



CONNECTICUT STATE  
COLLEGES & UNIVERSITIES

BOARD OF REGENTS FOR HIGHER EDUCATION

**BOR ACADEMIC AND STUDENT AFFAIRS COMMITTEE**  
**AGENDA**

**Friday May 4, 2012, 9:30 a.m. to 11:30 a.m. -- 39 Woodland St., Hartford, CT 06105**

- 1. Approval of Minutes\***
- 2. Approval of CSU Research and Teaching Awards Nominations\***

**ACTION ITEMS**

**3. Academic Program Approvals\***

a) New Programs

***Licensure and Accreditation***

- Elementary M.A.T. with Special Education Certificate Option Phase I, *Western Connecticut State University*
- A.A.S. in General Automotive Technology, *Gateway Community College*
- B.S. in Mathematics-Physics, *University of Connecticut*
- B.S. in Geography, *University of Connecticut*

***Accreditation***

- S.J.D. Doctor of Science of Law, *University of Connecticut*

b) Program Modifications

***Curriculum and Program Title Changes***

- Modification of the A.S. in Management to A.S. in Business Administration, *Quinebaug Valley Community College*
- Modification of the B.S. in Library-Information Service to B.S. in Information Management and Service, *Southern Connecticut State University*
- PhD./M.S. Degree Programs in Molecular & Cell Biology, *University of Connecticut*

***Offering Program at Location other than Main Campus***

- Modification of the Comprehensive Special Education PK-12 Teacher Certification Program to be Offered at East Lyme, CT, *Southern Connecticut State University*

**INFORMATION ITEMS**

**4. Program Modifications Not Requiring BOR Action\*\***

- Photography Option within the A.S. in Fine Art Program, *Northwestern Connecticut Community College*
- Digital Media Option within the A.S. in Fine Art Program, *Northwestern Connecticut Community College*

**5. Statement of Athletic Philosophy - – Eastern Connecticut State University**

**DISCUSSION ITEMS**

**6. Discussion Items**

- a) Connecticut Early Childhood Education Teaching Credential Initiative\*
- b) Legislative Update

**7. Adjourn**

\* Information Attached

\*\* Below-Threshold Program Approval Items - Documentation on File and Available on BOR Member Request

**CONNECTICUT BOARD OF REGENTS**  
**MEETING OF THE**  
**ACADEMIC & STUDENT AFFAIRS COMMITTEE**

**REGULAR MEETING – MINUTES**  
9:30 a.m. – Friday, April 13, 2012

CSU System Office  
Boardroom 123  
Hartford, CT

Regents Present: Merle Harris, Chair, Naomi Cohen, Lawrence DeNardis, Nicholas Donofrio, Michael Fraser (via conference), Yvette Melendez

Regents Absent: René Lerer, Catherine Smith, Alex Tetley

Provosts, VPs, Deans Present Ken Bedini (ECSU), Rhona Free (ECSU), Dana Wilkie (COSC)

Others from Colleges Gena Glickman (MCC), Maureen McDonnell (ECSU)

CSUS/CCC Staff Present: Louise Feroe, Germán Bermúdez, Braden Hosch, David Levinson, Mike Meotti (via conference), Maureen McClay

Chair Merle Harris called the meeting to order at 9:45 a.m.

**1. Minutes were accepted and approved**

**ACTION ITEMS**

**2. Approval of Nominations for Honorary Doctoral Degrees**

- Additional nominees presented for 2012 commencements
  - Western CT State University – Ronald Bruder
  - Central CT State University – Carol Ammon

Approval moved by Naomi Cohen  
Seconded by Nick Donofrio  
Motion approved unanimously

Discussion ensued regarding future nominations. It was suggested a list should be developed by institutions with a few possible future nominations for each. Dr. Feroe would pursue with presidents to make this a practice.

**3. Academic Program Approvals**

It was noted all items on the agenda had been approved by ACA.

(a) New Programs

**Licensure and Accreditation:**

- o A.S. Degree and UG Certificate (C2) for E-Commerce - Three Rivers CC
  - Moved by Nick Donofrio; seconded by Naomi Cohen
  - Unanimously approved

General discussion ensued regarding an explicit label for community college program as leading directly into the workforce or as pathways to baccalaureate degrees. The implementation of the BOR transfer policy will result in clear definitions. Discussion continued on a more clear definition for A.S., A.A.S. designations, emphasis on stackable credentials, and further clarity on transfer pathways.

Additional comments ensued regarding duplication of programs. It was noted that community colleges are geared to local draw. Pres. Glickman also noted that the Community College Deans

share information up front and a full process is implemented. It was noted a seamless process is important, identifying combined modality as an important way to facilitate student access to programs. A timetable will be developed for implementation of a more formal seamless process similar to that described within the Deans' group, to be shared at next meeting. There was a question regarding financial structure and if the reports count only new students. It was noted that the new form is more rigorous and addresses this concern. Another issue being addressed is joint programs that can be more efficient and better quality. Expecting cohesiveness but not necessarily making all programs identical was mentioned, as was the need to develop distinct strengths at individual colleges.

- A.S. Degree Program in Sport & Leisure Management – Three Rivers CC
  - Motion for approval by Naomi Cohen; seconded by Nick Donofrio
  - Discussion – began as certificate; with increased interest built to an A.S. degree
  - Unanimously approved
- UG Certificate Program (C2) in Women's Studies –Three Rivers CC
  - Motion for approval by Nick Donofrio; seconded by Yvette Melendez
  - Discussion – it was noted this is an on ground certificate program (not online)
  - Unanimously approved
- UG Certificate Program in Speech Language Pathology Studies – Charter Oak SC
  - Motion for approval by Nick Donofrio; seconded by Naomi Cohen
  - Discussion: Dean Dana Wilkie described program. Developed with CREC and under guidelines suggested by the American Speech Language-Hearing Association (ASHA). Will reach broad audience because fully online. Some inaccuracies in original submission re Manchester Community College's similar program have been addressed. It was noted that a similar MCC program exists, although fully on ground and with slightly different emphasis, principal target population, and number of credits. There was question re CREC's "ownership" of intellectual property. The standard of developer maintaining ownership for 5 years only was mentioned. It was determined the issue needs to be further addressed and formalized in policy. A "friendly" amendment to the motion was made to require that the contract that COSC signed with CREC be reviewed and the legal determination of intellectual property of courses be fully clarified.
  - Motion unanimously approved, with amendment noted.

**Accreditation:**

- B.S. Degree Program in Labor Relations & Human Resource Management – Eastern CSU
  - Motion for approval by Yvette Melendez; seconded by Nick Donofrio
  - Discussion: enrollment projections not yet met because of late start of program due to approval delays. Expect to draw from out-of-state enrollees under New England tuition agreement.

More general discussion followed, including question regarding online course criteria – it was noted that NEASC establishes a 50% threshold for a program to be considered online. There was additional discussion regarding the process of determining success of programs, meeting of objectives, and the criteria for elimination of programs.

- Motion unanimously approved

**Licensure Only:**

- B.S. Degree Program in Health Information Management – Charter Oak SC
  - Discussion: Program was described by Dean Dana Wilkie. First major being offered at COSC. Used consultant for study and development, coincides with COSC's mission. CWEALTH grant funded development, advisory committee from area hospitals, national market research firm also used. Determined a shortage in the field in northeast, expect COSC's program to take lead as more programs are developed throughout the region.
  - Motion moved by Larry DeNardis; seconded by Nick Donofrio
  - Motion unanimously approved

4. Manchester Community College's management contract for Great Path Academy.

President Glickman summarized item. MCC continues to host and sponsor Great Path Academy. With current management contract expiring, an RFP had been issued for new management contract. The Hartford Public Schools won the bid. MCC continues to have sponsorship authorized under previous Board of Trustees. The Attorney General's office asked for ratification of authorization under new Board of Regents. Mr. Meotti explained AG's stance was for clarification purposes only; the AG's office signs off on all state contracts. The Hartford BOE has already approved management contract.

- Motion for approval by Nick Donofrio; seconded by Larry DeNardis
- Unanimously approved

5. Program Modifications Not Requiring BOR Action

- Modification of Bachelor of Music at WCSU. Mr. Fraser noted a full studio had been created for audio and music production.

6. Discussion Items

- (a) Academic Program Review Criteria – Dr. Feroe described previous process. Question now is what role should the BOR have going forward. Seventeen institutions would mean an enormous number of programs to review. Possibilities for process could include one modeled by NEASC standards and learning outcomes. Questions should be developed (e.g. assessment, general academic quality, student characteristics, enrollment, efficiencies, cost benefit analysis). Generic approach may be too broad, categories may be needed.

Mr. Hosch noted there are over 1200 programs among the 17 institutions. With ideas of what Board wants to look at, a plan can be developed. Mr. DeNardis noted a cost benefit analysis to be applied fairly but rigorously important. Other requirements: units, system-wide approach, institutional autonomy. Mr. Donofrio noted at this point need to enlist presidents to get their data. Dr. Levinson stated national benchmarks and tools can be used. Mr. Fraser noted identities of individual institutions very important to students.

Requested actions:

- refer to Pres. Kennedy to be included on next Council of Presidents agenda
  - include in afternoon discussion session at BOR's upcoming retreat
  - come back with information for June ASAC meeting
- (c) Issue of Tenure for Academic Administrators – there is no change in policy yet but issue is being examined from the standpoint of attracting recruitment.

A motion to recess was made at 11:25 by Naomi Cohen, seconded by Larry DeNardis, for purpose of convening full BOR conference call meeting. Motion approved unanimously.

ASAC meeting reconvened at 11:40 a.m.

Discussion items continued:

- (d) Legislative Update – SB 40 – the bill re college readiness and completion continues to be changed. At this point, an amendment was written on the incorporation of adult education programs, implementation was pushed out to 2016, and language has been removed regarding high school graduates ability to enroll into any general education course, regardless of proficiency. Fiscal issues remain important and in need of revision. The BOR did submit financial information but it is not yet in the bill. However, it has gone to the Appropriations Committee. Several sections are still being looked at and amendments continue to be written.
- (b) Sexual Harassment Policies and Climate Study – harassment issue is in a legislative bill with no apparent implications for the ConnSCU System. There are issues and concerns on campuses. Drs. Feroe and Levinson are conducting climate reviews at the campuses, to be concluded in May. Issue includes "bullying", another area of concern.

Other items

- A Transfer and Articulation Policy draft plan has been written by committee and review and implementation is being developed. Implementation plan for TAP to be put on next agenda.

- Dr. Bermudez noted the upcoming LTA Conference (Learning, Teaching and Assessment) on April 20, previously a state university conference, is now open to all 17 institutions. There is a national speaker and facilitator. Ms. McClay noted she would send the link to all Committee members.

A motion to adjourn was made by Nick Donofrio, seconded by Larry DeNardis, unanimously approved.

Meeting adjourned at 12:00 noon.

**ITEM:**

Connecticut State University Research and Teaching Awards

**RECOMMENDED MOTION FOR FULL BOARD**

The Board of Regents resolves that faculty recognition awards in the Connecticut State University System continue under their new designations: CSU Norton Mezvinsky Research Award; and CSU Teaching Award. Recipients of this meritorious distinction in the current year are:

**System-Level CSU Norton Mezvinsky Research Award: Dr. Leah S. Glaser, CCSU**

Dr. Glaser is recognized for her extensive and original research on the history of energy and sustainability in the American west. Her book, *Electrifying the Rural American West: Stories of Power, People, and Place* (2009) has received national acclaim. This work has been praised in book reviews published in several prestigious academic journals, including the *Journal of American History* and the *Pacific Historical Review*. Scholars have lauded Dr. Glaser for “breaking new ground” with her pioneering work in this area. She has also published several articles on this and related topics in top academic journals.

**System-Level CSU Teaching Award: Dr. Peter A. Drzewiecki, ECSU**

Dr. Drzewiecki is recognized for his innovative use of outside-the-classroom education, including a mix of lab, field trips and student research projects. He established an internship program for geology majors at the Connecticut Geological Survey. His students frequently present the results of research from his class at regional professional conferences and campus symposia. Students uniformly consider his classroom teaching to be always accessible and engaging.

**University-Level CSU Norton Mezvinsky Research Awards:**

Dr. Leah S. Glaser, Associate Professor of History, CCSU

Dr. Jamel Ostwald, Associate Professor of History, ECSU

Dr. Valerie A. Andrushko, Associate Professor of Anthropology, SCSU

Dr. Mary E. Doherty, Associate Professor of Nursing, WCSU

**University-Level CSU Teaching Awards:**

Dr. Jason Sikorski, Assistant Professor of Psychology, CCSU

Dr. Peter A. Drzewiecki, Associate Professor of Environmental and Earth Science, ECSU

Dr. Deborah A. Carroll, Associate Professor of Psychology, SCSU

Dr. Jessica J. Eckstein, Assistant Professor of Communication, WCSU

**BACKGROUND**

The annual Teaching and Research Awards was created to recognize outstanding tenure-track or tenured Assistant and Associate Professors in the CSU System universities who have excel in research and teaching. The Research Awards recognize exceptional research accomplishments or promise. The Teaching Awards recognize junior faculty who have been outstanding teachers for the past five years, and have a minimum of two-year track record of promoting instructional improvements in their programs and departments. University-Level Awards are issued for each university and each category and receive a \$1,000 each. The System-Level Award for each category is chosen among the four university awards, to receive an additional \$1,000.

**ANALYSIS**

The nominees selected at for university-level awards have undergone a thorough review process at the local level and the system-level nominees have been selected by the group of CSU Professors. Through this resolution, the Board of Regions reaffirms its commitment to excellence in research and teaching at the Connecticut State University System. The Board recognizes the efforts of all involved and commits to the continuation of this program.

05/04/2012 – Academic & Student Affairs Committee

05/17/2012 – Board of Regents

## Nomination of Dr. Leah S. Glaser for the CSUS Norton Mezvinsky Trustees' Research Award

Department of History Departmental Evaluation Committee  
Summary for Members of the CSUS Board of Trustees:

The History Department DEC unanimously and unreservedly nominates Dr. Leah S. Glaser for the CSUS Norton Mezvinsky Trustees Research Award. She is esteemed by her peers as a consummate researcher. Over the past five years, her research has raised new issues in the areas of energy and sustainability in her fields of public history and the history of the American West. Every reviewer of her 2009 book, *Electrifying the Rural American West: Stories of Power, People, and Place* (University of Nebraska Press), declared it to be one of the most well researched volumes published on the subject. The book explored the development of electrical infrastructure in particular regions and communities. It stressed the importance of local factors, whether environmental, cultural, or political in determining who receives electricity, how they use it, and the nature of utility services in any particular region. Interpreting energy distribution, the development of infrastructure, and the role of utilities through the lens of place (region, local and community history), her work revealed that outside forces have not directed these processes; rather communities negotiated, integrated, and adapted technology and the resulting infrastructure to their particular needs and values. This work is also unique in its integration of different cultural and ethnic group experiences with technology.

Several academically prominent journals published laudatory reviews throughout 2010 and 2011, including the *Journal of American History*, the *Western Historical Quarterly*, the *Pacific Historical Review*, *Agricultural History*, and *Montana: The Magazine of Western History*. There have been ten reviews in historical publications, all of which have credited the work with breaking new ground. Her work has led a growing field of interest in Western History on energy as evidenced by the theme of the Western History Conference ("The Wired West") in 2009, increasing publications on the topic, and faculty appointments in the field on energy topics.

As one of the first authors to treat Native Americans as rural westerners, the editors of *Indians and Energy: Exploitation and Opportunity in the Southwest* invited Dr. Glaser to publish a chapter that focused on the distribution to and use of electricity by Native Americans. Much of the domestic energy for the U.S. is produced on southwestern Indians lands from coal, uranium, oil, as well as solar and wind, yet fewer Native Americans enjoy electrical power in their homes than any other group. Her essay explained Native American struggles to access electricity as part of their own adaptation and self-determination in twentieth-century America. The work was part of an extended academic symposium where scholars of different disciplines met together to clarify the complex relationship between native people and energy, past and present.

Examining the historical development of energy distribution and use in the rural west led her to question other ways that public history might illuminate our environmental and community sustainability today. An article, "Preserving The Machine in the Garden: The Challenge of Interpreting a Rural-Industrial Landscape" is currently out for review with the national, peer-reviewed journal, *Environmental History*. The article addresses the historical attempts to reconcile natural and cultural issues in the National Park System for more sustainable management of resources and comprehensive interpretation of history to the public. Rural sites of



## Nomination of Dr. Leah S. Glaser for the CSUS Norton Mezvinsky Trustees' Research Award

industrial activity are part of America's earliest economic history, but urbanization separated these ideas in the American mind by the early twentieth century. The interpretation and preservation of the Hopewell Furnace National Historic Site within a recreational state park reveals the interrelationships between cultural, recreational, and natural resources in a particular kind of cultural landscape, a rural-industrial one.

Dr. Glaser has organized and chaired three national conference panels and discussions since 2010 and three local conference panels since 2006 around her research. Her scholarship searches for new ways that public historians can balance accurate historical interpretation and sustainable practices. Major organizations like the National Trust for Historic Preservation have advocated that the re-use of old buildings complements the values of responsible growth and saves far more energy than new development. Her hope is that her work will offer site managers new ideas for integrating sustainable technologies into the treatment of historical resources, enlisting historic sites to educate the public about sustainability and historically sustainable practices. Historic sites can often managed pollution and energy use in ways more environmentally sustainable, but those techniques are often more historically accurate. The editor of the journal *The Public Historian* is interested in publishing a special issue of the topic, and Dr. Glaser has approached publishers about an edited volume exploring these areas of inquiry with the encouragement of her peers.

Her research activities enhance her role in CCSU's Public History graduate and undergraduate programs. She serves the community in promoting historic preservation as sustainable development as a Board member of Connecticut Preservation Action. CCSU has designated several of her courses as "community engagement." She has guided student research on a variety of topics such as the role of parks and recreation, downtown cores, public infrastructure, water, and homelessness in the community of New Britain. The city's various agencies are clients for this research, which testifies to the importance of history as a tool for planning for the future. It serves as a basis for historic preservation plans in New Britain.

Not many of us would doubt the importance and value of electrical power to our culture and economy after the Fall of 2011. New England's Hurricane Irene and the "October Storm" illustrated how important it is for us to understand the relationship between our natural environment, the economy, big business, the regulatory power of the government, and what Americans perceive as their "natural rights" to electrical power. In the past decade, the U.S. has engaged in "nation-building" through infrastructure building as a way to bring "freedom and democracy" to foreign nations. As a public historian, Dr. Glaser has enlisted history to examine topics relevant to today's concerns such as energy use and sustainability. Her interdisciplinary research, embracing environmental history and the history of energy and technology as well as public history, promotes a historical understanding of our society's most pressing contemporary problems.

Members of the Departmental Evaluation Committee:  
Dr. Mark Jones, DEC Chair  
Dr. Heather Munro Prescott  
Dr. Katherine A. Hermes  
Dr. Glenn Sunshine, Department Chair, Ex Officio

**Leah S. Glaser, PhD**  
**Associate Professor of History**

*Campus:*

Department of History, Central Connecticut State University  
1615 Stanley Street, PO Box 4010  
New Britain, CT 06050-4010  
860-832-2825, glaserles@ccsu.edu

*Home:*

85 Mather Street  
Hamden, CT 06517  
203-288-1233

**EDUCATION**

**Arizona State University, Tempe, AZ**

May 2002

*Doctor of Philosophy* in American History

*Fields:* Public History, U.S. History from 1865, American West

*Dissertation:* "Rural Electrification to Multiethnic Arizona: A Study in Power, Urbanization, and Change."

*Master of Arts* in Public History: Historic Preservation emphasis.

December 1996

*Thesis:* "The Story of Guadalupe, Arizona: The Survival and Preservation of a Yaqui Indian Community."

**Tufts University, Medford, MA**

*Bachelor of Arts* in History and Art History.

May 1992

**TEACHING**

**Central Connecticut State University, New Britain, CT**

*Associate Professor of History and Public History*

Fall 2011-present

*Assistant Professor of History and Public History*

Fall 2006-Spring 2011

*Acting Coordinator, Public History Program*

Summer 2009-Summer 2010

**Quinnipiac University, Hamden, CT**

*Adjunct Assistant Professor of History*

Fall 2003- Spring 2006

**Arizona State University, Tempe, AZ**

*Faculty Associate*

Fall 1999-Fall 2001

**Maricopa County Community Colleges, Maricopa County, AZ**

*Adjunct Faculty*

Fall 1998-Spring 2002

**MAJOR PUBLICATIONS**

*Electrifying the Rural American West: Stories of Power, People, and Place.* Lincoln, NE: University of Nebraska Press, 2009.

"'An Absolute Paragon of Paradoxes': Native American Power and the Electrification of Arizona's Reservations," in Sherry L. Smith and Brian Frehner, eds. *Energy and Indians: Exploitation and Opportunity in the American Southwest.* Santa Fe, NM: School of Advanced Research Press, 2010.

"Beyond the Boom/Bust Cycle: Locating Enduring Stories in the Cultural Resources of the West," *Western Historical Quarterly* 41 (Summer 2010): 218-226.

"Nice Towers, eh? Evaluating a Transmission Line in Arizona." *CRM: Cultural Resource Management* 20 (17), U.S. Department of the Interior, National Park Service (1997), pgs. 23-24.

"Working for Community: The Yaqui Indians at the Salt River Project," *Journal of Arizona History* 37 (4) (Winter 1996): 337-356.

**Selected Reports (peer-reviewed)**

"An Industrial Place in a Rural Space: The Administrative History of Hopewell Furnace National Historic Site," Philadelphia, PA: Northeast Regional Office/ National Park Service/ Bloomington, IN: Organization of American Historians, August 2005.

"The EMA Transmission Line," No. AZ-6- B. Historic American Engineering Record (HAER), National Park Service, Western Region, 1996.

**CONFERENCE Participation**

*Organizer, Co-facilitator, Working Group* "Public History and Sustainability,"  
**National Council on Public History, Milwaukee, WI**

April 2012

*Organizer, Chair, Panelist, Roundtable,* "Public History and Sustainability,"  
**American Society for Environmental History, Phoenix, AZ**

April 2011

*Chair*, "Many Languages, Cultures, and Wests: Contestation of American Education in the Southwest and the United States." October 2010

**Western History Association**, "Many Wests," Lake Tahoe, NV

*Organizer, Chair, Panelist*, Roundtable, "History in the Balance: Reconciling the Management of Natural and Cultural Resources in the National Parks," March 2010

**National Council on Public History/ American Society for Environmental History**, Portland, OR

*Organizer, Co-facilitator*, Working Group "Recycling Buildings? Reframing Historic Preservation in the Language of Sustainability and the Green Economy," March 2010

**National Council on Public History/ American Society for Environmental History**, Portland, OR

*Panelist*, Roundtable: "The Electric West." October 2009

**Western History Association**, "The Wired West," Denver, CO

*Workshop Co-Organizer*, "Memory and the West," May 2009

**Western Historians in the New England Region**, Amherst, MA

*Chair*, "Learning the Hard Way: A Century of National Park Planning," January 2009

**American Historical Association**, New York, NY

*Organizer and Chair*, Roundtable: "Historic Preservation IS Smart Growth," November 2008

**Second Annual Statewide Smart Growth Conference**, Omni Hotel, New Haven, CT

*Paper Presenter*, "Power to the Indians: The Production and Use of Electricity on Arizona's Reservations," **Indians and Energy: Exploitation and Opportunity** Sept. 2007/ April 2008

**in the American Southwest Symposium** at the School of American Research campus, Santa Fe, New Mexico

(September 2007) and conference at Clements Center for Southwestern Studies, Southern Methodist University, Dallas, TX (April 2008).

