1. Approval of Minutes

**CONSENT CALENDAR**

2. Academic Program Approvals
   - **Licensure**
     - Environmental Studies (BA) *[University of Connecticut]*
   - **Program Modifications**
     - Health Claims Processing (UG Certificate) -- Name Change *[Tunxis CC]*
     - Computer Science (MS) -- Course Modifications *[Southern CSU]*
     - Teaching English as a Second Language (MS) -- Name Change *[Central CSU]*
   - **Terminations**
     - Spanish (MS) *[Central CSU]*
     - Global Leadership and Literacy (GR Certificate) *[Central CSU]*

**ACTION ITEMS**

3. Academic Program Approvals
   - **Licensure**
     - Business Administration (AS) Option in Health Care Management Services *[Quinebaug Valley CC]*
     - Computer Services (AS) Option in Web Development *[Quinebaug Valley CC]*
     - Construction Management (AS and AAS) *[Capital CC]*
   - **Accreditation**
     - New Media Communication – Accreditation *[Tunxis CC]*
     - Pathway to Teaching Careers (AS) – Accreditation *[Housatonic CC]*
   - **Licensure and Accreditation**
     - Web Design (C2) *[Quinebaug Valley CC]*

4. Institutional Accreditation
   - Capital Community College
   - Charter Oak State College
   - Quinebaug Valley Community College
   - Southern Connecticut State University
   - Tunxis Community College

5. CSU Teaching and Research Awards

**INFORMATION ITEM**
   - Non-substantive Change
     - Minor in Leadership Development *[Southern CSU]*
MINUTES

Regents Present: Merle Harris (Chair), Naomi Cohen, Lawrence DeNardis (via conference), Nicholas Donofrio, Lew Robinson

Regents Absent: Yvette Melendez, Alex Tettey, Michael Fraser, Catherine Smith

Staff Present: Braden Hosch, Elsa Nunez, Bob Kennedy, Bill Bowes, Tom Clark, Colleen Flanagan, Erin Fitzgerald, Terri Raimondi, Steve Weinberger, Pamela Coleman, Maureen McClay

Invited Guests: Steve Minkler (MXCC), Adrienne Maslin (MXCC)

Other Attendees: Patricia Bouffard (NWCC), Amy DeSonia (QVCC), Ellen Durmin (SCSU), Rhona Free (ECSU), Jane Gates (WCSU), Jess House (WCSU), Michael Rooke (TXCC)

Chair Merle Harris called the meeting to order at 9:35 a.m. Minutes were approved unanimously with a motion by Nick Donofrio, seconded by Naomi Cohen.

ACTION ITEMS

Plan to Redirect Consolidation Savings to Campuses. President Kennedy reported on the planned funding for positions and the factors involved. Twenty-three positions had been approved in June and an additional 24 positions were now approved for a total of 47. He noted at least six were direct student support positions. In response to a question on the “collaborative” positions, he noted those positions are officially assigned to one institution which collaborates with the other institution. With a question re the funds spent, it was stated approximately $3.7 million to $4.0 million has been spent, with expectations to redirect additional savings following confirmation of availability. The plan was approved unanimously with a motion by Nick Donofrio, seconded by Naomi Cohen.

Agenda Amendment

It was moved and approved to amend the agenda to include a brief Executive Session.

New Mission Statement for Middlesex Community College. Dr. Hosch introduced Deans Steven Minkler and Adrienne Maslin who gave background and information re the college’s strategic planning group’s work leading up to the adoption of a new mission statement. Chair Harris mentioned that in the future, as all our institutions review mission statements, they should reflect the Board of Regents mission statement presently under development. Motion to approve Middlesex CC Mission Statement made by Nick Donofrio, seconded by Naomi Cohen. Unanimously approved.
Academic Program Approvals

Program Modifications

Middlesex CC – A.S. in General Studies to be offered at Meriden location;
– A.S. in Technology Studies Option in Manufacturing Machine Technology to be offered at Meriden location.

Dr. Hosch reviewed the background information and introduced Dean Minkler. Dr. Minkler described the space additions, staff, cost and enrollment. With an inquiry from Mr. Donofrio, Dean Minkler gave more financial details and information on sustainable abilities. In response to BOR Chair Lew Robinson, Dean Minkler noted purpose and objectives of Meriden location. Mr. DeNardis applauded effort of satellite institutions.

Programs were moved by Mr. Donofrio, seconded by Ms. Cohen and unanimously approved.

DISCUSSION ITEM
Planning Assessment Criteria for Licensure of New Program

Dr. Hosch reviewed background and noted the five major points to examine as described in the staff report. In conjunction, suggestions discussed and generally approved were:

- Having finances reviewed by BOR finance staff, with a new finance form developed;
- Licensure and accreditation applications should be separate [after licensure approval, program may then be reviewed at a later date to determine feasibility of continuance]

Other comments noted:

- Strategic plan to be examined, additional criteria may be needed as change to policy;
- The Finance Office review will mean a more robust process
- Establishing a system for evaluation and cost effectiveness both important
- Topic will be discussed at Presidents’ Council
- At the full board level, Chair Robinson noted it is important to continue efforts to reduce costs and produce revenue

Discussion ensued re programs created using cash reserves. There are policies re reserves at both the community colleges and state universities. Reserves primarily used for contingencies. There is a required level of funds to be maintained and Board action is also required. Policies should be reviewed for consistency.

Consensus determined process will continue as is until a new process is developed and in place. The new process will be reviewed by the Council of Presidents, Finance Officers and Academic Officers. A revised report will be submitted at the November meeting.

INFORMATION ITEMS
Non-Substantive Changes

Chair Harris and Dr. Hosch reviewed process for non-substantive changes. New programs need Board approval, however, non-substantive changes are for information only. Dr. Hosch will write staff reports for explanation of items.
Non-substantive items reviewed:

- Undergraduate Certificate (C1) – Long Term Care Certificates for Direct Care Workers [COSC]
Transfer and Articulation Policy (TAP) Update
Dr. Nunez reported an enormous amount of work was done over the summer with the steering committee and subcommittees all meeting and the faculty committees doing the major work. The full report was due soon. She noted that a Project Manager had been appointed – Patricia Hirschy. Dr. Hirschy is presently a math professor at Asnuntuck CC and the Liberal Arts Department Chair. She has been heavily involved in MattyConn. As manager, she will coordinate the work of the committees and shepherd through the institutions creating pathways. It is expected to have a fully implemental transfer and articulation policy by the end of the year.

Remedial/Developmental Education Update
Dr. Nunez reported the bill (PA12-40) was signed in June with final implementation in 2014. Since then four regional groups or teams of faculty and academic officers have been established, with the first meetings occurring in late August. A convocation was planned for September 14 with national experts presenting. An inventory of present practices had also been compiled. The law will require use of multiple measures for college admittance, e.g. high school grades as well as testing. The plan is to establish regional centers located in neutral territory. Issues include protection of access and ability to pay. The regional teams will be working on academic infrastructure. The financial structure will be determined after study.

Legislative Update – none.

Executive Session
The meeting went into executive session at 11:12 a.m. with a motion by Ms. Cohen, seconded by Mr. Donofrio.

Adjournment
Meeting returned to public session and adjourned at 11:30 a.m.
ITEM
Licensure of a program in Environmental Studies leading to the Bachelor of Arts (B.A.) degree at the University of Connecticut

RECOMMENDED MOTION FOR FULL BOARD
RESOLVED: That the Board of Regents for Higher Education license a program in Environmental Studies leading to the Bachelor of Arts (B.A.) degree at the University of Connecticut

BACKGROUND
The University of Connecticut has requested licensure of a program in Environmental Studies leading to the Bachelor of Arts (B.A.) degree. 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-34).

The University has identified this field as a Focused Area of Excellence in its academic plan. It expects an enrollment of 100 majors in early years with growth up to 200 majors, with the number of graduates ranging from 30 to 60 a year. The program will complement its current program in Environmental Science leading to the Bachelor of Science (B.S.) degree.

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.

The program was recommended for licensure by the statewide Advisory Committee for Accreditation (ACA) on Sept. 6, 2012.

09/19/12 – ConnSCU Academic Council
10/05/12 – BOR-Academic and Student Affairs Committee
10/18/12 – Board of Regents

PLANNING ASSESSMENT

Conformance with institutional mission
The program is consistent with the University’s mission
Need
The development of an Environmental Studies major has been in response to the broad interest in environmental policy and law, the history of American environmentalism, and the expression of humans’ relationship to nature in literature among UConn students and faculty. The program will prepare students for participation in rapidly expanding occupations, which may include careers in environmental justice, sustainability, and the communication of environmental concerns to the public. In addition, it will prepare students for global citizenship and engagement.

Unnecessary duplication of programs
Six similar programs are offered by institutions in Connecticut:

- Environmental Studies (B.A.) – Connecticut College
- Environmental Studies (B.A.) – Goodwin College
- Environmental Studies (B.A.) – Mitchell College
- Environmental Studies (B.A.) – Wesleyan University
- Environmental Studies (B.A.) – Yale University
- Environmental Theories and Applications (B.S.) – Post University

Cost effectiveness
The costs for delivering the program at projected enrollment levels appear consistent with similar programs at the University.

Availability of adequate resources
The University has adequate resources to deliver this program.

DESCRIPTION
In the University of Connecticut Academic Plan for 2009-2014 the environment is listed as one of the Focused Areas of Excellence: “emerging areas of interdisciplinary excellence grounded in traditional academic disciplines.” While UConn currently has a successful undergraduate major in environmental science, which focuses heavily on biophysical science, there is no comparable degree relating to the study of the environment primarily from the perspective of the humanities and social sciences. The proposed B.A. in environmental studies is designed to fill this gap. It has been under development for several years, and is now ready to be launched.

