## BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

I.1. Education Committee

## 2:30 p.m. Education Committee – Valhalla B

Thursday, April 4, 2013 UW-La Crosse Room Valhalla B Cartwright Center La Crosse, WI

- a. Consent Agenda:
  - 1. Approval of the Minutes of the February 7, 2013, Meeting of the Education Committee;
  - 2. UW-Madison: Bachelor of Science in Pharmaceutical Sciences; [Resolution I.1.a.(2)]
  - 3. UW-Stout: Bachelor of Science in Environmental Science; [Resolution I.1.a.(3)]
  - 4. UW-Stout: Master of Science in Construction Management; [Resolution I.1.a.(4)]
  - Approval of Requests to Trustees of the William F. Vilas Trust Estate for support of scholarships, fellowships, professorships, and special programs in arts and humanities, social sciences, and music. [Resolution I.1.a.(5)]
- b. Annual Program Planning and Review Report.
- c. Report of the Senior Vice President:
  - 1. Implications of the 2013-15 Executive Budget for Academic and Student Affairs;
  - 2. Upcoming Reports and Reviews.

Program Authorization (Implementation) Bachelor of Science in Pharmaceutical Sciences UW-Madison

# EDUCATION COMMITTEE

Resolution I.1.a.(2):

That, upon the recommendation of the Chancellor of the University of Wisconsin-Madison and the President of the University of Wisconsin System, the Chancellor be authorized to implement the Bachelor of Science in Pharmaceutical Sciences.

## NEW PROGRAM AUTHORIZATION BACHELOR OF SCIENCE IN PHARMACEUTICAL SCIENCES UNIVERSITY OF WISCONSIN-MADISON

## **EXECUTIVE SUMMARY**

## BACKGROUND

This proposal is presented in accordance with the procedures outlined in Academic Planning and Program Review (ACIS 1.0, Revised August 2012, available at <a href="http://www.uwsa.edu/acss/planning/">http://www.uwsa.edu/acss/planning/</a>). The new program proposal for a Bachelor of Science in Pharmaceutical Science at the University of Wisconsin-Madison is presented to the Board of Regents for consideration. The institution has submitted the authorization document and a letter of institutional commitment from the university's Provost.

#### **REQUESTED ACTION**

Approval of Resolution I.1.a.(2), authorizing the implementation of the Bachelor of Science in Pharmaceutical Sciences degree program at the University of Wisconsin-Madison.

## DISCUSSION

The proposed Bachelor of Science in Pharmaceutical Sciences (B.S.-Pharm.Sci.) at UW-Madison was developed with the intention of being a milestone degree that will be awarded "on the way to the Doctor of Pharmacy (Pharm.D.)," the entry-level degree for practicing pharmacists. The Pharm.D. curriculum is meant to be constantly evolving to maintain a progressive and reiterative connection to career goals. The Pharm.D. program consists of 219 credits and generally takes four years to complete from the time of first enrollment in the Pharm.D., and approximately seven to nine years to complete from the time of first entry into a bachelor's program. The proposed milestone BS-Pharm.Sci. undergraduate degree is a necessary and useful addition to the UW-Madison School of Pharmacy's program array.

To be eligible for admission for the B.S.-Pharm.Sci., students must have entered UW-Madison as new freshmen or transfer students and subsequently enrolled in the Pharm.D. program prior to completing a bachelor's degree. The proposed B.S.-Pharm.Sci. will be granted to such Pharm.D. students at the point when they have completed 125 total degree credits and all specified requirements. Requirements include all of the UW-Madison General Education Requirements, the full suite of Pharm.D. prerequisite courses as an undergraduate, plus -an additional 57 credits of specified School of Pharmacy courses, and the requirement that the student earn 30 credits while enrolled as a UW-Madison undergraduate. A full-time student may complete the B.S. Pharm.Sci. in four years.

The B.S.-Pharm.Sci. degree will fill a gap in available credentials that was created when the professional Pharmacy program went from being offered at the bachelor's level to the clinical doctorate. The program will primarily serve students who enrolled at UW-Madison as undergraduates and who subsequently enrolled in UW-Madison's Pharm.D. program without completing a bachelor's degree. A bachelor's degree is not required for admission to the Pharm.D. Consequently, many students who start as new freshmen or transfer undergraduates enroll in the Pharm.D. without ever completing a bachelor's degree.

Graduates of the B.S.-Pharm.Sci. will enjoy the benefits of a UW-Madison bachelor's degree and alumni status. The rare student who enters the Pharm.D. program without holding a bachelor's degree and, subsequently, chooses to leave the Pharm.D. program without completing the Pharm.D., will now be able to enter the workforce or enroll in graduate school with a bachelor's degree in hand. The demand for highly-skilled individuals in pharmacy, medicine, and related fields is very high. The proposal also serves UW-Madison by recognizing and recording these students as bachelor's degree recipients, whereas currently 50-60 students a year are never counted as having completed a bachelor's degree, despite their academic success.

No new courses need to be created and implemented for the proposed degree and major; this curriculum is already being completed by students who enroll in the Pharm.D. program after having taken undergraduate courses as UW-Madison undergraduates but without completing a degree.

## RECOMMENDATION

The University of Wisconsin System recommends approval of Resolution I.1.a.(2), authorizing the implementation of the Bachelor of Science in Pharmaceutical Sciences at the University of Wisconsin-Madison.

#### **RELATED REGENT AND UW SYSTEM POLICIES**

Regent Policy 4-12: Academic Program Planning, Review, and Approval in the University of Wisconsin System.

Academic Information Series #1 (ACIS-1.0; revised August 2012): Statement of the UW System Policy on Academic Planning and Program Review.

# REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN PHARMACEUTICAL SCIENCES AT UW-MADISON PREPARED BY UW-MADISON

## ABSTRACT

The proposed Bachelor of Science in Pharmaceutical Sciences (B.S.-Pharm.Sci.) is intended to serve students who enrolled at UW-Madison as undergraduates and who subsequently applied to and enrolled in UW-Madison's Doctor of Pharmacy (Pharm.D.) program without completing a bachelor's degree. A bachelor's degree is not required for admission to the Pharm.D. Consequently, many students who start as new freshmen or transfer undergraduates enroll in the Pharm.D. without ever completing a bachelor's degree. This program will serve as a milestone degree that will be awarded "on the way to the Pharm.D." The proposed program will give B.S.-Pharm.Sci. graduates the benefits of a UW-Madison bachelor's degree and alumni status. No new courses need to be created and implemented for the proposed degree.

## **PROGRAM IDENTIFICATION**

**Institution Name** University of Wisconsin-Madison

**Title of Proposed Program** Pharmaceutical Sciences

**Degree/Major Designation** Bachelor of Science

**Mode of Delivery** On-campus, face-to-face delivery

**Single Institution or Collaboration** Single institution delivery

## **Projected Enrollment by Year Five of the Program**

As of Fall 2012, there were 532 total enrollments in the Doctor of Pharmacy program. An estimated 60 students will complete the B.S.-Pharm.Sci. degree annually.

#### **Tuition Structure**

Resident students will pay standard UW-Madison undergraduate tuition while enrolled as undergraduates and regular Pharm.D. tuition while enrolled as Pharm.D. students.

College, School or Functional Equivalent

The proposed program will be housed within the UW-Madison School of Pharmacy.

#### **Proposed Date of Implementation**

August, 2013

## **INTRODUCTION**

## **Rationale and Relation to Mission**

UW-Madison is a major research university that delivers a broad range of programs at the undergraduate, graduate, and professional levels. The mission of the UW-Madison School of Pharmacy is to educate, train, and provide life-long learning opportunities for undergraduate and graduate students, practicing pharmacists, and scientists, while creating, disseminating, and applying new knowledge based on research in the biomedical, pharmaceutical, social, and clinical sciences to enhance the quality of life through improved health. The UW-Madison School of Pharmacy's vision is to enhance its international prominence in pharmaceutical research, education, outreach, and practice and to house the most creative and dynamic programs that train the next generation of pharmacists, scientists, educators, and leaders in an inclusive and welcoming working/learning environment.

Consistent with its stated vision, the UW-Madison School of Pharmacy now proposes to implement a B.S.-Pharm.Sci. This program was developed with the intention of being a milestone degree that will be awarded "on the way to the Pharm.D." The B.S.-Pharm.Sci. will fill a gap in available credentials that was created when the professional Pharmacy program went from being offered at the bachelor's level to the clinical doctorate. The program will allow UW-Madison to recognize the undergraduate success of these students who will meet all of the UW-Madison bachelor's degree graduation and general education requirements. Students will become eligible for participation in dual degree programs that require a completed bachelor's degree and, subsequently, chooses to leave the Pharm.D. program without holding a bachelor's degree able to enter the workforce or enroll in graduate school with a bachelor's degree. The proposal serves UW-Madison by recognizing and recording these students as bachelor's degree recipients, whereas currently these 50-60 students a year are never counted as graduated, despite their academic success.

#### Need as Suggested by Current Student Demand

The majority of students who receive the B.S.-Pharm.Sci. will go on to complete a Doctor of Pharmacy, the entry-level degree for practicing pharmacists. According to the U.S. Department of Labor, Bureau of Labor Statistics, "Employment of pharmacists is expected to increase by 25 percent from 2010 to 2020, faster than the average for all occupations." The demand for highly-skilled individuals in pharmacy, medicine, and related fields is very high. The rare student who graduates with a B.S.-Pharm.Sci. without completing the Pharm.D. degree will leave UW-Madison with a strong science-based bachelor's degree.

The proposed B.S.-Pharm.Sci. will give students opportunities they do not currently have to enter the workforce in jobs that require a degree in a Science, Technology, Engineering and Mathematics (STEM) field as a minimum qualification or to enroll in graduate school. According to Anthony Carnevale, the lead author of a 2011 report from the Georgetown University's Center on Education and Workforce, technical skills have "Become the common currency of the labor market." Further, Carnevale reports "Regardless of occupation, people with a bachelor's degree in a STEM major make roughly \$500,000 more over their lifetimes than non-STEM majors. Over the past 30 years, salaries in STEM-related jobs have jumped faster than those in any other occupation other than healthcare professionals and managerial occupations. STEM wages jumped 31 percent over the past 30 years, compared with 23 percent for all non-STEM occupations."

The proposed B.S.-Pharm Sci program serves students in four ways:

- 1. UW-Madison undergraduates who subsequently enroll in the Pharm.D. will have the opportunity to earn a B.S. degree. Consequently, they will be counted as having completed a degree and will enjoy the benefits of being UW-Madison alumni
- 2. Students' career choices and educational opportunities will be expanded because their undergraduate education as well as their Pharm.D. educational experience is recognized.
- 3. More Pharm.D. students will be eligible for participation in dual-degree programs with graduate degrees or certificates because a bachelor's degree is required for admission into a graduate program.
- 4. A student who entered the Pharm.D. program without holding a bachelor's degree, and chooses to leave the Pharm.D. program without completing it, will now be able to leave the University with a B.S.-Pharm.Sci., rather than no degree at all.

