitting for the ACSM Group Exercise Instructor Certification who meets the admissions requirements of the College can enroll in the certificate program as a preparatory for the certification exam.

All students who successfully complete the Group Exercise Instructor Certificate will be strongly advised to sit for the American College of Sports Medicine (ACSM) Group Exercise Instructor Certificate. This exam will be taken at the student's cost and will act as a capstone assessment for the program curriculum.

## Learning outcomes

Graduates of this program will:

- 1. Demonstrate an understanding of related exercise physiology, kinesiology and nutrition related to the group exercise setting.
- 2. Demonstrate entry level knowledge and skills necessary for safe and appropriate health screenings and exercise assessments.
- 3. Display sound knowledge and skills needed for group exercise class design and delivery with a variety of populations.
- 4. Practice sound, prudent, and ethical functions necessary in accordance with the legal and professional scope of the Group Exercise Instructor.

- 5. Develop leadership, interpersonal and communication skills necessary to be an effective professional in this career path.
- 6. Effect continuous improvement of the profession by actively pursuing career development and maintenance of certifications.

#### Admission

This certificate program will be offered with open admissions. All students interested in completing the Group Exercise Certificate will apply and complete the general admissions requirements at NCC. To start taking courses in the certificate program, the student must be eligible for ENG 101 Composition, successfully completed ENG 101 or have a college level English completed at another institution with credits officially transferred to NCC. All students enrolled in the certificate program will be required to obtain CPR certification with AED prior to enrolling in the HPE 213 Group Exercise Instruction II course. The cost of CPR/ AED training will be the responsibility of the student. Minimum requirements for certification include American Red Cross or American Heart Association CPR/AED for the adult, unless specified otherwise by the field placement agency.

## **Enrollment Projections**

The College projects an enrollment of 21 (12 FTE) during its first year and anticipates an increase to 41 (24 FTE) students during its third year.

## Projected Enrollment

	First Term Yr 1		First Term Yr 2		First Term Yr 3	
	FT	FT PT		PT	FT	PT
Internal Transfers	5	10	10	15	15	15
New Students	5	5	10	10	10	10
Continuing	0	0	10	15	20	25
Total Headcount	10	15	30	40	45	50
Total Estimated FTE per Year	1	.5	43	3.3	61	.7

### Administration

Paul M. Gallo will be the primary faculty at NCC, who will oversee the daily operations of the Group Exercise Instructor Certificate, including program assessment, course scheduling, faculty staffing, internship coordination, student recruitment and academic advisement. Paul has been the Director of Exercise Science and Wellness at NCC since July of 2004. He is a certified and licensed NATABOC Athletic Trainer, ACSM Clinical Exercise Specialist, ACSM Health Fitness Specialist and NSCA Certified Strength and Conditioning Specialist. He has his Master of Art in Exercise Physiology from Adelphi University and Bachelor of Science in Athletic Training and Kinesiology from the State University of New York at Cortland College. Paul is also expected to graduate with his doctoral degree in Applied Physiology from Teacher's College Columbia University in May of 2014. With over 10 years of experience in teaching, program development and assessment, advisement and facility management, Paul is an excellent candidate for coordination of the Group Exercise Instructor Certificate Program. Paul is required to teach a total of three credits per semester. He does expect to sit for the ACSM Group Instructor Exercise Certification Exam prior to the anticipated start of this certificate program, which is fall 2014.

There will be a minimum of one Exercise Science Community Advisory Board meeting per academic year to review the Group Exercise Instructor Certification curriculum and program assessment. The Exercise Science Advisory Board is made up of Clinical Exercise Physiologists, Health-Fitness and Group Exercise Professionals, local employers, faculty from NCC and local four-year institutions, strength and conditioning specialists, internship supervisors, physical therapists, NCC alumni and one NCC Exercise Science Student. The Exercise Science Advisory Board will be responsible for continual assessment of the Group Exercise Instructor Certificate Program and will also make sure the curriculum is up-to-date, in accordance with guidelines and recommendations and continually meeting workforce needs. With the qualifications of the Exercise Science Advisory Board Members (see attached), there is no need to form a separate advisory board for this certificate program. Additionally, faculty who teach the certificate courses will meet with the program coordinator semester-by-semester to review the program assessment.