The Environmental Studies major is an interdisciplinary program designed to provide students with the knowledge, skills, and perspectives needed to understand the interactions between human society and the environment. Understanding the ethical and cultural dimensions of our relationship with the environment, as well as the challenges of protecting it, requires insights from multiple perspectives, including the humanities, the social sciences, and the natural sciences. Core courses in the major ensure familiarity with basic principles from these three areas. With this shared core of knowledge, majors will focus their studies on an area of special interest, taking electives and related courses that allow greater specialization. Among the many possibilities are environmental sustainability, issues concerning public policy and environmental justice, and the literary and philosophical legacy of human encounters with the non-human world. A capstone course will allow each student to research a distinct perspective on a contemporary environmental issue. A major in Environmental Studies might lead to a career in a
variety of fields, including public policy, environmental education, eco-tourism, marketing or consulting, journalism, or advocacy.

The major will lead to a Bachelor of Arts degree in the College of Liberal Arts and Sciences (CLAS) or the College of Agriculture and Natural Resources (CANR). The student’s choice of colleges would be made in consultation with faculty and advisors based upon the student’s interests and career goals.

**ADMINISTRATION**

The proposed administrative structure is a partnership of co-directors, one each from CANR and CLAS. Appointments would be for 3-5 years. The responsibilities of the Co-Directors of Environmental Studies Program would include: recruiting students; developing assessment strategies; developing advising protocols and managing student records; developing university-wide programming associated with the major; and acting as co-chairs of the Environmental Studies Faculty Advisory Board. In addition, the program would have a half-time staff to assist with student administration of the major.

**CURRICULUM**

*Introductory Courses*

All majors must take three introductory courses:

- EVST 1000. Introduction to Environmental Studies (new course)
- NRE 1000. Environmental Science; or GEOG 2300. Introduction to Physical Geography; or GSCI 1050. Earth and Life Through Time with Lab; or GSCI 1051. Earth and Life Through Time
- BIOL 1102. Foundations of Biology; or, for those seeking a more advanced background, BIOL 1108. Principles of Biology II

*Core Courses (18 credits)*

**Humanities Core:** All majors must take 2 of the following courses:

- ENGL 3240. American Nature Writing
- HIST 3540. American Environmental History
- PHIL 3216. Environmental Ethics

**Social Sciences Core:** All majors must take 2 of the following courses

- ARE 3434. Environmental and Resource Policy
- NRE 3245. Environmental Law
- POLS 3412. Global Environmental Politics

**Natural Science Core:** All majors must take 2 of the following courses:

- AH 3175. Environmental Health (prerequisites, BIOL 1102 and CHEM 1122)
- EEB 2208. Introduction to Conservation Biology
- GEOG 3400. Climate and Weather
• GSCI 3010. Earth History and Global Change (prerequisite, GSCI 1050 or 1051)
• NRE 4170. Climate-Human-Ecosystem Interactions

EVST 4000W. Capstone Research Project (new course; fulfills W and Information Literacy requirements)

*Other areas of recommended preparation (not required):

• **Earth Science:** GSCI/GEOG 1070. Global Change and Natural Disasters; MARN 1002/1003. Introduction to Oceanography without/ with lab
• **Physical Science:** CHEM 1122. Chemical Principles and Applications with lab; CHEM 1127Q. General Chemistry; PHYS 1030Q/1035Q. Physics of the Environment without/ with lab
• **Statistics:** STAT 1000Q. Introduction to Statistics I; STAT 1100Q. Elementary Concepts of Statistics

*Additional requirements for the major:*
Majors must take a specified number of courses at the 2000, 3000, and/or 4000 level. These courses must be designed to form a coherent set of additional courses that will provide the student with a focus or additional depth in an area of interest related to the major. They must be chosen in consultation with the student’s faculty advisor and be approved by the advisor. Courses listed above that are not used to meet the core requirements may be used to meet this requirement.
FACULTY
Members of the Environmental Studies Faculty Advisory Board are also committed to teaching courses in the new major. They include: Andrew Ballantine, Geography; JC Beall, Philosophy; Mark Boyer, Political Science; Tim Byrne, Environmental Science; Wayne Franklin, English; Matthew McKenzie, History; Kathleen Segerson, Economics; Stephen Swallow, Agriculture and Resource Economics; and John Volin, Natural Resources and the Environment. Other faculty members have been voluntarily working on the development of an interdisciplinary introductory course for the Environmental Studies major. These faculty include: Chris Elphick, Ecology and Evolutionary Biology; Sydney Plum, English; Richard Rockwell, Sociology; Merrill Singer, Anthropology; Robert Thorson, EEB; Friedemann Weidauer, Literature, Culture and Languages — as well as Professors Ballantine, Beall, Boyer, MacKenzie, and Segerson.

Departments offering courses included in the core courses for the major have been notified of the need to support these courses through staffing and regular offerings and have expressed willingness to do so.

RESOURCES
The proposed new major has been designed, to the greatest extent possible, to draw on existing courses and resources and complement other college priorities. The CLAS hiring plan proposes four new faculty positions (Philosophy, English, Geography, and Economics) that would support the Environmental Studies major. All four of these position meet other college priorities as well. Similarly, the CANR hiring plan includes two positions (Natural Resources and the Environment, and Agricultural and Resource Economics) that would contribute to the major while meeting other college priorities.

Beyond faculty, the program needs a modest amount of administrative support:

- Half-time program assistant (obtained by increasing the half-time administrative position in the Environmental Sciences program to full time, and running both programs together – no additional space is required)
- 1 month equivalent of summer salary to be split between co-directors, one each from CANR and CLAS
- Four, 20-hour, full-year TA positions (roughly $100,000) to support lab courses and the capstone course
- $3500 in program and operating support.

FACILITIES/EQUIPMENT/LIBRARY/SPECIAL RESOURCES
The administration of the Environmental Studies major would share existing space with the administration of the Environmental Science major, so no new space requirements are anticipated. In addition, the major will not require special equipment or library resources.
ITEM
Modification of a program in Health Claims Processing leading to an undergraduate certificate at Tunxis Community College to change the name to Health Information Technology and increase program length to 31 credits

RECOMMENDED MOTION FOR FULL BOARD
RESOLVED: That the Board of Regents for Higher Education approve a modification of a program in Health Claims Processing leading to an undergraduate certificate at Tunxis Community College to change the name to Health Information Technology

BACKGROUND
Tunxis Community College has requested to change the name of program in Health Claims Processing leading to an undergraduate certificate to a new name of Health Information Technology. The program title is out-of-date and the new name is consistent with current practice. Two existing information technology courses have been added, and all courses have been updated to strengthen their internal IT components. The credit additions and revisions change the number of credits in the program from 27 to 31 and raise the certificate level from a program that requires less than a year to one that requires at least one but less than two years.

This change in program length and title is consistent with the quality standards for programs set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning; updates of content of this sort are periodically made to academic programs and do not require Board approval when 15 undergraduate credits or fewer are adjusted. A change to the name of an academic program must receive approval from the Board of Regents, pursuant to 10a-34-3(c) of the regulations.

09/19/12 – ConnSCU Academic Council
10/05/12 – BOR-Academic and Student Affairs Committee
10/18/12 – Board of Regents
RATIONALE
Updating the existing Health Claims Processing certificate to Health Information Technology certificate will provide students with broad and rigorous new skills for these software platforms; they will have the skills necessary for entry-level positions in the health information technology job market. With the new federal requirement that all health records be stored electronically by 2016, the Bureau of Labor Statistics in its 2010-2011 outlook forecasts that growth in the medical records and health information technicians field will be by 20 percent through 2018. The Connecticut Department of Labor estimates that 13,700 new health care support and practitioner jobs will be created in the state, many of which will be in the health information technology records management field.

CURRICULUM

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT*137</td>
<td>Word Processing Applications I</td>
<td>3</td>
</tr>
<tr>
<td>BOT*180</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BIO*115</td>
<td>Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>BOT*181</td>
<td>Medical Coding I</td>
<td>3</td>
</tr>
<tr>
<td>BOT*182</td>
<td>Medical Coding II</td>
<td>3</td>
</tr>
<tr>
<td>BOT*280</td>
<td>Medical Transcription &amp; Document Production</td>
<td>3</td>
</tr>
<tr>
<td>BOT*288</td>
<td>Medical Practice Management Software Applications*</td>
<td>3</td>
</tr>
<tr>
<td>BOT*291</td>
<td>Electronic Health Records*</td>
<td>3</td>
</tr>
</tbody>
</table>

* Added to program

RESOURCES
No new resources are needed to modify this certificate program. All courses have the resources they need. The software required for BOT*288 Medical Practice Management Software Applications and BOT*291 Electronic Health Records come with the textbooks. Specialized adjunct faculty members who are licensed medical coders already teach these courses and will be able to bring appropriate expertise to the students.
ITEM
Modification of a program in Computer Science leading to a Master of Science (M.S.) degree at Southern Connecticut State University to change program credit distribution

RECOMMENDED MOTION FOR FULL BOARD
RESOLVED: That the Board of Regents for Higher Education approve a modification of a program in Computer Science leading to a Master of Science (M.S.) degree at Southern Connecticut State University to change program credit distribution

BACKGROUND
Southern Connecticut State University has requested to modify the curriculum of its program in Computer Science leading to the Master of Science (M.S.) degree. The changes restructure the core and electives in the program and replace three existing concentrations in:

- Visualization & Intelligent Systems
- Distributed Computing
- Computer Systems

with two new concentrations in:

- Software Development
- Network & Information Security.

Because the modifications exceed 12 graduate credits, approval is required by the Board of Regents, pursuant to 10a-34-3(c) of the regulations. Proposed changes are consistent with the quality standards for programs set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning.
RATIONALE
The Masters of Science in Computer Science (MS in CS) at Southern Connecticut State University was first introduced in the fall of 2001. These curricular changes are proposed to keep up with developments in the field. Six new courses in areas such as mobile application development and network/information security have been developed to address critical needs in the workplace. Conversely, areas such as visualization and intelligent systems have exhibited less demand as enrollments have tapered off.