*"Green Building: Tools and Strategies for Sustainable Reuse"* June 2008

**Cornell University Historic Preservation Planning Program**, Cornell AAP Center, New York, NY

## HONORS, GRANTS, and AWARDS

"Sustainability Education Programs for the CCSU Community and Beyond,"

*CCSU Community Engagement Grant*, 2010-2011 \$1000

*CCSU Faculty Development Grant*, Spring 2010 \$900

*CCSU Excellence in Teaching Honor Roll*, Central Connecticut State University, 2008-2009

*Dean's Research Initiative Grant*, College of Arts and Sciences, Central Connecticut State University, 2008, \$1100

*Associated Students of Arizona State University (ASASU) Graduate Research Grant*, 2000

## Community Lectures/ Presentations

*Workshop Leader*, "Western Expansion," **American Voices, Teaching American History** grant, January 2011  
Central Connecticut State University, New Britain, CT

"Scholarship Direct to the Classroom Luncheon: Authors share their work with K-12 teachers of Western History." October 14, 2010

**Western History Association** conference, Lake Tahoe, NV.

"Making Use of Old Buildings," *Where We Live* with John Dankowsky, **WNPR**, Hartford, CT September 2010

"Art in Western History," **New Britain Museum of American Art**, New Britain, CT November 2, 2009

"Energy and the Development of Natural Resources in the West" July 24, 2009

"Technology and the West" April 30, 2009

**Teaching American History** grant, **Capitol Region Education Council (CERC)**, Hartford, CT

"Examples of Historical Thinking," **National History Education Clearinghouse**.

**George Mason University Center for History and New Media** and

**Stanford University School of Education**, Fairfax, VA January 2009

Nomination of Leah Glaser for the Norton Mezvinsky Trustees' Research Award  
Evidence of Research Contribution, Achievements, and Scholarly Activities

Other reviews of *Electrifying the West*:

Jacqui Ainlay-Conley, University of Colorado-Denver, *Journal Of Arizona History* 52 (1) (Spring 2011): 105-106.

Mac Harris, South Dakota State Agricultural Heritage Museum. "Electrifying the Rural American West: Stories of Power, People, and Place." *South Dakota History* 40, no. 3 (Fall 2010): 288.

Bonnie Lynn-Sherow, Kansas State University, *Agricultural History* 85 (1) (Winter 2011): 137-138.

**National Involvement.** In the past five years, Dr. Glaser has organized three discussion panels/roundtables around the topic of "Public History and Sustainability" at **National Council on Public History** and the **American Society for Environmental History**. She has also participated in panels including a roundtable discussion on "The Electric West" at the **Western History Association** and was invited to chair a session on national park planning at the **American Historical Association** in January 2009. In addition, Director Sherry Smith, a prominent historian of Native Americans and the West, recruited her for the annual Clements Center for Southwestern Studies (Southern Methodist University, Dallas, TX) **Indians and Energy: Exploitation and Opportunity in the American Southwest Symposium** in Santa Fe, New Mexico and Dallas in 2007 and 2008. Following the publication of her book, several scholarly journals have invited her to author reviews for books and manuscripts including the *American Historical Review*, *Agricultural History*, *The Public Historian*, and the *Western Historical Quarterly*. Dr. Glaser is now recognized as a major researcher in public history, the history of the American west, and environmental history.

Nomination of Leah Glaser for the Norton Mezvinsky Trustees' Research Award  
Evidence of Research Contribution, Achievements, and Scholarly Activities

**3a. Evidence of Scholarly Activities Subjected to External Review (peer or editorial)**

- \**Electrifying the Rural American West: Stories of Power, People, and Place*, Lincoln, NE: University of Nebraska Press, November 2009. Editorial and peer reviewed manuscript by Jay Brigham of *Morgan Angel, and Associates* and Brian Cannon, Charles Redd Center for Western Studies, Brigham Young University. See page 3c for peer reviews of the final book.
- \*“‘A Paragon of Paradoxes:’ The Production and Use of Electricity on Arizona’s Reservations.” Book chapter in Sherry Smith and Brian Frehner, eds. *Indians and Energy: Exploitation and Opportunity in the American Southwest*. Santa Fe, NM: School of Advanced Research Press, 2010. Editorial and peer review.
- \*“Beyond the Boom/Bust Cycle: Locating Enduring Stories in the Cultural Resources of the West,” *Western Historical Quarterly* 41 (Summer 2010): 218-226. Editorial review.
- \*“Preserving and Interpreting the ‘Machine in the Garden:’ The Rural-Industrial Landscape of Hopewell Furnace National Historic Site.” Submitted for publication to *Journal of Environmental History* in June 2010, currently under peer review.

**Other Works**

- \*“Cultural Landscape Study,” **Wild and Scenic River Study, Lower Farmington River and Salmon Brook Study Committee**, National Park Service, Simsbury, CT. Fall 2009.

Nomination of Leah Glaser for the Norton Mezvinsky Trustees' Research Award  
Evidence of Research Contribution, Achievements, and Scholarly Activities

**3b. Grants, Contracts, and Fellowships**

"Sustainability Education Programs for the CCSU Community and Beyond," Community Engagement  
Grant, Central Connecticut State University, 2011-12, \$1000.

Faculty Development Grant, "Public History and Sustainability," Central Connecticut State University,  
Spring 2011, \$900.

Research Reassigned Time, Central Connecticut State University, Spring 2009.

Research Reassigned Time, Central Connecticut State University, Spring 2008.

Dean's Research Initiative, School of Arts and Sciences, Central Connecticut State University,  
Spring 2008, \$1100.

### 3c. National Recognition

Every American historian awaits a review of her book in the *Journal of American History*, the profession's most prestigious journal. Timothy J. LeCain, of Montana State University, in his balanced critique published in the *Journal of American History* (January 2011) states that Dr. Leah S. Glaser's work challenges previous understandings of the way electrification "furthered the adoption of a dominant national culture" by positing instead that changes were local and community-oriented. He praises her close research into the roots of the inequities of electrification that affected all rural Westerners, including Native Americans. "[T]he diligent reader will find a wealth of primary-source material that provides a detailed view of the complex process of rural electrification in Arizona, and by extrapolation, the American West."

Other reviews have also praised Dr. Glaser's extensive and detailed research:

"Using concepts of modernization, deregulation, and localism as a means to address the ways in which technological progress can benefit and interrupt social and cultural cohesiveness, Leah S. Glaser has written a thoughtful and insightful examination of the process of electrification in the American West."—Christopher J. Castaneda, California State University, Sacramento, *Western Historical Quarterly* 22 (Autumn 2011), 404.

"Glaser's careful and thoughtful study suggests that electrification was generally an democratic and progressive feature of twentieth century rural America."—Daniel Pope, University of Oregon, *Pacific Historical Quarterly* 80 (2011), 159.

"Glaser's well-researched analysis of the three models of power ownership—private companies, cooperatives, and tribal enterprises—offers useful commentary to modern promoters of worldwide rural electrification."—M. L. Tate, *Choice*

"[*Electrifying the Rural American West*] is a well-researched, detailed, 'bottom-up' addition to the history of twentieth-century western development that centers the actions of diverse individuals within national institutions."—David Brooks, *University of Montana, The Magazine of Western History*

"Glaser provides a valuable look at how local peoples and communities can influence the larger contours of energy policy, infrastructure, and resource use."—David D. Vail, Kansas State University, *Annals of Wyoming: The Wyoming History Journal* (August 2010), 36-37.

"Glaser's fine book should be read not only by western and Native American historians, but by an scholars interested in the responses of rural places and peoples to the forces of twentieth-century modernity."—Andrew Needham, New York University, *New Mexico Historical Review* 86 (March 2011), 132.

### ***Educational Improvements***

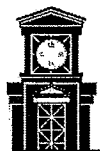
Peter has been made very important contributions to improving teaching and advising in the EES department and across the university. Within the department, Peter has been active in modifying the curriculum in order to improve retention and graduation rates and he has been actively involved in the department effort to modify the curriculum in order to integrate the Sustainable Energy program.

At the university level, Peter has been involved in educational improvements in the honors program, the First-Year Program, undergraduate research, and academic advising. His formal contributions include the following:

- Instructor in the Honors program for three years
- Member of the Honors Council, where he is involved in improving the program
- First Year Program instructor for three years
- Served on the ad hoc committee to assess and revise the First Year Program, served as advocate for the new program with the University Senate.
- Co-Chair of the new First Year Program committee
- Served on the Arts and Science Research Conference and Exhibition committee for seven years. This on-campus conference is an outstanding showcase for student research.
- Undergraduate Research Coordinator for Eastern. This office encourages and supports undergraduate research at Eastern and has important liaison responsibility with departments.
- Developed online training module in Responsible Conduct of Research for faculty and students.
- Chair of the Strategic Planning Working Group. Developed plan for campus Academic Services Center.
- First Chair of the Student Academic Advising Committee

Peter has proven himself to be not only an excellent formal classroom teacher, but also an inspiring and effective research mentor. His departmental and university committee work has allowed him to also make significant impacts to improve teaching and learning at the university level.





PETER A. DRZEWIECKI  
EASTERN CONNECTICUT  
STATE UNIVERSITY

November, 2011

Department of Environmental Earth Science  
Eastern Connecticut State University  
83 Windham Street, Willimantic, CT 06226  
860-465-4322  
drzewieckip@easternct.edu

## EDUCATION

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### University of Wisconsin-Madison (1989-1996)

Madison, Wisconsin

Ph.D. in Geology (May, 1996) Advisor: Dr. Toni Simo

M.S. in Geology (May, 1992) Advisor: Dr. Toni Simo

### University of Notre Dame

Notre Dame, Indiana

B.S. in Geology (May, 1989) Graduated with honors. Undergraduate advisor: Dr. J Keith Rigby

Attended Indiana University's geological field camp in SW Montana (summer, 1988)

## TEACHING EXPERIENCE

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### Eastern Connecticut State University

Willimantic, Connecticut

Associate Professor (2002-present). Taught/presently teaching courses in: Dynamic Earth, Geology of National Parks, Ancient Environments (Historical Geology), Oceanography, Basin Analysis, Sedimentology and Stratigraphy, First-Year Seminar, and Honors Colloquium

### ExxonMobil Upstream Research Co. (formerly Exxon Production Research Co.)

Houston, Texas

Explored for oil and gas reserves; developed and taught in-house courses to professional geologists, including: Overview of Sequence Stratigraphy (1999, 2000), Introduction to Clastic Facies (1999), Slope Canyon Depositional Environments (1999), Introduction to Clastic Core Description (1999, 2000), and Carbonate Basics 2 (2001).

### University of Wisconsin-Madison

Madison, Wisconsin

Teaching Assistant (1991-1994): Introduction to Oceanography, Physical Sedimentology, Carbonate Sedimentology, and Evolution and Extinction

## RESEARCH

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### Eastern Connecticut State University

Willimantic, Connecticut

2002 to present – Investigation of the origin, nature, and implications of Triassic and Jurassic continental cycles in the Hartford Rift Basin of central Connecticut; sedimentological and diagenetic analyses to interpret the tectonic and climatic controls on sediment fill of the basin; sequence stratigraphic and statistical evaluation of the vertical facies stacking patterns.

2002 to present – Investigation of the origin, geometry, and evolution of Silurian carbonate mud-mounds in northern Indiana through fieldwork, thin section investigation, and 3-dimensional image analysis of Stromatolite cavities.

### ExxonMobil Upstream Research Co. (formerly Exxon Production Research Co.)

Houston, Texas

Senior Research Geologist (1996 - 2001) 3-D mapping and paleoenvironmental interpretation of Permian carbonate mud mounds; Depositional controls on non-marine sequence; Internal architecture of deep-water submarine fan and slope channel systems.

### University of Wisconsin-Madison

Madison, Wisconsin

Doctoral Research (1992-1996) - Investigated the interactions among eustasy, tectonics, climate, environmental factors, and biological factors in controlling the evolution and facies architecture of a mid-Cretaceous carbonate platform in northern Spain.

Masters Research (1989-1992) - Investigated the origin of diagenetic seals bounding pressurized compartments (gas reservoirs) in the deep St. Peter Sandstone (Ordovician), Michigan basin.

## PROFESSIONAL SERVICE

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Secretary, Limnogeology Division of the Geological Society of America (2006 to present)

Mansfield Conservation Commission (2006 to present) – Evaluation of the environmental impact of new construction in Mansfield, Connecticut

Connecticut Department of Environmental Protection (2005 to present) – Establishment of a rock core facility in Harwinton, Connecticut.

Connecticut Department of Public Works (2006 to 2008) – Geological evaluation of construction site in Rocky Hill, Connecticut.

Connecticut Department of Transportation (2002 – 2004; 2007-2008) - Task Force for Hot Mix Asphalt Pavement Improvement, Fine Aggregate Subcommittee.

## RECENT RESEARCH AND CURRICULUM GRANTS

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Teacher Quality Grant Program (2011; Drs. J. Day, J. & C. Tannahill, P.I.s).....	\$115,367.00
AAUP Research Grant (2011).....	\$4,955.00
AAUP Summer Curriculum Development Grant (2011; with Drs. D Hyatt and J. Diller).....	\$4,100.00
AAUP Faculty Development Grant (2010).....	\$1091.00
AAUP Research Grant (2010).....	\$4,547.00
AAUP Summer Curriculum Development Grant (2010).....	\$1,108.00
AAUP Faculty Development Grant (2009).....	\$1091.00
AAUP Research Grant (2009).....	\$3,807.00
AAUP Summer Curriculum Development Grant (2009).....	\$1,243.00
Teacher Quality Partnership Grant Program (2009; Dr. Catherine Tannahill, P.I.).....	\$106,310.00
AAUP Faculty Development Grant (2008).....	\$1100.00
AAUP Summer Curriculum Development Grant (2008).....	\$1,763.00
AAUP Research Grant (2008).....	\$4,940.00
AAUP Summer Curriculum Development Grant (2007).....	\$2,240.00
AAUP Research Grant (2007).....	\$5,000.00
United States Geological Survey EdMap Grant (2007).....	\$21,262.00
Teacher Quality Partnership Grant Program (2007; Dr. Catherine Tannahill, P.I.).....	\$150,000.00
Teacher Quality Partnership Grant Program (2006; Dr. Catherine Tannahill, P.I.).....	\$114,000.00
Teacher Quality Partnership Grant Program (2005; Dr. Catherine Tannahill, P.I.).....	\$160,760.00
CSU Innovative Learning Pilot Program Grant with Dr. Drew Hyatt and others (2004).....	\$41,000.00
CTDLC/Davis Grant (2004; Dr. Drew Hyatt, P.I.).....	\$11,265.00
Teacher Quality Partnership Grant Program (2004; Dr. Catherine Tannahill, P.I.).....	\$105,387.00
NSF Grant with Dr. Toni Simo (1994-1996).....	\$96,000.00

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## PUBLICATIONS

### Articles

- Drzewiecki, P. A., and Zuidema, S., 2007, Sequence Stratigraphy of Playa and Perennial Lake Deposits, Jurassic East Berlin Formation, Central Connecticut. *Northeastern Geology and Environmental Science*, vol.29, pp. 49-68.
- Thurmond, J., Drzewiecki, P. A., and Xu, X., 2005, Building Simple Multiscale Visualizations of Outcrop Geology using Virtual Reality Modeling Language (VRML). *Computers and Geosciences*, 31:913-919.
- Drzewiecki, P. A., and Simo, J. A., 2002, Depositional processes, triggering mechanisms, and sediment composition of carbonate mass gravity deposits: Examples from the Late Cretaceous of the south-central Pyrenees, Spain. *Sedimentary Geology*, 146:155-189.
- Drzewiecki, P. A., and Simo, J. A., 2000, Tectonic, Eustatic, and Environmental Controls on mid-Cretaceous Carbonate Platform Deposition, South-Central Pyrenees, Spain. *Sedimentology*, 47:471-495.
- Demko, T. M., Drzewiecki, P. A., Geslin, J., Feldman, H., Hasiotis, S. T., McCrimmon, G. G., Van Wagoner, J. C., and Wellner, R., 2000, Next Generation Sequence Stratigraphy. Internal ExxonMobil Research Report. *This report addresses the controls of variations in sediment supply on clastic stratigraphic architecture.*
- Campion, K. M., Sprague, A. R., Mohrig, D. C., Lovell, R. W., Drzewiecki, P. A., Sullivan, M. D., Ardill, J. A., Jensen, G. N., and Sickafoose, D. K., 2000, Outcrop Expression of Confined Channel Complexes. In: *Deep water Reservoirs of the World* (Weimer, P., Slatt, R.M., Coleman, J., Rosen, N.C., Nelson, H., Bouma, A.H., Styzen, M.J., and Lawrence, D.T., eds.) Gulf Coast Section SEPM Foundation, p. 127-150.
- Drzewiecki, P. A., and Simo, J. A., 1997, Carbonate platform drowning and oceanic anoxic events on a mid-Cretaceous carbonate platform, south-central Pyrenees, Spain. *Journal of Sedimentary Research*, 67:698-714.

### Recent Abstracts

- Drzewiecki, P. A., 2011, Microbial Origin of Late Silurian Carbonate Mud-mounds, North-central Indiana. GSA Abstracts with Programs, Vol. 43, No. 5, p. 95
- Drzewiecki, P. A., 2011, Stratigraphic Architecture and Growth History of a Silurian Carbonate Mound at Wabash, Indiana. GSA Abstracts with Programs, Vol. 43, No. 1, p. 137
- Hyatt, J. A., Drzewiecki, P., Jones, A., Naumec, C., and Curtiss, L., 2011, Interactive Virtual Field Trips that Examine Landforms in Providence Canyon State Park, Southwest GA. GSA Abstracts with Programs, Vol. 43, No. 1, p. 158.
- Drzewiecki, P. A., Hyatt, J. A., Oster, W. III, and Nicoulin, A., 2010, Analysis of Modern Alluvial Architecture in Providence Canyon State Park, GA, Using 2D and 3D Ground Penetrating Radar. GSA Abstracts with Programs, v. 42, No. 5, p. 241.
- Drzewiecki, P. A. and Nicoulin, A., 2010, Sedimentological, Diagenetic, and Stable isotope Investigation of the Origin of Stromatactis-bearing Carbonate Mud Mounds (Silurian) from North-central Indiana. GSA Abstracts with Programs, v. 1, No. 5, p. 168.

### 3. Contributions to Educational Improvement

#### a. Courses Taught

The following is a table of the courses taught by Peter Drzewiecki over the last five years. It includes course descriptions, level, and a list of innovations and improvements.

Course Title / Description	Innovations / Improvements / Impacts
<b>EES-106 Geology of National Parks (LAC Tier I)</b> <i>Physical geology course for majors and LAC that uses National Parks to illustrate geological principles.</i>	<ul style="list-style-type: none"> <li>• Incorporates familiar examples from National Parks to teach geological concepts</li> <li>• Hands-on, active learning in class (for example, using rock and mineral samples in class to illustrate how to identify them – an activity generally reserved for laboratory)</li> <li>• Has students learn about the geology of a National Park by developing a brochure on that park's geology</li> </ul>
<b>EES-130 Ancient Environments (EES majors)</b> <i>First course for EES majors only; study of the origin and evolution of the earth, earth systems, and life.</i>	<ul style="list-style-type: none"> <li>• Uses data in homework and lab exercises that comes from the geological literature</li> <li>• Teaches a section on biogeochemical cycles to reinforce connections between geology and energy science through the carbon cycle – this is not typically taught in this course</li> <li>• Teaches course content in a non-conventional order, which students identify as helpful through course satisfaction surveys</li> <li>• Takes students into the field numerous times to conduct geological investigations</li> <li>• Data from research is used for class exercises</li> </ul>
<b>EES-200 Oceanography (LAC Tier II)</b> <i>Basic survey of the oceans for EES majors and LAC students.</i>	<ul style="list-style-type: none"> <li>• Incorporates small “mini-labs” within the lectures to provide opportunities to apply what is learned in class.</li> </ul>
<b>EES-344 Sedimentology and Stratigraphy (EES majors)</b> <i>Study of the origin and interpretation of the sedimentary rocks that record changes that occur at the Earth's surface through time.</i>	<ul style="list-style-type: none"> <li>• Uses real examples from experiences in the oil industry in both homework and laboratory exercises</li> <li>• Data from research are used for class exercises</li> <li>• Runs class like work experiences – grade based primarily on small projects throughout the year that include independent and team effort, instead of tests</li> <li>• Takes students into the field numerous times to conduct geological investigations</li> <li>• Continually updates the content of the course to reflect what is important in related industries</li> </ul>
<b>EES-362 Sedimentology and Tectonics (EES majors)</b> <i>Study of the tectonic controls on the deposition of sedimentary rocks.</i>	<ul style="list-style-type: none"> <li>• Combined the expertise of two professors (Dr. Peter Drzewiecki and Tim Schroeder)</li> <li>• Ran class as a seminar such a students will experience in graduate school</li> <li>• Used data from the literature and from the petroleum industry in exercises</li> <li>• Took students into the field to conduct geological investigations</li> <li>• Based grades on projects and presentations – not exams</li> </ul>

<b>EES-392 Earth Science Practicum (EES majors)</b> <i>Directed undergraduate research for EES majors.</i>	<ul style="list-style-type: none"> <li>• Allows students the opportunity to use state-of-the-art geological equipment</li> <li>• Provides students with experiences in scientific investigation</li> </ul>
<b>EES-480 Independent Study (EES majors)</b> <i>Independent undergraduate research for EES majors</i>	<ul style="list-style-type: none"> <li>• Designs experience to mimic a Master's thesis</li> <li>• Final report modeled after a journal publication is required</li> <li>• Nearly all students present at the Northeast Geological Society of America Meeting and Eastern's Arts and Sciences Research Conference and Exhibition</li> <li>• Allows students the opportunity to use state-of-the-art geological equipment</li> <li>• Students interact with sedimentologists outside Eastern</li> <li>• Students publish abstracts on research, and some are co-authors on journal articles</li> </ul>
<b>EES-491 EES Internship (EES majors)</b> <i>EES student internship with professional geoscientists.</i>	<ul style="list-style-type: none"> <li>• Allows students the opportunity to interact with professional geologists</li> <li>• Students gain practical applied work experience in geoscience</li> </ul>
<b>FYR-174 First-Year Seminar (First-Year Program)</b> <i>Academic survival skills and introduction to the liberal arts for first-year students</i>	<ul style="list-style-type: none"> <li>• Combines content from two other course clusters to illustrate the connections between these courses</li> <li>• Developed a "scavenger hunt" activity for exploring the Eastern campus that is used by several other cluster instructors</li> </ul>
<b>HON-130-01 Honors Colloquium (Honors Program)</b> <i>Instructing Honors students how to think critically and conduct research.</i>	<ul style="list-style-type: none"> <li>• Illustrates critical thinking by debating the teaching of Creationism in science classes</li> <li>• Takes students into the field to illustrate the application of the scientific method to geological examples</li> </ul>
<b>HON-380 Honors Research (Honors Program)</b> <i>Honors students conduct independent undergraduate research.</i>	<ul style="list-style-type: none"> <li>• Designs experience to mimic a Master's thesis</li> <li>• Allows students the opportunity to use state-of-the-art geological equipment</li> <li>• Students interacted with sedimentologists outside Eastern</li> </ul>
<b>HON-488-14 Honors Thesis (Honors Program)</b> <i>Honors students write thesis of their honors research.</i>	<ul style="list-style-type: none"> <li>• Final report modeled after a journal publication is required</li> <li>• Student presented at the Northeast Geological Society of America Meeting and Eastern's Arts and Sciences Research Conference and Exhibition</li> <li>• Students publish abstracts on research</li> </ul>

## **b. Scholarly Approach to Teaching and Learning**

One of the hallmarks of Peter Drzewiecki's tenure at Eastern has been his contribution to education improvement not only in his classes, but also within the EES Department and at the university level. His service affects a wide range of students and he has been instrumental in implementing programs that have broad and far-reaching implications.

