

TO: Advisory Committee on Accreditation
FROM: Christine Thatcher, Associate Director, Academic Affairs
DATE: May 12, 2011
SUBJECT: ACA Meeting on Thursday, May 19, 2011

The Advisory Committee on Accreditation will meet in the Department of Higher Education Conference Room, third floor, 61 Woodland Street, Hartford, at 10:00 a.m. on Thursday, May 19, 2011.

If you will not be able to attend the meeting, please forward the materials to your alternate so that he/she will be able to come. Please call me at (860) 947-1822 if neither you nor your alternate can participate.

AGENDA

1. CALL TO ORDER – 10:00 a.m.
2. CONSIDERATION OF MINUTES – [Minutes of April 21, 2011](#)
3. DISCUSSION
4. CONSENT CALENDAR
 - a. Licensure Applications - *None*
 - b. Accreditation Applications
 - Central Connecticut State University** - Accreditation of a program in Mathematics Education Leadership, leading to a Sixth-Year Certificate
 - c. Simultaneous Licensure and Accreditation Applications
 - University of Hartford** - Licensure and Accreditation of a concentration in Montessori within the M. Ed. in Elementary Education program
5. ACTION AGENDA
 - a. Licensure Applications
 - Johns Hopkins University** - Licensure of a program in Systems Engineering, leading to the Master of Science (M.S.) degree, at Northrop Grumman Corporation Electronics Systems in Norwalk, CT
 - Saint Joseph College** - Licensure of a program in Nursing Practice, leading to the Doctorate of Nursing Practice (D.N.P.) degree to be offered online
 - b. Accreditation Applications
 - Fairfield University** - Accreditation of a program in Nursing Practice, leading to the Doctor of Nursing Practice degree (DNP)
 - University of Bridgeport** - Accreditation of a program in Biomedical Engineering, leading to the Master of Science (M.S.) degree

c. Simultaneous Licensure and Accreditation Applications - *None*

6. INFORMATION ITEMS

Monthly Update –please use the following link to access this information on our website:

<http://www.ctdhe.org/DHEWeb/AcademicProgramProposals.asp>

7. OTHER BUSINESS

8. **BOARD OF GOVERNORS RESOLUTIONS** – April 20, 2011

9. NEXT ACA MEETING – June 16, 2011

10. ADJOURNMENT

Board of Governors for Higher Education

Advisory Committee on Accreditation Minutes of the Meeting Thursday, April 21, 2011

The Advisory Committee on Accreditation met in the Board's Conference Room, Department of Higher Education, third floor, 61 Woodland Street, Hartford, at 10:00 a.m. on Thursday, April 21, 2011.

Members or alternates present: Shirley Adams, Ann Clark, David Dauwalder, John Donohue, Robert Madden, Barbara McCarthy, Leon Newman, William Pizzuto, Judith Resnick, Martha Shouldis, and Abbey Zink.

Staff present: Braden Hosch, Patricia Santoro, Christine Thatcher

1. CALL TO ORDER

William Pizzuto called the meeting to order at 10:05 a.m.

2. CONSIDERATION OF MINUTES – Minutes of March 17, 2011

William Pizzuto called for approval of the minutes of March 17, 2011. Judith Resnick moved approval and Abbey Zink seconded; the motion passed with Ann Clark and John Donohue abstaining.

3. DISCUSSION

4. CONSENT CALENDAR

Licensure Applications

Brown University, Providence, RI - Relicensure of a program in Biology, leading to the Master of Arts (M.A.)

Accreditation Applications

Manchester Community College - Accreditation of a program in Music Studies, leading to the Associate in Arts (A.A.) degree

Manchester Community College - Accreditation of a Pathway to Teaching Careers program, leading to the Associate in Arts (A.A.) degree

University of Connecticut - Accreditation of a program in African American Studies, leading to the Bachelor of Arts (B.A.) degree

Western Connecticut State University - Accreditation of a program in Media Arts, leading to the Bachelor of Arts (B.A.) degree with options in Media Studies and Media Production

Simultaneous Licensure and Accreditation Applications - *None*

On a motion made by Martha Shouldis and seconded by Shirley Adams, the Committee voted to approve the Consent Calendar, with Abbey Zink abstaining.

5. ACTION AGENDA

Licensure Applications

a. Sacred Heart University - Licensure of a program in Health Care Information Systems, leading to the Master of Science (M.S.) degree, to be offered on-ground and online

Braden Hosch, Director of Policy, Finance, and Academic Affairs, gave an overview of the application and introduced Pat Walker, Dean of the College of Education and Health Professions, who represented the University.

Pat Walker reviewed the enrollment projections and anticipated start date of the program. Martha Shouldis complimented the timely development of a program in this emerging field.

After discussion, the program was found to be in compliance with Board of Governors' approval standards. Martha Shouldis moved approval and David Dauwalder seconded; the motion passed unanimously.

b. University of Bridgeport - Licensure of a program in Design Management, leading to a Master of Professional Studies (M.P.S.) degree

Christine Thatcher, Associate Director of Academic Affairs, reviewed the application and introduced Hans van der Giessen, Provost, and Richard Yelle, Director of the Shintaro Akatsu School of Design, who represented the University.

After a brief discussion regarding the hiring of new faculty, the program was found to be in compliance with Board of Governors' approval standards. Shirley Adams moved approval and Ann Clark seconded; the motion passed unanimously.

c. University of Phoenix, Phoenix, AZ - Relicensure of a program leading to the Bachelor of Science (B.S.) degree in Business/Management, and a program leading to the Master of Business Administration (M.B.A.) degree to be offered by the University of Phoenix in Norwalk, Connecticut

Braden Hosch gave an overview of the application and introduced William Beck, II, Regional Director of Academic Affairs and Acting Fairfield County Campus Director of Academic Affairs; Nancy Pluzdrak, Norwalk Campus Director; and Tamara Clark, Chairperson at the Norwalk Campus, who represented the University.

The Committee expressed concerns regarding the University's continued difficulty in meeting enrollment projections. Nancy Pluzdrak indicated that the University has changed their marketing strategies to more strongly focus on the campus programs as opposed to online learning. She further explained that the University has recently started a 3-week non-credit, no cost orientation workshop for all potential incoming students which the University believes will ultimately result in higher retention rates.

After a brief discussion, the program was found to be in compliance with Board of Governors' approval standards. David Dauwalder moved approval and John Donohue seconded; the motion passed with Martha Shouldis abstaining.

Accreditation Applications

a. Sacred Heart University - Accreditation of a program in Exercise Science and Nutrition, leading to the Master of Science (M.S.) degree

Patricia Santoro, Director of Academic Affairs, reviewed the application. The University was represented by Pat Walker, Dean of the College of Education and Health Professions; Michael Emery, Chair of the Department of Physical Therapy and Human Movement Science; and Wendy Bjerke, Clinical Assistant Professor of Exercise Science.

Martha Shouldis inquired about whether the University currently has potential graduates. Wendy Bjerke indicated that there may be twelve students ready to graduate in the fall.

After discussion, the program was found to be in compliance with Board of Governors' approval standards. Robert Madden moved approval and John Donohue seconded; the motion passed unanimously.

Simultaneous Licensure and Accreditation Applications

a. University of Bridgeport - Licensure and Accreditation of a program in English, leading to a Bachelor of Arts (B.A.) or a Bachelor of Science (B.S.) degree

Christine Thatcher reviewed the application. The University was represented by Hans van der Giessen, Provost; Steve Healey, Dean of the College of Arts and Sciences; and Edward Geist, Chair and Professor of English.

Abbey Zink inquired about the required capstone project for the program. Edward Geist indicated that all students must complete a senior thesis as their capstone project.