The current MS in Computer Science program requires nine credits of core courses and the choice of one of three concentrations: (1) visualization & intelligent systems, (2) distributed computing, and (3) computer systems. In addition to the nine core credits, students are required to take all four courses (12 credits) in their chosen concentration, three courses (9 credits) from the other concentrations, and six credits for a capstone requirement (thesis or special project) resulting in an overall total of 36 credits for the master’s degree.

The proposed program requires a new 12 credit core, the choice of one of two concentrations in either (1) software development (renamed from distributed computing) or (2) network & information security (renamed from computer systems) in which students will be required to take all four courses (12 credits) in their chosen concentration, two courses (6 credits) of non-core courses (i.e., from the other concentration or free electives), and six capstone credits (as defined in the current program) for a total of 36 credits. The visualization and intelligent systems concentration that is part of the current system will no longer be an option in the new program.

CURRICULUM
The following three courses comprise the current core curriculum:

- CSC 521: Algorithms (3 credits)
- CSC 523: Formal Languages (3 credits)
- CSC 525: Advanced Operating Systems (3 credits)

While these courses are still relevant in the field of computer science, they no longer represent a common set of knowledge and skills that is necessary to succeed in the courses defined in the program’s two newly proposed concentrations. As a result, a new core is proposed and all three of the current core courses will move out of the core and be offered as electives in the program.

The new core will consist of four courses (12 credits) in areas that are foundational for both of the new concentrations:

- CSC 540: Database Systems (3 credits)
- CSC 543: Web Programming (3 credits)
- CSC 563: Multithreaded Distributed Programming (3 credits)
- CSC 565: Computer Networks (3 credits)

These courses consist of fundamental knowledge for both software development and network and information security and will fully prepare students for their chosen area of concentration.
New Required Courses and Concentrations

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 540</td>
<td>Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSC 543</td>
<td>Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC 563</td>
<td>Multithreaded Distr. Prog.</td>
<td>3</td>
</tr>
<tr>
<td>CSC 565</td>
<td>Computer Networks</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Core Courses (12 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 540</td>
<td>Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSC 543</td>
<td>Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC 563</td>
<td>Multithreaded Distr. Prog.</td>
<td>3</td>
</tr>
<tr>
<td>CSC 565</td>
<td>Computer Networks</td>
<td>3</td>
</tr>
</tbody>
</table>

Software Development Concentration (12cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 535</td>
<td>Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSC 545</td>
<td>Adv. Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSC 550</td>
<td>Fund. of Mobile App. Dev.</td>
<td>3</td>
</tr>
<tr>
<td>CSC 560</td>
<td>Software Quality</td>
<td>3</td>
</tr>
</tbody>
</table>

Network & Info. Security Concentration (12cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 555</td>
<td>Principles of Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CSC 558</td>
<td>Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CSC 568</td>
<td>Ethical Hacking &amp; Pen. Testing</td>
<td>3</td>
</tr>
<tr>
<td>CSC 578</td>
<td>Secure Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses in the Field (6 credits chosen from)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 521</td>
<td>Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CSC 523</td>
<td>Formal Languages</td>
<td>3</td>
</tr>
<tr>
<td>CSC 576</td>
<td>Data Warehousing</td>
<td>3</td>
</tr>
<tr>
<td>CSC 583</td>
<td>Parallel Computing</td>
<td>3</td>
</tr>
<tr>
<td>CSC 587</td>
<td>Computational Science of Simulation &amp; Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CSC 581</td>
<td>Computational Intelligence</td>
<td>3</td>
</tr>
</tbody>
</table>

Capstone Requirement (choose one, 6 credits)

- Thesis I & Thesis II 6
- Special Project 6

Total 36

Core Course Prerequisites (only if needed)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC XXX</td>
<td>Accelerated Programming</td>
<td>4</td>
</tr>
</tbody>
</table>

RESOURCES

With an expected enrollment increase, it is possible that resources will need to be allocated for faculty support and technological equipment. Library support and resources are expected continue as they have since the inception of the graduate program.
ITEM
Modification of a program in Teaching English as a Second Language leading to the Master of Science (M.S.) degree at Central Connecticut State University to change the name to Teaching English to Speakers of Other Languages (TESOL)

RECOMMENDED MOTION FOR FULL BOARD
RESOLVED: That the Board of Regents for Higher Education approve a modification of a program in Teaching English as a Second Language leading to the Master of Science (M.S.) degree at Central Connecticut State University to change the name to Teaching English to Speakers of Other Languages (TESOL)

BACKGROUND
Central Connecticut State University has requested to change the name of its program in Teaching English as a Second Language leading to the Master of Science (M.S.) degree to change the name to Teaching English to Speakers of Other Languages (TESOL). The name is consistent with current practice in the field.

A change to the name of an academic program must receive approval from the Board of Regents, pursuant to 10a-34-3(c) of the regulations.

RATIONALE
The name/term, Teaching English as a Second Language, is often used in the field to distinguish between teaching English in native English speaking countries, like the USA (English as a second language), and teaching it in countries where English is not widely spoken, like France (English as a foreign language). The term “Teaching English to Speakers of Other Languages” is both more general and a more accurate description of what the institution prepares students to learn and do.

RESOURCES
No resources are required to make this change.

09/19/12 – ConnSCU Academic Council
10/05/12 – BOR-Academic and Student Affairs Committee
10/18/12 – Board of Regents
ITEM
Termination of a program in Spanish leading to the 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 the termination of a program in Spanish leading to the Master of Science (M.S.) degree at Central Connecticut State University

BACKGROUND
Central Connecticut State University has requested to terminate a program in Spanish leading to the 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
Enrollments have been insufficient to sustain the program (fewer than 4 students each term), and all students have either completed the program or moved to the master’s degree program in Modern Languages. The University has recently added a specialization in Italian and Spanish for Certified Teachers.

RESOURCES
No resources are required to make this change. Faculty who teach Spanish language teach courses in the Modern Languages program.

09/19/12 – ConnSCU Academic Council
10/05/12 – BOR-Academic and Student Affairs Committee
10/18/12 – Board of Regents
ITEM
Termination of a program in Global Leadership and Literacy leading to a post-baccalaureate certificate 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 the termination of a program in Global Leadership and Literacy leading to a post-baccalaureate certificate at Central Connecticut State University

BACKGROUND
Central Connecticut State University has requested to terminate a program in Global Leadership and Literacy leading to a post-baccalaureate certificate. 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
No students ever enrolled in this program, indicating there is no student demand.

RESOURCES
No resources are required to make this change.
ITEM
Licensure of an Option in Health Care Management in a program in Business Administration 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 license an Option in Health Care Management in a program in Business Administration leading to the Associate of Science (A.S.) degree at Quinebaug Valley Community College

BACKGROUND
Quinebaug Valley Community College has requested licensure of an Option in Health Care Management in a program in Business Administration leading to the Associate of Science (A.S.) degree. The Business Administration: Health Services Management option prepares students for managing a health care office. The College currently offers associate’s degree programs in Business Administration as well as in Medical Assisting; certificate programs are offered in Health Career Pathways, and Health Information Management Technician: Coding Specialist.

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-34). Undergraduate options of greater than 15 credits require licensure as new programs, pursuant to the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning (10a-34-2(j)).

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.

The program will be considered by the statewide Advisory Committee for Accreditation (ACA) on October 4, 2012 and will forward a recommendation to the Board of Regents. Action from the BOR-ASA is contingent upon a favorable recommendation from ACA.
PLANNING ASSESSMENT

Conformance with institutional mission
The program is consistent with the College’s mission and fits within an existing degree program.

Need
The College has held multiple meetings in the past year with local health care providers, including, Day Kimball Hospital, Generations Family Health Care, and Windham Hospital. Needs addressed by these partners include employees with a management/supervisory background. This degree will meet the needs of our partners in developing individuals with knowledge, skills and abilities in the area of business management within a health care setting. The Bureau of Labor Statistics has issued a favorable outlook for career pathways for graduates completing this degree option.

Unnecessary duplication of programs
Specializations in associate’s degree programs are not uniformly tracked or consistently categorized. Students in northeastern Connecticut do not have alternative on-ground providers of business administration programs at the associate’s degree level beyond offerings at QVCC.

Cost effectiveness
The College anticipates no additional resources or equipment will be required to operate the program, although cost effectiveness will ultimately depend upon meeting enrollment targets. Enrollment projections anticipate 75 students in the program by the third year of operation, which is aggressive. The median enrollment by program at the college is 25 students, although the associate degree program Business Administration: Management Option had a fall 2011 headcount enrollment of 76; the AS in Accounting program had a headcount enrollment of 69.

Availability of adequate resources
Assuming no additional resources are needed for the program, existing resources appear adequate, although in general community colleges face a structural budget deficit.

DESCRIPTION

Purpose and Objectives
The program in Business Administration with an Option in Health Services Management provides students with the knowledge and skills needed to manage a health care office, with a foundation of general education for the competencies generally expected of graduates of associate’s degree programs. Graduates will be prepared to obtain internet-related information technology positions.

The College has held multiple meetings this past year with their health care partners, including, but not limited to, Day Kimball Hospital, Generations Family Health Care, and Windham Hospital. Needs addressed by these partners include employees with a management/supervisory background. This degree will meet the needs of our partners. This degree will also assist graduates from the HIMT, phlebotomy, community health worker, and medical office skills certificate programs who are current working in the health care field move up in their current place of employment, by gaining additional skills from taking business and health care related coursework.
Students in the health care management program will include current students in the various health certificates (Health Information Management, Community Health Worker, Medical Office Skills, and Phlebotomy) as well as in the business certificates (Applied and Advanced Management, and Applied and Advanced Accounting) as a means of continuing their education at the associate degree level. Student demographics include full and part time, traditional and non-traditional, and students in other medical or business fields that are looking to enter or advance in the field of health care. This option has been designed to align with an existing Business Administration program that currently allows seamless transfer to a number of 4-year institutions (i.e., Eastern Connecticut State University, UConn, and Charter Oak State College).