His scholarly approaches to Teaching and Learning within his own classes are summarized in the table above. In addition to these, he has been an active participant in revising and refining the curriculum of the EES department and offering EES students high impact learning opportunities outside of the classroom. Specific contributions include:

### *Innovative Teaching Outside the Classroom*

- He has added field-based (field trips) learning activities to all his classes, even at the most introductory level.
- He helped develop online learning tools (with Dr. Drew Hyatt) for the identification of rocks and minerals that is used not only at Eastern, but at other universities as well. The URL for the website is: <http://www.easternct.edu/learningtools/LTES-ver5/>
- He developed an upper level course (with Dr. Tim Schroeder) for EES majors that was designed after a graduate school course, required readings from professional geology journals, and provided students with a graduate-style class; it included a weekend fieldtrip.

### *Department-level Undergraduate Research / High Impact Courses*

- Peter offers 2-3 students undergraduate research experiences (independent studies / practicums) every year that are modeled after graduate thesis projects. These students routinely publish abstracts about their work and present their research at regional geology conferences.
- He has included students as co-authors on professional research papers.
- While on sabbatical in the fall of 2010 at the Connecticut Geological Survey, he established an internship program with the Connecticut State Geologist for 1-2 students a year.
- He organizes and runs an annual departmental workshop on how to prepare for and apply to graduate school.
- He annually take 5-12 students to a regional geology conference to experience geologists interacting professionally, learn about job and graduate school opportunities, and interact with graduate students; many present their undergraduate research.

### *Educational Improvements in the EES Major*

- Peter worked with other EES faculty to update the EES curriculum in order to (1) integrate the Sustainable Energy track better with the rest of the EES curriculum, and (2) improve retention and graduation rates; this curriculum is pending submission to the University Senate.

- He converted EES-130 into a writing-enhanced course for the EES major to satisfy the second course in the University Writing Program.

At the university level, Peter has been involved in educational improvement activities that range from the First-Year Program to undergraduate research and the Honors Program, including:

#### *Honors Program*

- Peter has been one of the part-time instructors in HON-130 for three years, where he demonstrates the use of the scientific method by taking students into the field to solve geological problems.
- He currently serves as a member of the Honors Council, where he is involved in admitting students into the program, making decisions that improve the program, and maintaining the program's quality.

#### *First-Year Program*

- Peter participated in the First-Year Program as an instructor in a cluster course (EES-106 Geology of National Parks) and the accompanying FYR-174 course for three years.
- More recently, in January of 2011, he served on the ad hoc committee charged with assessing and revising Eastern's First-Year Program. This involved reviewing examples of programs at other institutions, assessing the success and problems associated with Eastern's cluster-based program, and creating the current 1-course first-year program. He was one of three professors asked to present the new program to the University Senate.
- He is currently co-chair of the First-Year Program Committee, which has been active in developing the goals of the program, the objectives of the FYI-100 course, approving FYI-100 proposals, developing the Learning Management System, and assessing the success of the program once implemented.

#### *Undergraduate Research*

- Peter has fostered undergraduate research over the past 7 years by planning and helping run the Arts and Sciences Research Conference and Exhibition. He chaired the event in 2011.
- He currently serves as Eastern's Undergraduate Research Coordinator, where he solicited departmental liaisons and has worked with them to assess how to offer undergraduate research experiences to more students.
- He developed an online training module in Responsible Conduct of Research (with Drs. Hyatt and Diller) for all students and faculty conducting undergraduate research.

#### *Academic Advising*

- Peter was chair of the Strategic Planning Working Group that developed a plan for the campus's Academic Services Center (ASC)
- He was instrumental in developing the current Academic Advising Program, planned and lobbied for the Senate's Student Academic Advising Committee, and served as the first chair of the Committee.

## 2011-12 Norton Mezvinsky Trustees' Research Award Nomination

### Dr. Jamel Ostwald

History Department  
Eastern Connecticut State University

#### 1. Summary

Prof. Jamel Ostwald has compiled an impressive record of research and creative activity since he joined the History faculty at Eastern Connecticut State University. He has recently published an award-winning book in military history with Brill Academic, a prestigious Dutch publishing house. His *Vauban under Siege: Engineering Efficiency and Martial Vigor in the War of the Spanish Succession* provides a new and vigorous interpretation of European siege warfare during the early eighteenth century. Book reviewers have praised *Vauban under Siege* and for its innovative analysis and it won the Society for Military History Distinguished Book Award in Non-American History in 2009.

Over the past five years, Prof. Ostwald has also contributed three chapters on various aspects of 17th- and 18th-century European military history in high-profile books published in Europe and the United States and has written several book reviews in the peer-reviewed *Journal of Military History*, the most important academic journal in his field. Book reviews in history are typically concise analytical and critical essays written by experts on the invitation of journal editors.

During the current year, Prof. Ostwald has been writing three additional works, including a chapter on the War of the Spanish Succession for a book on European warfare and an extensive annotated bibliography on the wars of Louis XIV. His most significant current research project is *The Duke of Marlborough and the English Cult of Battle*, a book-length manuscript that has caught the attention of Cambridge University Press. When published, Ostwald's *Duke of Marlborough* undoubtedly will make a significant contribution to understanding the military contribution to one of England's most esteemed generals and to the evolution of European warfare more generally.

Prof. Ostwald has also been active in his profession in other ways. He has presented scholarly papers at national and international conferences within the past five years, in addition to chairing or commenting at three other panels. His growing reputation as a military history also led to an invitation to lead a faculty development seminar at the U.S. Military Academy at West Point in 2009. Ostwald has also served as assistant editor of *Vulcan: The International Journal of the Social History of Military Technology*, an honor which attests to his growing recognition within the field of military history. He is an active member of the American Historical Association, the Historical Society, and the Society of Military History.

All of this represents an impressive record of accomplishments so early in the career of a historian. Scholarly reputations in history are built on thoroughly researched and relatively long pieces of writing, relative to most other fields, including articles, book chapters, and entire books. There is little doubt that his accomplishments to date represent only the beginning of what is developing as a distinguished career in European military history. Such a solid record of achievement has already brought honor to the Connecticut State University and deserves encouragement and support through recognition by the Board of Trustees Research Award.



I study the skeletons of ancient people for clues about how they lived and died. Through my research, I learn about the diverse ways in which ancient people confronted everyday challenges, and how their bones act as a record of these activities.

In particular, I am intrigued by the link between biology and culture, which can be seen in cases of trauma, trophy-taking, intentional head shaping, and more. In one of my studies of the Inca Empire, I was able to demonstrate that ancient skull surgery (trepanation) was an important medical treatment for the Inca, often carried out to treat head injuries. Inca practitioners completed these surgeries with precision and a clear knowledge of cranial anatomy, resulting in a survival rate that reached 90% at one point (Andrushko and Verano, 2008). Another study revealed that native tribes in California commonly practiced trophy-taking, including scalping and forearm trophy-taking, as part of a larger suite of warfare strategies (Andrushko et al., 2010). Such cases of trophy-taking spiked during a period known for increased migration and social stratification. These studies in Peru and California—along with studies on burials from Connecticut—have helped to demystify issues of diet, disease and medicine, warfare, migration, and the effects of societal growth on ancient groups.

The teacher-scholar model that SCSU favors is an ideal fit for me since my research and teaching are inextricably linked. I involve students in my research at home (where students have worked with me to study prehistoric and historic skeletons from Connecticut) and abroad (where I have brought SCSU students to Peru with me for the past three years). In Peru, my students have described their research experiences as life-changing. One Honors student, Diana Messer, joined me in Peru for two summers and is now pursuing her master's degree in biological and forensic anthropology. In one proud moment, Diana presented a poster of our work on Inca head shaping at the 2011 American Association of Physical Anthropologists annual meeting. Based on successes such as these, I am continually looking for ways to include students in my research projects. I am also working to enhance my classes through active research, by incorporating the information gleaned from my research into my lectures, independent studies, and Honors thesis supervisions. The academic website that I created illustrates this commitment with information about my research and teaching: <http://home.southernct.edu/~andrushkov1/>.

My creative activity thus far includes nine peer-reviewed articles, two book chapters, nine research grants, sixteen conference presentations, and sixteen invited university lectures. These efforts reflect my active and ongoing participation in research at home and abroad. Specifically, my research abroad consists of summer fieldwork in the Cuzco region of Peru and year-round data

analysis and publication, while my local research includes a growing professional association with Dr. Nick Bellantoni at the Connecticut Office of State Archaeology. I have also continued the California research that grew from my master's work and now involves a collaboration of international colleagues. I am gratified to see that the academic community has embraced this work, which has been read and cited not only by other biological anthropologists but also by archaeologists, ethnographers, historians, and medical researchers. To reach the widest academic audience possible, I am committed to publishing my work in high-impact, widely read journals. For example, the *American Journal of Physical Anthropology* (AJPA), where I have published four articles in the past five years, was recently ranked one of the top 10 most influential journals of the century by the Special Libraries Association Biomedical and Life Sciences Division (DBIO). AJPA is the flagship journal of my discipline and is consistently rated among the top journals in the anthropology category of the Social Science Citation Index with an impact factor of 2.756.

Outside of academia, my research has received significant attention for its new insights on the ancient Inca. A segment exploring my work was part of the NOVA documentary "Ghosts of Machu Picchu," which premiered on PBS on February 2, 2010. Articles describing my research have also appeared on websites such as Science News, National Geographic, and the Discovery Channel, as well as in magazines and newspapers. It is gratifying that my research has gained attention, since I believe that anthropologists have a duty to share their knowledge with the public. My invited lectures offer me another opportunity to disseminate my research to a wider audience and, more broadly, to share the wonders of biological anthropology. For example, in my recent invited lecture at Fairfield University on October 20, 2011, I spoke about my current research while weaving in vignettes from my travels as a biological anthropologist. The student and faculty response to my talk was enthusiastic, illustrating the benefits of engaging the public in anthropological research.

Moving forward, I will continue to uncover new insights from ancient skeletal remains while branching out to studying biological patterns of groups living today. This work on modern groups has already begun with my co-authored study on iron-deficiency anemia (Walker et al., 2009) and will allow me to apply my expertise to address long-term patterns of health and disease in today's populations. I remain committed to intertwining my research and teaching, both in classroom lectures and in internships, where SCSU students have the opportunity to engage in intellectually stimulating, hands-on research.

## 1. Summary

I began my formal academic and research career rather late in my nursing career due to my commitment to clinical practice as a Certified Nurse-Midwife from 1980-2000. Prior to that time, I served as a Family Nurse-Practitioner, Clinical Nurse Specialist, medical-surgical nurse and maternal-child nurse. I did not start to publish my research until obtaining my PhD in 2000.

My research falls under the general heading of women's health and uses a qualitative methodology. The path of this research follows two directions. The first direction includes studies on nurse-midwifery, decision-making in formulating birth plans, therapeutic alliance as a concept for the childbearing season, widowhood during pregnancy (the 9/11 tragedies and the wars in Iraq and Afghanistan) and client experiences of midwifery care. These studies have been published in refereed journals.

The second direction examines the experiences of U.S. military nurses deployed to Iraq and Afghanistan. This includes studies pertaining to the provision of nursing care to U.S. and coalition forces, pediatric care for children, and detainee care to enemy forces in prison hospitals. Content also focuses on living conditions, stress and coping, family separation, women's health and hygiene issues, Post Traumatic Stress Disorder, reintegration of the nurses into society after homecoming, and various other thematic components of the nurses' war experiences.

While teaching at the University of Massachusetts Lowell, I expanded my research and publishing efforts investigating "The Lived Experience of Widowhood during Pregnancy" by interviewing widows from the 9/11 tragedies and the wars in Iraq and Afghanistan. This proved to be a landmark study because the topic had never been previously studied. The findings were published in the *Journal of Midwifery and Women's Health* in 2008, and were further disseminated at regional conferences in NY, RI, and MA and internationally at the 18<sup>th</sup> International Research Congress of Sigma Theta Tau International in Vienna, Austria in July 2007. Furthermore, a study poster was presented at the 'International Perspectives in the History of Nursing Conference' at Royal Holloway College, University of London in September 2010.



Three of my research studies have focused on the experiences of nurses in the Iraq and Afghanistan wars. This understudied population of health care providers desperately needed their voices to be heard. The first study, "The Lived Experience of U.S. Military Nurses in the Iraq and Afghanistan Wars, 2003-2009" was published in the *Journal of Nursing Scholarship* in 2010. Podium presentations were given in CT, NY, MA, PA, and in London, England. A study poster was presented at the American College of Nurse-Midwives annual meeting in Washington, D.C. in 2010 where it was selected as Best Poster Presentation for the conference. The second study, "Women's Health and Hygiene Experiences while Deployed to Iraq and Afghanistan Wars" is scheduled for publication in the spring 2012 issue of the *Journal of Midwifery and Women's Health*. A podium presentation was given at the Eastern Nursing Research Society conference in April 2011. The third study, "Parental Separation Experiences of U. S. Nurses Deployed to the Iraq and Afghanistan Wars" is also in press and is scheduled to be presented at the Eastern Nursing Research Society conference at Yale University in March 2012.

It is noteworthy that these three studies have culminated in a book, 'Nurses in War: Voices from Iraq and Afghanistan.' The book is being published by Springer Publishing Company in New York with a release date of April 15, 2012.

My major contributions to nursing knowledge and nursing research are to bring to the forefront the experiences of understudied populations----nurses deployed to war zones, pregnant widows, and nurse-midwives and their clients. I seek to capture the essence of their experiences which adds to the developing body of knowledge about these populations. My intellectual curiosity has always been sparked by voids in the research literature. I gravitate toward topics that are challenging, often difficult, and sometimes sad. Yet, my selected topics deserve to be studied, have definite merit, and have yielded rich data. The voices of my research subjects need to be heard. Their experiences are highlighted in my journal articles, in my research presentations, and in my upcoming book.

Lastly, I am a peer reviewer for two professional nursing journals and am an expert witness in the legal system for maternal-newborn cases. I am fortunate to be able to combine teaching, research, and clinical practice.

## 1) Summary:

Please accept my nomination of Dr. Jason Sikorski for the 2011-2012 Trustees Teaching Award. Dr. Sikorski is in his fourth year at CCSU and has already distinguished himself as a competent, passionate, and brilliant professor and mentor. He clearly loves being an educator and has developed a reputation for excellence among his colleagues and students. Dr. Sikorski utilizes a scholarly approach to education that has been met with exciting results.

Dr. Sikorski does not approach teaching with the goal of only instilling knowledge about psychology. He always updates his courses based on what has worked during the last semester in his class and with evidence based research on the teaching of psychology (TOP) literature. He is a regular contributor to the TOP literature, with extensive publications and presentations on being an effective educator (over 15 peer-reviewed publications in this area alone). In 2010, he published a book for beginning teachers of psychology. It is on the American Psychological Association's website (our top national association) and has been reviewed by PsycCritiques who recommended this book as a "step-by-step guide for negotiating academia.... Good relevant examples..... and very helpful." In addition, he has been interested in finding innovative methods for teaching complicated statistics to his Research Methods students. Along with several colleagues in psychology, Dr. Sikorski has developed a number of on-line tutorials or screencasts, which integrate spoken and written presentation. These help students to learn how to analyze research scenarios with statistics such as correlations, t-tests, and ANOVAs. Four of these web-based resources were published by [www.teachpsychscience.org](http://www.teachpsychscience.org), a peer-reviewed resource for professors teaching research and statistics in psychology. In addition, he is working with a colleague in psychology to deal with student's anxiety about taking research methods classes. Thus far, they have found that anxiety levels are reduced in students who take research methods when more resources are available, like statistics tutorials.

On any given day in the psychology department, you will see a very long line of students waiting to meet with Dr. Sikorski. On the average, he spends about 5 hours a day in office hours. He is always available to his students and takes very seriously the idea of mentoring. He works with approximately 10-12 students per year very closely in a graduate school model of mentoring. He brought with him to CCSU a database that he helped collect on juvenile sex offenders. He graciously allows his students access to the database and works with them on developing presentations, posters, and articles in this area. To give you an example of his results, in the past 3 ½ years, Dr. Sikorski has had his

research team present on two different occasions in a colloquium for the psychology department. He has mentored 12 students for presentations at Psychology Day (a CSU yearly conference), 4 URAC presentations (Undergraduate Research and Creative Activities Conference (a CCSU yearly conference), 34 presentations at Eastern Psychological Association (EPA, a regional conference in psychology), and 3 presentations at the American Psychological Sciences Conference in Psychology (a national conference). His students have been recognized for their work in psychology. At URAC, of the 4 presentations made, 1 of his students won for best poster and 3 won the big senior prize that sent them to a national undergraduate research conference. Of the 34 presentations at EPA, 5 of his students have won poster awards. His students have won the Barnard Scholar award, the library award, and 7 of his students have won the psychology department's Mary Corcoran Scholarship award, for most promising students in the area of psychology.

Given Dr. Sikorski's ongoing work to create meaningful educational experiences, he has worked tirelessly on the Psychology Assessment Committee. As part of the committee, he created our current thesis evaluation rubric to standardize the progress and chart how graduate students meet learning outcomes set by the department. He has also created assessment protocols that chart student learning for university and departmental outcomes for undergraduates, which are completed every semester. Much of the information presented in reports from the psychology department on learning outcomes comes from Dr. Sikorski's assessment efforts. Finally, he is working on process mapping for transfer students. Given the concern over retention rates for transfer students, he is interviewing all of the key players in the transfer advising process to inform a revision as to how we provide transfer advising in order to improve graduation retention rates for transfer students.

Finally, Dr. Sikorski has worked tirelessly on improving student faculty relations in the psychology department. Right now, under the direction of Dr. Sikorski, the Psychology Club is the largest club on campus, boasting 25-35 people per week at each meeting. He has helped secure national internships for students, brought in national speakers from all over the country, organized faculty research presentations for students, and brought 20 students per year to the EPA conference to expose students to a professional research conference.

Given Dr. Sikorski's stellar performance in the area of teaching and mentoring, I cannot think of a more deserving candidate for the 2011-2012 Trustees Teaching Award.

Carolyn R. Fallahi, Ph. D., Associate Professor of Psychology

## 1) Summary

My pedagogical methods vary from course to course depending upon the course level and content, and include lectures, work-to-criterion writing assignments, online quizzes, small-group discussions, collaborative assignments, problem-solving tasks, weekly homework assignments, learning centers and other 'hands-on' techniques. I utilize empirically-tested technological techniques in my classes including power-point presentations, VISTA, simulation software, statistical packages, publisher-based software, and Web-based resources where appropriate. All of my students read primary source journal articles and I use writing assignments to help students develop content related higher-level thinking skills.

In order to foster a positive learning environment, I communicate to my students my overall goals for the course as well as specific learning goals for each week. To this end I post weekly 'Learning Checks' on my course webpages. I encourage questions from my students. I return all corrected assignments within 1 –2 class periods, and provide written feedback (positive and corrective) on all assignments. I also explicitly tell my students that they share a personal responsibility for their own learning. I clearly spell out what the students need to do in order to optimize their own success in achieving the learning objectives of each course.

I adapt my teaching strategies to meet the learning needs of the students who are currently sitting in my classroom. This adaptation may involve, for example, reviewing the basics in a statistics class (e.g. basic rules of math order of operations) before proceeding to more advanced material. In my Behavioral Statistics Course, students need to actively be solving problems during class. Students work in pairs to find solutions to problems. I 'switch' peers weekly, so every student gets to work with a new partner each week. The end result has been that my students know each other and are more likely to work together outside of the classroom. To increase reading and mastery of the textbook content, I use online quizzing with 'work to criterion' settings.

I created a course in Psychopharmacology (PSY 487). The use of drugs as therapeutic agents for mental illness and the abuse of drugs in our culture, are very timely topics in the discipline of Psychology. Although many universities offer courses in Drugs and Behavior, few offer undergraduate courses in Psychopharmacology. Early on, I realized that students who did not have a background in basic biopsychological mechanisms, had difficulty with the course. I made Brain and Behavior (PSY 383) a prerequisite for PSY 487. Students are now much more prepared for the course. My focus is on 'processes' not drug names. The students are required to design novel solutions to practical problems. I often 'change the audience to fit the task' to give students practice explaining complex phenomena in simple ways. Assignments include: Develop a new drug for a hypothetical disorder; write an article for the Southern News on how alcohol affects the brain; and explain to the parents of a person with schizophrenia, how their son's medication works. Many alumni report to me that the course was extremely valuable to them.