After discussion, the program was found to be in compliance with Board of Governors' approval standards. Martha Shouldis moved approval and Abbey Zink seconded; the motion passed unanimously.

6. INFORMATION ITEMS

7. OTHER BUSINESS

8. BOARD OF GOVERNORS RESOLUTIONS – March 16, 2011

9. NEXT ACA MEETING – May 19, 2011

10. ADJOURNMENT

The meeting adjourned at 11:07 a.m.

STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION
CONSENT CALENDAR

Institution: Central Connecticut State University
Item: Accreditation of a program in Mathematics Education Leadership, leading to a Sixth-Year Certificate
Date: May 19, 2011

Background

Central Connecticut State University has applied to the Board of Governors for Higher Education for accreditation of the licensed program in Mathematics Education, leading to a Sixth-Year Certificate. The program is licensed until November 30, 2011 and the institution expects its first graduates in spring of 2012.

The program is designed for mathematics teachers in grades K-12 who aspire to assume greater leadership responsibilities within their schools and districts, including but not limited to developing curriculum, providing professional development, serving as resource teachers, serving as department chair or department head, and serving as district-wide curriculum coordinators. Students enrolled in the program pursue one of two tracks: the Department Chair certification or certification as Intermediate Administrator.

Description

Purpose and Objectives

The University has not instituted any curricular changes since the time of licensure. However, the department has evaluated the progress of the new program. The results of that assessment of the data indicated three major points provided by CCSU below:

1. The faculty noted that virtually all of the members of the cohort had difficulty “moving out of their comfort zone.” For example, those who had elementary education teaching experience found it very difficult to transfer their understanding of teaching and curriculum to the secondary level. Similarly, those with a secondary background found it difficult to consider the foundations of the elementary program.

In the second cohort faculty will require students to consider topics related to the complete span of Kindergarten through grade 12.

2. Writing skills were generally weaker than the faculty had expected; additionally, students generally felt quite stressed working on more than one

assignment at a time. Related to this was a concern, on the part of students, that the work load was too great.

The faculty agree that a more explicit explanation of expectations at the time of acceptance into the program will help to alleviate the stress associated with writing and workload.

3. Several students had difficulty utilizing databases from the university library, even though each student had written either a thesis or special project as a capstone for their Master's Degree.

The faculty will provide a day for students to become re-acquainted with the library offerings through online database searches.

Administration

The program is administered by a full-time faculty member in the Department of Mathematics.

Curriculum

The Sixth Year Certificate program in Mathematics Education requires a total of 32-37 credits. To complete the program all students are expected to complete 21 credits of core requirements. In addition, they are expected to participate in a supervised internship. Credits for the internship are determined based on the track the student selects to follow. The first track is for the Department Chair Certification and requires an internship consisting of 2 credits; the second track is for the Intermediate Administrator Certification Track and requires an internship consisting of 4 credits;

Core requirements (21 credits EDL 655: Leadership and Supervision, 3 credits

MATH 611: Mathematics Curriculum K-8: Theory and Implementation, 3 credits

MATH 612: Mathematics Curriculum 7-14: Theory and Implementation, 3 credits

MATH 613: Research on the Learning of Mathematics, 3 credits

MATH 614: Research on the Teaching of Mathematics, 3 credits

MATH 615: The Cultural Context of Mathematics Education, 3 credits

MATH 616: Assessment in Mathematics Education, 3 credits

MATH 622: Internship in Mathematics Education Leadership (2 credits)

Department Chair Certification Track (11 additional credits, 32 total)

EDL 514 Administration (3 credits)

Two graduate level courses in MATH, chosen with approval of advisor (6 credits)

MATH 622 Internship in Mathematics Education Leadership (2 credits)

The DCC track meets requirements for department chairperson under Section 10-145d-579 of the Connecticut State Department of Education Certification Regulations, page

121. The course requirements for this certification are “a master’s degree...or 30 semester hours of credit in addition to the bachelor’s degree” and “in the total post baccalaureate program at least six semester hours of graduate credit in instructional supervision and school administration, six semester hours of graduate credit in curriculum development, and six semester hours of graduate credit in the area for which endorsement is sought.” In addition, at least 30 months of successful teaching experience are required.

Intermediate Administrator Certification Track (16 additional credits, 37 total)
Must successfully complete candidacy for this track in EDL 655

EDL 610 School Leadership I (3 credits)

EDL 611 School Leadership II (3 credits)

EDL 615 Understanding External Environments of School Leadership I
(3 credits)

EDL 616 Understanding External Environments of School Leadership II
(3 credits)

EDL 690 Internship in Educational Leadership I: Theory and Practice
(2 credits)

EDL 691 Internship in Educational Leadership II: Research and Practice
(2 credits)

To receive Intermediate Administrator Certification, students must also pass a performance-based examination administered by the State of Connecticut, the Connecticut Administrator’s Test (CAT). The State of Connecticut also requires 50 months of teaching experience prior to licensure and completion of a designated course in Special Education.

Enrollment

The University had anticipated a cohort of 20 part-time students every two years. Ten students were accepted into the first cohort in summer 2009, and one has since withdrawn. The University plans to enroll its second cohort this summer, and plans to admit ten or more students.

Resource Support

Faculty

The University lists 15 faculty members from mathematics and education leadership who teach in the program.

Library and Learning Resources

The library resources are sufficient for this program.

Facilities and Equipment

No additional facilities are needed for the program.

STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION
CONSENT CALENDAR

Institution: University of Hartford

Item: Licensure and Accreditation of a concentration in Montessori within the M. Ed. in Elementary Education program

Date: May 19, 2011

Background

The University of Hartford has applied for licensure and accreditation of a Montessori Concentration (16 credits) as part of an elementary education program leading to the Master of Education (M.Ed.) degree. The University already offers a Montessori concentration in a program in early childhood education also leading to the Master of Education (M.Ed.) degree. This proposed program will create the opportunity for graduate level preparation with a concentration in the elementary level of Montessori Education through the established partnership with the Association Montessori International (AMI) approved Montessori Training Center of New England. Prepared Montessori teachers interested in pursuing a graduate degree in Elementary Education will take courses in elementary education in addition to the courses undertaken for the Montessori diploma preparation for the particular Montessori Core Courses. There are several programs in the United States with a collaborative model but no other AMI preparation program or master's degrees with an AMI Montessori Concentration in New England.

Description

Purpose and Objectives

Montessori Education is in the forefront of public education in the larger Hartford area. The Montessori Training Center of New England (MTCNE) managed by Capitol Region Education Council (CREC) is New England's only regional training center for Association Montessori Internationale (AMI) and one with which the University has an already established partnership. At the Learning Corridor in downtown Hartford there is the regional CREC Montessori Magnet School with a 20 year history. The existing commitment by the Hartford Public Schools (HPS) to a public pathway in Montessori education birth through grade 12 increases the access for Hartford families to a quality education. HPS opened Montessori Magnet School at Annie Fisher 4 years ago and Moylan Montessori is into the third year of operation. Both of these schools will eventually grow to the size of the CREC Montessori program of 350 students. Approval has also been given for develop a Montessori Middle School Program known as the Erdkinder, because of its farm based emphasis, and a Montessori High School will complete the proposed HPS Montessori Pathway.

Connecticut is currently the only state with a Unique Endorsement (#110) through the Connecticut State Department of Higher Education leading to public Montessori teacher certification. The

University of Hartford (UH) has been a contributing partner to the academic preparation of Montessori teachers at the early childhood level for the past five years through the M.Ed. in Early Childhood Education with a Montessori Concentration. Students enrolled in this program have the option to receive their AMI diploma, Unique Endorsement #110 in Primary Montessori and the M. Ed. through the collaborative efforts of MTCNE and the University of Hartford.