In addition, the proposal serves UW-Madison by recognizing and recording these students as bachelor's degree recipients. Currently, these students, despite their impressive academic success, are counted as not graduated.

## **DESCRIPTION OF PROGRAM**

#### **Institutional Program Array**

Ranked as one of the best pharmacy programs in the United States, the UW-Madison School of Pharmacy offers a comprehensive array of degree and certificate programs at the undergraduate, graduate and professional levels. The B.S. in Pharmacology & Toxicology focuses on the principles by which chemicals affect the health of humans and animals. The M.S. in Pharmacy is a terminal degree that provides training for innovative health system pharmacy administration and managerial leadership. The Ph.D. in Pharmaceutical Sciences provides interdisciplinary education and preparation for research in the fields of Drug Discovery, Drug Action, and Drug Delivery. The M.S. and the Ph.D. in Social and Administrative Sciences in Pharmacy prepare students for research in drug use, patient and provider communication and behaviors, health outcomes, pharmacy practice, and more. The Doctor of Pharmacy (Pharm.D.) is the entry-level degree for practicing pharmacists. The proposed B.S.-Pharm.Sci. is intended only for students who enter UW-Madison as new freshmen or new transfer students, who subsequently enroll in the Pharm.D. before they complete a bachelor's degree, and who also complete all of the bachelor's degree requirements as outlined below. As such, it will fill a specialized and important niche in the UW-Madison School of Pharmacy program array.

#### Other Programs in the University of Wisconsin System

UW-Madison offers the only Doctor of Pharmacy within the UW System. Because the B.S.-Pharm.Sci. is intended as a "milestone" degree to recognize the undergraduate success of eligible Pharm.D. students, there is no comparable program at other System institutions.

#### **Collaborative Nature of the Program**

The proposed B.S.-Pharm.Sci. fills an important role for UW-Madison students entering the Pharm.D. program. Within UW-Madison, it provides opportunities for these students to participate in dual-degree programs between the Pharm.D. and other graduate or professional programs that require a completed degree for admission (for example, a Pharm.D./Ph.D. or Pharm.D./Master of Public Health).

In addition, in their responses to the UW-Madison in the Notice of Intent to plan for this degree, some UW universities indicated an interest in a collaborative degree arrangement. UW-Madison and the UW-Madison School of Pharmacy faculty and staff share an interest in developing collaborative arrangements that may allow transfer students to earn a bachelor's degree in a related field or STEM area at their home UW institution as a milestone degree in the Pharm.D. program. UW-Madison will contact those specific UW campuses upon approval of the B.S.-Pharm.Sci. to develop collaborative arrangements.

#### **Diversity**

To achieve its mission of educating expert health care providers who can serve effectively in contemporary society, the UW-Madison School of Pharmacy attracts students, staff, faculty, and administrators who reflect our diverse society; are skilled at working across lines of race, class, economics, religion, sexual identity, culture, nationality, ability, and other forms of difference; and are committed to creating social justice in health care. The Director of Diversity works closely with students, faculty, and staff to promote a climate, curriculum, and community that values social inclusivity, academic excellence, and the development of skills, knowledge, and values that promote the greatest access to the highest quality health care for everyone. Moreover, the new Director of Recruitment and Outreach will focus efforts on attracting a diverse population of students from within the state. The UW-Madison School of Pharmacy promotes cultural competence by directing students to be active in community service/volunteer activities; offering coursework, workshops, and seminars dealing with expanding cultural knowledge; and encouraging activities through clubs/social organizations, professional organizations, community, civic, and religious groups.

#### **Student Learning Outcomes and Program Objective**

The B.S.-Pharm.Sci. is based on the philosophy that a successful student builds expertise in many specific areas by gaining mastery of foundation material from the biomedical, pharmaceutical, social, and clinical sciences. The foundation material provides an intellectual framework. The UW-Madison School of Pharmacy embraces diversity in its teaching approach, including active learning, traditional teaching strategies, up-to-date laboratories, robust use of technology, and an emphasis on learning as a life-long activity. The B.S.-Pharm.Sci. curriculum is meant to be constantly evolving to maintain a progressive and reiterative connection to career goals. The B.S.-Pharm.Sci. program learning goals are as follows:

- 1. *Information processing and provision:* Retrieve, analyze, and interpret the scientific and lay literatures, and provide drug and health information to healthcare professionals, scientists, and the public.
- 2. *Scientific and medical terminology*: Use appropriate scientific and medical terminology to convey anatomic, pathophysiologic, physical, chemical, pharmacologic, pharmacoeconomic, socio-behavioral, and therapeutic concepts.
- 3. *Drug factors:* Apply knowledge of the physical, chemical, pharmacologic, and formulation properties of drugs and relate how these properties influence drug parameters (such as kinetics, pharmacodynamics, stability, dosage form design, and treatment-related outcomes). Differentiate among the major therapeutic drug classes based on mechanisms of action, clinical use and adverse effects, contraindications, drug interactions, dosage forms, and dosing regimens.
- 4. *Patient factors:* Collect, integrate, and apply knowledge of a patient's biochemistry, anatomy, physiology, genomics, culture, socio-behavioral characteristics, and pathophysiologic states to develop an individualized patient care plan using drug factors that will improve therapeutic outcomes, minimize drug reactions, reduce adverse events, and increase adherence.
- 5. *Drug kinetics:* Design or modify dosage regimens using patient-specific or population pharmacokinetic data, the plasma concentration-time profile of drugs, and factors that alter them.
- 6. *Product preparation:* Compound parenteral and non-parenteral drug products using appropriate calculations, pharmaceutical components, and techniques. Demonstrate a commitment to patient safety by assuring total accuracy in calculation, preparation, labeling, and dispensing of prescription and medication orders.
- 7. *Communication:* Communicate effectively in oral and written forms with patients, caregivers, healthcare professionals, scientists, and others. Demonstrate empathy, listening skills, and altruism in interactions.
- 8. *Teamwork:* Collaborate effectively with pharmacy colleagues, other healthcare professionals, scientists, and patients and/or their caregivers.
- 9. *Behavioral principles:* Apply social and behavioral principles and theories in the design, delivery, and evaluation of pharmaceutical care.
- 10. *Management principles:* Use management principles to analyze and have ability to manage pharmacy operations and to analyze and evaluate personnel, including

optimizing physical and technological resources, to assure safe, efficient and effective management of medication distribution, control, and use systems.