I teach a required capstone course (PSY 462W) for B.S. Psychology Research Specialization majors. The focus of the course is the development and application of instrumentation in the research process. We read current and classic literature. We also discuss research ethics and students are required to complete NIH online ethics training. We review in detail 3 particular types of instrumentation which vary from term to term, but I have included Magnetic Resonance Imaging, functional Magnetic Resonance Imaging, Internet Data-Collection methods, Evoked-Response Potentials, Tests of Animal Behavior (Operant Conditioning and Maze learning), and Neuropsychological Tests, among the types of instrumentation studied. For each instrumentation unit, students read and report on primary sources. We take a field trip to a lab either on campus or in the local community, which employs the instrumentation. Following the field trips, students analyze actual (most researchers have been very generous in sharing actual data with our class) or hypothetical data to draw conclusions and write APA-style reports. Throughout the course, the students are treated as research consultants, and are expected to behave as professional consultants. For a capstone project, students deliver a formal presentation of an original research project involving instrumentation. The project is scaffolded throughout the semester, with continuous substantive feedback from the instructor, peer reviews, and required revision. Students gain valuable professional experience and skills in this course.

I regularly supervise students (both undergraduates and graduates) completing field practica. Prior to students' enrolling in the course, they are required to interview with me and submit recommendations from other faculty members. I then 'match' students with a practicum site in the community; students must also interview with a site supervisor. Students complete 150 hours at the field site. Students are required to maintain a weekly, reflective journal of all internship activities, to attend 'virtual' lab meetings on VISTA each week, to post responses to instructor-created discussion threads and to respond to other students' posts. Feedback from site supervisors in the community has been overwhelmingly positive. Many students are hired upon graduation, by their field practicum sites.

I have served as the director of the B.S. Psychology Research Specialization since 2006, for which I receive no load credit. I serve as the major advisor to all B.S. program majors, locate and secure field practicum sites and supervisors in the community, make regular site visits to practicum sites, interview all students' enrolling in research field practica, work directly with students on an individual basis to prepare them for on-site interviews, and match students with a practicum site. Recently, I submitted a program revision to include a required capstone lab or field practicum experience. I also updated the cognate courses, which will facilitate students interested in pursuing careers in Cognitive Science, Neuroscience, or Medicine. The program revision was recently approved by the University Curriculum Forum.





**WESTERN CONNECTICUT STATE UNIVERSITY  
MASTER OF ARTS IN TEACHING (M.A.T.)  
ELEMENTARY EDUCATION (K-6)**

**E**xpertise in content knowledge  
**D**iversity  
**U**nity  
**C**lassroom and school leadership  
**A**ttitudes  
**T**echnology  
**O**rganize knowledge/facilitate learning  
**R**eflective Practitioner

**EXECUTIVE SUMMARY**

The proposed Western Connecticut State University's Master of Arts in Teaching M.A.T. in Elementary Education:

**1. Replaces the current Certification Only Program**

- WestConn's *Certification Only* program has been voluntarily suspended for the last two years by the university in preparation for the M.A.T.
  - Rationale: The state is proposing that the Professional Educator Certificate requirements include 30 graduate credits beyond the bachelor's degree. The certification only program is 30 credits beyond the bachelor's degree, most of which are undergraduate course work.-
- This Elementary Education M.A.T. will be limited to a cohort of 25 per year
  - *Certification Only* served an estimated 75-100 candidates entering per year
- Demand is high for a post-baccalaureate certification program at the elementary level
  - Documented weekly inquiries of over 25 per week have been received by the Certification Officer and Program Coordinator over the past two years

**2. The M.A.T. serves a more "elite" cadre of candidates**

- It is a full-time graduate program
- It has higher program entry requirements. Candidates must:
  - Hold a B.S., B.A., M.S., M.A., or higher in a related content area
  - Have a 2.8 GPA, and pass the Praxis I test
- It has higher program retention requirements:
  - Passing Praxis II and Connecticut Foundations of Reading Tests

**3. Incorporates a newly created Special Education Certificate Option**

- *New 14 credit program developed in partnership with SCSU*
  - Contains 5 Special Education courses
  - Emphasis on Bilingual and Autism
  - Open to all K-12 Classroom Teachers
- A Special Education Task Force formed in Western Connecticut in 2008
  - A needs assessment, based on responses from 50 Public School Superintendents, identified the desire to increase (and support) programs in Special Education and for children with Autism

**4. Added continuing education component beyond the completion of the Master's program**

- Designed to keep novice teachers connected to the university through their two-year induction period upon being hired

The M.A.T. in Elementary Education proposal is far from typical. Following our secondary model, coursework not only integrates Best Practices as represented by the Connecticut Accountability for Learning Initiative (CALI), Scientific Research Based Interventions (SRBI), but also reflects many of the certification changes identified in the proposed 2015 implementation. Increased clinical practices are already embedded.

As evidenced by our Secondary M.A.T. job placement rate of 100% of candidates actively seeking employment (90% had signed contracts before the program was even completed), our program is highly successful even in the present economic conditions.

Bonnie Lee Rabe, PhD, M.A.T. Program Coordinator, May 18, 2011

## STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION

Institution: Gateway Community College

Item: Licensure and accreditation in a program for General Automotive Technology leading to an Applied Associate in Science (A.A.S.) Degree.

Date: May 3, 2012

### Background

Gateway Community College is seeking licensure and accreditation of a program of general automotive technology leading to an Applied Associate in Science degree. The degree program is related to Gateway CC's NATEF/ASE nationally certified corporate sponsored Associate Degree program (GM-ASEP). The intent is to seek NATEF/ASE certification for the General Automotive Technology A.A.S. program as well. Due to the extensive support received through financial grants and donations, the College will be able to support the new degree program at our current facility.

The degree program is primarily intended to meet the growing need of technicians in the College's service region by providing training in the most current technology to prepare students for entry-level employment as automotive technicians, as well as training for students already employed. This program furthers the College's mission to "respond to the changing academic, occupational, technological and needs" by offering "a broad range of credit...technical and career...programs and courses leading to transfer, employment and lifelong learning." It is also consistent with the College goal of supporting "economic development through partnerships with business, industry,...by providing workforce development ..."

### Description

#### Purpose and Objectives

This undergraduate degree program is intended for students who are seeking employment in the field of automotive technician. With 290 annual job openings, the industry is having a very difficult time keeping up with the growing shortage of skilled technicians. The want ads in any major newspaper are constantly seeking trained professionals in the field. This is confirmed even further with dealership service managers. They strongly indicate there is a critical shortage of automotive technicians throughout the State. The Automotive Mechanic and Technician field is one of the highest employment areas in the State. In this highly technical field, anyone with practical training and a college education has numerous opportunities for advancement. With Connecticut as the College service area, Gateway Community College's General Automotive Technology A.A.S. program is ideally situated to supply its corporate sponsors,

dealership, and local garages with excellent skilled automotive technicians for this highly-skilled field.

### Learning Outcomes

Students who complete the General Automotive Technology Applied Associate in Science degree program will be able to:

1. Apply language arts and communication skills related to the occupation, including but not limited to: reading, writing, and oral communications.
2. Perform mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals, and graphs.
3. Use scientific methods and critical thinking to solve problems in science related to the occupation, including but not limited to: preparing resumes, seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics, and teamwork.
4. Demonstrate workplace skills related to the occupation, including but not limited to: preparing resumes, seeking employment, maintaining a safe and healthy workplace ethics, and teamwork.
5. Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.
6. Identify and use appropriate tools, testing, and measurement equipment to accomplish certain tasks related to the occupation.
7. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
8. Apply knowledge of general engine diagnosis and repair, including but not limited to: the engine's cylinder heads, valve train, block, lubrication, and cooling system.
9. Apply knowledge of transmission and transaxle maintenance, adjustment, diagnosis, and repair.
10. Apply knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment, and repair.
11. Apply knowledge of general disc and/or drum brake system hydraulics, power assist and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.
12. Apply knowledge of general electric/electronic systems, including but not limited to: starting, charging, lighting, wiring, accessories, diagnosis, and repair.
13. Apply knowledge of general heating and air conditioning systems and their components, maintenance, adjustment, diagnosis, and repair.

14. Apply knowledge of general engine performance, including but not limited to: computer controls, ignition, fuel exhaust, and emissions systems, and their maintenance, diagnosis, adjustments, and repair.

15. Apply knowledge of computer applications, including word processing, spreadsheets, graphs, and other software related to the occupation.

#### Administration

The Program Coordinator of the College's the Automotive Technology GM-ASEP, Automotive Technology Toyota T-TEN A.A.S. degree programs and the General Automotive Certificate program will be responsible for the day-to-day operation of this program.

#### Admissions

There are no additional requirements for admission beyond admission to the College other than each student accepted into the program must purchase the tools required in the program, wear a uniform when attending all classes and secure a sponsor for their internship. Assistance in locating a sponsor can be requested from the Program Coordinator.

#### Enrollment Projections

The College projects 45 - 60 students to enroll in the program each year of operation.

#### Headcount Enrollment Projections

Projected Enrollment	FY 2012		FY 2013		FY 2014	
	FT	PT	FT	PT	FT	PT
Internal Transfers	10	8	0	5	0	5
New Students	25	15	25	15	25	15
TOTAL ENROLLMENT (est.)	35	23	25	20	25	20

#### Comments from Other Institutions

No comments were received in response to the State-wide circulation of the program proposal.

#### Curriculum

##### **General Education Requirements:**

COM * 171	Fundamentals of Human Communication	3
ENG* 101	English Composition	3
Elective	Humanities	3
Elective	Fine Arts	3
Elective	Social Science	3
MAT* 115	Mathematics for Science and Technology	3
PHY* 109	Fundamentals of Applied Physics	4
CET 116	Computer Applications for Technology	<u>3</u>
Total General Education Requirement Credits		26

**Program Requirements and Electives:**

AUT* 130	Engines Repair	3
AUT* 132	Specifications	2
AUT* 134	Electrical Systems	3.5
AUT* 136	Suspension & Steering	3
AUT* 138	Brakes	3.5
AUT* 170	Internship II	4
AUT* 231	Fuel Systems	3.5
AUT* 233	Manual Transmission & Transaxle	3.5
AUT* 235	Automatic Transmission & Transaxle	3.5
AUT* 237	Heating and Air Conditioning	3.5
AUT* 170	Internship III	2
AUT* 270	Internship IV	2
AUT or AFV Elective (non-internship)		<u>3 – 4</u>
Total Program requirement Credits		39 - 41
TOTAL CREDITS		65 - 66

**Similar Programs**

Naugatuck Valley Community College is the only other Community College with a college credit automotive program in Connecticut. However, this program is not a corporate sponsored program and is NATEF/ASE certified. There are three proprietary schools in the service region; however, none of them offer college credit programs or corporate sponsored programs, and only one of these is NATEF/ASE nationally certified. Gateway's Automotive Programs are the only corporate sponsored programs. In addition, Gateway has three postsecondary programs that are NATEF/ASE nationally certified.

**Resource Support****Faculty**

Other than an anticipated need for two (2) additional adjunct faculty members, courses will be taught by existing faculty. The faculty members identified to teach in the program possess the appropriate credentials and teaching experience to teach in the program.

**Library and Learning Resources**

No additional library or learning resources will be required for the program.

**Facilities and Equipment**

Existing facilities are sufficient to operate the program.

## STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION

Institution: University of Connecticut

Item: Licensure and accreditation for Bachelor of Science in Mathematics-Physics

Date: April 5, 2012

### **Background and Description**

Historically, mathematics and physics have always been closely connected. The problems and concepts of physics have inspired much of mathematics, and, in turn, mathematics has provided many methods for rigorously analyzing physical problems. In the modern world, an understanding of key concepts from both fields is in demand for entry into graduate programs in physics and applied mathematics, as well as for scientific analysis positions in high-technology industries and at national laboratories.

The goal of the proposed major is two-fold: to provide physics-focused students with a solid background in the mathematics applicable to their field, and to give mathematics-focused students an appreciation of the motivation and intuition for the many mathematical tools that are applied in physics. The major contains two tracks: one for students leaning towards Physics (Track A), and for those leaning towards Mathematics (Track B). The required courses have sufficient overlap, easing entry into either a physics or mathematics graduate field. The total number of credits for either track (49) of the proposed major is comparable to the number required for the Mathematics-Statistics (42) program, and compares favorably with the number of credits required for a double major in Mathematics and Physics (78). Further, no new courses need to be offered for the proposed major.

Among our peer institutions, the University of Iowa, Iowa State University, and the Ohio State University offer this major.

### **Program Administration**

The program would require a new administrative resource, namely a new committee to oversee the progress of this major. The following persons have agreed to serve on this committee:

Maria Gordina (Math.),

Tom Blum (PHYS.),

Gerald Dunne (PHYS.), and

The Chairs of the Mathematics and Physics course and curriculum committees (ex officio). The committee will elect a chair from among themselves.

### **Cost Effectiveness and Availability of Adequate Resources**

No new teaching resources would be needed to offer this degree program. It relies entirely upon existing courses, and its core components are also core components for the existing majors in Mathematics and in Physics, so would be taught in any case.

### **Curriculum**

All courses listed are currently offered. No new courses need to be created for this program.

## STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION

Institution: University of Connecticut

Item: Licensure and accreditation for Bachelor of Science in Geography

Date: April 5, 2012

### **Background and Description**

The proposed Bachelor of Science degree focuses on the methods and techniques of geographic information science and technology (GIST). Within GIST, there are main foci of studies beyond the basic principles: (1) proper understanding of the statistical analysis of geographic data; (2) proper methods for the visualization of geographic data; and (3) the proper use of GIST in a normative decision-making environment.

By pursuing this degree, including courses within the spatial focus in other departments as related courses, students can effectively prepare themselves for technical careers in spatial analysis in the federal government (Defense Mapping Agency, National Atmospheric and Oceanic Administration) and private firms. Geographic Information and Science Technology has become integral to studying the environment and accessing the delivery of medical services, which are both important aspects of the current Academic Plan.

It is expected that this degree will generate 10 – 15 new majors per year.

### **Program Administration**

Robert Cromley, Ph.D., is an expert in Geographic Information Science, and he will be the lead administrator for the new degree program.

### **Curriculum**

The B.S. degree requires degree requires 31 credits in 2000-level or above Geography courses and 12 credits of related course work in other departments. B.S. majors must complete a basic core of 6 courses: GEOG 2100, 2300, 3500Q, 3510, 4500, 4510, and one methods course (choice of GEOG 2510, 3110, 3300, 3505, or 4520) and 6 additional credits, including at least one “W” course in geography in consultation with their departmental advisor.

The following courses all carry three credit hours:

GEOG 2100 Economic Geography

GEOG 2300 Physical Geography

GEOG 2510 Visualizing Geographical Data

GEOG 3110 Location Analysis

GEOG 3300 Principles and Applications of Physical Geography

GEOG 3310 Fluvial Geomorphology  
GEOG 3320W Environmental Evaluation and Assessment  
GEOG 3330W Environmental Restoration  
GEOG 3400 Climate and Weather  
GEOG 3410 Human Modifications of Natural Environments  
GEOG 3500Q Geographic Data Analysis  
GEOG 3505 Remote Sensing of Marine Geography  
GEOG 3510 Cartographic Techniques  
GEOG 4130 Transportation Geography  
GEOG 4300 Advanced Physical Geography  
GEOG 4500 Introduction to Geographic Information Systems  
GEOG 4510 Applications of Geographic Information Systems  
GEOG 4520 Selected Topics in Geographic Information Systems

## **Faculty**

The following faculty members will be teaching in the proposed program.

Carol Atkinson-Palombo, Ph.D., Urban Analysis  
William Berentsen, Ph.D., Regional Development  
Thomas Cooke, Ph.D., Population  
Robert Cromley, Ph.D., Geographic Information Science  
Heidi Dierssen, Ph.D., Remote Sensing  
Dean Hanink, Ph.D., Economic Geography  
Richard Mrozinski, M.A., Applications of Geographic Information Systems  
William Ouimet, Ph.D., Geomorphology  
Jeffrey Osleeb, Ph.D., Transportation  
Anji Seth, Ph.D., Climate Change  
Alexander Vias, Ph.D., Globalization  
Chuanrong Zhang, Ph.D., Spatial Modeling



## STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION

Institution: University of Connecticut  
Item: Accreditation of Doctor of the Science of Law Degree  
Date: May 3, 2012

### Background & Description

The Doctor of Science of Law (S.J.D.) degree is a research-based degree for individuals interested in pursuing advanced legal studies beyond the Juris Doctor (J.D.) and Master of Laws (LL.M.) degrees. The focus of the S.J.D. program will be on the preparation and defense of a dissertation. We anticipate that S.J.D. students will take between 2-4 years to complete their dissertation; the first year will be in-residence.

The Board of Regents licensed the S.J.D. program on November 2, 2011, after receiving a favorable recommendation from the ACA on October 19, 2011. On January 31, 2012, the Law School also obtained a letter of Acquiescence from the American Bar Association, the Law School's primary accreditation agency (the ABA does not accredit law programs beyond the J.D., but requires review and "acquiescence").

We anticipate that most of our S.J.D. applicants will be foreign scholars who must meet U.S. Immigration requirements, such as obtaining a visa. It will be more difficult to obtain the necessary documentation for a program that is licensed, but not yet accredited. The program information that we submitted to the Board of Regents in fall 2011 remains current and the reasons the ACA and then the Board approved licensure on November 2 also support granting accreditation under Regulations Section 10a-34-4(h) and 10a-34-5. As described in detail in our S.J.D. application (attached), this degree program is closely related to our existing J.D. and LL.M. programs. We anticipate that most of our S.J.D. students will have obtained their LL.M. from our School, and the S.J.D. program is built upon the Law School's traditional strengths in Human Rights Law, Insurance, and Intellectual Property. No comments have been received in response to the circulation of the program proposal.

Program requires a dissertation. S.J.D. students must have both an initial law degree (in the U.S., this is the J.D.) and a LL.M. prior to starting the S.J.D. program.

ABA Acquiescence received January 31, 2012. Other than first year program review and the Law School re-accreditation requirements (every 7 years), no further ABA approval necessary.

### Enrollment Projections

ACTUAL Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers						
New Students	3		5		5	
Returning Students						
ACTUAL Headcount Enrollment						
ACTUAL FTE per Year						
PROJECTED FTE <i>(at Licensing)</i>	3		4-8		4-8	
ACTUAL-PROJECTED	0		0		0	

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

APPLICATION FOR MODIFICATION OF ACCREDITED PROGRAM (Public Higher Education Institutions) - 01/20/12

## SECTION 1: GENERAL INFORMATION

<b>Institution:</b> Quinebaug Valley Community College		<b>Date of Submission to BOR Office:</b> 04/10/2012	
Most Recent NEASC Institutional Accreditation Action and Date: Recertification Site Visit held in October 2011; Board action pending in April 2012			
<b>Original Program Characteristics</b> CIP Code No. 52.9999; DHE# 01776 Title of CIP Code: Business, Management, Marketing, and Related Support Services Name of Program: Management Degree: Title of Award: A.S. Date Program was Initiated: 6/6/1972 Modality of Program:    On ground    Online <input checked="" type="checkbox"/> Combined Fully online courses? 57% (Above 50% NEASC threshold) Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): <b>63</b>		<b>Original Program Credit Distribution</b> # Cr in Program Core Courses: <b>36</b> # Cr in General Education Courses: <b>24</b> # Cr of Electives in the Field: 0 # Cr of Free Electives: 0 # Cr Special Requirements (include internship, etc.): <b>3</b> <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>63</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>63</b> (ALL)	
<b>Type of Program Modification Approval Being Sought:</b> Significant Modification of Courses/Course Substitutions and Change of Program Title			
<b>Modified Program Characteristics</b> Name of Program: Business Administration Degree: Title of Award (e.g. Master of Arts) A.S BOR Assigned CIP No. 52.0101; Title of CIP Code: Business/Commerce, General Program Initiation Date: 2012 Modality of Program:    On ground    Online <input checked="" type="checkbox"/> Combined Fully online courses? 57% (Above 50% NEASC threshold) Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): <b>63</b>		<b>Modified Program Credit Distribution</b> # Cr in Program Core Courses: 3 # Cr in General Education Courses: <b>48/49</b> # Cr of Electives in the Field: 12 # Cr of Free Electives: 0 # Cr Special Requirements (include internship, etc.): 0 <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>63/64</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>63</b> (ALL)	
Institution's Unit and Location Offering the Program: Main Campus, Danielson, CT			
Institutional Contact for this Proposal: Dr. Amy Sue DeSonia		Title: Dean of Academic Affairs	Tel.: 860 412 7260 e-mail: <a href="mailto:adesonia@qvmc.commnet.edu">adesonia@qvmc.commnet.edu</a>

## SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION

### Background and Rationale:

According to CT Department of Labor statistics as of February 2012, most of the Management and Accounting fields (CDS# 1501, 1602) require a Bachelor's degree and/or related work experience. Graduates of the reorganized program will complete academic requirements for entry into the workforce (including an internship) or for transfer to a four year business degree program. Options to be created under the reorganized Business Administration degree (i.e. Business Information Systems, Project Management, and Human Resources Specialist) will facilitate individualized academic programming. Transfer pathways already exist at several area colleges and universities. Students currently seeking to transfer are advised into either the General Studies or Liberal Arts and Science programs, as the current Management degree program does not allow tailoring that would facilitate program-to-program transfer. This proposed degree program will allow students intending to transfer to be identified and advised more efficiently, which historically has proven to increase both retention and graduation rates.

Potential students include individuals currently working as business professionals who wish or are being required to obtain an Associate's degree; high school graduates and others seeking a career change; students seeking to transfer to area four year schools and all students interested in careers in business.

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The reorganization of the Management degree into a more flexible programmatic offering is consistent with the long term strategic plan of the BOR to facilitate transfer between the CC and CSU systems. Individualized options, to be proposed later and earned by selecting courses within specific program areas, will allow students to tailor their individual educational plans to meet their desired educational goals (i.e. transfer vs. entering the work force with an indentified content area concentration.)

### *Description of Modification*

As noted above, the modifications to the program generally involve a loosening of rigid programmatic requirements into a more flexible student directed educational plan. No significant changes to admission or graduation requirements are anticipated.

### *Addressing CT Workforce Needs*

Specifically, the objectives of the reorganized degree and newly created options are to:

- meet workforce demands for business professionals in various industry sectors in Connecticut.
- expand opportunities for existing QVCC and state community college students.
- open new doors to those who desire and can benefit from a college education.
- to offer an Associate in Science degree that will allow students to transfer into a business program at a 4 year college or university (specifically UCONN and Eastern Connecticut State University) and meet a significant number of requirements in a Liberal Arts Core curriculum.

### *Use of Institutional Strengths, Distinctive Character, and/or Location*

QVCC has long been a leader in developing partnerships with the ECSU and UCONN. This collaboration has resulted in the restructuring of the rigid Management Degree program into the more flexible Business Administration Degree. This increased flexibility allows for students to pursue an individualized educational path to meet the transfer requirements of the various receiving schools in our area. This program is intended to be similar to that available at other CC's. It should also be noted that many of the courses available/required under the newly created degree are readily available either at QVCC or in the CC system.