**Learning outcomes**

Students completing the program will be able to:

1. Integrate knowledge and acquired skills to function as a competent manager in a health care setting.
2. Use medical terminology and general business vocabulary specific to the field of health care management.
3. Identify and address the needs of both the patient and employees in a medical facility.
4. Utilize his/her attained knowledge of various administrative medical facility procedures, practices, and technologies to complete simulated “real-world” tasks.
5. Effectively apply relevant management skills in a health care office setting.
6. Appropriately identify and effectively apply legal and ethical standards of practice.
7. Understand the principles of problem solving, including creative and critical thinking, and apply them to both business and personal situations.

**Admission**

Admission to the program requires only admission to the College: applicants must hold a high school diploma or equivalent. In addition, the student must satisfactorily place into college level courses per the college’s placement criteria.

**Enrollment Projections**

The College projects a headcount enrollment of 14 students in the first year, more than doubling to 39 in the second year, and then increasing 75 in the third year of operation.

**Headcount Enrollment Projections**

<table>
<thead>
<tr>
<th></th>
<th>First Term Year 1</th>
<th>First Term Year 2</th>
<th>First Term Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Transfers FT</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>PT</td>
<td>5</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>New Students      FT</td>
<td>2</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>PT</td>
<td>5</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Continuing Students FT</td>
<td></td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>PT</td>
<td>10</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Total Enrollment  FT</td>
<td>4</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>PT</td>
<td>10</td>
<td>28</td>
<td>53</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>39</td>
<td>75</td>
</tr>
</tbody>
</table>
Administration
The program will be administrated by the Business Program Coordinator, Jennifer Oliver. The administrator, along with full time faculty members in the Allied Health and Business Departments, will be the primary advisors for students in the program.

Curriculum
The health services management option under the associate of science in business administration entails 27 general education credits, 19 credits in the medical and health field, and 15 credits in the business department. Students must take a minimum of 24 credits of coursework for the major at the institution and must maintain a GPA of 2.5.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>113</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BBG</td>
<td>101</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BBG</td>
<td>280</td>
<td>Problem Solving and Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>BMG</td>
<td>202</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BMG</td>
<td>220</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM</td>
<td>102</td>
<td>Introduction to Health Care Systems</td>
<td>3</td>
</tr>
<tr>
<td>HLT</td>
<td>170</td>
<td>Medical Law and Ethics for the Health Care Professional</td>
<td>3</td>
</tr>
<tr>
<td>MED</td>
<td>111</td>
<td>Administrative Medical Assisting</td>
<td>3</td>
</tr>
<tr>
<td>MED</td>
<td>112</td>
<td>Medical Insurance and Billing</td>
<td>3</td>
</tr>
<tr>
<td>MED</td>
<td>131</td>
<td>Clinical Assisting</td>
<td>4</td>
</tr>
<tr>
<td>MED</td>
<td>216</td>
<td>Electronic Medical Records Management</td>
<td>3</td>
</tr>
<tr>
<td>COM</td>
<td>xxx</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>ENG</td>
<td>101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ECN</td>
<td>101</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECN</td>
<td>102</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BIO</td>
<td>110</td>
<td>Principles of the Human Body</td>
<td>3</td>
</tr>
<tr>
<td>HIS</td>
<td>xxx</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>HIS</td>
<td>xxx</td>
<td>Humanities elective</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>137</td>
<td>Intermediate Algebra (or higher)</td>
<td>3</td>
</tr>
<tr>
<td>PSY</td>
<td>211</td>
<td>General Psychology OR SOC101 Principles of Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 34

Total 27
RESOURCES SUPPORT

Faculty
Full-time faculty teaching in the program will be:

- Cheri Goretti, MA Anna Maria College
- Cindi Brassington, MS, University of Bridgeport
- Erin Pagano, MS Bay Path College
- Jennifer Oliver, BS University of Connecticut, CPA

Facilities
No new resources are required for the this degree option.
### PROJECTED Program Revenue

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
<th></th>
<th>Year 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Time</td>
<td>Part Time</td>
<td>Full Time</td>
<td>Part Time</td>
<td>Full Time</td>
<td>Part Time</td>
</tr>
<tr>
<td>Tuition (Do not include internal transfers)</td>
<td>$3,598</td>
<td>$4,570</td>
<td>$12,971</td>
<td>$18,820</td>
<td>$30,544</td>
<td>$27,132</td>
</tr>
<tr>
<td>Program-Specific Fees</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Other Rev. (Annotate in text box below)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Annual Program Revenue</td>
<td>$8,168</td>
<td></td>
<td>$31,791</td>
<td></td>
<td>$57,676</td>
<td></td>
</tr>
</tbody>
</table>

### PROJECTED Expenditures

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
<th></th>
<th>Year 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number (as applicable)</td>
<td>Expenditure</td>
<td>Number</td>
<td>Expenditure</td>
<td>Number</td>
<td>Expenditure</td>
</tr>
<tr>
<td>Administration (Chair or Coordinator)</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Faculty (Full-time, total for program)</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Faculty (Part-time -total for program)</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Support Staff</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Library Resources Program</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Equipment (List as needed)</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Other (e.g. student services)</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Estimated Indirect Cost (e.g. student services, operations, maintenance)</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Total ESTIMATED Expenditures</td>
<td></td>
<td>$0</td>
<td></td>
<td>$0</td>
<td></td>
<td>$0</td>
</tr>
</tbody>
</table>
ITEM
Licensure of an Option in Web Development in a program in Computer Services 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 license an Option in Web Development in a program in Computer Services leading to the Associate of Science (A.S.) degree at Quinebaug Valley Community College

BACKGROUND
Quinebaug Valley Community College has requested licensure of an Option in Web Development in a program in Computer Services leading to the Associate of Science (A.S.) degree. The Computer Services: Web Development option prepares students for internet-related information technology positions. Students acquire skills to develop and maintain web sites and a solid background in server side integration and webmaster tasks. The College currently offers the Computer Services associate’s degree with an option in Software Applications. The College also has a program in Computer Networking leading to the A.S. degree.

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-34). Undergraduate options of greater than 15 credits require licensure as new programs, pursuant to the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning (10a-34-2(j)).

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.

The program will be considered by the statewide Advisory Committee for Accreditation (ACA) on October 4, 2012 and will forward a recommendation to the Board of Regents. Action from the BOR-ASA is contingent upon a favorable recommendation from ACA.

08/14/12 – ConnSCU Academic Council
10/04/12 – Advisory Committee on Accreditation
10/05/12 – BOR-Academic and Student Affairs Committee
10/18/12 – Board of Regents
PLANNING ASSESSMENT

Conformance with institutional mission
The program is consistent with the College’s mission and fits within an existing degree program

Need
The program provides students with skills to maintain an organizations web presence, through content revision, backup and security activities. The College cites expanded household penetration of the internet as evidence that business opportunities will drive an increase in a need for a workforce with these skills. While these data points are somewhat sparse, information technology positions have been forecast by various groups to grow over the course of the next six years.

Unnecessary duplication of programs
Specializations in associate’s degree programs are not uniformly tracked or consistently categorized. Students in northeastern Connecticut do not have alternative on-ground providers of information technology programs at the associate’s degree level beyond offerings at QVCC.

Cost effectiveness
The College anticipates no additional resources or equipment will be required to operate the program, although cost effectiveness will ultimately depend upon meeting enrollment targets. Enrollment projections anticipate 69 students in the program by the third year of operation, which is aggressive. The median enrollment by program at the college is 25 students. The Computer Services Networking associate’s degree program had a fall 2011 headcount enrollment of 47; the AS in Computer Services program with no specialization had a headcount enrollment of 21. The institution will likely need to employ a new approach to recruitment to gain these enrollments.

Additionally, the College forecasts no additional costs for opening sections for required core courses or general education courses. This means the additional students would have to fit into existing openings in current course section offerings.

Availability of adequate resources
The College forecasts no additional expenses in the first two years of program operation and $5,173 in the third year. It is unclear that existing sections can accommodate the enrollment increase without incurring additional cost.
DESCRIPTION

Purpose and Objectives
The program in Computer Services with an Option in Web Development provides students with the knowledge and skills needed to develop and maintain web sites by providing a solid background in server side integration and webmaster tasks. Graduates will be prepared to obtain internet-related information technology positions.

The College’s computer networking program already uses a dedicated computer networking lab with resources that are outside of the college network. This lab is also an ideal environment for web development, including web server configuration, content posting and transactions, in a safe learning environment without the need for expensive external web servers or additional ISP access. Virtualization software already in use can allow each student to configure a web server as well as establish client transactions via server side databases. Existing hardware and facilities in place will allow for the addition of web development classes for students in northeastern Connecticut who are interested in web programming and troubleshooting in a two-year degree program.

Learning outcomes
Students completing the program will be able to:

1. Use the core technologies of current markup languages such as HTML, XHTML and CSS for web development and design. Students will create web pages using text editors to gain a fundamental understanding of a basic markup language. Manual creation of Cascading Style Sheets will be used to explore CSS interaction and manipulation on a website that contains several web pages.

2. Analyze and structure XHTML code and CSS for web page development. Students will explore advanced techniques of XHTML and CSS through the use of content management software and other code generators.

3. Identify proper database design techniques and its application over a distributed network. Students will identify the basic networking terms and understand basic networking structures. Basic information security terms and practices will be included. Students will create SQL compatible databases over a distributed network to gain experience creating and updating fields, records, and tables.

4. Identify basic graphic design elements and how they contribute to effective web page design. Students will create web pages that use best practices for color, placement, and other textual effects.