- 11. *Practice evaluation:* Apply patient- and population-specific data, quality assurance strategies, and evaluation to develop and implement practice-based drug use strategies and public health policies to assure that medication use systems minimize drug misuse, optimize patient outcomes, and address public health problems.
- 12. *Health disparities:* Identify causes of health disparities and incorporate principles of cultural awareness, sensitivity, and competence into plans to address these issues.
- 13. *Public Health:* Identify and address public health problems and promote health and wellness. Design individual and population-specific, evidence-based disease prevention and disease management programs (such as medication therapy management) and protocols based upon analysis of epidemiologic and pharmacoeconomic data, medication use criteria, medication use review, and risk reduction strategies.
- 14. *Lifelong learning:* Create and enhance a personal plan for continuing professional development to promote lifelong learning and ensure maintenance of professional competence.

## Assessment of Program Learning Goals and Program Objectives

Several general principles underlie the UW-Madison School of Pharmacy's approach to educational assessment:

- 1. Data produced by assessment measures is intended to provide the school with information about successes and about needs for change in the academic programs. Data is not intended to evaluate individual students or faculty.
- 2. Educational assessment should include both quantitative and qualitative approaches. Data must be viewed as a whole; individual parts must not be used out of context.
- 3. Educational assessment must not inhibit innovation or risk-taking in teaching techniques and learning. Rather, assessment processes should be used to encourage trying new pedagogical techniques and to promote evidence-based educational practice.
- 4. The assessment process builds on and does not replace ongoing curricular review. The UW-Madison School of Pharmacy's Curriculum Committee is responsible for periodically reviewing its course offerings. Educational assessment processes, including feedback mechanisms, are intended to complement rather than to replace the activities of this committee.

The UW-Madison School of Pharmacy's Director of Assessment provides administrative leadership and the Assessment Committee compiles and reviews assessment results, and develops the annual Assessment Report. This report:

- 1. Summarizes the extent to which each of the educational outcomes expected of students are achieved.
- 2. Identifies areas in which the program is successful in achieving its educational mission, as established by the school.
- 3. Suggests revision of the curriculum or pedagogy in areas where assessment results detect problems or identify areas for improvement.
- 4. Suggests revision in the measures, methods and/or overall plan for educational assessment, if the Committee feels that current practices do not adequately capture needed information.

The UW-Madison School of Pharmacy uses a variety of assessment instruments and methods. Direct assessments of student performance serve as the primary means for assessing student-learning outcomes. These are complimented by indirect assessments that provide useful information regarding diverse aspects of program operations, student experiences, and student achievement.

#### Student Learning Outcomes

Each defined educational outcome of the program will have a small number (1-3) of "key assessments" to regularly and systematically analyze program outcomes. The Assessment Committee is responsible for identifying these assessments; the Committee's selections will be brought to the UW-Madison School of Pharmacy Faculty/Staff regularly for information and discussion. The Assessment Committee is responsible for collaborating with relevant course instructors in establishing the key assessments.

Each key assessment is completed regularly, at specified points in the program. The Director of Assessment is responsible for coordinating with course instructors and the instructional support staff and carrying out key assessment processes.

#### Curricular Effectiveness

Program Operations, student experiences, and student achievement are assessed using a wide variety of tools and techniques. Survey tools include the American Association of Colleges of Pharmacy Curriculum Quality Surveys and instructional evaluations. Qualitative information is gathered through exit interviews with graduating students. Records that are reviewed include student promotion case analysis, graduation and attrition rates, and grade point averages and trends.

## **Program Curriculum**

The requirements for the B.S.-Pharm.Sci. degree are as follows:

a. To be eligible, students must have entered UW-Madison as new freshmen or transfer students and subsequently enrolled in the Pharm.D. program prior to completing a bachelor's degree.

b. The degree is granted to such Pharm.D. students at the point when they have completed 125 total degree credits and all specific requirements. Requirements include all of the UW-Madison General Education Requirements, the full suite of Pharm.D. prerequisite courses as an undergraduate, plus an additional 57 credits of specified School of Pharmacy courses, and 30 credits earned while enrolled as a UW-Madison undergraduate.

Figure 1 below shows the curricular requirements for the courses a student would take when enrolled in the undergraduate program, including General Education courses. Figure 2 below shows the curricular requirements for the B.S.-Pharm.Sci. while the student is enrolled as a Pharm.D. student.