### *Avoiding Duplication*

As noted above, similar programs exist within the CT CC system (i.e. MCC's Accounting and Business Administration Transfer, A.S.), and more are currently in the process of being implemented throughout the system. Thus, this program is considered to be a necessary development in response to an emerging student success initiative: facilitating transfer of CC students for the completion of a Bachelor's degree.

### *Employment Prospects for Graduates*

According to the State Department of Labor website which reports current CT Labor Market Information, Business and Financial Operations occupations are projected to grow by roughly 9%, with approximately 780 new jobs anticipated through 2018. Areas of notable growth include Agents and Business Managers of Artists, Performers and Athletes (20%), Compliance Officers (24.5%), Human Resources, Training & Labor Relations Specialists (14%), Financial Analysts (14%) and Personal Financial Advisors (23%.) While Management Occupations are expected to grow more slowly overall (1.3%, 461 new positions anticipated), significant increases are expected in Computer and Information Systems managers (10%), Medical and Health Systems Managers (8%), Early Childhood Education Administrators (10%) as well as Social and Community Service Managers (6%). Although most of these fields are expected to require a bachelor's degree, these areas will be targeted for certificate development opportunities within the "elective" (concentrated) programming area of this proposed Business Administration degree. These certificates will combine existing coursework from the related non-business disciplines with core business courses. As a result, students will be introduced to the areas of projected job growth and enabled to transfer into the related bachelors level programs.

Note that the degree's influence goes beyond these specific positions as business management is an integral part of all business and industry. Similar to the difficulty in capturing the growth in management positions in general, a business program and the skill sets obtained through its study will create career opportunities in a wide range of organizations, industries and

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occupations.

### **Description of Program Resources Needed**

The QVCC Library focuses its collection development policy on support for the curriculum and works closely with faculty in relevant programs to acquire expanded resources as they are identified.

#### Books and other materials in the major field

The QVCC Library has acquired both print and electronic titles to support our current management, accounting and computer sciences programs. Access to these collections is provided by the Library's Online Catalog. Using the Online Catalog, students can access Library materials from both the Danielson and Willimantic campus libraries, as well as from off campus. Students can also use the Online Catalog to search easily for materials in all 12 libraries in the Connecticut Community College system. In addition, students can search libraries throughout Connecticut using either the Library's online Directory of Connecticut Libraries or the ReQuest Statewide Library Catalog. Materials located at other libraries can be obtained through interlibrary loan.

The QVCC Library subscribes to more than 40 electronic periodical databases. Research involving periodical articles is primarily conducted through these full-text subscription databases.

When needed resources are not available online, or when faculty members request a specific publication in print as well as online, the Library subscribes to the in-print format. The preference for online over print reflects the research needs of both on-ground and distance learning students.

#### Full-text databases covering all disciplines

##### Academic Search Premier

A comprehensive academic database, Academic Search Premier indexes and abstracts over 8,300 periodicals; of these, more than 7,200 are peer-reviewed journals and most are full-text. Subject areas covered include all academic disciplines.

##### MasterFILE Premier

This general database provides indexing and abstracts for more than 5,000 publications, including magazines, journals, reference books, and primary source documents. Included are full-text articles from nearly 2,000 titles and an extensive image collection. Subject areas covered include all academic disciplines.

##### Academic OneFile

A comprehensive academic database, Academic OneFile contains more than 12,000 periodicals, including more than 4,000 full-text, peer-reviewed journals. Subject areas covered include all academic disciplines.

##### Expanded Academic ASAP

An academic database with indexing and abstracts for more than 4,200 periodicals and full-text for more than 2,500. Contents are split between magazines and peer-reviewed journals. Subject areas covered include all academic disciplines.

##### General OneFile

A general database containing more than 11,500 periodical titles, including more than 3,000 peer-reviewed journals. Content includes more than 7,900 full-text titles. Subject areas covered include all academic disciplines.

##### Opposing Viewpoints Resource Center with Critical Thinking

A comprehensive full-text resource for information on a wide range of current social issues. Includes more than 2.2 million articles, including 9,000 pro-con articles, 5,000 topic overviews, primary source documents, biographies, court-case overviews, statistical tables, images, podcasts, and links to reviewed Web sites. The Critical Thinking component challenges students to develop crucial information literacy and logical thinking skills.

#### Full-text newspapers

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### Newspaper Source

Newspaper Source provides full-text access to 35 United States and international newspapers and selected full-text for 375 regional U.S. newspapers.

### ProQuest Newspapers

This database provides full-text access to newspaper articles in the Hartford Courant, New York Times, Washington Post, Wall Street Journal, Christian Science Monitor, and Los Angeles Times.

### Historical Hartford Courant (1764-1922)

Full-text coverage for every article published in the *Hartford Courant* from the first issue on December 3, 1764 through December 31, 1922.

### Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	First Term, Year Fall 2011		First Term, Year Fall 2010		First Term, Year Fall 2009	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers	4	1	5	4	4	1
New Students	9	8	11	10	9	8
Returning Students	19	56	15	57	19	66
ACTUAL Headcount Enrollment	32	65	31	71	32	65
ACTUAL FTE per Year	21	18	27	27	27	25
Size of Credentialed Group for Given Year	14		12		8	

Note that the data provided above includes only those students that are enrolled in the Management degree program for the periods indicated. Students currently taking business and accounting classes, enrolled in either the LAS or GS degree program, are excluded. (It is interesting to note that upon reviewing the declared program for students in a sample of three core business sections offered spring 2012 (ACC 113, ACC 117, and ACC 123) 30% were declared as either non-degree, LAS or GS.)

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Curriculum Details for a Program Modification <i>(to be use as appropriate for specific modification request)</i> <sup>1</sup>						
Course Number and Name <sup>2</sup>	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Program Core Courses</b>			<b>3</b>	<b>General Education Courses</b>		<b>42/43</b>
ACC* 113 Financial Accounting	1-5		3	Science Elective	6	3/4
Complement of 12 program elective core courses; dependent upon area of proposed specialization **				Liberal Arts focused Elective	6	18
				Communications Elective	6	3
				Humanities Elective	6	3
				Foreign Language Elective	6	3
				Social Science Elective	6	3
				History Elective	6	3
				ECN* 101 Macroeconomics	1-5,6	3
				ECN* 102 Microeconomics	1-5,6	3
<b>Core Course Prerequisites</b>			<b>6</b>	<b>Available Program Elective Courses</b> **		<b>12</b>
1) Placement in MAT* 137 Intermediate Algebra			3	ACC* 117 Managerial Accounting		
2) Placement in ENG* 101 Composition			3	ACC* 123 Acc Software Applications		
				ACC* 241 Federal Taxes		
				ACC* 271 Intermediate I		
				ACC* 272 Intermediate II		
				BBG* 101 Intro to Business		
				BBG* 115 Bus Software Applications		
				BBG*230 Business Law		
				BBG* 280 Prob Solv & Dec Making		
				BBG* 294 Internship		
				BFN* 201 Principles of Finance		
				BMG* 202 Prin of Management		
				BMG* 220 HR Management		
				BMK* 201 Marketing		
				CSA* 135 Spreadsheet Applications		
<b>Total Other Credits Required to Issue Modified Credential</b>						<b>63/64</b>

<sup>1</sup> Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.

<sup>2</sup> Make any detail annotations for individual courses as needed to understand the curricular modifications taking place

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### Learning Outcomes - L.O.

1. Demonstrate relevant content knowledge in required core business disciplines and apply concepts in problem solving through identifying and evaluating alternative solutions and offering a well-supported conclusion.
2. Recognize proper business acumen and decorum in professional interactions; demonstrate appropriate interpersonal communication and presentation skills and demeanor; demonstrate the ability to use presentation and team interpersonal skills effectively in class presentations.
3. Recognize and respond thoughtfully to situations that present ethical dilemma, demonstrating the ability to identify ethical dilemmas and social responsibilities of business, an ability to confront ethical dilemmas, and apply ethical principles to business situations using concepts learned.
4. Apply concepts in core business disciplines and critical thinking skills to make sound financial decisions.
5. Demonstrate an understanding of the interrelationships between accounting and business courses.
6. In addition, the graduate will complete the comprehensive learning outcomes identified within the general education core courses.

### SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS

#### Two-Year Cost Effectiveness and Availability of Adequate Resources

*(Please provide attach a Pro-Forma Budget for the modification of program in the format provided)*

No additional resources are required to support the implementation of the program. Current programmatic budget and staffing level is considered to be sufficient to facilitate program management.



# Connecticut Board of Regents for Higher Education

## APPLICATION FOR NEW PROGRAM APPROVAL PRO FORMA <sup>1</sup> BUDGET - RESOURCES AND EXPENDITURE PROJECTIONS

Institution Quinebaug Valley Community College Date 4/10/2012  
 Proposed Program Modification -- AS in Management

PROJECTED Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers (from other programs)	4	1	4	5	1	4
New Students (first time matriculating)	8	9	10	11	8	9
Continuing (students progressing to credential)			8	6	9	10
Headcount Enrollment	12	10	22	22	18	23
<b>Total Estimated FTE per Year</b>	17		33		30	

PROJECTED Program Revenue	Year 1		Year 2		Year 3	
	Full Time	Part Time*	Full Time	Part Time	Full Time	Part Time
Tuition (Do not include internal transfers)	\$14,392	\$8,226	\$33,354	\$15,997	\$32,453	\$18,411
Program-Specific Fees						
Other Rev. (Annotate in text box below)						
<b>Total Annual Program Revenue</b>	\$22,618		\$49,351		\$50,864	

\* estimated 6 credits

PROJECTED Additional Expenditures*	Year 1		Year 2		Year 3	
	Number (as applicable)	Expenditure	Number	Expenditure	Number	Expenditure
Administration (Chair or Coordinator)						
Faculty (Full-time, total for program)						
Faculty (Part-time -total for program)						
Support Staff						
Library Resources Program						
Equipment (List as needed)						
Other (e.g. student services)						
Estimated Indirect Cost (e.g. student services, operations, maintenance)						
<b>Total ESTIMATED Expenditures</b>		\$0		\$0		\$0

\* Note: Capital outlay costs, institutional spending for research and service, etc. can be excluded.

Annotation: No addition expenditures

<sup>1</sup> This PRO FORMA budget provides reasonable assurance that the program can be established and is sustainable. Some assumptions and/or formulaic methodology may be used and annotated in the text box.

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## SECTION 1: GENERAL INFORMATION

<b>Institution:</b> Southern Connecticut State University		Date of Submission to BOR Office: Feb. 3, 2012
Most Recent NEASC Institutional Accreditation Action and Date: Anticipated April 2012		
<b>Original Program Characteristics</b> CIP Code No. 250101; DHE# 00646; Title of CIP Code Library Science Name of Program: Library-Information Service Degree Title: Bachelor of Science Date Program was Initiated: 1946 Modality of Program: On ground    Online    X Combined If "Combined", % of fully online courses? 10% Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): 122		<b>Original Program Credit Distribution</b> # Cr in Program Core Courses: 9 # Cr of Electives in the Field: 0 # Cr of Free Electives: 21 # Cr Special Requirements (include internship, etc.): 0 <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>30</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>30</b>
Type of Program Modification Approval Being Sought : Significant Modification of Courses/Course Substitutions and Change of Program Title (Note: University will file an Application for Discontinuation of Original Program with the BOR once exact numbers of internal transfers is known, shortly after initiation of the modified program)		
<b>Modified Program Characteristics</b> BOR Approved CIP Code No. 250101; Title of CIP Code Library Science Name of Program: Information Management and Services Degree: Title of Award: Bachelor of Science Modality of Program: On ground    Online    X Combined If "Combined", % of fully online courses? 14.8% Total # Cr Institution Requires to Award the Credential: <b>122</b>		<b>Modified Program Credit Distribution</b> # Cr in Program Core Courses: 18 # Cr of Electives in the Field: 12 # Cr of Free Electives: 6 # Cr Special Requirements (include internship, etc.): 3 <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>39</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>39</b>
Institution's Unit and Location Offering the Program: School of Education		
<b>Institutional Contact for this Proposal:</b> Marianne Kennedy		Title: Interim Provost Tel.: 203-392-5350 e-mail: kennedym4@southernct.edu

## SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION

### Background and Rationale

The Department of Information and Library Science of Southern Connecticut State University is an academic unit offering an undergraduate program leading to the Bachelor of Science in Library-Information Service, graduate programs leading to the Master of Library Science and to the Sixth Year Professional Diploma in Information Studies, and a graduate-level certification program in School Library Media Specialist. The Bachelor of Science in Library-Information Service integrates coursework in information science, library science, and interdisciplinary studies. The Master of Library Science (MLS), accredited by the American Library Association (ALA), offers preparation for careers in all types of libraries and a range of information occupations. Distance learning, leading to the ALA-accredited MLS degree, is licensed and accredited by the Board of Governors, Department of Higher Education, State of Connecticut. Connecticut Certification as a School Library Media Specialist is accredited by NCATE.

### Description of Modification

- 1) increase the number of required courses by making three currently elective courses required;
- 2) add a research-based capstone project requirement (Tier 3 course) to align with the campus' new Liberal Education Program (LEP) program;

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- 3) revise the name of the major from Library-Information Service to Information Management and Services to better articulate the goals of the major; and
- 4) streamline interdisciplinary electives to better match current state of profession skills and knowledge needs.

These changes will now upgrade the current three required courses (ILS 302, ILS 320, ILS 330) [9 credits] and seven electives [21 credits] from a broader and less demarcated range for 21 credits to the following enhanced and more cohesive curriculum:

Required (18 credits):

- ILS 302 - Information Service
- ILS 320 - Technical Services
- ILS 330 - User Services
- ILS 421 - Organization of the Information Center
- ILS 425 - Information Sources
- ILS 440 - Information Service Technology

Electives (12 credits) chosen from:

- CSC 152 - Computer Programming I
- CSC 153 - Computer Programming II
- CSC 104 - Web Technology
- CSC 206 - Web Scripting
- CSC 212 - Data Structures
- CSC 306 - Internet Multimedia
- CSC 443 - Fundamentals of Internet Programming

Electives (6 credits) chosen from one of these cognate areas:

Management

- MGT 105 - Managerial Communication
- MGT 300 - Management and Organization
- MGT 305 - Organizational Behavior
- MGT 415 - Developing Team Managerial Skills

Psychology / Sociology

- PSY 210 - Infant & Child Development
- PSY 215 - Adolescent Development
- PSY 227 - Social Psychology
- PSY 370 - Educational Psychology or
- PSY 371 - Educational Psychology for Early Childhood
- SOC 361 - Urban Sociology
- SOC 203 - Social Organizations

Communication

- COM 205 - Fundamentals of Professional Presentations
- COM 225 - Interpersonal Communications
- COM 253 - Fundamentals of Video Production

Required (3 credits):

Senior Capstone (ILS 490)

The Bachelor of Science in Information Management and Services (formally Library- Information Service) degree program prepares graduates for support positions in libraries. The program, particularly when combined with a second major such as business or computer science or health-related field, also prepares graduates for a variety of information-based careers. A core of six required courses (18 credit hours) and a required Senior Capstone project provide a solid base of professional competencies after the ALA's Core Competences of Librarianship and include foundations of the information profession, information resources, organization of recorded knowledge and information, technological knowledge and skills, organization

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of information and memory institutions, and research in information and library services. The Connecticut Community Technical College (CTC) System (specifically Capital and Three Rivers Community Colleges) and Southern Connecticut State University have established an agreement to expedite the transfer of students from Certificate and Associate Degree Programs in Library Service at the Connecticut CTCs to the Bachelor of Science in Library-Information Service Degree Program at Southern Connecticut State University. This agreement provides the opportunity for Connecticut CTC graduates of Library Service programs to expand their career options by continuing their studies at the baccalaureate level.

#### *Addressing CT Workforce Needs*

The 2002-2012 Connecticut Job Outlook anticipated 64 annual job openings for professional librarians; 100 for library technicians (LTAs); and 78 for library assistants. Looking at the 2010-2011 Edition of the Occupational Outlook Handbook (U.S. Bureau of Labor Statistics), we find that the job outlook for professional librarians is favorable (expected 8% growth in jobs) as a large number of librarians are likely to retire in the coming decade. For the library technicians and assistants is good (expected 10% growth in jobs) due to high turnover.

#### *Using Institutional Strengths, Distinctiveness and/or Location*

Southern offers the Master of Library Science (MLS) degree program. The American Library Association (ALA) has accredited the MLS degree program since 1972. There are approximately 300 students in the MLS program. The faculty who teach in the MLS program will also teach in the undergraduate program.

#### *Transfer Agreements*

There are no new transfer agreements that will be instituted due to the already existing Articulation Agreement that Southern has with Three Rivers CC and Capital CC that permits transfer of courses from their library technical assistant (LTA) programs into Southern's undergraduate LIS major. [The last Articulation Agreement was signed between Chancellor Marc Herzog and President Michael Adanti.]

#### *Avoiding Unnecessary Duplication*

Two community colleges have LIS programs: a certificate program at Three Rivers CC and an associate degree at Capital CC. Southern's program largely draws students who seek a 4-year degree, many with LIS as a second major. Southern's program is research-based in that all majors are required to complete a capstone project that is based on empirical research. There are no other similar degree programs in the state.

Please provide a description/analysis of employment prospects for graduates of this proposed program. The Occupational Outlook Handbook, Bureau of Labor Statistic, projects through 2018 that information and technical services are growth employment areas; with other areas often combined with information, such as management, also growth employment areas. The 2010-2011 Edition of the Occupational Outlook Handbook (U.S. Bureau of Labor Statistics), we find that the job outlook for professional librarians is favorable (an expected 8% growth in jobs) as a large number of librarians are likely to retire in the coming decade. For the library technicians and assistants is good (an expected 10% growth in jobs) due to high turnover, but those with specialized postsecondary library training will fare better. The 2002-2012 Connecticut Job Outlook anticipated 64 annual job openings for professional librarians; 100 for library technicians (LTAs); and 78 for library assistants.

#### **Resources**

##### *Faculty*

The planned rotation schedule for undergraduate courses calls for half the six core courses to be offered in the fall semester and the other half in the spring semester. The elective, ILS 244, which is often taken by students in other programs, will be offered each semester. The Senior Capstone will be offered every semester. This calls for one full-time equivalent faculty member. This will be covered by each faculty member teaching one undergraduate class each year. No new faculty resources are required for this program modification.

ILS has a diverse fulltime faculty. The combined areas of expertise of the faculty range the breadth of the curriculum. The

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fulltime faculty engages in scholarly activities and has made significant contributions to the field. In addition, the faculty is active in a variety of service areas both within and beyond the university.

#### Administration/Leadership

Dr. Chang Suk Kim, department chair, will provide administrative oversight of the program. A faculty member serves as undergraduate program coordinator. There are also a number of faculty members who have served and/or continue to serve in leadership roles for the department and the university who are administrative and leadership resources

#### *Materials for Information and Library Science at Buley Library*

Buley Library has used a library liaison model to assist in collection development for almost ten years. In this model, a representative from the ILS department and a library liaison work collaboratively to ensure that materials selected meet the instructional needs of the students and support the teaching and research objectives of instructors. Departmental liaisons will also encourage recommendations from their teaching peers.

Available budgets for library resources has become challenging. The Library's Materials Budget was reduced by \$222,000 for 2011-2012 and the Library's print book allocation need to be trimmed by approximately 20% this fiscal year. The fiscal year 2011-2012 print book allocation for the subject area of information and library science is \$4,436.21.

Over the five-year period 2005-2009, the library book budget for information and library science has averaged \$13,782 for approximately 200 book purchases per year.

The library regularly purchases numerous print and online publication for the Department on a continuing basis, including, but not limited to:

- Information and Library Science Program Review Report

- Advances in Librarianship

- American Booktrade Directory

- Directory of Special Libraries and Information Centers Online Educational Media and Technology Yearbook

- Encyclopedia of Business Information Sources Online

The library maintains a Standing Order Plan with the American Library Association to ensure that all appropriate publications of the Association are acquired immediately upon publication. This Standing Order Plan results in the acquisition of between 60 and 75 new titles in the field. The library also maintains a Children's Award Winner Plan (funded separately at a \$4000-\$5000 level), which ensures immediate shipment of children's literature upon the announcement of the various award-winning titles. This Plan results in the addition of 200 to 250 items per year to the library's collection. Additional selections of children's literature are made by the Curriculum/Juvenile librarian, which are also funded separately.

The library continues to add to a growing list of online reference titles such as Credo Reference Online (150+ titles), Gale Directory Library (6+ titles), Gale Virtual Reference Library (125+ titles), and Oxford Reference Online (50+ titles).

In addition, during the previous year (2010/2011) Buley Library has spent the following funds on information resources for the Information and Library Science Department:

Databases	\$ 10, 209.00
Print Journals	\$ 5, 364.75
Electronic Journals	\$ 10, 970.44

Overall, the library subscribes to over 150 online databases and 75,000 unique online journal titles. All of the online databases and journals are fully accessible to the entire University community 24/7 from both on and off-campus.

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Selected databases to which the library subscribes that directly relate to the Department's needs are:

Education Research Complete

ERIC

Library, Information Science & Technology Abstracts Library Literature

LISA: Library & Information Science Abstracts WorldCat

The library provides access to over 500 online journal titles specifically focused on library and information science such as American Archivist, American Libraries, Aslib Proceedings, Cataloging and Classification Quarterly, Children's Literature Association Quarterly, Choice, Collection Management and dozens of others.

All of the information resources available at Buley Library are supplemented by an active program of interlibrary loan which allows Buley to borrow materials from any library in the world for use by Southern's students and faculty.

Notwithstanding budget reductions, Buley's collection of e-books continues to grow in size to reflect the current trend in libraries, which is to transition from print to electronic books. This is an area in which the library expects continued expansion in the future.

### Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	First Term, Year __2009__		First Term, Year __2010__		First Term, Year __2011__	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers						
New Students	9	1	8	0	1	1
Returning Students	32	11	33	5	25	4
ACTUAL Headcount Enrollment	42	12	42	5	29	5
ACTUAL FTE per Year	45.27		42.07		26.67	
Size of Credentialed Group for Given Year	15		17		tba	

\*Number provided by R. Riccardi, Management Information & Research, SCSU

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12

Curriculum Details for a Program Modification						
Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				Other Related/Special Requirements		
ILS 302 - Information Service	1		3	ILS 490 Senior Capstone	7	3
ILS 320 - Technical Services	2		3			
ILS 330 - User Services	3		3			
ILS 421 - Organization of the Information Center	4		3			
ILS 425 - Information Sources	5		3			
ILS 440 - Information Service Technology	6		3			
Core Course Prerequisites				Elective Courses in the Field		
				ILS 244 Use of Information Sources	5	3
Total Other Credits Required to Issue Modified Credential						
<b>Learning Outcomes - L.O.</b> <ol style="list-style-type: none"> <li>1. Demonstrate professional and ethical standards in library and information work and show familiarity with the Library Bill of Rights and the Library Code of Ethics</li> <li>2. Exhibit knowledge of the organization of technical services in libraries and familiarity with acquisition processes and cataloging classification systems</li> <li>3. Demonstrate knowledge of reference processes and the process of developing library information programs</li> <li>4. Show understanding of contemporary issues concerning information, libraries, and users</li> <li>5. Show foundational knowledge of a range of information sources and their use</li> <li>6. Demonstrate knowledge and application of learned skills to major technologies used in contemporary information service</li> <li>7. Apply knowledge of resources, users, and systems to real-world library and information problems</li> </ol>						

The Information Management and Services curriculum is based on a coverage of core skills and competencies for a library technical assistant and spans, at the appropriate paraprofessional level, all eight competency areas established by the American Library Association: 1) foundations of the profession, 2) information resources, 3) organization of resources, 4) technology, 5) reference and user services, 6) research, 7) lifelong learning, and 8) organization of information agencies.