This proposal is designed to extend the existing UH/MTCNE partnership to include a M.Ed. in Elementary Education with a Montessori concentration to be established in the Department of Education and Human Service. This program will create the opportunity for graduate level preparation with a concentration in the elementary level of Montessori Education through the established partnership with the Association Montessori International (AMI) approved Montessori Training Center of New England. Prepared Montessori teachers interested in pursuing a graduate degree in Elementary Education will take courses in elementary education in addition to the courses undertaken for the Montessori diploma preparation for the particular Montessori Core Courses. There are several programs in the United States with a collaborative model but no other AMI preparation program or Masters degrees with an AMI Montessori Concentration in New England.

Administration

This Elementary Montessori Concentration will fall under the purview of the Graduate Elementary Education Program Coordinator for all matters of recruitment, advising and program-related leadership. The Elementary Education Program Coordinator is a faculty member in the Department of Education and Human Service who will engage in on-going faculty evaluation within the Elementary Montessori Core courses. The Graduate Elementary Education Program Coordinator will make class visitations and observations while working with the lead researchers in the Montessori Studies initiative to conserve efforts. Through the MTCNE interval structures and the work of the Montessori Studies initiative, regular visits to the Montessori Training Center of New England will be made in order to engage in on-going evaluation of the teaching and learning taking place within the Montessori Concentration. In conjunction with the ENHP Director of Communications and Recruitment, the program will be publicized at all receptions and information sessions. In addition, MTCNE has a distinctive communications and recruitment plan.

The training center operated and managed by Capitol Region Education Council (CREC) has a managing Director. This position manages applications to MTCNE, handles recruiting, staffing, record keeping, program budgets for the AMI portion of the course work, and the general business operations of the training center. The Director works with the collaborating Montessori Studies faculty to ensure students are well aware of the partnership between the training center and the university. The position and the actual physical space for MTCNE are funded through CREC. The efforts of the Director not only benefit the MTCNE but simultaneously the University of Hartford and thus a small summer stipend has been included in the budget.

Enrollment Projections

As the typical program of study is designed as a seven semester program, three years of estimated headcount is offered here.

Headcount Enrollment Projections

	S1	AY1	S2	AY2	S3	AY mature	S mature
Grad 1	10	10	9	9	9	0	0
Grad 2			10	10	9	9	9
Grad 3					10	9	9
Grad 4							
Grad 5							
Grad 6							
Total Headcount	10	10	19	19	28	19	28

Elementary Montessori teaching positions are always in demand. The Montessori Training Center of New England receives job placement notices from across the country and most all of the students have jobs immediately following their graduation with an AMI diploma.

Additionally, two public Montessori schools in Hartford are expanding their public Montessori programs to add more elementary classrooms. There are currently 12 elementary teaching positions in the three public CREC and HPS Montessori schools. This will expand to 27 over the next few years so the demand for AMI elementary teachers will increase in the local public sector while it is still a need in the local private sector as well. The need for AMI trained teachers beyond our local area can be met by individuals with an AMI diploma.

Curriculum

The concentration being proposed prepares professionals who are capable of addressing the changing needs of children in Montessori schools. Some candidates may have undergraduate degrees in subject areas and therefore have not had pedagogical training before their AMI diploma. Other candidates have had some form of teacher training but are specializing in Montessori and seek the intellectual rounding out of master-level academic work. The sixteen (16) credit core in Montessori recognizes the professional preparation of the Montessori trained teacher through the Montessori courses. The twenty-one (21) credit elementary education core provides the Montessori teacher with a well-rounded background in elementary education.

Courses and practical experiences listed in the Montessori concentration, combined with the selected elementary education courses, will lead to a Master's Degree in Elementary Education with a Montessori Concentration. The thirty-seven (37) credit program of study requires two (2) semesters or three (3) summers to complete the Montessori portion of the program. The remaining elementary courses will be taken as they are made available through a regular course schedule serving all UH elementary graduate students over two (2), three (3) or four semesters. The instructor for the Montessori concentration courses comes from the Montessori Training Center of New England. The current instructor, Greg MacDonald, is the Director of Elementary Training for

MTCNE. Mr. MacDonald has achieved recognition as a Director of Training through AMI and has served in that capacity at the Montessori Institute at Loyola College, Erie College as well as at the Australian Montessori Teacher Education Foundation in Sydney, Australia. He himself is a former Montessori Elementary teacher and building principal. He provides consultation worldwide and is a much sought out Montessori expert in his field.

M.Ed. in Elementary Education with a Montessori Concentration

Course Title	Credits
Elementary Core (existing courses)	
Must take 2 of the 3	6
EDR 550 Fundamentals of Reading Instruction	
EDR 551 Rdg and Lang Arts Instruction OR	
Approved course preparing for the CT Foundations of Reading Test (such as the current EDR 544)	
EDH 510 Theoretical Foundations: Children and Adults with Special Needs	3
EDE 664 Math Methods	3
EDP 540 Applied Developmental and Learning Theories	3
EDE 662 Planning/Assessing: Elementary	3
EDT 610 Computers as Instructional Tools	3
<i>Total credits from Elementary Core</i>	21
Montessori Core (new)	
EDEM 500 Child Development and Montessori Philosophy	3
EDEM 510 Montessori Approach Mathematics and Geometry	3
EDEM 520 Montessori Approach to the Humanities	3
EDEM 530 Montessori Approach to the Sciences	3
EDEM 540 Classroom Methods and Practicum	4
<i>Total credits from Montessori Core</i>	16
Total credits for the degree program	37

As part of the graduate program in Early Childhood Education, students will be required to take a comprehensive examination.

Culminating Activity

As a culminating activity for this graduate degree, students will be required to undertake the comprehensive exam that is part of the graduate program in elementary education. The concentration in the Montessori culminating activity consists of a set of oral exams and a focused research paper as well as the preparation of their Montessori Teaching Albums.

Resource Support

Faculty

The Montessori course instructor(s) hold the terminal degree in the field of Montessori education, which is AMI “trainer” status. These adjunct faculty member(s) will be evaluated annually to ensure these individuals are held to the same expectations of professional development and best practice in Montessori as all other faculty teaching UH courses.

The following individuals represent three levels of AMI trainers related to the Montessori portion of the M.Ed. in Elementary Education with Montessori Concentration. These individuals not only hold academic degrees but also at least one level of Association Montessori Internationale (AMI) training, teacher preparation training and/or training of the trainer status. This level of expertise is not held by University of Hartford faculty. All of the existing elementary courses, currently taught in the M.Ed. in Elementary Education are taught by current University of Hartford faculty.

All Elementary Core courses will continue to be taught by the existing University of Hartford faculty members who have been teaching these courses for the existing Masters in Elementary education. The following captures the available seats in the elementary core courses (the existing courses) over the past semesters. This information confirms existing resource is available in the elementary education courses.

Library and Learning Resources

The University of Hartford has approximately thirty Montessori focused books in the current collection. Sixteen of those address Montessori Method of Education and fourteen have Maria Montessori as a subject. In addition to our on-campus library, an extensive Montessori library is housed at the MTCNE. The Shannon M. Helfrich Resource Center has a web-access for browsing and all materials can be borrowed for the permitted period of time.

Montessori Materials

All Montessori materials are located at the MTCNE in the Montessori training classroom which is where the Montessori courses are, and will be, held.

Computer Technology

No additional technology is needed. Students will benefit from the educational technology provided through the elementary education program and educational technology course, EDT 610.

Facilities and Equipment

It is not essential for additional classroom or office space on the University of Hartford campus to maintain this concentration.

STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION

Institution: Johns Hopkins University

Item: Licensure of a program in Systems Engineering, leading to the Master of Science (M.S.) degree, at Northrop Grumman Corporation Electronics Systems in Norwalk, CT

Date: May 19, 2011

Background

Johns Hopkins University has applied for licensure of a program in Systems Engineering, leading to the Master of Science (M.S.) degree, at Northrop Grumman Corporation Electronics Systems (NGC) in Norwalk, CT. The program will be offered through the Whiting School of Engineering's Engineering for Professionals program (JHU-EP). This program has formed an academic partnership with NGC to provide customized courses, which will be delivered at multiple sites across the nation. The proposed partnership would allow employees of NGC at the Norwalk location to join a cohort of students which would include NGC employees in Rolling Meadows, IL and Baltimore, MD. The program consists of ten courses and will be delivered by a combination of on-site visits from JHU-EP instructors to each site and synchronous web-conferencing between sites.

The arrangement between NGC and JHU-EP will be by cohort. Cohorts are admitted in 2 ½ year increments, which is the time necessary for completion of the degree. A second cohort will not be admitted until the completion of the first. The initiation of future cohorts will be dependent on the need and interest of Northrop Grumman Corporation.

The proposed program is an applied degree is described as being directly relevant for employment. It is anticipated that graduates will enhance their careers, gain promotions and be highly sought after within their own company and by others.

Description

Purpose and Objectives

The Engineering for Professionals program (JHU-EP) of the Johns Hopkins Whiting School of Engineering has as its mission "To provide graduate education in engineering and applied science for working professionals." The curriculum is designed to meet workforce needs and its class schedule and delivery format is structured to meet the needs of professionals who are working full time.

The Electronics Systems division of Northrop Grumman Corporation has determined that there is a critical shortage of systems engineers across their corporation and approached JHU-EP in an effort to provide a uniform curriculum to its workforce throughout the United States.

According to the University's catalog, the M.S. program in Systems Engineering is designed to address the specific needs of engineers and scientists engaged in all aspects of analysis, design, integration, production and operation of modern systems. The program provides students with both theoretical and practical knowledge, skills, and tools; a systematic approach to problem solving; and the confidence to solve complex system problems.

Administration

The Program Chair is responsible for the administration of the program and for supervision of the instructors. The Program Chair reports to the Associate Dean for JHU-EP, who answers to the Dean of the Whiting School of Engineering.

The lead administrative coordinator and point-of-contact is the Applied Physics Laboratory (APL) Education Center Director.

Northrop Grumman has named an on-site administrator for the MS in Systems Engineering partnership program with Johns Hopkins, who is an HR Business Partner with Northrop Grumman Corporation Norden Systems in Norwalk, CT. His responsibilities include Talent Acquisition, and Learning & Development.

The Vice Chair of Systems Engineering for JHU-EP will serve as academic advisor for students at Norwalk. The vast majority of advising is done by email and phone.

Curriculum

Courses are team taught in the Systems Engineering program. Each course will be delivered by at least two JHU instructors and one Northrop Grumman co-instructor. The program consists of ten courses chosen by NGC, with advice and oversight by the JHU-EP Associate Dean and Systems Engineering Program Chair and Vice Chair. The content of these courses are tailored to the needs of NGC by appointing a senior Systems Engineer at NGC as a co-instructor, who provides examples, case studies and lectures relevant to NGC. Courses are 9 weeks in length and the program may be completed in 2 ½ years.

The proposed partnership program in Systems Engineering includes the following 10 courses:

645.462	Introduction to Systems Engineering
645.767	System Conceptual Design
645.768	Design & Integration
645.756	Metrics, Modeling & Simulation
645.771	System of Systems Engineering
645.467	Management of System Projects
645.753	Enterprise Systems Engineering
645.761	Systems Architecting
645.468	Systems Engineering of Deployed Systems
645.800	Systems Engineering Capstone Project

Admissions and Enrollment

The partnership cohort that would include Norwalk students calls for a minimum of 18 students and a maximum of 24. It is anticipated that five students would come from Norwalk, about 5-10 from Rolling Meadows, IL, and the balance will come from Baltimore, MD.

The admission requirements include a bachelor's degree in a technical field from a regionally accredited college or university and a grade-point average of 3.0 or better on a 4.0 scale. Applicants must also have at least one year of relevant experience in a technical organization.

Resource Support

Faculty

All faculty teaching in this program will be part-time instructors of the University employed full-time elsewhere or retired from professional work which qualify them to teach specific courses. JHU-EP has submitted and been approved for faculty waiver requests for all instructors who do not have a terminal degree. All but one of the instructors teaching in the Northrop Grumman partnership are full-time employees of Johns Hopkins University at the Applied Physics Laboratory. Their full-time job involves research and development, or related work, while teaching in the program is considered a professional activity in addition to their full-time position.

The JHU-EP Systems Engineering program seeks instructors who have 10 to 15 years of relevant professional experience to teach in the program. While the program does seek to hire instructors with graduate degrees, professional experience and not an academic degree is the primary qualification for teaching in the program. This is because the Systems Engineering program is an experience-based program that seeks to deliver workforce-ready education. The program also requires students to have relevant professional experience in order to be admitted into the program.

Instructors will be located primarily in the Baltimore area and will travel one or two times to Norwalk, as well as to Rolling Meadows. For two to four of the ten courses, co-instructors will be from the Rolling Meadows or Norwalk facilities and will teach from that site.

Library

The Johns Hopkins University Library system will adequately provide resources for this program. There are over 1000 book titles in the online catalog supporting Engineering, as well as major and specialized full-text journal packages including IEEE, ACM, Compendex, and Inspec. Specialized materials such as technical reports and standards such as ASTM are available. Subscriptions to individual journals as well as full-text packages include core journals such as *Innovations in Systems and Software Engineering*, *IEEE Intelligent Transportation Systems Magazine*, *Systems Biology*, *Control Systems Magazine*, and *International Journal of Smart Engineering System Design*.

Facilities and Equipment

Students will connect remotely via NGC's Live Meeting Plus camera, which provides video and audio projection of the instructor and students, as well as the projection of slides. For three of the class sessions, JHU-EP instructors will travel to Rolling Meadows or to Norwalk for face-to-face delivery. In two of the ten courses, the NGC co-instructors will be Norwalk NGC employees.

STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION

Institution: Saint Joseph College

Item: Licensure of a program in Nursing Practice, leading to the Doctorate of Nursing Practice (D.N.P.) degree to be offered online

Date: May 19, 2011

Background

Saint Joseph College has applied for licensure of a Doctorate of Nursing Practice (DNP) program. The DNP with specializations in Psychiatric Mental Health and Family Health Nursing will be the second doctoral degree licensed at the institution. The program will be offered online with some supporting clinical work to be completed on campus. This post-Master's DNP at Saint Joseph College will culminate in the writing of a clinical dissertation based on the needs of a clinical practice of the student's choice. The College plans to enroll students and implement the proposed program in September 2012.

Saint Joseph College offers a Master's level graduate program in nursing in the areas of Family Nurse Practitioner, Psychiatric/ Mental Health Nurse Practitioner, and Nurse Educator. The Nursing program at Saint Joseph College is currently accredited by the AACN and the DNP will be part of the renewal accreditation in 2013.

In 2004 the American Association of Colleges of Nursing (AACN) issued a position statement declaring that programs educating nurses who license as APRNs must be at the doctoral level by 2015. The APRN license in Connecticut applies to nurse practitioners (NPs), clinical nurse specialists (CNS), and certified registered nurse anesthetists (CRNAs); certified midwives (CNMs) have a separate license in Connecticut.

Saint Joseph College offers the Master of Science in Biology, Biochemistry and Nutrition online, and Blackboard technology is widely used across the College curricula.

Following a review of the application and other pertinent information provided by the College, an evaluation team from the Department of Higher Education visited the campus on March 8, 2011. The team was comprised of: Dr. Patricia Dardano, Chair of the Doctor of Nursing Practice Program at Regis College; Dr. John Donohue, Provost at Albertus Magnus College and ACA member; and Dr. Christine Thatcher, DHE. The findings of the evaluation team are summarized within the report below.