Figure 1	
Pre-Pharm.D. and General Education Course Requirements	Credits
(Total = 68 credits)	
Math 221 or Math 171/217	5-10
General Chemistry 103 or 109	4-5
General Chemistry 104 or 109	4-5
Organic Chemistry 343	3
Organic Chemistry Laboratory 344	2
Organic Chemistry 345	3
Physics 103 or 201 or 207	4-5
Physics 104 or 202 or 208	4-5
Zoology/Biology 151 OR Zoology 101 and 102	5 or 3/2
Zoology/Biology 152 OR Botany 130	5
Microbiology 101 or 303	3
Microeconomics 101	4
Statistics 301 or 371 or 541	3
Communication A	2-3
Social Science or Anthropology Course	3
Psychology 202	3
Ethnic Studies Course	3-4
Humanities Course	3
History Course	2
Elective Credits (if needed to reach 68 credit minimum)	Variable

Figure 2

Pharm.D. Curriculum Required for BS-Pharm.Sci. (Total = 57 credits)	Credits
PHM SCI 420, Intro to Drug Action & Drug Delivery I	4
PHM SCI 432, Pharmaceutical Biochemistry	4
S&A PHM 411, Psychosocial & Management Aspects of Phm	3
PHYSIOL 335, Physiology	5
PATH 404, Pathophysiologic Principles of Human Diseases	3
PHM SCI 421, Intro to Drug Action & Delivery II	4

Pharm.D. Curriculum Required for BS-Pharm.Sci. (Total = 57 credits)	Credits
PHM SCI 531, Medicinal Chemistry I	2
PHM SCI 541, Drug Delivery Systems Laboratory I	3
S&A PHM 414, Pharmacy in the Health Care System	3
PHM SCI 521, Pharmacology I	3
PHM SCI 540, Drug Delivery Systems	4
PHM SCI 542, Drug Delivery Systems Laboratory II	3
PHM PRAC 555, Pharmacotherapy I	4
PHM SCI 522, Pharmacology II	3
PHM SCI 532, Medicinal Chemistry II	2
PHM PRAC 556, Pharmacotherapy II	4
PHM PRAC 570, Drug Literature Evaluation	3

In total, the B.S.-Pharm.Sci. curriculum consists of 125 credits, which can be completed within four academic years. No new courses need to be created and implemented for the proposed degree and major; this curriculum is already being completed by students who enroll in the Pharm.D. program after having taken undergraduate courses as UW-Madison undergraduates but without completing a degree.

## **Projected Time to Degree**

The B.S.-Pharm.Sci. degree is granted to Pharm.D. students at the point when they have completed 125 total degree credits and all specific requirements. The full-time student may complete the B.S. Pharm.Sci. in four years.

#### **Program Review Process and Accreditation**

The UW-Madison School of Pharmacy was deemed to have fulfilled the accreditation requirements designated by the Accreditation Council for Pharmacy Education (ACPE) in January 2012 (following an extensive school-wide self-study), thereby extending its accreditation status through June 30, 2020. The B.S.-Pharm.Sci. program review will be incorporated into the 2020 ACPE reaccreditation process, which is a comprehensive review that includes attention to a wide variety of quality factors, a focus on student learning, and the outcomes listed above, and includes a review of the extent to which students are prepared for a multicultural and diverse world.

#### REFERENCES

- Carnevale, Anthony P., et al. *Science, Technology, Engineering, Mathematics* (2011). Georgetown University Center on Education and the Workforce. Retrieved from cew.georgetown.edu/stem/.
- U.S. Department of Labor. *Bureau of Labor Statistics*. 2012-2013 Occupational Outlook Handbook. Retrieved from http://www.bls.gov/ooh/Healthcare/Pharmacists.htm.



Via e-mail

February 26, 2013

To: Kevin Reilly, President, University of Wisconsin System

From: Paul M. DeLuca Jr., Provost

RE: Authorization Proposal – Bachelor of Science – Pharmaceutical Sciences

In keeping with UW System and Board of Regent Policy I am sending you a proposal for a new BS-Pharmaceutical Sciences at UW-Madison.

The program has been designed to meet UW-Madison's definition and standards of quality and to make a meaningful contribution to the institution's overall academic plan and program array. Students will be required to meet all the requirements of other UW-Madison bachelor's degree requirements.

There is institution-wide support for the program, including faculty governance approval. In keeping with UW-Madison policy, this program has been reviewed and endorsed by the faculty of School of Pharmacy and approved by the University Academic Planning Council.

Because of the distinctive nature of the program, as a "milestone" degree, there are no new instructional costs. The School of Pharmacy will provide for the additional advising needs. The necessary financial and human resources are in place and are committed to implement and sustain the program. The program faculty have established a robust plan for assessment of student learning, program review, and accreditation.

I am pleased to send you this proposal with my support.

Please contact Jocelyn Milner (ilmilner@wisc.edu, 263-5658) if you have any questions.

Attachment

Copies: Stephen Kolison via UWSA Academic Affairs (<u>afgp@uwsa.edu</u>) Mark Nook, UW System Administration Teresa Brown, UW System Administration Jeannette Roberts, School f Pharmacy Bill Mellon, School of Pharmacy Christine Sorkness, School of Pharmacy Jocelyn Milner, Academic Planning and Institutional Research Program Authorization (Implementation) Bachelor of Science in Environmental Science UW-Stout

# EDUCATION COMMITTEE

Resolution I.1.a.(3):

That, upon the recommendation of the Chancellor of the University of Wisconsin-Stout and the President of the University of Wisconsin System, the Chancellor be authorized to implement the Bachelor of Science in Environmental Science.

## NEW PROGRAM AUTHORIZATION BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE UNIVERSITY OF WISCONSIN-STOUT

# **EXECUTIVE SUMMARY**

# BACKGROUND

This proposal is presented in accordance with the procedures outlined in Academic Planning and Program Review (ACIS 1.0, Revised August 2012, available at <a href="http://www.uwsa.edu/acss/planning/">http://www.uwsa.edu/acss/planning/</a>). The new program proposal for a Bachelor of Science in Environmental Science at the University of Wisconsin-Stout is presented to the Board of Regents for consideration. The institution has submitted the authorization document and a letter of institutional commitment from the university's Provost.