The seven student learning outcomes align with the eight competency areas and six required core courses as follows:  
Students who complete the undergraduate major in information management and services will be able to:

☐ Demonstrate professional and ethical standards in library and information work and show familiarity with the Library Bill of Rights and the Library Code of Ethics [1) foundations of the profession]

ILS 302 Introduction to the Information Profession – Introduces the competency area ILS 320 Technical Services– Emphasizes the competency area

ILS 330 User Services– Emphasizes the competency area

ILS 421 Organization of the Information Center– Reinforces the competency area ILS 425 Information Sources– Emphasizes the competency area

ILS 440 Information Service Technology– Emphasizes the competency area Feedback (measurement of competency) is included in ILS 302



## CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR MODIFICATION OF ACCREDITED PROGRAM (Public Higher Education Institutions) - 01/20/12*

☐ Exhibit knowledge of the organization of technical services in libraries and familiarity with acquisition processes and cataloging classification systems [3] organization of resources]

ILS 320 Technical Services– Introduces the competency area

ILS 330 User Services– Emphasizes the competency area

ILS 425 Information Sources– Emphasizes the competency area

ILS 440 Information Service Technology– Emphasizes the competency area

Feedback (measurement of competency) is included in ILS 320

☐ Demonstrate knowledge of reference processes and the process of developing library information programs [2] information resources; 5) reference and user services]

ILS 302 Introduction to the Information Profession – Introduces the competency area ILS 330 User Services – Emphasizes the competency area

ILS 421 Organization of the Information Center – Emphasizes the competency area ILS 425 Information Sources – Emphasizes the competency area

Feedback (measurement of competency) is included in ILS 330

☐ Show foundational knowledge of a range of information sources and their use [2] information resources]

ILS 302 Introduction to the Information Profession – Introduces the competency area ILS 330 User Services – Introduces the competency area

ILS 425 Information Sources – Emphasizes the competency area

Feedback (measurement of competency) is included in ILS 425

☐ Demonstrate knowledge and application of learned skills to major technologies used in contemporary information service [4] technology]

ILS 302 Introduction to the Information Profession – Introduces the competency area ILS 320 Technical Services – Introduces the competency area

ILS 330 User Services – Introduces the competency area

ILS 421 Organization of the Information Center – Emphasizes the competency area ILS 425 Information Sources - Reinforces the competency area

ILS 440 Information Service Technology – Advanced applications introduced Feedback (measurement of competency) is included in ILS 320, ILS 425, ILS 440

☐ Apply knowledge of resources, users, and systems to real-world library and information problems [6] research]

ILS 320 Technical Services – Introduces the competency area

ILS 330 User Services – Introduces the competency area

ILS 421 Organization of the Information Center – Emphasizes the competency area ILS 440 Information Service Technology – Emphasizes the competency area

Feedback (measurement of competency) is included in ILS 320

☐ Show understanding of contemporary issues concerning information, libraries, and users [7] lifelong learning; 8) organization of information agencies]

ILS 302 Introduction to the Information Profession – Introduces the competency area ILS 320 Technical Services – Introduces the competency area

ILS 330 User Services – Introduces the competency area

ILS 421 Organization of the Information Center – Emphasizes the competency area ILS 425 Information Sources – Introduces the competency area



## **CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**

**APPLICATION FOR MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - **01/20/12**

ILS 440 Information Service Technology – Introduces the competency area Feedback (measurement of competency) is included in ILS 421

*INTRODUCED – Students are not expected to be familiar with the content or skill at entering the course. Initial instruction and learning activities focus on basic knowledge, skills, and/or competencies and entry-level complexity. By the end of the course instruction and learning activities concentrate on enhancing and strengthening knowledge, skills, and expanding complexity.*

*EMPHASIZED – Students are expected to possess a basic level of knowledge and familiarity with the content or skills. Instruction and learning activities concentrate on enhancing and strengthening knowledge, skills, and expanding complexity.*

*REINFORCED – Students are expected to possess a strong foundation in the knowledge, skill, or competency. Instructional and learning activities continue to build upon previous competencies with increased complexity.*

*ADVANCED - Students are expected to possess an advanced level of knowledge, skill, or competency. Instructional and learning activities focus on the use of the content or skills in multiple contexts and at multiple levels of complexity.*

*FEEDBACK ON STUDENT PERFORMANCE / ASSESSMENT: Students are asked to demonstrate their learning on the outcome through exercises, projects, tests, etc., and are provided formal Feedback.*

# CT Board of Regents for Higher Education

ACCREDITATION OF A LICENSED PROGRAM - **RESOURCES AND COST ESTIMATES** 1/20/12 Form

Institution SCSU Date April 25, 2012  
 Licensed Program B.S. Library-Information Service

	FY 2013		FY 2014		FY 2015	
ACTUAL Enrollment	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers			0			
New Students	9	5	10	10	15	15
Returning Students			9	5	19	15
ACTUAL Headcount Enrollment	9	5	19	15	34	30
ACTUAL FTE per Year						
PROJECTED FTE (at Licensing)	8.73	2.12	18.43	6.37	32.97	12.74
ACTUAL-PROJECTED	-8.73	-2.12	-18.43	-6.37	-32.97	-12.74
Size of First Credentialed Group			Date of Award of First Credential			

Estimated Program Revenue	FY 2013		FY 2014		FY 2015	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition (Do not include internal transfers)	\$76,869	\$12,810	\$170,393	\$40,352	\$320,159	\$84,738
Program Specific Fees						
Other Rev - Registration Fee	\$275		\$825		\$1,650	
ACTUAL Program Revenue						
PROJECTED Rev. (at Licensing)	\$89,954		\$211,569		\$406,548	
Dif. ACTUAL-PROJECTED	-\$89,954		-\$211,569		-\$406,548	

Estimated Expenditures*	FY 2013		FY 2014		FY 2015	
	Number (as applicable)	Expenditure	Number	Expenditure	Number	Expenditure
Administration (Chair or Coordinator)						
Faculty (full-time, total for program)		\$0		\$0	1.00	\$60,000
Fringe Benefits on Full Time						\$30,900
Faculty (Total for program)	\$0	\$0	-	\$0	1.00	\$90,900
Support Staff		\$0		\$0		\$0
Library Resources Program		\$0		\$0		\$0
Equipment (List if needed)		\$0		\$0		\$0
Other - Advertising of program		\$4,000		\$6,000		\$6,000
Estimated Indirect Cost (e.g. student services, operations, maintenance)		\$0		\$0		
Total Annual Expenditures	0	\$4,000	0	\$6,000	1	\$96,900

\* Note: Capital outlay costs, institutional spending for research and service, etc. can be excluded.

Annotations: There will be no additional personnel expenses incurred for the first two years of this program modification, because currently there is excess capacity in these sections that will be absorbed by the incremental enrollment shown above. The only additional expenses to be incurred will be for more aggressive advertising of this program, particularly in the tri-state (Massachusetts, Rhode Island and Connecticut) area.

If enrollment grows as anticipated above, there will be one additional full time faculty member required in the third year of the modification.

AN APPLICATION FOR  
A PROGRAM MODIFICATION TO A PhD and MS DEGREE PROGRAM IN  
Molecular and Cell Biology

The Graduate School  
The University of Connecticut

Submitted to:

The Board of Governors for Higher Education

State of Connecticut

May 30, 2011

## 1. PROVIDE A DESCRIPTION AND RATIONALE FOR THE PROGRAM MODIFICATION.

The Department of Molecular and Cell Biology (MCB) hosts five Fields of Study (FOS) that offer MS and PhD degrees: Biochemistry, Cell and Developmental Biology, Genetics, Structural Biology and Biophysics (SBB) and Microbiology. We propose renaming one FOS (SBB) to Molecular and Cell Biology (MCB). New students who apply to the Department and current students wishing to do so, will be admitted into this renamed FOS.

To retain the disciplinary focus of the current FOSs, we propose creating four new Areas of Concentration within the new MCB FOS: Biochemistry, Structural Biology and Biophysics; Cell and Developmental Biology; Genetics and Genomics; Microbiology.

The four remaining FOSs will be delisted from the Graduate School web site and rendered dormant to allow students currently in one of the four FOSs to be grandfathered so that they receive their degrees in their chosen FOS.

### Summary:

#### 5 Current FOS

**Structural Biology and Biophysics**  
**Biochemistry**  
**Cell and Developmental Biology**  
**Genetics and Genomics**  
**Microbiology**

#### 1 New FOS with 4 AOC

**Molecular and Cell Biology**  
Structural Biology, Biochemistry and Biophysics  
Cell and Developmental Biology  
Genetics and Genomics  
Microbiology

Departmental authorization to make the FOS change was provided on March 14, 2011 by a vote of the faculty of the Department of Molecular and Cell Biology (attached). That vote approved the following proposal:

1. Rename "Structural Biology and Biophysics" Field of Study to "Molecular and Cell Biology."
2. Create four new Areas of Concentration to retain the disciplinary structure and substance of the existing FOSs. New students will choose an Area of Concentration (AOC) after consulting with their graduate Committee. These AOC are:  
  
Biochemistry, Structural Biology and Biophysics  
Cell and Developmental Biology  
Genetics and Genomics  
Microbiology
3. Retain the remaining Fields of Study to allow current students the option of graduating in their chosen field of study.

The nomenclatural change provides an umbrella descriptor beneath which Areas of Concentration will be subsumed. The rationales for the renaming include the following:

- a. Current biological research is more interdisciplinary than in the past as techniques, approaches and fundamental concepts have bridged disciplines and broadened the knowledge needed to succeed in the biological sciences disciplines. In essence, approaches, technologies and instructional needs cross the traditional disciplines housed in MCB. At the same time, experimental systems, knowledge bases, conceptual differences, scholarly journals, professional organizations and employment opportunities dictate that disciplinary areas be retained as Areas of Concentration which will termed "Graduate Programs" in MCB.

- b. To compete in institutional and national rankings, smaller programs bearing traditional disciplinary monikers are at a disadvantage to larger umbrella programs that overarch several traditional disciplines in science. Traditional disciplines in the Department of Molecular and Cell Biology are quite strong but have suffered from the perception of being individually small. By including our traditional programs under a larger umbrella of "Molecular and Cell Biology" our aggregate strengths become synergistic and the existing cohesiveness of our graduate programs is more clearly reflected. The graduate programs already operate as a unit in graduate training, admissions and laboratory rotations so, from a practical perspective, little will change in Department operations. Much will change in how the Department is presented and perceived from outside while still retaining disciplinary-specific training and scholarship.
- c. There are a number of elements of the reorganization that are consistent with the current academic plan (<http://academicplan.uconn.edu/files/UConnAcademicPlan.pdf>). Indeed, MCB embodies all three of the interdisciplinary themes that represent the goals of the university community that are articulated in the "Our World, Our People, Our Future" document. We make substantial contributions to the "Our World" component via our research expertise in environmental contamination, the health effects of this contamination, and in its remediation. The MCB faculty is a significant strength to the "Our People" theme with our contributions to the understanding of the fundamental roles played by genetic mechanisms in both normal and aberrant development, the manipulation of stem cells for therapeutic applications, the development of immune manipulations that benefit both infectious and autoimmune disease, and numerous other biomedical applications. "Our Future" similarly benefits from the activities of MCB faculty. We are engaged with the private sector in a number of entrepreneurial activities that benefit the state of Connecticut, and train a large number of students who become part of the high technology workforce that remains in the state.
- d. Consolidation of the FOSs will enhance our visibility both within the University, facilitating future collaborations with other academic units, and will broaden our reach within the state and nationally. In a broader sense, molecular and cell biology *sensu lato* is heading in the direction of larger aggregates of individuals with overlapping interests, techniques and training needs. Several Universities have already taken this approach, for example Harvard (<http://www.mcb.harvard.edu>), Yale (<http://www.yale.edu/mcdb/>), Rutgers (<http://lifesci.rutgers.edu/~molbiosci/>), Univ. Michigan (<http://www.mcdb.lsa.umich.edu/grad.php>) and so forth. Not surprisingly, this direction is also being taken by funding agencies (e.g. NSF has a major funding Division called Molecular and Cellular Biosciences - <http://www.nsf.gov/div/index.jsp?div=MCB>), and by students looking for graduate schools. This change will enable us to compete more effectively into the future.

## **2. WHAT IS THE RELATIONSHIP OF THE MODIFICATION TO THE EXISTING APPROVED PROGRAM?**

The change is primarily nomenclatural reflecting a broadening of the interacting populations subsumed in the new FOS "Molecular and Cell Biology." Creating new AOCs within Molecular and Cell Biology will identify existing disciplines with attendant curricula and research clusters. In essence, the curriculum will not change, students will receive the same training and education in research and teaching; courses will retain their identity (See Appendix 2). MCB is already a leader in keeping up with modern trends in molecular and cell biology. This ongoing ferment will not change. The courses and curriculum will remain aligned with traditional disciplines in the sense that students will receive the same education and research opportunities in the individual programs or Areas of Concentrations, and without interruption. We anticipate no change in research direction or training beyond the normal and ongoing improvements that come with the territory.

## **3. PROVIDE AN HISTORICAL CONTEXT FOR THE PROPOSED CHANGE.**

In 1985, our Fields of Study were associated with separate "Sections" of the old "Biological Sciences

Group." Each Section bore the name of a FOS - Microbiology, Genetics & Cell, Biochemistry & Biophysics, Physiology, and Ecology. The Group disproportionated into MCB, PNB and EEB in about 1985. The idea was for MCB to be united by the then accelerating advances in molecular approaches to Biology.

The restructuring provided a grouping that became increasingly "interdisciplinary" through the years and has led to our currently strong position in research and teaching. The recombination also signaled a slow contraction of tenure-track faculty over ~25 years, from 38 members in 1986 to 24 just four years ago; we now number 28 and are promised to slowly recover to 32.

Part of the reason why a frankly strong department has been allowed to shrink is perception. MCB's graduate structure at five major fields of study is strikingly different when viewed from outside versus inside the department. That is, while the Department can discern the microstructure and needs of our traditional disciplines, outside evaluators who control hiring lack the knowledge needed for similar discernment when budget cycles loom large. Our FOSs currently operate as a single graduate program when it comes to admissions, rotations, graduate student labs, funding and even coursework. The distinctions are mainly in curriculum, research focus and disciplinary identity. It is not unusual for students in the same lab to belong to different FOSs that is governed by the direction their research takes.

The major problem with maintaining several strong but small FOSs is that the University views them separately for internal assessments, and then passes FOS information on to ranking bodies (NRC, USNews, etc) that compare our small FOSs with "programs" throughout the country. FOS has no official "national" designation - it is UConn specific - so the groupings are what we make them. The outcome is that MCB programs are generally fractured rather than viewed as a coherent whole leading to erroneous perceptions.

In addition to the issue of size, current trends, as noted above (1. d.), in Molecular and Cell Biology are to subsume traditional disciplines beneath the moniker of "Molecular and Cell Biology" or something similar. These broader trends have emerged from the interplay of a number of complex factors that include the practical (shared equipment and approaches) to the theoretical as all of biology becomes impacted by the influence of high-throughput DNA, RNA and protein sequencing, the unity of life processes and the universality of technical approaches to disparate experimental systems.

The result is that for both scholarly and practical reasons, the time has come to combine Fields of Study into a single entity and create Areas of Concentration as Graduate Programs so that clarity in presentation and academic outcomes may be achieved. The change will align MCB at UConn with other schools throughout the country and will provide a more identifiable presence within the University at large.

#### 4. ENROLLMENT INFORMATION

##### a. Provide the enrollments in the current program's specialized courses for the past two years

Total number of graduate students in MCB:

2009-10 - 176 (92 PhD; 84 MS)

2010-11 - 198 (104 PhD; 94 MS)

Current breakdown by FOS:

Enrollment 2011 - Current MCB Graduate Fields of Study						
#Phd/#MS students in each FOS						
Applied Genomics PSM	Microbial Systems PSM	Cell Biology	Genetics	Biochemistry	Microbiology	SB&B
0/31	0/9	21/27	29/20	17/8	17/8	8/1

**b. Provide estimates of the enrollments in the proposed modified program for the next two years**

We do not anticipate a dramatic change in total graduate enrollment since the programs affected are established. About 90-110 PhD students will be enrolled in the new MCB FOS, plus about 60-70 MS students. These would be in addition to the 40-50 PSM students in Applied Genomics and Microbial Systems Analysis programs that are not included in this FOS change. The anticipated enrollments are:

<b>Enrollment 2012-13 - Proposed Graduate Areas of Concentration</b>			
#Phd/#MS students in each AOC			
SBB&B	Cell Biology	Genetics	Microbiology
25/9	25/22	30/20	20/8

## 5. RESOURCES

**a. Provide a statement of the costs of the existing program and the projected costs for the modified program, including any new costs.**

No additional costs or resources are anticipated to implement the name change.

**b. Provide a list of all faculty members who will be associated with this modified program. Include for each person: (i) degrees held and in what subject(s); (ii) current and prospective teaching assignments; (iii) their full- or part-time status; and (iv) whether they have an exclusive appointment with the off-campus program.**

Total number of FTE (tenure/tenure track) 28.5  
All faculty members are in Storrs

NAME	Degree and Program Affiliation	Teaching	Percent Appt.
ALBERT, ARLENE D	PhD Biochemistry	MCB3011, 3100H, 3895, 5034	100
ALDER, NATHAN	PhD Biochemistry	MCB5896, 5899, 5025	100
ALEXANDRESCU, ANDREI	PhD Biophysics	MCB4009, 5013, 3841W	100
BENSON, DAVID	PhD Microbiology	INTD1784, MCB5679	100
BURKHARD, PETER	PhD Biophysics	MCB3007, 5003, 5015	50% with IMS
CHEN, THOMAS	PhD Cell Biology	MCB3210 5210, 3201	100
COLE, JAMES L	PhD Biophysics	MCB4008, 5008, 5012, 3007, 5003, 5099	100
GAGE, DANIEL J	PhD Microbiology	MCB5621, 3617	100
GIARDINA, CHARLES	PhD Cell Biology	MCB5217,	100
GOGARTEN, J. PETER	PhD Microbiology	MCB3421, 5496, 5471	100
GOLDHAMER, DAVID	PhD Cell Biology	MCB4219	50% with CRB
GRAF, JOERG	PhD Microbiology	MCB3633, 5681, 5896	100
KNECHT, DAVID	PhD Cell Biology	MCB2225, 2210	100

LEE, JULIET	PhD Cell Biology	MCB3841W, 5280, 5299	100
LYNES, MICHAEL A	PhD Cell Biology	MCB4211, 5255, 5299	100
MARCUS, PHILIP	PhD Microbiology	MCB3246, 5240	50% with BBC
MELLONE, BARBARA	PhD Genetics & Cell	MCB5449, 2410, 5499	100
NELSON, CRAIG	PhD Genetics	MCB5499, 5243, 1401	100
NOLL, KENNETH M	PhD Microbiology	MCB5896, 3601W	100
NYHOLM, SPENCER	PhD Microbiology	MCB3841W, 5896, 5699	100
O'NEILL, MICHAEL	PhD Genetics	MCB3412, 5429, 1405, 5427	100
O'NEILL, RACHEL	PhD Genetics	MCB3412, 5429, 1405, 5427	100
PAPKE, ROBERTSON	PhD Microbiology	MCB3841, 5699	100
PASK, ANDREW	PhD Genetics	MCB2410, 5499, 5899	100
REITER, WOLF-DIETER	PhD Biochemistry	MCB3010, 5011, 5896	100
ROBINSON, VICTORIA	PhD Biochemistry	MCB2289, 4009, 5013	100
STRAUSBAUGH, LINDA	PhD Genetics	MCB2400, 5490, 5896, 5900, 5429, 5454	100
TESCHKE, CAROLYN	PhD Biochemistry	MCB4026, 5002, 5099	100
ZHANG, PING	PhD Genetics	MCB2413, 5452, 5896	100
ZWEIFACH, ADAM	PhD Cell Biology	MCB2210, 5896	100

Curricula vitae of each of the proposed program faculty are in Appendix A.

**c. Describe the library facilities available to the students enrolled in this modified program.**

No additional facilities are required to implement the name change.

**d. Indicate what provisions have been made for student access to adequate instructional facilities, equipment, academic advising, and other necessary instructional support services.**

No additional resources, facilities equipment or other instructional support services are required to implement the name change.

**6. PROFESSIONAL ACCREDITATION (IF APPLICABLE)**

NA



## **Appendix A — Curricula Vitae of Faculty**

## Appendix B — Graduate Curricula

### "Old" Graduate Curricula vs. "New" Curricula

The "old" curricula for each of the existing FOS are shown below. These will now be the "new" curricula for the new AOCs. No changes are anticipated, except those that take place in the normal process of curriculum development. That is, the old FOS curricula will be substantially the same as the new AOC curricula.

### Biochemistry curriculum

#### 1. Course work for the Ph.D.:

Ph.D. students with a Masters degree should take 22 - 24 credits total course work including the requirements given below. All other students need a total of 44 - 48 credits of coursework, comprising at least 22 - 24 credits of course work plus at least 15 credits of GRAD 6950. All students should participate in the Departmental Graduate Seminar (MCB 5899) and present their research results once each year while in the program. In addition, graduate students are encouraged to take a rotation of one credit of research (MCB 6897) during each of their first two semesters in the program. No foreign language is required for the Ph.D. in Biochemistry.

#### 2. Background course required:

MCB 3010/5001 (undergraduate or graduate biochemistry) or equivalent. Students with insufficient background in biochemistry are encouraged to take MCB 5001 (or its equivalent without a lab as MCB 5896-040) during their first semester.