Description

Purpose and Objectives

According to the College, the Doctor of Nursing Practice (DNP) program prepares nurses with the knowledge and skills for responsible and accountable practice for patients with family health and mental health problems. The curriculum prepares the graduate to assess, diagnose and treat individual patients and families who present with complex, chronic, and/or co-morbid conditions. Graduates will have strong knowledge of nursing scholarship, clinical practice, health promotion, disease treatment, and the skills necessary to work in a changing and evolving health care environment. The essential threads of the scientific underpinnings of advanced nursing practice, health promotion and population health, organizational and systems leadership, inter-professional collaborative skills, clinical scholarship, evidenced based practice, cultural competence, and ethical sensitivity and responsibility are interwoven across the curriculum. These core concepts are designed to meet the Core Competencies of the AACN Essentials of Doctoral Education for Advanced Nursing Practice.

Graduates of the DNP program will be able to:

- Apply fiscal principles and systems thinking to health care system problems
- Critically analyze the effects of health policies on patients, nursing and the health care system.
- Analyze epidemiological and statistical data for their implications related to individual and population health.
- Apply cultural competencies as defined by the American Association of Colleges of Nursing.
- Demonstrate leadership skills to strengthen practice and health care delivery for individuals and populations.
- Identify and effectively manage ethical dilemmas in patient care, in health care organizations and in research.
- Use information technology and research methods to design, implement and evaluate evidence-based interventions.
- Critically appraise and translate research into practice.
- Complete and defend a Clinical Dissertation consistent with the student's identified research interest. This dissertation will focus on using evidence-based research to approach a problem in a clinical area of practice or practice management. Clinical practicum hours may be used to collect and evaluate data on a specific population in a practice setting.

Evaluation Team Findings: Section 10a-34-10, Purposes and Objectives

The evaluation team recommended a review of the purposes and objectives of the program to ensure doctoral level language and to add a statement regarding the Clinical Dissertation. Saint Joseph College has complied with this request. One objective was removed, and the last bullet above provides the statement on the Clinical Dissertation requirement.

A significant revision to the proposal occurred after the site visit. The original proposal included both post-BSN and post-master's options for the DNP. The team had recommended the program focus on the post-master's option to the DNP, and subsequently Saint Joseph College withdrew

the post-BSN request in the application. It was determined that the current Master's program offered by Saint Joseph is sufficient to meet the needs of the students at this time.

Administration

A well qualified Program Director will oversee the program. The Program Director reports to the Chair of the Nursing Department and the Dean of the School.

According to the College, a clinical coordinator position is needed to monitor and assess clinical placement sites and assist students in finding suitable placements, as well as completing the necessary contracts with the sites.

Evaluation Team Findings: Section 10a-34-11, Administration

It was clearly evident that the administration at Saint Joseph College supports the DNP proposal. The administrative structure overseeing the program will be appropriate.

Admissions

Eligible students must be registered nurses who have an undergraduate degree in nursing from an accredited institution and a 3.5 G.P.A. from their Master's program. Students will be required to achieve a score of 1000 on the Graduate Record Exam (GRE). Applicants whose native language is not English, must take the TOEFL (Test of English as a Foreign Language) and obtain a score of 550 or higher on the written examination, or 213 or higher on the computerized examination. All post Master's Nurse Practitioners will undergo a portfolio review of their previous supervised clinical education to determine how many additional clinical hours will be required for them for the DNP. They will also be required to write a 3 page essay on their clinical interests followed by an interview with the graduate committee to make sure that their clinical and research interests can be supported by a faculty mentor at the College.

Enrollment

Saint Joseph College anticipates enrolling the first DNP students for the Fall 2012 semester. The program will admit the DNP students in cohorts of 10-15, once or twice per year.

Curriculum

The curriculum is organized to meet the requirements of the Essentials of Doctoral Education for Advanced Nursing Practice as outlined by the AACN. The core courses include content in organizational behavior, systems organization and leadership, healthcare disparities and care for the underserved, evidenced based practice and extensive clinical practicum and research translation courses.

The DNP culminates with a clinical dissertation with two advisors, one being a Saint Joseph College Nursing faculty and the other a doctorally prepared preceptor. This project could take the form of a practice change initiative, a quality improvement project, a pilot study or an evaluation of a new practice model. The type of project done will depend on the needs of the agency the student selects to work with. The length of time required to complete the program depends on several factors: full time or part time study, the number of practicum hours required, and the length of time needed to complete the clinical dissertation.

Post-Master's DNP Plan of Study Total: Credits 39

Year 1

- 700 Nursing Science and Practice (3)
- 701 Healthcare Quality and Informatics (3)
- 702 Management and Transformational Leadership (3)
- 703 Quantitative Methods and Biostatistics (3)

- 705 Advanced Clinical Practicum I (5) – summer session
- 726 Specialty Seminar (2)

Year 2

- 704 Systems Thinking and Fiscal Analysis in Health Care (3)
- 723 Ethics, Healthcare Disparities and Social Justice (3)
- 724 Health Policy and Political Action in Nursing and Healthcare (3)
- 725 Research Translation (3)

- 781 Advanced Clinical Practicum II (8) – summer session

Evaluation Team Findings: Section 10a-34-15, Curriculum and Instruction

The evaluation team recommended a revision of the syllabi both in bringing in current references and in style, thus making the syllabi more consistent. Saint Joseph College has since reviewed and revised their proposed syllabi and submitted them to the Department of Higher Education. The team also recommended that the faculty look to structure the curriculum and evaluate course content and requirements for better integration toward common program goals. In the newly submitted application, the courses have been re-ordered from the original as the first step in this process.

Saint Joseph College has hired a consultant to help incorporate Ethics into the curriculum.

The evaluation team suggests the development of an advisory committee to receive continued feedback on what knowledge and skill sets are valued in the practice community, and what would be expected of a DNP graduate.

The team also recommends an update to the “Student Handbook For Graduate Nursing Students” to provide specific requirements of the DNP program.

Similar Programs

The University of Connecticut, Sacred Heart University, Fairfield University and Quinnipiac University each have DNP programs. The University of Massachusetts Amherst is the closest school with an online DNP.

Resource Support

Faculty

Courses will be taught by ten full-time faculty and selected adjuncts. The full time Nurse Practitioner faculties either hold doctorates or are enrolled in doctoral programs. All faculty members are registered nurses. The full time faculty include a Certified Nurse Midwife, a

Certified Family Nurse Practitioner, a Certified Pediatric Nurse Practitioner and two faculty members who are Certified Clinical Nurse Specialists in Psychiatric Mental Health Nursing (one of whom has a joint appointment with Nursing and Counseling) and three Nurse Educators.

The College is in the process of hiring three new positions in nursing as well as two half-time positions. The positions require a PhD or DNP in nursing as well as licensure in the State of Connecticut. In total, 13 full-time faculty members will be available to teach and advise in the proposed program.

Evaluation Team Findings: 10a-34-13. Faculty

The evaluation team suggests that the College reevaluate faculty load in preparation for the increase in advising expectations of doctoral research. The institution should consider the additional requirements of scholarship in a doctoral program as well as the need for individualized meetings with students in the final stages of the dissertation that will greatly be affected by faculty availability.

Library and Learning Resources

The college has a state-of-the-art library and a Center for Academic Excellence fully equipped to serve the student's academic needs. Information and research needs are satisfied through a variety of resources including an online catalog and electronic databases which include the Cochrane Databases. The library houses over 135,000 books, periodicals, and audiovisual materials, with online databases available through remote access. The library is also linked nationwide through the OCLC system, providing all students access to an exceptional, high-quality information reservoir.