## **REQUESTED ACTION**

Approval of Resolution I.1.a.(3), authorizing the implementation of the Bachelor of Science in Environmental Science degree program at the University of Wisconsin-Stout.

## DISCUSSION

The proposed Bachelor of Science in Environmental Science (B.S.) is an interdisciplinary and pre-professional program that will prepare graduates to meet rapidly shifting global career demands and opportunities focused on environmental preservation, restoration, and sustainable management. The 120-credit degree includes 40-41 credits in general education, 24-25 credits in Environmental Science core courses, and 55-56 credits in one of the four concentrations offered: Plant Science Innovations, Land Resources, Aquatic Biology, and Environmental Health. The Departments of Biology, Chemistry, and Physics currently offer the courses and have the faculty expertise to implement the proposed major.

Due to UW-Stout's long-standing relationship with industry, students will have exposure to various components of industry via their co-op experience and through projects in the UW-Stout Discovery Center. Graduates of the Environmental Science program will develop practical skills in the field and laboratory, and will be prepared to solve real life environmental problems in independent and collaborative settings.

According to the U.S. Bureau of Labor Statistics also projects that the demand for environmental scientists will increase as more businesses are expected to consult with environmental scientists to help minimize impact on the environment.

## RECOMMENDATION

The University of Wisconsin System recommends approval of Resolution I.1.a.(3)., authorizing the implementation of the Bachelor of Science in Environmental Science at the University of Wisconsin-Stout.

# **RELATED REGENT AND UW SYSTEM POLICIES**

Regent Policy 4-12: Academic Program Planning, Review, and Approval in the University of Wisconsin System.

Academic Information Series #1 (ACIS-1.0; revised August 2012): Statement of the UW System Policy on Academic Planning and Program Review.

# REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE AT UW-STOUT PREPARED BY UW-STOUT

## ABSTRACT

The proposed Bachelor of Science in Environmental Science (B.S.) is an interdisciplinary and pre-professional program that will prepare graduates to meet rapidly shifting global career demands and opportunities focused on environmental preservation, restoration, and sustainable management. Four concentrations will be offered: Plant Science Innovations, Land Resources, Aquatic Biology, and Environmental Health. The Departments of Biology, Chemistry, and Physics currently offer the courses and have the faculty expertise to implement the major.

## **PROGRAM IDENTIFICATION**

**Institution Name** University of Wisconsin-Stout

**Title of Proposed Program** Environmental Science

**Degree/Major Designations** Bachelor of Science

Mode of Delivery On campus

**Projected Enrollments by Year Five** 90 students

## **Tuition Structure**

Residential tuition will be a total of \$3,578 per semester for a full-time resident student who is enrolled in 12 credits per term. Students will be charged \$298 per credit inclusive of fees for resident tuition; non-resident tuition will be \$556 per credit inclusive of fees.

## **Department or Functional Equivalent**

There will be three departments that will deliver components of the proposed degree: the Department of Biology, the Department of Chemistry, and the Department of Physics.

## **College, School or Functional Equivalent**

College of Science, Technology, Engineering, and Mathematics

## **Proposed Date of Implementation**

Fall, 2013

## **INTRODUCTION**

## **Rationale and Relation to Mission**

An Environmental Science Concentration has existed within the UW-Stout B.S. in Applied Science since 2008. Currently, the program in Applied Science also offers concentrations in Biotechnology, Materials Science, Interdisciplinary Science, and Nanoscience. The proposed B.S. in Environmental Science represents a conversion of the existing concentration in Environmental Science into a stand-alone 120-credit degree.

The B.S. in Environmental Science will prepare graduates to meet rapidly-shifting global career demands and opportunities focused on environmental preservation, restoration, and sustainable management. As an interdisciplinary program, Environmental Science will include four concentrations: Land Resources, Plant Science Innovations, Aquatic Biology, and a new Environmental Health concentration. Many students will combine this program with minors in Chemistry, Geographic Information Systems (GIS), Human Physiology, Plant Science, or Sustainable Design and the Environment.

Due to UW-Stout's long-standing relationship with industry, students will have exposure to various components of environmentally-focused industry via a co-op experience and through participation in projects at the UW-Stout Discovery Center, a leading research and technology transfer hub for the region and the entire state. The mission of the center is to advance UW-Stout's polytechnic focus of applied research by expanding the university's commitment to quality and innovation, transformative education, and interdisciplinary collaboration.

Graduates of the Environmental Science program will develop practical skills in the field and laboratory, and will be prepared to solve real-life environmental problems in independent and collaborative settings. In alignment with UW-Stout's designation as Wisconsin's Polytechnic University, this program will support its mission and central tenets by 1) offering a curriculum that prepares students for professional careers in environmental science, 2) blending research and theory with practice to produce innovative solutions to real world problems, and 3) working closely with business, industry, and other educational institutions to benefit students and grow the economy.

#### **Relation to Strategic Plan**

The proposed B.S. in Environmental Science exemplifies UW-Stout's vision to provide "collaborative programs that integrate applied learning, theory and research with business, education, arts and government." The fit of the proposed program with UW-Stout's mission and strategic plan was identified by faculty in the College of Science, Technology, Engineering and Mathematics, supported by the Dean, and placed on UW-Stout's Academic Plan for development by the Provost.