Courses required:

MCB 5012- Foundations of Structural Biochemistry

MCB 5013- Structure and Function of Biological Macromolecules

Additional course requirements:

#### 2. Background course required: At least one course from column A and one from column B

A	B
MCB 5008	MCB 5217
Theory of Biophysical Techniques	Biosynthesis of Nucleic Acids and Proteins
MCB 5015	MCB 5621
X-ray Structure Analysis	Molecular Biology and Genetics of Prokaryotes
MCB 5025	MCB 5423
Structure and Function of Biological Membranes	Experiments in Molecular Genetics
MCB 5035	MCB 5426
Protein Folding	Genetic Engineering and Functional Genomics
MCB 5038	MCB 5034
Techniques in Structural Biology	Human Metabolism and Disease
CHEM 5337	MCB 5636
Optical Methods of Analysis	Industrial Microbiology
	MCB 5240
	Virology
	MCB 5472
	Computer Methods in Molecular Evolution
	MCB 5679
	Microbial Physiology
	MCB 5280
	Advanced Cell Biology
	PHAR 5471
	Advanced Pharmacology I

## **Cell Biology curriculum**

### **REQUIRED COURSES**

MCB 5217 Gene Expression  
MCB 5280 Advanced Cell Biology  
MCB 5896-062 Cell Biology of Membrane Proteins  
MCB 5899-002 Introduction to Faculty Research  
MCB 5899-001 Graduate Seminar  
MCB 6897 Research

### **OTHER COURSES**

#### **Cell and Developmental Biology**

MCB5240 Virology  
MCB 4219 Developmental Biology  
MCB 5255 Cellular Immunology  
MCB 5210 Molecular Endocrinology  
MCB 5681 Mechanisms of Bacterial Pathogenicity  
PNB 5347 Electron Microscopy  
PNB 5351 Advanced Electron Microscopy

#### **Biochemistry/Biophysics**

MCB 5001 Biochemistry  
MCB 5008 Theory of Biophysical Techniques  
MCB 5011 Enzyme Structure and Function  
MCB 5012 Foundations of Structural Biochemistry  
MCB 5013 Structure and Function of Biological Macromolecules  
MCB 5002 Biochemistry Laboratory  
MCB 5025 Structure and Function of Biological Membranes  
MCB 5034 Human Disease and Metabolism  
MCB 5038 Techniques in Structural Biology  
MCB5896-041 Biochemistry  
MCB 5896 Introduction to Mathematical Biophysics  
MCB 5896-059 Special Topics : Structure and Dynamics of Cellular Machines

#### **Genetics**

MCB 5434 Molecular Aspects of Genetics  
MCB 5621 Molecular Biology and Genetics of Prokaryotes  
MCB 5427 Laboratory Techniques in Functional Genomics (Lab)  
MCB 5426 Genetic Engineering & Functional Genomics  
MCB 5449 Molecular Genetics  
MCB 5452 Problems in the Genetics of Eukaryotes

#### **Seminars**

MCB 5299 Current Topics in Cell Biology (Journal Club)  
MCB 5893 Special Topics in Cellular and Molecular Biology  
MCB 5896-051 Seminar in Genetics  
MCB 5896-042 Frontiers in Applied Genomics (Seminar)

## Genetics and Genomics curriculum

In addition to a foundation of knowledge in genetics and genomics (Category I), modern genetics research often requires integrative approaches that include biochemistry and structural biology (Category II), and cell and developmental biology (Category III). Ph.D. candidates and Masters by coursework students in Genetics and Genomics must complete a total of 6 courses from the following list of core courses with a grade of B or higher, and at least one course must come from each of the three categories. This is the basic course requirement for the program, and occurs within the total coursework credits required by the Graduate School. Most students will take additional courses beyond the required 6 to complete total credit requirements by the Graduate School (44-48 total credits, including coursework and research credits for Ph.D. and 24 for Masters).

### CATEGORY I. GENETICS AND GENOMICS

MCB 4416: Forensic Applications of DNA Science (3)  
MCB 5426: Genetic Engineering & Functional Genomics (3)  
MCB 5432: Molecular Genetic Approaches to Developing Systems (2 units)  
MCB 5449: Molecular Genetics (3 units)  
MCB 5452: Problems in the Genetics of Eukaryotes (3)  
MCB 5454: Molecular Aspects of Genetics (2)  
MCB 5472: Computer Methods in Molecular Evolution (3)  
MCB 5499: Genetics, Development and Evolution (2)  
MCB 5621: Molecular Biology & Genetics of Prokaryotes (3)  
MCB 5681: Mechanisms of Bacterial Pathogenicity (3)  
EEB 5348: Population Genetics (3)

### CATEGORY II. BIOCHEMISTRY AND STRUCTURAL BIOLOGY

MCB 5012: Structural Biochemistry (3)  
MCB 5013: Structure and Function of Biological Macromolecules (3)  
MCB 5022: Human Disease (3)  
MCB 5035: Protein Folding (3)  
\*MCB 5217: Biosynthesis of Nucleic Acids and Proteins (3)  
MCB 5299: Structure and Function of Biological Membranes (3)

### CATEGORY III. CELLULAR AND DEVELOPMENTAL BIOLOGY

\*MCB 4219: Developmental Biol. (3) OR  
MCB 5240: Virology (3)  
MCB 5255: Cellular Immunology (3)  
\*MCB 5280: Advanced Cell Biology (3)  
ADDITIONAL ELECTIVES

### GENETICS AND GENOMICS

MCB 5471: Molecular Evolution and Systematics (1)  
MCB 5896: Investigation of Special Topics (max 6)

### BIOINFORMATICS

MCB 5896 Investigation of Special Topics (max 6)  
BME 6086 Special Topics In Biomedical Engineering (max 6)  
CSE 5800/ BME 5800: Bioinformatics (3)  
CSE 5095 Special Topics in Computer Science and Engineering (3)  
STAT 6425: Seminar in Applied Probability (max 6)

## **Structural Biology and Biophysics curriculum**

### **Masters Degree**

Background course: MCB 3010/5001 (undergraduate or graduate biochemistry) or equivalent. Students with insufficient background in biochemistry are encouraged to take MCB 5001 (or its equivalent without a lab as MCB 5896-040) during their first semester.

MCB 5012: Foundations of Structural Biology

MCB 5013: Structure and Function of Biological Macromolecules

Three additional courses from the list below

Plan A - 15 total credits and a thesis

Plan B - 24 total credits of course work and a final examination. A laboratory course or research credit is highly recommended. For the Plan B Masters, the three core courses plus three other courses from the approved list are required. A total of 24 credits is needed. A written exam for exiting Masters students will be administered by a committee of 3 including the major advisor. Questions are sometimes solicited from other faculty who have had direct interaction with the student. The exam is usually a take home exam tailored for the particular student's current or long term interests.

### **PhD Degree**

Course requirements

Courses available for the PhD or Masters in Biophysics

MCB 5002 Advanced Biochemistry Laboratory (Lab)

MCB 5008 Theory of Biophysical Techniques

MCB 5011 Enzyme Structure and Function

MCB 5012 Foundations of Structural Biology

MCB 5013 Structure and Function of Biological Macromolecules

MCB 5015 X-ray Structure Analysis

MCB 5616 Experiments in Bacterial Genetics (Lab)

MCB 5217 Biosynthesis of Nucleic Acids and Proteins

MCB 5019 X-ray Diffraction Laboratory

MCB 5423 Experiments in Molecular Genetics (Lab)

MCB 5025 Structure and function of biological membranes

MCB 5035 Protein Folding

MCB 5038 Techniques in Structural Biology

MCB 5076 Biomolecular NMR Spectroscopy

MCB 5449 Molecular Genetics

MCB 5472 Computer Methods in Molecular Evolution

MCB 5280 Advanced Cell Biology

All graduate students must follow the rules and regulations of the Graduate School as outlined in the Graduate Catalog in the Standards and Degree Requirements section, and are strongly encouraged to form an Advisory Committee as soon as possible. Upon review of the student's background and academic interests, the Advisory Committee may modify the requirements for obtaining a degree in Structural Biology / Biophysics.

## **Microbiology Curriculum**

The requirements for the Ph.D in Microbiology conform to the requirements of the Graduate School as set forth in the Graduate School Catalog. These requirements include approximately 44 to 48 academic credits, a general examination, and a final examination based on the dissertation (dissertation defense). A plan of study listing courses to be completed for the degree must be filed with the Graduate School before twelve credits are completed. These and other requirements of the Doctor of Philosophy degree are described in the Graduate Catalog.

The number of courses and research credits that comprise the required 44-48 credits are determined by the students and their advisors. Typically about one-half of these credits are from coursework. Courses in microbiology, genetics and biochemistry are used to fulfill this requirement. Appropriate courses outside these areas can also be used.

### **General Examination format**

A General Examination must be passed as a requirement for the Ph.D. It consists of two parts in the Microbiology program: an examination of general knowledge of Microbiology (the preliminary examination, given in written and/or oral portions) and an examination based upon thesis-related research (the related examination). Finally, students must defend their dissertation (the oral defense) at the end of their research program.

### **Plan A and B MS Degree**

The requirements for the M.S. degree in Microbiology conform to the requirements of the Graduate School as set forth in the Graduate School Catalog. Master's degrees may be earned under either of two plans as determined by the advisory committee. The first plan emphasizes research, the second requires comprehensive understanding of a more general character.

Plan A requires not fewer than 15 credits of advanced course work and the writing of a thesis. Plan B requires not fewer than 24 credits of advanced course work, a final examination, but no thesis. In either case, advisory committees may require more than the minimum number of credits. Check the Graduate catalogue for details on transferring credits, time limits and other information.

### **Microbiology-related courses generally taken by all students:**

MCB 5895 Section 20 - Independent Studies - Rotation course for Ph.D. students

MCB 5896 Seminar in Microbiology

MCB 5621 - Molecular Biology and Genetics of Prokaryotes

MCB 5681 - Mechanisms of Bacterial Pathogenicity

MCB 5896 section 51 - Introduction to Molecular Evolution and Bioinformatics

MCB 5899 section 002 Introduction to faculty research MCB 5899 section 001

GRAD 5910 Section 002 - Responsible Conduct in Research

MCB 5217 Biosynthesis of Nucleic Acids and Proteins

MCB5896-041 Biochemistry

MCB5679 Microbial Physiology

MCB5235 Applied Microbiology

MCB5240 Virology

MCB5616 Experiments in Bacterial Genetics

MCB 3841 Bacterial Diversity (may be taken for graduate credit)

MCB 5255 Cellular Immunology

EEB 5348: Population Genetics (3)

PNB 5347 Electron Microscopy

PNB 5351 Advanced Electron Microscopy

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

APPLICATION FOR MODIFICATION OF ACCREDITED PROGRAM (Public Higher Education Institutions) - 01/20/12

## SECTION 1: GENERAL INFORMATION

<b>Institution:</b> Southern Connecticut State University		<b>Date of Submission to BOR Office:</b> April 19, 2012	
Most Recent NEASC Institutional Accreditation Action and Date: anticipated April 2012			
<b>Original Program Characteristics</b> CIP Code No. 131001 DHE#: 04580 Name of Program: Initial Special Education Certification Title of Award: Initial Special Education Teacher Certification Modality of Program: X On ground Total #Cr Required to Award the Credential: 42.5		<b>Original Program Credit Distribution</b> # Cr in Program Core Courses: 30.5 # Cr Special Requirements (include internship, etc.): 12 <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>42.5</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>42.5</b>	
<b>Type of Program Modification Approval Being Sought:</b> X Offering of Program at Off-Campus Location (location other than main campus): <b>East Lyme, CT</b>			
<b>Modified Program Characteristics</b> CIP Code No. 131001 Name of Program: Initial Special Education Certification Title of Award: Initial Special Education Teacher Certification Modality of Program: X On ground Total #Cr Required to Award the Credential: 42.5		<b>Modified Program Credit Distribution</b> # Cr in Program Core Courses: 30.5 # Cr Special Requirements (include internship, etc.): 12 <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>42.5</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>42.5</b>	
Institution's Unit and Location Offering the Program: School of Education, SCSU; proposing to offer same program as in main campus at the East Lyme satellite location			
<b>Other Program Accreditation:</b> <ul style="list-style-type: none"> <li>State Department of Education initial teacher certification, Comprehensive Special Education K-12</li> </ul>			
<b>Institutional Contact for this Proposal:</b> Marianne Kennedy		<b>Title:</b> Interim Provost	<b>Tel.:</b> 203-392-5350 <b>e-mail:</b> kennedym4@southernct.edu

## SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION

### Background and Rationale

#### *Addressing CT Workforce Needs and/or the Wellbeing of CT Society/Communities*

In Circular Letter: C-7 issued by Stefan Pryor, Commissioner of Education on March 7, 2012 Comprehensive Special Education K-12 was listed among the Teacher Shortage Areas for the 2012-13 School Year. The Condition of Education in Connecticut (2011) lists Comprehensive special education among the teacher shortage areas that have persisted for five years. This report also indicates that approximately 10% of available special education teaching positions remained unfilled and that approximately an additional 15% were filled by individuals holding temporary certifications i.e., individuals having not yet completed an approved special education preparation program. Therefore, many of the 64,000 Connecticut public school students who required special education services in 2009-2010 were not receiving adequate services or were being taught by individuals without the appropriate certification. The proposed off-site program would produce well-trained special educators to fill the employment gap and make quality educational services available to students eligible for special education services.

#### *Description of Modification*

The only modification is that this teaching certification program will be offered at an off-site location (E. Lyme). There are no modifications to curriculum or admissions requirements. This program will not result in the granting of a degree. Program completers will be eligible for recommendation to the State Department of Education for initial teaching certification, Comprehensive Special Education K-12 – the same recommendation made for completers of the on-campus program.

## CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR MODIFICATION OF ACCREDITED PROGRAM (Public Higher Education Institutions) - 01/20/12*

### *Making Use of Institution's Strengths, Distinctive Character and/or Location*

This program uses the same State Department of Education approved program that is offered on the main campus; the same sequence of courses will be offered. Faculty members from the main campus have the expertise to teach courses in the program are available to teach courses at the off-site location. Assessments for maintaining program accreditation from the Council of Exceptional Children are in place for the main campus program and will be equally applicable for the off-site program as well

### *Transfer Agreements*

There are no transfer agreements with other institutions. Any transfer and articulation policies adopted by the BOR for the Connecticut State Colleges and Universities will be applicable to this program.

### *Avoiding Unnecessary Duplication*

Central Connecticut State University (CCSU) offers a program for Comprehensive Special Education certification at the graduate level as does SCSU. The programs at SCSU and CCSU draw students from different geographic areas than the proposed off-site program at E. Lyme. This program would not negatively impact the CCSU or SCSU programs

### *Employment Prospects for Graduates*

The employment prospects for graduates of the program are excellent. Special education is a designated shortage area within the State of Connecticut. The latest published data documents approximately 25% of available special education teaching positions are either unfilled (10%) or filled by individuals who have not yet completed an approved special education teacher preparation program (15%). The certification which students receive from the State of Connecticut is reciprocal with most states. Special education is a shortage area throughout the nation so graduates will have a certification that is portable if they subsequently move out of Connecticut.

### **Description of Resources Needed**

Classroom space in East Lyme is the only physical resource needed. This space would be provided by the East Lyme Middle School, which already provides office and classroom space for other off-site programs. Administrative support needs include a UA (budgeted for the maximum amount allowable, \$24,000) and three credits of faculty reassigned time each semester. Funds are needed to pay stipends for cooperating teachers and mileage for full-time faculty traveling to teach at the E. Lyme site.

### **Other Considerations**

The State Department of Education has approved this certification program for delivery on-campus and indicated that as long as the program offered off-site was the same, program completers would be eligible for certification.



# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR MODIFICATION OF ACCREDITED PROGRAM (Public Higher Education Institutions) - 01/20/12*

Curriculum Details for a Program Modification			
Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs
<b>Program Core Courses</b>			
SED 225 — Introduction to Exceptional Individuals	1		3
SED 235 — Intro to Early Childhood Special Education	1	SED 225	3
SED 325 — Curriculum and Methods for Exceptional Individuals	2, 3	SED 225	3
SED 335 — Teaching Individuals with Physical Disabilities	2, 3	Dept. Permission	3
SED 365 — Basic Principles of Academic Assessment & Remediation	3, 6	Dept. Permission	3
SED 375 — Classroom Management Techniques in Educational Settings	7	Dept. Permission	3
SED 435 — Language Arts for Exceptional Individuals: Assessment & Instruction	2, 3, 6	SED 325	3
SED 445 — Regular Education Initiative/Collaboration/Consultation	4	Dept. Permission	3
SED 449 – From Theory to Practice : A school-Based Exp. In Special Ed	1, 2, 3, 5, 6, 7	SED 225, 235, 325, 335, 365, 375, 435	3
SED 452 Seminar in Reflective Practice	5	Co-requisite EDU 300/400	2
EDU 300 Student teaching I	1-7	Dept. Permission	6
400 Student teaching II	1-7	EDU 300, Dept. Permission	6
IDS 471 English Language Learners in the Classroom	2, 3	Praxis I passed or waived, SED 435	1.5
<b>Total Other Credits in Program</b>			<b>42.5</b>
<b>Learning Outcomes - L.O.</b> <ol style="list-style-type: none"> <li>Understand the similarities and differences in human development and the characteristics between and among individuals with and without exceptional learning needs.</li> <li>Demonstrate ability to individualize instruction to provide meaningful and challenging learning for individuals with exceptional learning needs</li> <li>Select, adapt, and use a repertoire of evidence-based instructional strategies to promote positive learning results in general and special curricula and to modify learning environments appropriately for individuals with exceptional learning needs</li> <li>Develop collaborative skills to serve as a resource to general educators and special service providers to facilitate the integration of individuals with exceptional learning in general education environments and across settings and services.</li> <li>Become familiar with and practice within the CEC Code of Ethics and other standards of the profession.</li> <li>Use the results of assessments to help identify exceptional learning needs and to develop and implement individualized instructional programs, as well as to adjust instruction in response to ongoing learning progress.</li> <li>Use nonaversive techniques and evidence-based practices to support targeted behavior, maintain attention, and enhance academic and social competence of individuals with exceptional learning needs</li> </ol>			

# CT Board of Regents for Higher Education

ACCREDITATION OF A LICENSED PROGRAM - **RESOURCES AND COST ESTIMATES** 1/20/12 Form

Institution SOUTHERN CONNECTICUT STATE UNIVERSITY

Date \_\_\_\_\_

Licensed Program Comprehensive Special Education

ACTUAL Enrollment	FY 2013		FY 2014		FY 2015	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers						
New Students (all part time)		15		20		20
Returning Students						
ACTUAL Headcount Enrollment	0	15	0	20	0	20
ACTUAL FTE per Year						
PROJECTED FTE (at Licensing)						
ACTUAL-PROJECTED	0		0		0	
Size of First Credentialed Group			Date of Award of First Credential			

Estimated Program Revenue	Year 1 - FY 2013		Year 2 - FY 2014		Year 3 - FY 2015	
Please refer to Annotation	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition (Do not include internal transfers)		\$184,343		\$427,860		\$508,500
Program Specific Fees						
Other Rev. (Registration Fee)	\$4,125		\$6,325		\$6,600	
ACTUAL Program Revenue						
PROJECTED Rev. (at Licensing)	\$188,468		\$434,185		\$515,100	
Dif. ACTUAL-PROJECTED	-\$188,468		-\$434,185		-\$515,100	

Estimated Expenditures*	Year 1 - FY 2013		Year 2 - FY 2014		Year 3 - FY 2015	
	Number (as applicable)	Expenditure	Number	Expenditure	Number	Expenditure
Administration (Chair or Coordinator)						
Faculty (full-time, total for program)						
Faculty (Adjuncts)		\$33,750		\$59,400		\$49,131
Support Staff		\$48,750		\$48,331		\$58,426
Library Resources Program						
Equipment (List if needed)						
Other (e.g. student services)		\$24,000		\$29,100		\$29,200
Estimated Indirect Cost (e.g. student services, operations, maintenance)						
Total Annual Expenditures		\$106,500		\$136,831		\$136,757

\* Note: Capital outlay costs, institutional spending for research and service, etc. can be excluded.

## Annotation:

Enrollment is projected for three cohorts : #1 @ 15 students; #2 @20 students and #3 at 20 students. Cohorts overlap in the Fall of 2013 and Fall of 2014 semesters, during which period total enrollments grow to 35 and 40 students respectively. University provides full details of each line in this proforma budget.(all details available to reviewers on request)

**EASTERN CONNECTICUT STATE UNIVERSITY  
DEPARTMENT OF INTERCOLLEGIATE ATHLETICS, INTRAMURALS AND RECREATION**

**STATEMENT OF ATHLETIC PHILOSOPHY AND  
PRINCIPAL OF SPORTSMANSHIP AND ETHICAL CONDUCT**

**PRESENTED TO THE BOARD OF REGENTS  
CONNECTICUT STATE COLLEGES AND UNIVERSITIES  
APRIL 2012**

**Department Philosophy**

By placing its highest priority on the overall quality of the liberal arts educational experience, Eastern Connecticut State University's Department of Intercollegiate Athletics, Intramurals & Recreation seeks to integrate its programs and goals with academic and developmental objectives and to assure the assimilation of student-athletes into the general student body. To achieve this end:

- Eastern offers a broad-based, Division III athletic program aimed at safeguarding the amateur aspects of the various sports and maintaining the proper perspective of athletics within the academic mission of the University.
- Eastern encourages male and female students from all backgrounds to participate in some component of the athletic program to develop their full potential, so they may contribute more effectively to our society and live richer, fuller lives.
- Eastern places emphasis on good sportsmanship on the part of student athletes, both when engaged in competition and when supporting their peers from the stands.
- Eastern offers a quality co-curricular athletic program positively affects the health and well-being of the student population, either directly through participation, or indirectly through spectatorship and school spirit.

**NCAA Constitution 2.4 – Principle of Sportsmanship and Ethical Conduct**

For intercollegiate athletics to promote the character development of participants, to enhance the integrity of higher education and to promote civility in society, student-athletes, coaches, and all others associated with these athletics programs and events should adhere to such fundamental values as respect, fairness, civility, honesty and responsibility. These values should be manifest not only in athletics participation but also in the broad spectrum of activities affecting the athletics program. It is the responsibility of each institution to: *(Revised: 1/9/96)*

(a) Establish policies for sportsmanship and ethical conduct in intercollegiate athletics consistent with the educational mission and goals of the institution; and *(Adopted: 1/9/96)*

(b) Educate, on a continuing basis, all constituencies about the policies in 2.4-(a). *(Adopted: 1/9/96)*

**Summary Report:**  
**Early Childhood Higher Education Program Approval and Early  
Childhood Teacher Credential Pilot**

**Dr. Deborah Adams, CT State Department of Education**  
**Dr. Merle Harris, CT Board of Regents**  
**Dr. Regina Miller, Independent Consultant**

## Introduction

One of the greatest challenges facing education is addressing the gap between high and low achieving students. Many states are turning to early childhood education as a critical component of a multi-faceted solution. Connecticut has a rich history of promoting access to early childhood education as a foundation for future school and life success. For example, Connecticut utilizes funding through federal and state Head Start, the federal and state Child Day Care program, and the state School Readiness Grant program to provide more than 14,000 children, birth through five, with opportunities to engage in experiences that foster early learning and development. The design of these programs demands increased levels of accountability and positive learning outcomes for all children, including those with diverse needs. Meeting accountability expectations has implications for all components that encompass a quality early childhood education system, especially in the teacher preparation and workforce domain.