In addition, Saint Joseph College is a member and participant in iCONN. This library system allows students access to the complete set of databases via the Internet, which include at least 40 Nursing journals in addition to dozens of health and medical journals. This system allows students to read full text articles regardless if they are individual subscribers. An additional service the library provides online students is its ability to scan in articles into a PDF format that can be accessed via Blackboard. Many Nursing related government publications are also available to be read directly online.

Evaluation Team Findings: 10a-34-18. Library and Learning Resources

According to representatives from the College, library support is in place. There has been a recent increase in available databases. The budget for the upcoming year includes a request for additional resources. There is also a request for a part-time medical librarian in the budget who may become a liaison to the program. The team found the library resources to be adequate for the program and current.

Facilities and Equipment

The Academic Technology Unit offers a media production laboratory, faculty production workstations, and instructional support for faculty teaching online.

Evaluation Team Findings: 10a-34-19. Facilities and Equipment

The team recommends continued support for faculty in online pedagogical strategies and online course development.

STAFF REPORT: ACADEMIC AFFAIRS AND PLANNING

Institution: Fairfield University

Item: Accreditation of a program in Nursing Practice, leading to the Doctor of Nursing Practice degree (DNP)

Date: May 19, 2011

Background

The Board of Governors for Higher Education licensed a program in Nursing Practice leading to the Doctor of Nursing Practice (DNP) degree at Fairfield University in February 2010 for a period of two years through February 2012. As of Spring 2011, the program has enrolled 15 students who have earned 0-15 credits, and the University has deemed that the program's enrollments are sustainable. The institution has applied for accreditation of the program so that veterans of the U.S. Armed Forces who may apply for the 2011-12 year will be eligible for veterans' benefits.

The Doctor of Nursing Practice is a clinical doctorate for advanced preparation in nursing practice comparable to advanced clinical degrees in other health disciplines such as Medical Doctor (MD), Doctor of Pharmacy (PharmD), Doctor of Public Health (DrPH), and Doctor of Physical Therapy (DPT). The degree focuses on the appraisal and application of existing evidence to improve practice and is grounded in clinical practice. The DNP moves the focus of advanced practice nursing from the level of the individual patient to the population level by using a cross-population perspective to assess, manage, and evaluate common problems. The American Association of Colleges of Nursing in 2004 recommended that advanced practice nursing move to the doctoral degree for entry level instead of the MSN by 2015.

During the licensure application process, an evaluation team conducted a site visit. The team members were H. Michael Dreher, Chair of the Doctoral Nursing Department at Drexel University; Abbey Zink, Assistant Dean of the School of Arts and Sciences at Western Connecticut State University and ACA member; and Christine Thatcher, DHE. The team made several recommendations and suggestions in the following areas:

Areas of recommendations:

- Program competencies and course descriptions
- Composition of nursing library committee
- Library orientation for doctoral students

Areas of suggestions:

- Doctoral student policies
- Advisory board

The University's response to and progress on these items during the first year of operation appears in the report below.

Description

Purpose and Objectives

The DNP is the first doctoral program at Fairfield University. The University also offers the MFA in Creative Writing, which is a terminal degree. The DNP is offered by the School of Nursing, which currently offers Master's degree programs in Advanced Practice Nursing, Clinical Nurse Leader, Health Care Management and Nurse Anesthesia.

Graduates of the DNP program will possess the following competencies:

1. Independently provide culturally sensitive and evidence-based care to individuals and populations in a defined area of advanced nursing practice
2. Demonstrate critical thinking at the highest level of practice and accountability in the management of healthcare systems, considering ethical, legal, and socially just patient-centered care
3. Translate research into practice through critique of existing evidence, evaluation of outcomes, and implementation of projects that contribute to the development of best practices
4. Integrate science and theory from nursing and related disciplines within a reflective practice framework to inform clinical judgments, resolve dilemmas in healthcare, and serve as a patient care advocate
5. Evaluate patient, population, and healthcare system outcomes using fiscal analysis and cost-effective strategies to achieve quality improvement
6. Analyze the use of healthcare information systems and patient care technology to ensure high quality healthcare outcomes
7. Lead collaborative interdisciplinary relationships and partnerships to transform healthcare delivery systems and improve health
8. Assume a leadership role in the analysis, development, implementation, and evaluation of policies to improve healthcare delivery and outcomes at the local, regional, national, and international levels

Administration

The DNP program is housed in the School of Nursing at Fairfield University. Track Coordinators report to the Associate Dean for Academic Programs, who, in turn, reports to the Dean of the School. The current Chair of the DNP taskforce oversees the program and works collaboratively with Track Coordinators.

The School of Nursing is accredited by the Commission on Collegiate Nursing Education (CCNE) for its graduate and undergraduate programs until 2017. The DNP program will be considered for accreditation at the spring 2017 visit.

In addition, Fairfield University intends to participate in a Doctor of Nursing Practice (DNP) Consortium Initiative developed by the twenty one Jesuit Schools of Nursing. While this Consortium has not progressed and is on hold at the present time, the School is fully prepared to meet the needs of the doctoral program without this external resource.

Evaluation team suggestions:

The team suggested the addition of specific policies for doctoral students and to use this opportunity to develop these policies before additional programs are added at the doctoral level.

The team also suggested broadening the advisory board to include additional members outside of the University.

University response/progress:

The doctoral committee has developed additional procedures regarding orientation, immersion and dissertation processes. These processes have been reviewed with faculty and students and have been added to the online student handbook.

The DNP Advisory Board was formed to provide input during program development. This activity has been completed and the advisory board is now retired. As University begins to graduate the first students from the program in 2012, its Partnership Council, an ongoing group representing our community of interest will provide feedback about the extent to which these graduates meet their needs.

Curriculum

The program was designed by the Nursing Faculty at Fairfield University with consultation from experts at the University of San Diego and the University of Massachusetts, Amherst. The developers used guidelines published by the AACN in 2006. These guidelines include eight essential elements for curriculum development.

The program provides two pathways:

- 1) A post-baccalaureate program will include 50 – 53 credits of theory, 12 credits of clinical hours and 8 credits of DNP Immersion/Capstone completion.
- 2) The post-MSN program consists of 6 credits of Foundation Core, 15 credits of DNP Core and 8 credits of DNP Immersion/Capstone (400 hours).

In response to an issue raised during the site visit, the faculty examined each course to ensure that ethics is a prominent and visible thread across the curriculum. Most courses had ethics clearly stated in the course description and/or course objectives. Where ethics was not in evidence, objectives were added.

All guidelines regarding the final DNP project reflect the designation ‘Practice Dissertation.’ This will be a substantive study requiring students to apply existing knowledge to create and measure the outcomes of a population-based practice innovation. Graduation requirements include successful completion of an oral defense and preparation of a manuscript for a designated peer-reviewed journal.

To better reflect the increased work load requirement of faculty advising doctoral students, the University has added a requirement to the curriculum plan for all students in

the final two semesters to register for one credit of dissertation preparation. This requirement will continue until the student completes the degree. This additional requirement increased the total credits for each program by two credits.

Evaluation Team Recommendation:

The team recommended more explicit doctoral level competencies to be articulated in the course descriptions. Course titles could better represent doctoral training and should be revisited.

University Response/progress

The responded that faculty are confident that the course titles, descriptions and objectives fully address the DNP Essentials document as the course descriptions and objectives were developed based on the DNP Essentials document. A crosswalk table illustrating the fit between course objectives and the DNP Essentials was part of the initial process used in developing the curriculum. A copy of this table appears as an appendix.

Admission and Enrollment

Fairfield University intends to maintain the current level of enrollment in the graduate programs in the School of with the first students entering the DNP program in September 2010. By year three of the program, the University projects 28 new DNP students entering Fairfield each year. In 2010-11, 15 students entered the DNP program.