5. Demonstrate competency in programming languages commonly used in developing and servicing Internet web sites, both client-side and server-side. Students will write code in programming languages such as C++ and JAVA as well as scripting languages such as JavaScript and php.

6. Demonstrate proficiency in creating websites, web applications, and web-based information systems using the following technologies: HTML, CSS, client-side programming, server-side programming, SQL, and operating system administration technology. Students will create and manipulate dynamic web sites from both client and server side perspectives.

7. Demonstrate the successful creation of websites, web applications, and web-based information systems that comply with generally accepted web development principles.
Students will test and evaluate dynamic web sites to ensure they meet web accessibility and other web development best practices.

**Admission**
Admission to the program requires only admission to the College: applicants must hold a high school diploma or equivalent. In addition, the student must satisfactorily place into college level courses per the college’s placement criteria.

**Enrollment Projections**
The College projects a headcount enrollment of 30 students in the first year, more than doubling to 63 in the second year, and leveling off to 69 in the third year of operation

**Headcount Enrollment Projections**

<table>
<thead>
<tr>
<th></th>
<th>First Term Year 1</th>
<th>First Term Year 2</th>
<th>First Term Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Transfers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td>5</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>PT</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>New Students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td>5</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>PT</td>
<td>15</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td><strong>Continuing Students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td></td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>PT</td>
<td></td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Enrollment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td>10</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>PT</td>
<td>20</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>63</td>
<td>69</td>
</tr>
</tbody>
</table>

**Administration**
The program will be administered by Janet A. Hall, Assistant Professor of Computer Science, who is current Program Coordinator of Computer Services/Networking. Professor Hall holds in M.A. in Computer Resource Management and has industry experience in systems analysis and design, integration, and testing.

**Curriculum**

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST* 150</td>
<td>Web Design and Development I</td>
<td>3</td>
</tr>
<tr>
<td>CST* 250</td>
<td>Web Design and Development II *</td>
<td>3</td>
</tr>
<tr>
<td>CST* 130</td>
<td>Network Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CST* 170</td>
<td>Introduction to LANs</td>
<td>3</td>
</tr>
<tr>
<td>CSC* 106</td>
<td>Structured Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC* 226</td>
<td>Object Oriented Programming in JAVA</td>
<td>4</td>
</tr>
<tr>
<td>DGA* 111</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CST* 270</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CST* 258</td>
<td>Fundamentals of Internet Programming *</td>
<td>4</td>
</tr>
<tr>
<td>CSC* 230</td>
<td>Database Concepts with Web Apps *</td>
<td>3</td>
</tr>
</tbody>
</table>
CSC* 295  Cooperative Education/Work Experience  3

Elective Courses in the Field

Technical Elective  3

General Education Requirements

ENG* 101  Composition  3
ENG* 202  Technical Writing  3
COM* 171  Fundamentals of Human Communication or  3
COM* 176  Business and Professional Communication
          Humanities Elective  3
MAT* 137  Intermediate Algebra or
          Higher Level Mathematics
          Science Elective  3/4
HSE* 213  Conflict Resolution or  3
ANT* 105  Intro to Cultural Anthropology
IS 135  Principles of Problem Solving  3

RESOURCE SUPPORT

Faculty
Full-time faculty teaching in the program will be:

- Pauline Clifford, PhD, Walden University
- John Hall, M.A., Education, University of Connecticut
- Jeffrey Farese, B.A., Computer Technology, Saint Anselm College

Facilities
No new resources are required for the Computer Services, Web Development degree option. Existing facilities such as the networking lab and other computer lab teaching rooms will be used.
### PROJECTED Program Revenue

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Time</td>
<td>Part Time</td>
<td>Full Time</td>
</tr>
<tr>
<td>Tuition (Do not include internal transfers)</td>
<td>$8,995</td>
<td>$13,710</td>
<td>$33,354</td>
</tr>
<tr>
<td>Program Specific Fees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Rev. (Annotate in text box below)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Annual Program Revenue</td>
<td>$22,705</td>
<td>$61,584</td>
<td>$82,493</td>
</tr>
</tbody>
</table>

### PROJECTED Expenditures*

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number (as applicable)</td>
<td>Expenditure</td>
<td>Number</td>
</tr>
<tr>
<td>Administration (Chair or Coordinator)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty (Full-time, total for program)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty (Part-time, total for program)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Resources Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment (List as needed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (e.g. student services)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Indirect Cost (e.g. student services, operations, maintenance)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total ESTIMATED Expenditures</td>
<td>$0</td>
<td>$0</td>
<td>$5,173</td>
</tr>
</tbody>
</table>
ITEM
Licensure of a program in Construction Management leading to the Associate of Science (A.S.) degree and a program in Construction Management leading to the Associate of Applied Science (A.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 Construction Management leading to the Associate of Science (A.S.) degree and a program in Construction Management leading to the Associate of Applied Science (A.A.S) degree at Capital Community College

BACKGROUND
Capital Community College has requested licensure of a program in Construction Management leading to the Associate of Science (A.S.) degree and a program in Construction Management leading to the Associate of Applied Science (A.A.S) degree. The A.S. degree is considered a transfer degree, and the program has developed in alignment with the bachelor’s level program in Construction Management at Central Connecticut State University. The A.A.S. degree is not designated as a transfer degree and will not be covered by the Transfer and Articulation Policy.

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-34). Undergraduate options of greater than 15 credits require licensure as new programs, pursuant to the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning (10a-34-2(j)).

Staff review of the proposal has determined that each 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.

The programs will be considered by the statewide Advisory Committee for Accreditation (ACA) on October 4, 2012 and will forward a recommendation to the Board of Regents. Action from the BOR-ASA is contingent upon a favorable recommendation from ACA.

08/14/12 – ConnSCU Academic Council
10/04/12 – Advisory Committee on Accreditation
10/05/12 – BOR-Academic and Student Affairs Committee
10/18/12 – Board of Regents
PLANNING ASSESSMENT

Conformance with institutional mission
The program is consistent with the College’s mission and fits within an existing degree program

Need
Between 2008 and 2018 construction management jobs in Connecticut have been forecast to increase a six percent, with a three percent increase for first line supervisors and managers. Nationally, a seventeen percent increase is anticipated. Local construction projects such as the $1 billion in water quality improvement projects undertaken by the Metropolitan District Commission, the New Britain-Hartford busway, and the Jackson Laboratories facility may also create a demand for program graduates.

The College developed the degree in response to community demand. The United Brotherhood of Carpenters’, Local 43 and Connecticut Workforce Partners (CWP) requested that the college develop the degree. CWP, Capital Region Education Council and CCC have also received an I-BEST grant from the Hartford Foundation to offer non-credit training in construction management for displaced workers; recipients of this training are a potential pool of prospective enrollees in the degree program.

Unnecessary duplication of programs
Three Rivers Community College and Norwalk Community College offer similar associate degree programs but are not easily accessible to Hartford area students.

Cost effectiveness
The cost effectiveness of the program will hinge upon meeting enrollment targets – headcount enrollment is anticipated to start in the first semester with 21 students, increase to 29 in the second year, and then to 32 student in the third year. These numbers may be sufficient to sustain the program, although higher numbers might ensure greater viability.

Availability of adequate resources
The College reports . Tuition revenues will finance projected expenditures for new resources of part time faculty. Fee revenues will finance Library materials and general supplies, with College allocated capital bond fund dollars funding equipment purchases.

The program is anticipated to run at a $6,000 deficit in the first year, but revenues are anticipated to exceed expenses in the second and third years by $28,000 and $45,000 respectively. These figures again require enrollment targets to be met.

Maintaining the program as a department profit center will preserve program quality, provide adequate resources and will keep the college from diverting financial resources from other programs. Since courses in the existing architectural technology program will also serve the construction management program, some efficiencies will be created.
DESCRIPTION

Purpose and Objectives
The proposed program will prompt students to acquire basic knowledge and skills in administrative procedures, resource management and construction processes for building and heavy construction as well as the ability to utilize construction documents for quality take-offs, to participate in construction job-site office meetings and to provide related documentation and correspondence.

The terminal A.A.S. degree will allow graduates to be ready for immediate employment in entry level jobs in the industry. Employment prospects appear favorable, as the Connecticut Department of Labor has forecast an increase in construction management jobs through 2018.

The A.S. degree will allow graduates is designed as a transfer degree with a developed pathway to Central Connecticut State University (CCSU) - the university-of-choice for most Capital transfer students and the area’s only institution offering a baccalaureate degree in construction management. Dr. Jacob Kovel, chair of the CCSU program, has worked with the College in the design of its degree program, creating a clear transfer pathway for students. The college anticipates that upon full implementation of the Board of Regent’s Transfer and Articulation Policy, all credits will transfer to CCSU’s Construction Management baccalaureate degree. A local labor union has indicated its members have expressed an interest in completing an associate degree in this field prompting Connecticut Workforce Partners to request that the college develop a program. Additionally, participants in a displaced workers’ non-credit training program, grant-funded to the college and partnering organizations, are another potential pool of prospective enrollees. Program curriculum will be aligned with programs in Hartford Public Schools to create educational pathways for local high school graduates.

The proposed degree complements the Architectural Technology program already at the college, will include several of the same foundational courses and faculty members. This will allow construction management faculty to build on educational and industry partnerships cultivated by the architecture group and permit sharing of resources such as the CAD and other computer labs. The college’s non-credit division of continuing education also has training relationships with area organizations that will facilitate the development of internships and other partnerships.

Admission
Admission requirements to the program are the same as the requirements for admission to the College: The applicant must hold a high school diploma or its equivalent.