In alignment with those expectations, higher education programs must prepare a workforce that is well qualified and ready to meet the needs of all children, including those from diverse backgrounds and with multiple influencing factors that affect their learning and development (Bueno, Darling-Hammond, & Gonzales, 2010). Connecticut collects information on the early childhood workforce in publically funded programs through the CT Professional Registry. Data from the CT Professional Registry showed that many in the ECE workforce lacked college preparation and this provided the impetus to develop a pilot project to address standards alignment between early childhood higher education non-certification preparation programs and the early childhood national standards for educator preparation.

This work began in 2007, but gained momentum with the passage of Public Act 11-54 launching the pilot project to design a college program approval process leading to an Early Childhood Teacher Credential (ECTC). The ECTC will be earned through approved higher education programs particularly designed for those working or planning to work in publically funded early childhood education programs. In addition, an ECTC pathway was created for those currently working in the field or who graduated from colleges that had not undergone institutional approval. These individuals may participate in an individual professional portfolio review.

This report traces the history of the development of the ECTC, provides information about the ECTC pilot project, and recommendations for statewide implementation.

## Historical Context

In 2008, the Workforce Sub-Committee of the Early Childhood Cabinet developed a framework to address PA 05-245 – (all teachers in School Readiness funded programs to hold a bachelor degree by 2015). The sub-committee looked at the potential of meeting the legislative goal from the perspective of the educational pipeline, from the number of bachelor's degree programs and the salary for teachers holding a bachelor's degree in the early childhood workforce. It found that the 2015 goal was unrealistic due to the lack of four-year teacher preparatory programs, as well as the fact that the low salaries might discourage entry into this field. The Workforce Sub-

Committee report submitted to the Early Childhood Cabinet in June of 2008 requested a legislative change to allow 50% of teachers to hold a bachelor degree and 50% to hold an associate degree. In addition, there was a proposal that an Early Childhood Teacher Credential (ECTC) be developed.

Legislation was proposed in 2009, known as the 50/50 bill that did not pass. Also in 2008-2009, the Early Childhood Teacher Credential workgroup with representatives from higher education faculty, state agencies, the head start collaboration office, CT Charts-A-Course, CT Association for the Education of Young Children (CT AEYC), the Hartford Area Childcare Collaborative, and child care providers worked to develop higher education program standards and teacher competencies, an alternative route, a program approval process, including practicum experience requirements, associate level to bachelor level transfer, and out-of-country and out-of-state candidate requirements. This work was presented to the Commissioners of Higher Education and Education in June of 2009. In the 2011 session, Senator Beth Bye proposed legislation similar in concept to the previous 50/50 bill of 2009, which passed and is now known as PA 11-54. This new legislation expanded the teacher qualification requirements to include both the state funded School Readiness grant program and the state funded Child Day Care contracted programs. Through this expanded language it is now required for infant, toddler, and preschool teachers in these state funded programs to meet the requirements whereas earlier it only affected preschool teachers in the School Readiness grant program.

In the fall of 2010, the State Department of Education, supported by the Office of Workforce Competitiveness, launched a pilot to test a higher education institutional program approval process that would lead to an ECTC for program graduates. The pilot would indicate how prepared higher education institutions would be to meet the standards developed in 2009 and gather data regarding the approval process. Correspondence from the Department of Education went out to the original 2008-2009 credential workgroup, inviting participants to review the earlier work and make revisions based on changes made by the National Association for the Education of Young Children (NAEYC) in their standards for college program approval and to respond to the impending new legislation. This again was a representative committee with members from the Early Childhood Alliance, college faculty from two-year and four-year institutions, CT AEYC, Charts-A-Course, the Hartford Area Collaborative, and Departments of Higher Education and Education.

In March 2011, an invitation to all two-year and four-year colleges was sent from Commissioner of Education, George Coleman, requesting participation in the pilot phase of program approval. To date the following colleges and institutions are engaged in the ECTC pilot project: at the bachelor level, University of Connecticut, Charter Oak State College, Post University, Goodwin College; at the associate level, Goodwin College, Tunxis Community College, Gateway Community College, and Housatonic Community College. The final steps in the approval processes are under discussion with the Office of Financial and Academic Affairs for Higher Education, the Connecticut Board of Regents for Higher Education, and the Department of Education.

### Process and Procedures

The colleges noted above submitted an application to the Department of Education for program review showing program alignment to the NAEYC standards and assessments to measure the progress of students. A team reviewed the applications and provided ongoing technical assistance. The review team utilized processes similar to those used in NAEYC college program approval, comparing submitted materials to the standards, looking for alignment of artifacts with standards, analyzing coursework content with competency development, and evaluating key assessments across the early childhood program to maintain alignment between program outcomes and standards through an ongoing competency development lens. Since the colleges are at the beginning stages of revising their programs in alignment with the standards, data collection is anticipated for the fall 2012 semester.

The Committee met throughout the year, to revise and plan next steps in the development of the ECTC. The 2009 ECTC Process and Procedure document was revised to reflect up-to-date procedures as discussed in full committee meetings (see attachment).

### Findings

As this work evolved over time through the engagement of multiple stakeholders in the development process, there are some issues to be considered. For example:

- There is general support among early childhood education professionals in programs that deliver early childhood services and in higher education degree programs for a focus on the quality of education preparation for both the current and future workforces. However, the concern remains that without adequate compensation, recruitment and retention of highly competent educators will continue to be an issue.
- The ECTC application and review process encouraged reflection on the part of early childhood coordinators and faculty. Many program modifications occurred which should have a positive impact on the quality of the workforce as colleges utilize standards and competency measures. With this shift, it will be possible to gather data that demonstrates graduates from an approved college using standards and competency measures are prepared and will identify where program changes are needed. A system to collect data across programs in a uniform manner will need development.
- More resources are needed to assure that fieldwork is appropriately mentored. This is particularly true if fieldwork experiences are to be allowed at an individual's work site and necessary for those currently supporting themselves and families while pursuing a degree.
- Additional permanent resources are needed to provide the infrastructure and staffing at the State Department of Education to support the technical assistance process, the candidate application and review process for the individual professional portfolio review, and the ECTC issuance process with data collection systems.

### Recommendations and Future Implementation

If Connecticut is committed to education reform then both the current and future workforce must hold a prominent place in reform considerations. Although this report only addresses teacher preparatory institutions, future work in the area of in-service delivery is a necessity as well. The following recommendations and future implementation considerations resulted from the experience of the ECTC review team as well as interactions with collaborators in the development of the ECTC and the program approval pilot. To continue the college review process guiding colleges toward standards accountability and early childhood competency development, supports in the form of funding and cross-agency collaboration are needed to:

- Encourage Connecticut's public university system to develop consortium Bachelor level models of course delivery whereby universities would share courses and faculty expertise. This would provide on-line and on-ground access to early childhood teacher preparation programs across the state without the need for students to adhere to a traditional route.
- Develop the State Department of Education infrastructure to review, approve and provide technical assistance for program development. Colleges and universities interested in the next application process are Mitchell, St. Joseph, University of Hartford, and the remaining NAEYC approved community colleges in the state.
- Create or integrate data systems across colleges and state agencies to track data on the progress of candidates while engaged in the program as well as after they leave the program.
- Review individual candidate applications for ECTC. While the candidates graduating from approved colleges will be issued an ECTC, there will be many candidates graduating from non-approved college programs and individuals in the existing workforce wishing to apply for the ECTC. The individual professional portfolio review process will need fiscal support.
- Support the workforce in obtaining an ECTC through an approved college pathway. Scholarships and incentives will be needed for individuals required under PA 11-54 and Raised Bill 39 to meet the criteria.
- Develop coaching and/or mentoring support between the colleges and the sites in which students are conducting their fieldwork experiences. The current capacity in colleges to adequately prepare candidates in diverse fieldwork settings is insufficient, thus leaving the critical transfer of theory to practice to chance. There is a need for more formal and supervised coaching in fieldwork experiences to assist candidates in this critical stage of competency development.



**Early Childhood College Program Approval Processes Leading to  
an Early Childhood Teacher Credential**

**March 2012**

**Developed by:**

**The Early Childhood Education Standards and Program Approval Program  
Committee and Sub-Committees**

The Connecticut Early Childhood Teacher Credential (CT ECTC) process was designed to prepare the workforce in accordance with the requirements outlined in legislation (PA 11-54). The following is the result of the 2008 Connecticut Early Childhood Education Standards and Program Approval Committee and additional deliberations by subsequent representative committees. The processes and procedures were developed for awarding the CT ECTC at an Associate Degree level (Level A, Infant/Toddler and/or Preschool ECTC) and a Bachelor Degree level (Level B, Infant/Toddler and/or Preschool ECTC) through two routes: graduation from an approved higher education program or individual competency review. Individuals may apply for both endorsements at either level if the institution provided the appropriate coursework and field experiences required for each age group as described later in this document.

### **Process for Approving Programs**

#### **Program Approval**

Institutions of higher education will respond to the program recommendations for two-year and four-year programs (see Articulation Recommendations beginning on page 5) approved by the Committee. Each institution may have variations to their designed program but must demonstrate that all the competencies are met by the time the student completes the program and earns a degree. In addition, all Associate Degree programs must be accredited by the National Association for the Education of Young Children (NAEYC).

Each program will be reviewed under a process developed by the CT SDE in conjunction with the Connecticut State Colleges and Universities (ConnSCU) Board of Regents for Higher Education and the Office of Financial and Academic Affairs. To begin the process, programs submit the information outlined below to the CT State Department of Education (CT SDE):

- General Education courses;
- Oral language skills (covered in a course or courses taken by the student). This should be expressed as a set of communication competences;
- ECE courses (including prerequisite and/or co-requisite courses);
- Field work descriptions;
- Key assessments linked to student competency development; and
- Practicum description including the method of assessment of practicum performance.

The CT ECTC Standards are the basis for the development and approval of programs leading to the ECTC at all colleges and universities. The Standards were constructed from the NAEYC teacher preparation standards that outline the competencies students should develop during their college experience. An application for program approval can be obtained through the CT SDE which includes instructions for matrix development that identify which courses address each competency and how the competency is assessed. Each institution will have a process for advising and tracking student progress and program completion and shall designate a contact person responsible for tracking student progress.

Application reviews and technical assistance are provided and once approved, the program is granted approval for seven years.

## **Practicum Requirements for CT ECTC Program Approval**

The Practicum is a key component of both two-year and four-year programs. Therefore, practicum experiences are required at both the associate and bachelor's degree levels. The goal is that culminating practicum experiences will be both consistent and of high quality, as well as provide a way for those working in the field and studying part-time to complete a meaningful practicum experience.

### **Key Definitions**

**"Fieldwork"** means observations and on-site experiences in early childhood program settings to gain real-life experience and knowledge.

**"Student Practicum"** means a supervised classroom experience in an approved early childhood program setting, structured to provide opportunities to meet the CT ECTC competencies.

## **Associate Degree Practicum Requirements**

### **Prerequisite to Practicum**

- Students must have taken all required courses and all required competencies must be met prior to the culminating practicum.
- Students must have demonstrated competency on Key Assessments (other than those associated with the practicum) prior to the practicum experience.

These competencies are in the areas of:

- Child development and learning (including early language and literacy)
- Family and community relationships
- Observing, documenting, & assessing to support young children and families
- Teaching & learning
- Becoming a professional

(Level A competencies identified in the CT ECTC Standards document)

### **Hours Required**

- 100 hours of fieldwork prior to the practicum
- 200 hours for a culminating practicum

### **Age Groupings Possible**

- Infant and/or toddler
- Preschool through kindergarten

### **Placements**

Listings of approved programs by categories listed below can be obtained from the CT SDE.

- NAEYC center-based accredited programs
- Head Start center-based approved programs
- Kindergarten - NAEYC accredited programs

- Kindergarten - CAIS approved programs
- Other sites where the institution requests approval from the CT State Department of Education

### **Bachelor's Degree Practicum Requirements**

#### **Prerequisite to Practicum**

- Students must have taken all required courses and all required competencies must be met prior to the culminating practicum.
- Students must have demonstrated competency on Key Assessments (other than those associated with the practicum) prior to the practicum experience.

These competencies are in the areas of:

- Child development and learning (including early language and literacy)
- Family and community relationships
- Observing, documenting, & assessing to support young children and families
- Teaching & learning
- Becoming a professional

(Level B competencies identified in the CT ECTC Standards document)

#### **Hours Required**

- For transfer students with the Level A Credential, only one additional practicum experience is required. The additional culminating student teaching practicum at the four-year institution will require a minimum of 200 hours.
- For the four-year degree student with no transfer degree in ECE and no Level A Credential, two practicum experiences are needed. The first experience requires a minimum of 200 total hours. The second experience will also require a minimum of 200 hours.
- Field experience will be included as part of course requirements and will be instituted as appropriate to each approved program.

#### **Age Groupings Possible**

- Infant and/or toddler
- Preschool through kindergarten

#### **Placements**

Listings of approved programs by categories listed below can be obtained from the CT SDE.

- NAEYC center-based accredited programs
- Head Start center-based approved programs
- Kindergarten- NAEYC accredited programs
- Kindergarten - CAIS approved programs
- Other sites where college requests approval from the CT State Department of Education

### **Additional Implementation Considerations for Practicum Experiences at the Students' Worksite**

An examination of workforce data, as well as data on graduates from Connecticut's early childhood programs, indicate that many students are employed in an early childhood setting while completing a degree. These students depend on their income to support their families. Therefore, the Committee examined models in other states that allow students to continue employment while completing a practicum. Based on this review, the Committee recommends that students be allowed to complete the practicum experience at their worksite if the following conditions are met:

- The site meets the placement criteria.
- The student must be placed in a classroom or site that is different from their primary employment assignment.
- An external mentor, who will make program/classroom visits, needs to be included in the supervision process.
  - External mentors are individuals who are not associated with the practicum site but may be associated with the college, such as adjunct faculty.
  - External mentors may also be coaches and consultants currently working in the field and are familiar with the CT ECTC competencies.
  - External mentors will be hired by the college or university utilizing them for this special circumstance supervision and must be given specific training that allows them to support student learning free from employment stressors.
  - The external mentor will help to ensure objectivity during the practicum experience since the person with whom the student teaches or for whom the student works will not be the individual doing the supervision and student evaluation of competency associated with the practicum.

To further support student learning at the worksite, consider enrollment in a section of the practicum course with other students completing the practicum at their worksites. Additional funding will be needed to hire and train external mentors and might be acquired through student fees, state funding or a combination of these funding mechanisms.

### **CT ECTC Program Articulation for Students Transferring from a Two-Year Institution to a Four-Year Institution**

A goal of the Committee was to create an Articulation Plan for a smooth transfer of credits and practicum experience(s) from a two-year approved early childhood program to a four-year approved early childhood program. Transfer students should not lose credits or be required to earn more credits to complete a degree than students who start at the four-year institution as freshmen. The recommendations from the Committee to accomplish this goal are as follows:

**Associate Degree CT ECTC – Level A**  
**Minimum of 60 Credits**

**Core ECE Courses - 21 credits**

Introduction to Early Childhood Education (3)  
Observation Participation Seminar (3)  
Exceptional Learner (3)  
Early Language and Literacy (3)  
Child Development (3)  
Student Teaching Practicum (6 credits)

**CT ECTC Competency Areas to be addressed in other courses or as a separate course:**

Health, Safety, Nutrition (ECTC Standards 1b, 1c, 4e)  
Facilitating Social and Emotional Development/Classroom Management (ECTC Standard 4b)  
Child, Family and School (ECTC Standards 2a, 2b, 2c)

**Additional ECE elective credits: 9 credits in courses above or other electives**

**Total: 30 ECE credits**

**Core General Education: 18-19 of 30 Credits**

Composition (6) - 3 credits may be in an appropriate writing intensive course  
Human Communication (Speech) (3)  
General Psychology (3)  
Science (3-4)  
Math (3)

**Remaining General Education Credits:**

The college should include other courses needed to meet institution and/or State General Education requirements, such as those under consideration in the Board of Regents Transfer Policy. United States History and the appropriate math sequence are suggested for students who may later decide to continue in a teacher certification program.

**For the ECTC with an Infant/Toddler Endorsement:**

I/T Growth and Development and Methods and Techniques for Infants and Toddlers would be required along with I/T experiences in other courses including the Student Teaching Practicum.

**Other Requirements for Two-Year Program Approval and Articulation**

- NAEYC accreditation.
- Established prerequisites and appropriate sequencing of courses.
- Prerequisite for Introduction to ECE: Student will be ready to take the last developmental English course.
- Core ECE and General Education courses and the majority of ECE electives should be taken prior to the student teaching practicum.

**Bachelor Degree CT ECTC – Level B**  
**Minimum of 120 Credits**

**Transfer to a Bachelor Degree ECE Program** (reviewed as part of the four-year institution approval process)

- Twenty-four ECE credits should become part of the major at the upper division institution where a student transfers.
- The remaining ECE credits are to be transferred as ECE electives at the upper division institution.
- If a four-year institution has a major that is less than 48 credits, then half of the courses in the major should be transferred from the two-year institution and the remaining two-year institution courses should become ECE electives.

**Additional Coursework in Major**

- ECE coursework at the upper division institution will provide more advanced knowledge and connections to research in the field – with emphasis on theories and models, and reflective practice.
- The program will prepare students to meet State CT ECTC Level B Competencies (unless starting as a freshman then Level A and Level B competencies must be addressed).
- All programs must have upper division Student Teaching Practicum.
- Content areas for consideration:
  - Curriculum Design and Development/ Integrated Curriculum Methods and Materials
  - Assessment and Individualization/Inclusive ECE
  - Family Theories/Sociology of the Family
  - Literacy/Children’s Literature
  - Cross Cultural Perspectives/Diversity/Racial and Cultural Identities
  - Social, Emotional and Moral Development and Learning
  - Program Analysis
  - ECE Policy and Professionalism
  - Suggested elective:
    - Administration and Supervision of ECE programs

The upper division portion of the major should allow the student to earn additional credits in ECE or from Liberal Arts & Sciences and meet the institutional credit requirement for the degree. It is suggested that consideration be given to having the student construct a major that will be acceptable to a teacher certification program should the student eventually decide to enroll in the Alternate Route to Certification program or a traditional program.

## **Distinguishing the ECTC Endorsements**

The ECTC endorsement area is defined by the Observation and Practicum courses taken. A student can earn both an Infant/Toddler and Preschool endorsement if the coursework taken does the following:

- Prepares a student with knowledge and understanding of Infants/Toddlers through experiences specific to this age group; and
- Prepares a student with knowledge and understanding of Preschoolers through experience specific to this age group.

If coursework is most specific to one age group then the student qualifies for the endorsement only associated with that age group.

## **Application for the CT ECTC**

### **Student Applicant through an Approved Institution Pathway**

The application for the credential will be available in electronic format. Institutions will assist the student with registering in the CT Professional Registry. A transcript indicating graduation from the approved program must be submitted along with the application and verification from the institution indicating completion of the program and that the student has demonstrated the competencies associated with either the Infant/Toddler and/or the Preschool ECTC. Students can apply for both endorsements if all the requirements for each age group are met. Once the application and verification are complete, the student can obtain the ECTC document indicating their endorsement(s) directly from the CT Professional Registry website.

### **Individual Review Pathway**

Another goal of the Committee was to provide a pathway where individuals of the current workforce with college degrees and students from non-approved institutions could be awarded a CT ECTC to ensure there would not be a workforce shortage in 2015 when new legislative requirements go into effect. In addition, this goal enables teachers to earn a CT ECTC to enhance their career mobility. The Committee also addressed and made recommendations regarding a future Pathway through which those individuals with college degrees in other disciplines could earn a CT ECTC.

### **Eligibility**

To be eligible for a CT ECTC a teacher must:

- hold an associate or bachelor's degree in early childhood education, child development, child studies, human development or an early education concentration that is accredited by the Board of Governors for Higher Education and regionally accredited (in-state or out-of-state institutions) and have graduated prior to the approval of the ECTC by the Department of Education, the Board of Regents, and the Office of Financial and Academic Affairs and have three years of full-time experience, or 3240 hours of part-time experience (equivalent to three years full-time), met within the past five years; **or**
- the teacher has an associate degree or bachelor's degree in another field from a college that is accredited by the Board of Governors for Higher Education and is regionally



accredited (in-state or out-of-state institutions) and has earned 12 credits in Early Childhood Education in accordance with state policy and the approved list of courses (Infant/Toddler or Pre-k) and have three years of full-time experience, or 3240 hours of part-time experience (equivalent to three years full-time), met within the past five years;  
**or**

- be a recent graduate (3-5 years) from an out- of- state or out- of- country college or university and not yet employed.

The endorsement level will depend on the coursework contained in the degree or the content of other credits taken and the age level of the students in the teacher's work experience.

### **Process**

1. A teacher who has a degree in the field and meets the experience criteria will complete an application for the credential and provide evidence of education and work experience to Charter Oak State College. Charter Oak State College will review the applicant's work submitted in a portfolio format in alignment with the ECTC standards and determine if the applicant needs further development in specific areas. If the applicant needs professional development, a menu of choices will be provided to the applicant. The teacher will receive a Level A (associate) or Level B (bachelor's) Credential for pre-k and/or infant/toddler based on the Charter Oak State College review process after the applicant completes continued professional development. If the applicant needs no further professional development after the review, the appropriate credential will be awarded.
2. A teacher with a degree in another field who meets the experience criteria will complete an application and follow that same process with Charter Oak State College as outlined above. After reviews are complete and any necessary professional development is complete, the applicant would receive a Level A or Level B Credential depending on the level of the degree the teacher has previously earned.
3. A teacher with any degree but no experience in the field shall follow the processes outlined above. In addition, this teacher may be expected to complete appropriate practicum experiences.
4. A graduate from a Connecticut college recently approved to offer the ECTC program who earned a degree in the field prior to the college approval date may earn the credential by submitting a portfolio, in an approved format, demonstrating all of the required competencies. The credential will be Level A or Level B based on the degree received.

### **Out-of-Country Candidates with a Degree in the Field**

Applicants will need to demonstrate the expected level of literacy (oral and written) and have course work with content that provided the applicant with the knowledge and experiences to meet Connecticut's ECTC competencies. Out-of-country applicants, from non-English speaking countries, must provide transcript translations. All candidates from out-of-the-country will submit their transcripts to Charter Oak State College for review.

When course content is uncertain, candidates may be asked to provide course descriptions and/or course syllabi. Additional coursework may be required to meet Connecticut ECTC competencies.