Applicants to the program must have completed a baccalaureate degree. The degree must be either a BSN or a non-nursing bachelor’s degree with one course in public health nursing. A Connecticut RN license is required for admission. Other requirements include a 3.0 GPA for BSN to DNP applicant or 3.2 GPA for MSN to DNP applicants, computer literacy, an interview including the composition of an essay, as well as a personal statement and references. CNRA applicants must also have a minimum of one year of work experience in a critical care setting and have completed two semesters of college-level biology, two semesters of college-level chemistry and one semester of college-level microbiology and college-level math. A college-level physics course is highly recommended for nurse anesthesia.

Spring 2011 Program Headcount Enrollment by Credit Hours Earned

Enrollment Status	0-30 sch	31-60 sch	61-90 sch	91+ sch
Full-time	0	0	0	0
Part-time	15	0	0	0
Total	15	0	0	0

Resource Support

Faculty

The DNP program employs nine full-time faculty members, one part-time faculty member, and two adjunct faculty members who teach courses in the program. Eleven of these faculty members hold terminal doctoral degrees in appropriate fields; one part-time faculty member, whose highest degree is a MS in Biology with a certificate in nurse anesthesia, is experientially qualified because of professional experience in the field of nurse anesthesia. The University hired two new doctorally prepared faculty members in Spring 2011 who will be on board in September.

A curricular adjustment was made to reflect more appropriately the increased work load requirement of faculty advising doctoral students. As noted above, the University has added a requirement to the curriculum plan for all students in the final two semesters to register for one credit of dissertation preparation. This requirement will continue until the student completes the degree.

Faculty chairs advising doctoral students will receive one teaching load credit for each advisee during two semesters in which the student is enrolled in dissertation preparation. Faculty will receive no credit for students who require additional semesters to complete their practice dissertations. To ensure the best mentoring of doctoral students, faculty chairs will be balanced as much as possible across the faculty given the need to match faculty expertise with student interests.

Finance

In order to balance resources and provide appropriate educational services, the university has allowed MSN nurse practitioner tracks to remain open. Caps on the MSN program are being lowered as the University transitions to the DNP, with the goal of eventually closing MSN tracks.

Library

The Library at Fairfield University currently holds over 394,000 books, 1,170 print periodicals, 33,235 electronic periodicals, 12,788 audiovisual titles and over one million micro print, fiche or form titles. Electronic databases include access to many full-text journals and evidence-based resources such as the Cochrane Library.

Multiple resources have been acquired in the past year to enhance support for the doctoral program. These augmentations include Ovid Health, an electronic database that provides full-text access to numerous nursing and health related journals, and a searchable collection of nursing and medical e-books further expands the full-text online resources available to doctoral students.

Evaluation Team Recommendation

The team recommended creating a Nursing library committee that will include a doctoral student.

The team also recommended a formal library orientation for new doctoral students.

University Response/Progress:

The University has a Library Committee with School of Nursing faculty representation. The library provides an orientation to each and every doctoral student to ensure their needs are met. In addition, faculty members regularly assess student needs via focus groups and monthly meetings with our doctoral students. Additional funding for library acquisitions to support the doctoral program was included in the budget projection for this program. To date, several new databases, journals and books have been purchased. The University believes these mechanisms are sufficient to ensure that student library resource needs are met.

A day-long orientation of new doctoral students was held last fall that included an orientation to the library. The orientation will continue with each new cohort. In addition, many of the courses in the doctoral program imbed library sessions applicable to the specific content or assignments.

Facilities and Equipment

The School of Nursing facility has been technologically updated providing a simulation center that is hard wired for live or recorded simulation. The center consists of three simulation rooms and a control room. The auditorium has Mediasite Live capabilities. The School has ample laboratory and classroom space for the needs of the program.

Appendix:
Crosswalk: DNP Course Objectives and the DNP Essentials I-VIII

DNP Course	DNP Essentials Met (Objectives)	Social Justice & Vulnerable populations	Biostatistics	Focus on the Population	Reflective Practice
Epidemiology & Biostatistics	I (1, 2, 5, 6), III (3, 4, 5, 6), IV (2), VII (1, 2, 4, 5, 6)	Objectives 1-5	Objectives 2, 3, 4, 6	Objectives 1, 2, 4	Objectives 3 & 5
Research I- Qualitative & Quantitative Research Methods & Application to Practice	I (1, 2, 3, 6), III (1, 2, 4, 5, 6) IV (2),	Objectives 1 & 6	Objectives 2, 3, 4, 6	Objectives 4 & 6	Objectives 1 & 4
Research II-Research Translation for Clinical Practice	I (1, 2, 4, 6, 7, 8), III (1, 2, 3, 4, 5, 6, 9), IV (6) V (3, 5, 7, 8), VI (3, 5), VII (3, 4, 5)	Objectives 5, 7, 8	Objectives 1, 4, 6, 9	Objectives 1 & 3	Objectives 1, 2, 3 & 5
Advanced Nursing Roles & Reflective Practice	I (1, 2, 4, 6), III (2, 4), V (1, 5, 6), VI (1, 3, 7), VII (1, 3), VIII (1, 5, 7)	Objectives 1, 3, 6	X	Objectives 1, 3	Objective 1, 2, 4, 6 & 7
Health Care Policy	I (6, 7,) II (1, 2, 8) III (1,2, 4, 5,8), V (1-9), VII (1, 3, 5, 7, 8)	Objectives 6, 7, 8	Objective 5	Objectives 1, 2, 4, 5, 7, 8, 9	Objectives 1, 6. 7. 8. 9 & 10

DNP Course	DNP Essentials Met (Objectives)	Social Justice & Vulnerable populations	Biostatistics	Focus on the Population	Reflective Practice
Health Promotion	I (1, 5), II (1, 4), III (2, 3, 7), IV (2, 3, 6), V (1), VI (1, 4, 7), VII (1-7), VIII (1-7)	Objectives 1, 3, 5	Objectives 3, 6	Objectives 1-7	Objectives 4, 5, 6, & 9
Finance & Quality Management in Health Care Organizations	I (2), II (1-9), IV (5), V (1, 2, 3, 8, 9), VI (1, 2, 3, 4, 6), VII (1, 2, 5, 6, 7, 9)	Objectives 1,2, 3	Objectives 5 & 8	Objectives 1-5, 7, 9	Objectives 2, 3 & 6
Information Technology for Health Care Change	II (1-4), III (1, 2, 3, 5, 6) IV (1-7), V (4, 6)	Objective 6	Objectives 3-5	Objectives 2, 5, 6, 7	Objective #4
Leadership & Interdisciplinary Collaboration	I (2, 4, 5), II (1-7), VI (1-7), VII (4, 5), VIII (1, 7)	Objectives 3, 4, 5, 6	Objective 4	Objective 3	Objectives 1, 3, 5, 6, 7 & 8
Advanced Physiology & Pathophysiology	I (1-5), III (6), IV (4, 5) VIII (1-7)	Objectives 3, 6	Objective 6	Objectives 3,4, 6	Include case studies & discussion; problem-based learning scenarios in objectives and course description if possible (I did not have that syllabus)

STAFF REPORT: ADVISORY COMMITTEE ON ACCREDITATION

Institution: University of Bridgeport

Item: Accreditation of a program in Biomedical Engineering, leading to the Master of Science (M.S.) degree

Date: May 19, 2011

Background

The University of Bridgeport has applied for accreditation of a program in Biomedical Engineering, leading to the Master of Science (M.S.) degree. This program was first accredited in October 2008 and was implemented by the institution in fall of 2009. The program reports that its first graduates will be completing the program this spring.