Enrollment Projections
The program will enroll 21 full-time and part-time students in its first year (13.8 FTE) and increase to a total of 32 in year three (23 FTE).
Headcount Enrollment Projections

<table>
<thead>
<tr>
<th>Projected Enrollment</th>
<th>First Term Yr 1</th>
<th>First Term Yr 2</th>
<th>First Term Yr 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Transfers</td>
<td>FT 1</td>
<td>PT 2</td>
<td></td>
</tr>
<tr>
<td>New Students</td>
<td>FT 8</td>
<td>PT 10</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>FT 10</td>
<td>PT 6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FT 14</td>
<td>PT 15</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>FT 17</td>
<td>PT 15</td>
<td>15</td>
</tr>
<tr>
<td>Total Enrollment</td>
<td>FT 21</td>
<td>PT 29</td>
<td>32</td>
</tr>
</tbody>
</table>

Administration
The program coordinator is a licensed Architect with a five-year Bachelor of Architecture Degree and twenty years of experience in the field, and is currently pursuing a Master’s degree as a condition of employment. The coordinator will be contractually dictated as fifteen contact/teaching hours. Three teaching hours are the equivalent of nine non-teaching hours and the coordinator will devote nine hours a week (three contact hours) to administration of the program.

Curriculum
The Associate of Science degree consists of:
1) A program core of 25 credits of sequenced specialized courses in construction management
2) Other related/special requirements of 10 credits of courses supporting the major
3) General education courses consisting of twenty-eight credits with a distribution of courses among the arts and humanities, sciences, mathematics, and social sciences

Required Courses -- Associate of Science (A.S.) Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARC</td>
<td>221</td>
<td>Contracts and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>ARC</td>
<td>240</td>
<td>Environmental Systems</td>
<td>3</td>
</tr>
<tr>
<td>CAD</td>
<td>112/113</td>
<td>Computer-Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>CMN</td>
<td>XXX</td>
<td>Building Construction Systems</td>
<td>3</td>
</tr>
<tr>
<td>CNM</td>
<td>XXX</td>
<td>Const. Graphics/Quantity Takeoff</td>
<td>3</td>
</tr>
<tr>
<td>CNM</td>
<td>XXX</td>
<td>Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CTC</td>
<td>160</td>
<td>Surveying</td>
<td>4</td>
</tr>
<tr>
<td>CTC</td>
<td>XXX</td>
<td>Building Construction Estimating</td>
<td>3</td>
</tr>
</tbody>
</table>
Other Related/Special Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>111</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BMG</td>
<td>202</td>
<td>Prin. of Management</td>
<td>3</td>
</tr>
<tr>
<td>CSA</td>
<td>105</td>
<td>Intro. to Software Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art/Hum</td>
<td>XXX</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>CHE</td>
<td>121</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ECN</td>
<td>101</td>
<td>Prin. of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECN</td>
<td>102</td>
<td>Prin. of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENG</td>
<td>101</td>
<td>English Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENG</td>
<td>102</td>
<td>Literature and Composition</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>137</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>185</td>
<td>Trigonometric Functions</td>
<td>3</td>
</tr>
<tr>
<td>PSY</td>
<td>111</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses numbered XXX have been developed but have not been assigned numbers inside of the community college common course numbering system.

The Associate of Applied Science degree consists of sixty-five credits, divided as follows:

1) A program core of thirty-one credits of sequenced specialized courses in construction management including an internship general education
2) Six credits of technical electives
3) Four credits of foundation courses supporting the major
4) General education courses of twenty-four credits with a distribution of courses among the arts and humanities, sciences, mathematics, technological literacy and social sciences

Required Courses -- Associate of Applied Science (A.A.S.) Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC</td>
<td>221</td>
<td>Contracts and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>ARC</td>
<td>227</td>
<td>Codes and Ordinances</td>
<td>3</td>
</tr>
<tr>
<td>ARC</td>
<td>240</td>
<td>Environmental Systems</td>
<td>3</td>
</tr>
<tr>
<td>BBG</td>
<td>224</td>
<td>Business Internship</td>
<td>3</td>
</tr>
<tr>
<td>CAD</td>
<td>112/113</td>
<td>Computer-Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>CMN</td>
<td>XXX</td>
<td>Building Construction Systems</td>
<td>3</td>
</tr>
<tr>
<td>CNM</td>
<td>XXX</td>
<td>Const. Graphics/Quantity Takeoff</td>
<td>3</td>
</tr>
<tr>
<td>CNM</td>
<td>XXX</td>
<td>Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CTC</td>
<td>160</td>
<td>Surveying</td>
<td>4</td>
</tr>
<tr>
<td>CTC</td>
<td>XXX</td>
<td>Building Construction Estimating</td>
<td>3</td>
</tr>
</tbody>
</table>
Electives (6 credits from)

- ARC 223 Blueprint Reading 3
- ARC 229 Structures 3
- ARC 205 Advanced CAD 3
- ARC 108 Building Materials 3
  Coordinator-Approved Carpenters’ Union Credits

Other Related/Special Requirements

- ACC 111 Principles of Accounting I 4

General Education

- Art/Hum XXX Elective 3
- Sci XXX Elective 4
- CSA 105 Intro to Software Applications 3
- ECN 101 Prin. of Macroeconomics 3
- ECN 102 Prin. of Microeconomics 3
- ENG 101 English Composition 3
- ENG 102 Literature and Composition 3
- MAT 137 Intermediate Algebra 3
- MAT 230 Applied Calculus 3

Courses numbered XXX have been developed but have not been assigned numbers inside of the community college common course numbering system.

**Learning outcomes**

Graduates of the construction management degree programs will:

1. Interpret and effectively utilize construction and construction-related documents including reference materials, contracts, specifications, codes and ordinances.
2. Understand and conduct quantity takeoff processes using manual mathematical models/techniques and takeoff software.
3. Estimate construction costs for bidding and other purposes and assess the appropriateness of various construction methods, materials and environmental systems in specific situations.
4. Understand the theory and use of construction tools and/or equipment, including those related to surveying, testing and measurement.
5. Demonstrate manual and computer drafting skills.
6. Display the knowledge and skills required in the planning and management of a construction project including use of project software.
7. Identify and resolve problems related to all aspects of construction management.

Terminal assessment of the achievement of all degree level outcomes will use measures designed by the Connecticut state Colleges and Universities (ConnSCU) for year fourteen assessment in conjunction with those recommended by the American Council for Construction Education (ACCE). The ConnSCU institutions are currently designing common assessments for all rising juniors in the system. Program faculty will work with Central Connecticut State University (CCSU) faculty in construction management to develop the measures.
ACCE is recognized by the Council for Higher Education Accreditation (CHEA) as the accrediting agency for Baccalaureate and Associate Degree programs in construction, construction science, construction management and construction technology located in North America and Australia and the program will seek ACCE accreditation in its third year. The Council requires that the program develop an “academic quality plan” for continuous assessment and improvement. It specifies that assessment input must be obtained from all stakeholders. Program faculty, CCSU faculty and advisory board members will develop the academic quality plan.

RESOURCE SUPPORT

The College has structure the construction management program to be self-supporting, funded by tuition and fees. The term enrollments are based on realistic estimates of student registrations and the college is planning to actively promote the program through ad campaigns and with business partners. Tuition revenues will finance projected expenditures for new resources of part time faculty. Fee revenues will finance Library materials and general supplies, with College allocated capital bond fund dollars funding equipment purchases.

Maintaining the program as a department profit center will preserve program quality, provide adequate resources and will keep the college from diverting financial resources from other programs. Since courses in the existing architectural technology program will also serve the construction management program, some efficiency will be created. The College plans to eliminate any possibility of strain from the operation of this program.

Faculty
One full-time faculty member, already hired for this program, will teach 36% of the specialized courses. The remaining 64% will be taught by adjunct faculty members who must possess a Master’s degree, 0 to 2 years of teaching experience or equivalent work in the field.

Library and Other Resources
The college has also added twenty-one new book titles, primarily reference texts used in the construction management field. Additionally, a number of online databases will be procured to support the program, providing research materials supporting all course work and the information literacy component of the program.

Equipment
The college is renovating computer labs and a classroom for the program. The classroom space will accommodate 20 work stations, a teacher’s station with overhead projector, screen, document camera, DVD, VCR and computer. This space will be augmented by the existing CAD and architectural drawing labs which include 20 computer stations and 16 drafting tables and accommodate 20 students and 16 students respectively. Laboratory equipment and software will be purchased for the program at a total cost of $35,650.
### PROJECTED Program Revenue

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
<th></th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Time</td>
<td>Part Time</td>
<td>Full Time</td>
<td>Part Time</td>
<td>Full Time</td>
</tr>
<tr>
<td>Tuition (Do not include internal transfers)</td>
<td>$25,536</td>
<td>$17,290</td>
<td>$44,688</td>
<td>$25,935</td>
<td>$54,264</td>
</tr>
<tr>
<td>Program Specific Fees</td>
<td>$ 5,308</td>
<td>$ 8,734</td>
<td>$10,937</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Rev.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Annual Program Revenue</td>
<td>$48,134</td>
<td>$48,134</td>
<td>$79,357</td>
<td>$79,357</td>
<td>$91,136</td>
</tr>
</tbody>
</table>

### PROJECTED Expenditures

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
<th></th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number (as applicable)</td>
<td>Expenditure</td>
<td>Number</td>
<td>Expenditure</td>
<td>Number</td>
</tr>
<tr>
<td>Administration (Chair or Coordinator)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty (Full-time, total for program)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty (Part-time - total for program)</td>
<td>2</td>
<td>$12,761</td>
<td>6</td>
<td>$38,282</td>
<td>6</td>
</tr>
<tr>
<td>Support Staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Resources Program</td>
<td></td>
<td>$ 1,500</td>
<td></td>
<td>$ 600</td>
<td></td>
</tr>
<tr>
<td>Equipment (List as needed)</td>
<td></td>
<td>$35,650</td>
<td></td>
<td>$ 2,000</td>
<td></td>
</tr>
<tr>
<td>Other (e.g. student services)</td>
<td></td>
<td>$ 6,000</td>
<td></td>
<td>$ 6,000</td>
<td></td>
</tr>
<tr>
<td>Estimated Indirect Cost (e.g. student services, operations, maintenance)</td>
<td></td>
<td>$ 620</td>
<td></td>
<td>$ 856</td>
<td></td>
</tr>
<tr>
<td>Total ESTIMATED Expenditures</td>
<td></td>
<td>$56,530</td>
<td></td>
<td>$47,737</td>
<td></td>
</tr>
</tbody>
</table>

Other Revenue is generated from the College Service Fees.
Other Expenses: Supplies and computer software licenses required by the program.
ITEM
Accreditation of a program in New Media Communication leading to an Associate of Science (A.S.) degree at Tunxis Community College

RECOMMENDED MOTION FOR FULL BOARD
RESOLVED: That the Board of Regents for Higher Education accredit a program in New Media Communication leading to an Associate of Science (A.S.) degree at Tunxis Community College for a period of two years until October 31, 2014

BACKGROUND
Tunxis Community College has requested accreditation of a program in New Media Communication leading to an Associate of Science (A.S.) degree. The program was licensed by the Board of Governors for Higher Education in 2010. The program provides students with foundational knowledge in new media problem solving, new media literacy, project development, and the conceptual and technical skills for further study. The first degrees are expected to be awarded in December 2012. Enrollments have remained below ten for the first two years of the program and have fallen short of projections.