UW-Stout's strategic plan includes several Enduring Goals and Focus 2015 Goals that will be directly supported by the proposed B.S. in Environmental Science program. The program will enhance (refer to underlined areas of emphasis):

- Enduring Goal 1: Offering <u>high quality, challenging programs</u> that influence and respond to society.
- Enduring Goal 2: Preserving and enhancing our educational processes through the application of <u>active learning principles</u>.
- Enduring Goal 3: <u>Promoting excellence</u> in teaching, research, scholarship and service.
- Focus 2015 Goal 2: Expanding early and ongoing experiential learning opportunities including undergraduate applied research and entrepreneurship by <u>requiring progressive</u> applied experiences and a capstone experience.
- Focus 2015 Goal 4: Focusing on sustainability by implementing key elements of the President's Climate Commitment and Educational and Applied Research Initiatives through <u>developing curriculum and programs to support environmental sustainability</u>.

The transition from a concentration within the field of Applied Science to a major in the discipline of Environmental Science will also increase the program's profile, visibility, and prestige. The creation of a degree in Environmental Science presents the opportunity to departments within the College of Science, Technology, Engineering and Mathematics to align program plans based on industry standards and individual program objectives, to better serve our students.

## Need as Suggested by Current Student Demand

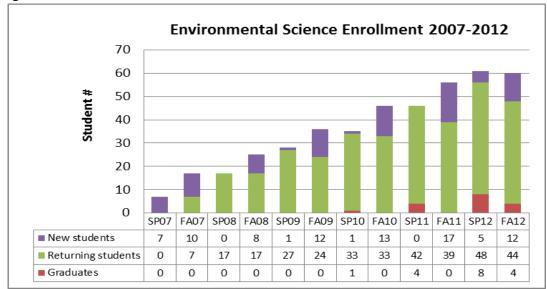
The B.S. in Environmental Science is being developed to respond to specific needs of the current and prospective students who have a strong interest in environmental sciences. The students that UW-Stout recruits for its applied science and pre-professional programs have indicated a strong interest in environmental and technological sustainability, and the College of Science, Technology, Engineering, and Mathematics expects that the student demand for environmentally-oriented professions is going to increase beyond the current enrollment in the concentration. The creation of a more visible and stand-alone major in Environmental Science with four job-focused concentrations will clarify students' educational experiences and expertise, and thereby increase their employability.

An elevation of the concentration in Environmental Science within the B.S. in Applied Science to a stand-alone B.S. in Environmental Science with four concentrations will also benefit UW-Stout's students by creating a framework that will provide more opportunities to gain knowledge, skills, and experiences that increase current and prospective students' postgraduation success.

Follow-up studies of recent graduates indicate that 14 students have graduated with a B.S. in Applied Science with an Environmental Science concentration to date. Of the 14 graduates, four are enrolled in graduate school, and ten hold entry-level jobs in an Environmental Science field. Upon implementation of the program in Environmental Science, the 60 students currently enrolled in the concentration (submajor), will have the option of choosing the new B.S. in Environmental Science or of remaining in the concentration within Applied Science. It is anticipated that students with fewer credits toward degree completed (freshmen and sophomores) will be the most likely to switch from the concentration within the Applied Science program into the new B.S. in Environmental Science.

Figure 1 below presents student enrollment in the existing concentration in Environmental Science, from 2007-2012.





Students enrolled within pre-professional programs, such as in the Environmental Science concentration, make up approximately 33% of all students enrolled in the Applied Science program. Particularly, the Environmental Health concentration of the new proposed Environmental Science program would increase job opportunities for this group of pre-professional students, as many of them apply to competitive health professional schools but also need alternate career options.

The establishment of a new Environmental Science degree will not have a negative impact on enrollment projections for the existing Applied Science program due to the growth of the Biotechnology and Interdisciplinary Science concentrations and the Pre-health Profession track within Applied Science.

## Need as Indicated by Market Research

According to the U.S. Bureau of Labor Statistics, "Employment of environmental scientists and specialists is expected to grow by 19 percent from 2010 to 2020." Heightened public interest in the hazards facing the environment, as well as the increasing demands placed on the environment by population growth, is projected to spur demand for environmental scientists and specialists.

The market demand reflects a few key trends that will create sustainable job opportunities. According to the U.S. Bureau of Labor Statistics, the demand will increase as more businesses are expected to consult with environmental scientists to help minimize the impact of business operations on the environment. For example, environmental consultants help businesses develop practices that minimize waste, prevent pollution, and conserve resources. They also provide important services to manage and repair degraded natural resources. Other environmental scientists are expected to be needed to help planners develop and construct buildings, utilities, and transportation systems that protect natural resources and limit damage to the land.

In addition to growth, many job openings will be created by scientists who retire, advance to management positions, or change careers. Recent employment of environmental scientists and specialists (including health) in the U.S. Midwest region is sound (see http://www.bls.gov/oes/current/oes192041.htm).

#### New Directions in the Profession

The primary objective of the proposed B.S. in Environmental Science is to prepare scientists to meet both current and future environmental challenges that then ensure a healthy, robust, and sustainable environment for generations to come. The planned concentrations in Plant Science Innovations, Land Resources, Aquatic Biology, and Environmental Health will allow students to specialize in fields of expertise within the industry while still providing a strong foundation experience to cover the breadth needed to be successful within Environmental Science throughout their careers. The curriculum, research experiences, service opportunities, and internships that our students will participate in as part of this program provides them with a vast array of skills in various environmental fields. Technical report-writing, data analysis, interpersonal communication, and experimental design are stressed across the curriculum. Opportunities for field experience or cooperative education are an essential component of the program

## **DESCRIPTION OF PROGRAM**

#### **General Structure and Institutional Program Array**

Environmental Science is an integrated approach to the study of ecological systems with the goal of solving and preventing environmental problems. Environmental scientists assess and restore natural landscapes, manage invasive species, ensure population viability of rare species, address environmental public health concerns, and facilitate community partnerships on food security and other environmental initiatives.