The program promotes divisional collaborations with faculty from Electrical Engineering, Computer Science and Engineering, Mechanical Engineering, and Technology Management. There are also substantive collaborations between the School of Engineering and the University's programs in health sciences in the development of health therapies and technologies offered by the School of Dental Hygiene, the College of Chiropractic, and the College of Naturopathic Medicine. A strong collaboration also exists with the School of Arts and Sciences, especially in the Departments of Biology and Chemistry with the interdisciplinary BME program.

Areas of study include Biomaterials and Biomechanics, Bioelectronics, Cellular and Molecular Bioengineering, and Bioinformatics. Students must show proficiency in each of these areas. Students are also required to complete a six credit research thesis worthy of publication.

Description

Purpose and Objectives

The Master of Science degree in Biomedical Engineering (BME) will prepare individuals with a strong scientific and technical background for entry into the Biomedical Engineering field at an advanced level and will prepare students for further study leading to a doctorate in the field. The program offers innovative educational strategy that integrates biological sciences and engineering, and applies engineering tools, methods and practices to solve problems in biology and medicine. Graduates of the program are expected to be highly-skilled biomedical engineers, and scientists who understand the ethical, social and economic implications of their work.

Administration

The program is overseen by a Program Director and Chair for Biomedical Engineering in the University's School of Engineering.

Curriculum

As the program developed, the University of Bridgeport modified the original program as approved at licensure. These modifications are listed below:

- The thesis requirement is now required, whereas it had originally been an option. The faculty found that the learning that occurs as students develop thesis projects is essential to the outcomes of the program.
- Requirements in the core have been become more specific as provided here:

The core curriculum consists of the following 16 credits:

BME 565	Biomedical Materials and Engineering	(3 credits)
BME 412	Bioelectronics	(3 credits)
BME 580	Tissue Engineering	(3 credits)
BME 620	Thesis	(6 credits)
ENGR 400	Seminar	(1 credit)

- The program now requires 34 semester credit hours, not the originally planned 30.
- The program concentrations evolved with the addition of new faculty in alignment with their expertise. These program tracks (concentrations) are slightly modified since the time of licensure:
 - Biomaterials and Biomechanics
 - Bioelectronics
 - Cellular and Molecular Bioengineering
 - Bioinformatics

The 18 credits in elective courses may be chosen from the list of BME concentration areas or chosen in consultation with the graduate advisor. Students have the flexibility to take two courses (towards electives) outside the BME program that have some relevance to Biomedical Engineering.

Program Electives:

Biomaterials and Biomechanics (Track -1)

- BMEG 508: Biomechanics
- BMEG 565: Biomedical Materials and Engineering
- BMEG/ELEG 547: BioMEMS
- BMEG/ELEG 562: Nanofabrication with Softmaterials
- BMEG/ELEG 561: Fundamental Analysis of Nanomaterials

Bioelectronics (Track-2)

- BMEG/ELEG-412: Introduction to Bioelectronics
- BMEG/ELEG-443: Digital Signal Processing
- BMEG/ELEG 453: Pattern Recognition
- BMEG/ELEG 513: Biomedical Image Processing

Cellular and Molecular Bioengineering (Track -3)

- BMEG 580: Tissue Engineering
- BMEG/ELEG 511: Applied Cardioengineering
- BMEG/ELEG 573: Magnetobioengineering

Bioinformatics (Track-4)

- BMEG/ELEG 413: Bioinformatics
- BMEG/ELEG 579: Advanced Bioinformatics
- BMEG/TCMG 466: Genetics Foundational Science and Issues

Admission

According to the University, admission to the interdisciplinary BME program requires an undergraduate background that includes elementary coursework in biomedical engineering, biotechnology, biology, clinical science, pharmaceutical science and also includes any branch of science and engineering that permeates through the fundamentals and advanced courses in engineering and the life sciences. Applicants with superior academic credentials but lacking the required background can be admitted subject to their taking the necessary preparatory courses. Applicants are expected to have an average B or better in their undergraduate course work.

Enrollment

The University projected an enrollment of 80 full-time and 10 part-time students in the first year; 150 full-time and 20 part-time students in the second year; and 150 full-time and 20 part-time students in the third year.

At accreditation, the University reports 13 students enrolled in fall 2009, 17 in spring 2010, 33 in fall 2010 and 13 in spring 2011. Currently, there are 76 students with 7 ready to graduate. While these enrollment numbers are lower than projected, the University states that the courses in the program are well enrolled and that the program is sustainable below the originally projected number of 150 students. The institution believes that the program will reach a stable enrollment of 100 students per year within the current environment, and reports that the quality of the students enrolled has been impressive.

Resource Support

Faculty

At the time of licensure, the University listed twenty-two full-time faculty members in the School of Engineering. The University had planned to hire two assistant professor positions in Biomedical Engineering, as well as one associate or full professor, who would serve as the Program's chair.

The School of Engineering has experienced some change-over in faculty but has maintained 22 full-time members. Two faculty members were hired in 2009 as planned; one serving as the Director and Chair of the program. A third faculty member hire was delayed due to the lower enrollments as discussed, and is anticipated for fall 2012. The University reports seven faculty members from the School of Engineering directly involved with this interdisciplinary program in Biomedical Engineering. Additionally, several faculty from outside of Biomedical Engineering contribute to the program.

Library and Learning Resources

The University's Wahlstrom Library provides all appropriate library resources for teaching and research. These resources include books, electronic databases, periodicals in print, microfilm, and other e-formatted materials.

Facilities and Equipment

There are seventeen laboratories in the School of Engineering. Seven of these laboratories support current students in the Biomedical Engineering program.

At its meeting on April 13, 2011, a quorum being present, the Board of Governors for Higher Education approved the following resolutions:

RESOLVED: that the Board of Governors for Higher Education licenses a program in Game Design and Development, leading to a Bachelor of Arts (B.A.) degree, to be offered by Quinnipiac University, for a period of three years until April 30, 2014.

RESOLVED: that the Board of Governors for Higher Education accredits a program in Pathway to Teaching Careers, leading to an Associate of Arts (A.A.) degree, to be offered by Tunxis Community College, for a period of time concurrent with institutional accreditation.

RESOLVED: that the Board of Governors for Higher Education approves the new facility designated as the School of Pharmacy of Saint Joseph College located at 229 Trumbull Street, Hartford, Connecticut.

RESOLVED: that the Board of Governors for Higher Education approves a program modification to the Master of Science (M.S.) and the Sixth Year Certificate in Reading, offered at Southern Connecticut State University, for a period of time concurrent with institutional accreditation.


RESOLVED: that the Board of Governors for Higher Education approves a program modification to the Bachelor of Science (B.S.) in Hospitality and Tourism Management, offered at the University of New Haven, for a period of time concurrent with institutional accreditation.

RESOLVED: that the Board of Governors for Higher Education approves a program modification to offer the Health Science program online, leading to the Associate of Science (A.S.) degree, to be offered by Goodwin College, for a period of time concurrent with institutional accreditation.

RESOLVED: that the Board of Governors for Higher Education accredits a program in Nursing, leading to the Bachelor of Science in Nursing (B.S.N.) degree, to be offered by Central Connecticut State University, for a period of time concurrent with institutional accreditation.

RESOLVED: that the Board of Governors for Higher Education accredits a completion program (RN to BSN) in Nursing, leading to the Bachelor of Science in Nursing (B.S.N.) degree, to be offered by Goodwin College, for a period of time concurrent with institutional accreditation.

RESOLVED: that the Board of Governors for Higher Education accredits a program in Health Science, leading to the Bachelor of Science (B.S.) degree, to be offered by Goodwin College, for a period of time concurrent with institutional accreditation. It is further resolved that the Board of Governors approves the program modification to offer this program online.



Michael P. Meotti
Commissioner