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 awards (CGS 10a-34).

Staff review of the accreditation application has determined that the program remains consistent with the standards for quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning, but since the program has not met modest enrollment projections of 12 and 14 students in the first two years, additional monitoring of the program for viability may be warranted.

The program will be considered by the statewide Advisory Committee for Accreditation (ACA) on October 4, 2012 and will forward a recommendation to the Board of Regents. Action from the BOR-ASA is contingent upon a favorable recommendation from ACA.
DESCRIPTION

Purposes and Objectives
New Media Communication complements and supports the scope of Tunxis’ existing programs (i.e. A.S. degrees in Graphic Design: Interactive Media Option and CIS: Programming Option) as well as existing programs within the Connecticut Community College System.

The program develops learning outcomes in the following areas:

Problem Solving:
- Anticipates and makes reasonable predictions about change in professional settings
- Articulates processes for solving problems

Project Building:
- Develops and follows production processes, sequences, and techniques
- Applies testing and evaluative criteria to projects, groups and individuals in pre-production and production stages of new media projects

New Media Literacy:
- Describes, evaluates, and compares systems
- Effectively communicates new media concepts, experiences, and their contexts in a variety of modes
- Conceptualizes, analyzes, and manipulates patterns

Administration
A program coordinator oversees the program. The responsibilities of this position include managing the New Communication lab, developing schedules, managing student internships and seeking/maintaining transfer articulation agreements, as well as staying abreast on contemporary practice and thus curricular alignment in New Media.

Admissions
There are no admission requirements for the program beyond admission to the College.

Enrollment
The College projected 8 full-time and 4 part-time students in the first year of the program, and the first graduates by spring 2012-13. Actual enrollments have been below projections, although the college reports that enrollment in the program’s courses have been “healthy.”

Fall Headcount Enrollment in New Media Communication (AS) Program

<table>
<thead>
<tr>
<th></th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected enrollments</td>
<td>12</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Actual enrollments</td>
<td>5</td>
<td>8</td>
<td>--</td>
</tr>
<tr>
<td>Difference</td>
<td>-7</td>
<td>-6</td>
<td>--</td>
</tr>
</tbody>
</table>
Curriculum
Students meet the requirements of New Media Communication by completing the 20 credits new media core. An additional interdisciplinary set of courses are drawn from History, Graphic Design, Communication, and Computer Information Systems (18 credits). Students meet sufficient requirements of system determined General Education (21-22 credits). The program is rounded out with 6 credits of directed electives, three in ART and three in CIS. No changes have been made to the curriculum since licensure.

RESOURCE SUPPORT

Faculty
In addition to the Program Coordinator, two full-time faculty members teach courses in the program.

Library and Learning Resources
The Library provides access to approximately 25 new media, film, communication technology, and new media journal titles through our online databases. Library databases include Academic Search Premier and Communications and Mass Media.

Facilities
Tunxis Community College has a New Media Lab that houses 20 MacBook laptops, 4 PC workstations, several older laptops that house Tunxis' game and media library. The laboratory houses older and modern game consoles; 2 large resolution monitors; an Amazon Kindle; sound recorders; 6 video cameras; several scanners; and other additional required equipment.
ITEM
Accreditation of Pathway to Teaching Careers program leading to an Associate of Arts (A.A.) degree at Housatonic Community College

RECOMMENDED MOTION FOR FULL BOARD
RESOLVED: That the Board of Regents for Higher Education accredit a Pathway to Teaching Careers program leading to an Associate of Arts (A.A.) degree at Housatonic Community College for a period of two years until October 31, 2014

BACKGROUND
Housatonic Community College has requested accreditation of a Pathway to Teaching Careers program leading to an Associate of Arts (A.A.) degree. The program was licensed by the Board of Governors for Higher Education in 2009. The program provides students a parallel curriculum to the first two years of study at Southern Connecticut State University for students preparing to enter a baccalaureate program in education, and an articulation agreement is in place. The focus of this program is to provide pathways into careers in shortage areas in secondary education with courses in chemistry, mathematics, physics, biology, English, and foreign languages. Enrollments have fallen short of projections.

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 awards (CGS 10a-34).

Staff review of the accreditation application has determined that the program remains consistent with the standards for quality set forth in the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning. Thirty students are enrolled in the program in fall 2012, although this is 65 students below the projection of 95 students when the program was licensed; additional monitoring of the program for viability may be warranted.

The program will be considered by the statewide Advisory Committee for Accreditation (ACA) on October 4, 2012 and will forward a recommendation to the Board of Regents. Action from the BOR-ASA is contingent upon a favorable recommendation from ACA.

10/04/12 – Advisory Committee on Accreditation
10/05/12 – BOR-Academic and Student Affairs Committee
10/18/12 – Board of Regents
DESCRIPTION

Purpose and Objectives
The Pathway for Teacher Careers program provides at a community college the first two years of study in a teacher education program in elementary or secondary education at a state university. The program objectives are:

- to develop and offer a course of study that results in a Pathway to Teaching Careers Associate in Arts degree;
- to offer classroom instruction that prepares students for transfer to Southern Connecticut State University;
- to facilitate interest in a career in teaching/education among current and future students;
- to meet the demands of the workforce, where employment opportunities exist and will continue to exist;
- to offer students a cost-effective associate degree pathway, which supports the increase in the number of students pursuing a degree in the teaching profession.

Upon completion of the Pathway to Teaching Careers program, students will be eligible to transfer to SCSU and to apply to the School of Education. Students will also be qualified with the AA degree to seek positions as public school paraprofessionals. The College states that Housatonic students could also easily adapt their program to prepare them to transfer to Fairfield University or to Sacred Heart University, both of which are within the College’s service region.

Administration
A coordinating faculty (full-time) is responsible for the day-to-day administration of the program, advising and recruiting students, retention, and developing educational and professional opportunities for Housatonic students.

Curriculum
No substantive changes have been made since licensure. The advising relating to the Foreign Language requirement has changed to reflect SCSU’s change to their Foreign Language requirement. SCSU students must now complete up to level II of a Foreign Language. Changes to the program are in process to parallel SCSU’s adoption of a new Liberal Education Plan (LEP) which replaced the previous University General Education Requirements in Fall 2011. Changes to the general education core proposed in the Transfer Articulation Plan (TAP) will also require modifications to the curriculum of this program.

Enrollment Projections

<table>
<thead>
<tr>
<th>Headcount Enrollment</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual</td>
<td>3</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td>Projected</td>
<td>60</td>
<td>80</td>
<td>95</td>
</tr>
<tr>
<td>Difference</td>
<td>-57</td>
<td>-58</td>
<td>-65</td>
</tr>
</tbody>
</table>
The College projected an enrollment of 20 full-time and 40 part-time students in the first year of the program, half of whom were expected to be internal transfers. The College anticipated 35 full-time and 45 part-time students in the second year and 45 full-time and 50 part-time students by the third year.

Student participation in the Pathways program is linked to the expansion of Housatonic’s student population in its STEM courses. Since 2010 Pathways enrollment indicates an upward trend that reflects increasing participation by our students in STEM courses; however, the College reports that it will take longer than originally envisioned to achieve the projected enrollment numbers. There have also been challenges in the transfer process itself.

**Faculty**
The College originally stated that no new faculty or other teaching positions will be required for the program. This continues to be the case. As noted, a full-time faculty member is responsible for the coordination of the program; she is an associate professor of Chemistry. The College lists three full-time and one adjunct faculty member who teach specialized courses in the program.

The degree program exists within the College’s Math/Science Department, since most of the shortage areas addressed in this degree reside in that department. Faculty from two other shortage areas, English and Foreign Language, also serve as secondary advisors for students seeking these areas of specialization.

**Library and Learning Resources**
The library collection consists of more than 50,000 volumes and more than 6,000 Videos and DVD’s.

The print subscriptions in library total 150 periodicals and students have electronic access to millions of full-text articles through various on-line databases, including the resources of iCONN. No new resources are required for this program.

**Facilities and Equipment**
No additional facilities or equipment have been needed for the program.
ITEM
Licensure and accreditation of a program in Web Design leading to an undergraduate certificate (27 credits) at Quinebaug Valley Community College

RECOMMENDED MOTION FOR FULL BOARD
RESOLVED: That the Board of Regents for Higher Education license and accredit a program in Web Design leading to an undergraduate certificate at Quinebaug Valley Community College for a period of time concurrent with institutional accreditation

BACKGROUND
Quinebaug Valley Community College has requested licensure and accreditation of a program in Web Design leading to an undergraduate certificate (27 credits). Students with the Web Design certificate will be prepared for entry level positions for website design and creation in private sector firms and public sector organizations. The College has existing associate’s degree programs in Computer Services, Computer Networking, Technology Studies with an option in Computer-Aided Design, and Fine Arts. Because the certificate may be completed in one academic year, the College has requested simultaneous licensure and accreditation of the program.