### Curriculum

The coursework involved in this certificate includes a wide variety of exams, quizzes and projects. This hands-on certificate utilizes a computer lab for 15 out of 21 credits. Students will demonstrate proficiency through hands-on labs, software simulations, integrated projects and course capstones.

Course Requirements

Course Number and Name	Credits
Program Core Courses	23
HPE 105 Introduction to Exercise Science	3
HPE 232 First Aid and Sport Injury	2
HPE 212 Group Exercise Instruction I	4
HPE 213 Group Exercise Instruction II	4
HPE 245 Programming and Prescription I	4
ENG 101 Composition	3
PSY 111 General Psychology 1 or SOC 101 Principles of Sociology	3
Elective Courses in the Field	6
BIO 111 Introduction to Nutrition	3
BMK 105 Principles of Marketing	3
Other Related/Special Requirements	1
TWO HPE Physical Activity Courses	1/2
Total	30

### Resource Support

The start-up of this certificate program will require minimal cost with regard to equipment, facilities and faculty support. The Group Exercise Instructor Certification will be based out of the Pitney Bowes Foundation Wellness Center which currently houses the Exercise Science

Program, Physical Activity Courses and Athletic Coaching course at the College. Courses for this certificate will be taught by fulltime and adjunct Exercise Science and Wellness Department faculty who have the appropriate qualifications. The equipment needs are already met within the established Exercise Science and Wellness inventory. With the projected enrollment and tuition revenue and minimal cost associated with this certificate program it is anticipated to be extremely cost effective.

## **Faculty**

About two-thirds of courses will be taught by full-time faculty in the Exercise Science Program, as part of their regular teaching requirements. These individuals include the Program Director for Exercise Science, Paul Gallo and the new Exercise Science Faculty Member (as of fall 2013) Nicole Hafner, both of whom are qualified to teach any of the HPE courses in the Group Exercise Instructor Certificate Program. Other courses will be taught by Exercise Science and Physical Activity adjunct faculty who are currently employed at NCC and qualified to teach such courses. Other qualified adjunct professors will be hired, if needed. Currently there are no plans to hire additional full or part-time faculty for this certificate program.

## Equipment/Software

The Group Exercise Instructor Certification will be housed in the Pitney Bowes Foundation Wellness Center, located on the ground floor of the LEED Certified Center for Health, Science and Wellness, which was completed in 2011. This facility also houses the Exercise Science Program, Physical Activity Courses and Athletic Coaching course at NCC. This facility provides state-of-the-art laboratories and studios that are realistic to actual group exercise settings and equipment that is similar to local university/ college wellness centers and commercial facilities. The Exercise Science Laboratory (room H007), which also acts as a classroom, and the two group exercise studios (rooms H004 and H005) will be the primary locations for this certificate program. Additional equipment and room space will not be needed for this certificate program, thus not adding to overhead expenses.

#### Library Resources

The Baker Library at NCC has a wide-variety of print textbooks, evidence-based journals and electronic journals related to the disciplines of Exercise Physiology, Biology, Anatomy, Kinesiology, Health-Fitness and Rehabilitation. The library also offers inter-library loans and ereserve through the BlackBoard Learn system. All Program Certificate Textbooks will be on reserve at the library and students enrolled in the Group Exercise Instructor Certificate will be required to complete a library orientation and database training session, similar to the students in the Exercise Science Program.

Currently, there is a library liaison assigned to the Exercise Science Program, who will also act as the liaison for the Group Exercise Instructor Certificate. Through collaborations with the library liaison, a web-based Exercise Science Library subject guide is currently available to all students in the Exercise Science Program. This self-guide will be modified to also include the Group Exercise Instructor Certificate students, pending approval of the proposed curriculum.