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 awards (CGS 10a-34). Certain certificates of greater than 15 credits require licensure as new programs, pursuant to the Connecticut Regulations for Licensure and Accreditation of Institutions and Programs of Higher Learning (10a-34-2(j)).

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.

The program will be considered by the statewide Advisory Committee for Accreditation (ACA) on October 4, 2012 and will forward a recommendation to the Board of Regents. Action from the BOR-ASA is contingent upon a favorable recommendation from ACA.
PLANNING ASSESSMENT

Conformance with institutional mission
The program is consistent with the College’s mission and is closely related to a number of information technology programs; it will also draw upon expertise from the Fine Arts Department. Outcomes for employment soon after completion fall squarely within the institution’s mission

Need
The program provides students with skills to maintain an organization’s web presence through content revision, backup and security activities. The College cites expanded household penetration of the internet and an increase in the use of social media as evidence that business opportunities will drive an increase in a need for a workforce with these skills. While these data points are somewhat sparse to demonstrate need, various groups, such as the Georgetown University Center on Education and the Workforce and the Bureau for Labor Statistics, have forecast healthy growth in opening for information technology positions over the next six years.

Unnecessary duplication of programs
Ten community colleges offer web development certificate programs ranging from 16 to 28 credits in length; however access to these programs to students in northeastern Connecticut is limited. Further, according to the College these programs focus on webmaster skills. QVCC’s proposed web design certificate focuses on the graphic design aspects of web technology while incorporating fundamentals of art and computer networking.

Cost effectiveness
The College anticipates no additional resources or equipment will be required to operate the program. Cost effectiveness will ultimately depend upon meeting enrollment targets. Enrollment projections anticipate 69 students in the program by the third year of operation, which is aggressive. As of fall 2011, the College’s certificate program with the highest enrollment was the early childhood education certificate program with a headcount enrollment of 13 students. The institution will likely need to employ a new approach to recruitment to gain these enrollments.

Additionally, the College forecasts no additional costs for opening sections for required courses. This means the additional students would have to fit into existing openings in current course section offerings.

Availability of adequate resources
The College forecasts no additional expenses to operate the program. It is unclear that existing sections can accommodate the enrollment increase without incurring additional cost.
DESCRIPTION

Purpose and Objectives
The purpose of the program in web design is to prepare students for entry level positions for website design and creation in private sector firms and public sector organizations. The program focuses on the graphic design aspects of web technology while incorporating fundamentals of art and computer networking. All courses are either studio or lab based to provide students hands-on experience. The program will lead to a job marketable skill set for Fine Arts degree students and returning learners to the College, and it may also provide career broadening paths for other degree seeking students.

Learning outcomes for the program are for students to:

1. Use the core technologies of current markup languages such as HTML, XHTML and CSS for web development and design.
2. Demonstrate an understanding of and familiarity with web site development requirements, skills and techniques, and web site design principles.
3. Design and implement accessibility-compliant user interfaces. Students will demonstrate this skill by creating web sites that meet web accessibility standards as described by the World Wide Web Consortium (W3C) guidelines.
4. Design and produce dynamic web content that interacts with the user. Students will demonstrate this skill by creating web sites that employ the fundamental client side interactive Internet technologies, such as Javascript, Dynamic HTML, and Macromedia Flash.
5. Design and build web sites that incorporate the graphical elements required of business web sites. Students will demonstrate this skill by creating web sites that employ all of the major industry standard graphical file formats and graphical compression techniques.
6. Demonstrate familiarity with the principles of good design and use computer graphic programs to produce individual design projects
7. Demonstrate fluency in two and three dimensional design concepts such as drawing, line, space, color, texture, composition and how to convey these in a digital format for web based users.

Admission
Admission to the program requires only admission to the College: applicants must hold a high school diploma or equivalent. In addition, the student must satisfactorily place into college level courses per the college’s placement criteria.

Enrollment Projections
The College projects an enrollment of 14 during its first year and anticipates an increase to 69 students during its third year.
**Headcount Enrollment Projections**
The College projects a headcount enrollment of 30 students in the first year, more than doubling to 63 in the second year, and leveling off to 69 in the third year of operation.

<table>
<thead>
<tr>
<th></th>
<th>First Term Year 1</th>
<th>First Term Year 2</th>
<th>First Term Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Transfers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td>5</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>PT</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>New Students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td>5</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>PT</td>
<td>15</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td><strong>Continuing Students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td></td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>PT</td>
<td></td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Enrollment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td>10</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>PT</td>
<td>20</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>63</td>
<td>69</td>
</tr>
</tbody>
</table>

**Administration**
The program will be jointly administered by the Program Coordinator for Fine Arts and the Program Coordinator for Computer Services and Credit for Prior Learning.

**Curriculum**
The Web Design certificate is composed of 27 credits of courses from a combination of computer technology, art, and graphics design studio courses.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Number and Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Core Courses</strong></td>
<td></td>
</tr>
<tr>
<td>DGA* L111 – Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>GRA* L151 - Graphic Design I             (a)</td>
<td>3</td>
</tr>
<tr>
<td>GRA* L252 - Graphic Design II            (b)</td>
<td>3</td>
</tr>
<tr>
<td>ART* L111 - Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART* L121 – Two Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART* L109 – Color Theory                 (c)</td>
<td>3</td>
</tr>
<tr>
<td>DGA* 240/CST* 254 - Web Page Design* (New Course)                              (a)</td>
<td>3</td>
</tr>
<tr>
<td>CST* L150 – Web Design &amp; Development I</td>
<td>3</td>
</tr>
<tr>
<td>GRA* L271 – Computer Animation             (a)</td>
<td>3</td>
</tr>
<tr>
<td>DGA* 283* - Digital Video Editing       (a)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27</td>
</tr>
</tbody>
</table>

  a) Prerequisite of DGA*L111
  b) Prerequisite of GRA*L151
  c) Prerequisite of ART*L111 and ART*L121
RESOURCE SUPPORT
Existing art studios and computer labs are sufficient for successful operation of this program

Faculty
No new faculty will need to be hired to teach in this program. Existing faculty who will provide instruction are:

   Eric Spencer, B.F.A., Rhode Island School of Design
   David Joly, Art Institute of Boston
   Pauline Clifford, PhD, Walden University
   Anthony Foranda, Rhode Island School of Design

Facilities and Library Resources
No additional laboratory or classroom equipment will be purchased to accommodate this program.
## Projected Program Revenue

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Time</td>
<td>Part Time</td>
<td>Full Time</td>
</tr>
<tr>
<td>Tuition (Do not include internal transfers)</td>
<td>$8,995</td>
<td>$13,710</td>
<td>$33,354</td>
</tr>
<tr>
<td>Program Specific Fees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Rev. (Annotate in text box below)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Annual Program Revenue</strong></td>
<td>$22,705</td>
<td></td>
<td>$61,584</td>
</tr>
</tbody>
</table>

## Projected Expenditures*

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number (as applicable)</td>
<td>Expenditure</td>
<td>Number</td>
</tr>
<tr>
<td>Administration (Chair or Coordinator)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty (Full-time, total for program)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty (Part-time - total for program)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Resources Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment (List as needed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (e.g. student services)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Indirect Cost (e.g. student services, operations, maintenance)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total ESTIMATED Expenditures</strong></td>
<td></td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>
INFORMATION ITEM
Non-substantive change for a Minor in Leadership Development in the Recreation and Leisure Studies Department curriculum at Southern Connecticut State University.

INFORMATION ITEM – NO RESOLUTION IS REQUIRED
No resolution is necessary. Approval by the Board is not required, although the program is reported for informational purposes (10a-34-3(e)).

BACKGROUND
Leadership is a core competency in the Recreation and Leisure Studies Department curriculum. Graduates of the program are expected to envision, articulate, organize, implement, coordinate, direct and manage people, programs, facilities and resources in their professional lives. This minor is intended to access students in any department across campus to the foundational principles of leadership that are a part of the Recreation and Leisure Studies curriculum, have them then enhance their understanding of leadership across various contexts through choice of electives in Recreation and Leisure Studies and other departments across campus, and have students do a culminating practicum where they apply their newly incubated leadership skills in a community setting. This minor is designed to advance the mission of the university by cultivating in students the capacity to integrate leadership into their private, professional and civic lives.

CURRICULUM
The overall learning objectives of this minor and the courses that students can choose from to satisfy these objectives are as follows:

1. **Develop knowledge of the foundations of leadership** (3 credits)
   
   Required: REC 120: Leadership Development

2. **Apply leadership principles to group dynamics and process** (3 credits)
   
   Required: REC 210: Activity Development and Leadership

3. **Foster ethics and an appreciation for diversity, global awareness, and cultural context in leadership** (6 credits)
   
   Required: Chose from the following list of courses
4. **Cultivate leadership in organizational contexts** (3 credits)
   
   *Required:* Chose from the following list of courses
   
   - COM 215: Small Group Communication
   - COM 225: Interpersonal Communication
   - SOC 211: Social Problems in the US
   - SWK 200: Intro to the Helping Professions
   - PSC 200: Political Change and Conflict
   - PSC 310 Comparative Public Policy
   - PSC 350: Public Administration
   - PSC 351: Analysis of Public Policy
   - PSC 354: Public Personnel Administration

5. **Demonstrate Community Engagement and Leadership in Practice** (3 credits)
   
   *Required:* REC 401: Practicum II

**RESOURCES**

No additional funding is anticipated since the program will use resources already extant at the University.