The B.S. in Environmental Science will complement UW-Stout's existing program array in the applied sciences as well as in its interdisciplinary and pre-professional curricular offerings due to its focus on developing students for careers and the applied nature of the curriculum. Given that the program will be developed from an existing submajor within the B.S. in Applied Science, the program will rely on existing areas of expertise across three departments within the College of Science, Technology, Engineering, and Mathematics, thus expanding options and career choices for students.

Most of the courses required in the B.S. Environmental Science program are currently offered as part of the current B.S. in Applied Science. The Departments of Biology, Chemistry and Physics currently have the faculty and expertise needed to implement the proposed program.

A program director will be appointed to lead the program. The role of the program director, typically a quarter-time assignment, is to provide leadership for the program, and to

coordinate the following program-related activities: curriculum management, program assessment, recruitment, retention, advisement, and partnership development.

#### Other Programs in the University of Wisconsin System

UW-Eau Claire, UW-Green Bay, UW-Milwaukee, UW-Madison, UW-River Falls, UW-Stevens Point, UW-Superior, and UW-Whitewater have active baccalaureate Environmental Science and Environmental Studies degree programs in areas similar to the proposed major. Although all comparable programs have common themes focusing on environmental issues and/or natural resource management, each has unique areas of emphasis built on the expertise of the individual institution's faculty and/or the natural resources in their local areas. The proposed B.S. in Environmental Science includes four distinctive, job-focused concentrations that will position graduates for employment in specific areas of Environmental Science: Land Resources, Plant Science Innovations, Aquatic Biology, and Environmental Health. All concentrations will allow students to specialize in fields of expertise within the industry while laying a strong foundation to cover the breadth needed for graduates to be successful within Environmental Science throughout their careers.

Rather than a large-core major with a few selective courses, the program has been constructed with career-focused, specialized tracks. The proposed degree at UW-Stout targets different skills, such as management and rehabilitation applications in aquatic, terrestrial, environmental health, and plant science applications to serve a unique set of employers in private industry and government.

The UW-Stout B.S. in Environmental Science will be distinguished from others in the UW System in other aspects as well. Students will be required to complete an internship in which they will apply technical report-writing, data analysis, interpersonal communication, and experimental design skills. The field experience requirement is an essential component of the program. In addition, students will have the opportunity to engage in applied experiences in UW-Stout's Discovery Center. Students are also required to take a capstone course in which they will partner with industry and the community to use triple bottom-line approaches to solve real world problems.

#### **Collaborative Nature of the Program**

There is no collaboration planned with other universities offering Environmental Science in the region or within the UW System. Collaboration with industry partners will result in experiential learning opportunities for students and outreach functions for faculty.

#### Diversity

The new major will have numerous components that provide increased opportunities for students to be exposed to a broad range of cultural diversity. This includes study abroad and student exchange opportunities, and a requirement to complete six credits of racial and ethnic studies courses within the university-wide general education program.

#### **Student Learning Outcomes**

As a result of completing the B.S. in Environmental Science program, students will be able to:

- Demonstrate a strong foundation in the fundamentals and principles of environmental sciences with a focus on environmental problem-solving skills.
- Apply theoretical principles to the integrated aspects of the environmental sciences that include: ecological research, GIS, statistical applications, and sustainability modeling.
- Display communication and teamwork skills, and an understanding of the importance of lifelong learning, professionalism, and global, ethical responsibility.
- Pursue careers in businesses/industry and/or advanced studies leading to professional careers in environmental science.

## Assessment

Annual updates that summarize the primary methods used to assess student learning and progress throughout the program will be submitted by the program director to the Provost's office. Student learning outcomes will be assessed by comparing student performance on preversus post-assessment measures in the core courses and the capstone course.

Methods used to assess student learning outcomes will correlate with program objectives and may include standardized tests, course-embedded assessments, or other direct measures of student learning and performance. Results will be from the previous fall and spring semesters and will include specific information on how well students performed on each of the assessments.

Plans for improvement may include proposed modifications in course content, course sequencing, changes in teaching methods, or other proposed changes designed to improve student performance. A feedback loop ensures that assessment information is shared with the three departments involved in delivering the program, key program faculty, and the program advisory committee.

## **Curriculum Structure**

The courses required to complete the 120-credit program, including 40-41 credits in general education, are as follows:

I. General Education Requirements (40-41 credits):

- A. Communication Skills (9 cr.)
- B. Analytical Reasoning and Natural Sciences (12 cr.)
- C. Arts and Humanities (6 cr.)
- D. Social and Behavior Sciences (6-7 cr.)
- E. Contemporary Issues (4 cr.)
- F. Social Responsibility and Ethical Reasoning (3 cr.)

Selectives (Electives from A-F to meet the 40-credit requirement) (3 cr.)

- II. Environmental Science Core Courses (24-25 cr.):
  - Environmental Science Profession (1 cr.)
  - Co-op or Field Experience (1 cr.)
  - Environmental Science and Sustainability Capstone (3 cr.)

- Organismal Biology or College Molecular Cell Biology I (4 or 5 cr.)
- Botany or Zoology (4 cr.)
- Ecology (3 cr.)
- College Chemistry II (5cr.)
  - Scientific Communications (new course offering starting fall 2013) (3 cr.)

III. Environmental Science Concentrations

- A. Plant Science Innovations (55-56 cr.)
  - Plant Pathology (3 cr.)
  - Plant Physiology (4 cr.)
  - Organic Chemistry I (4 cr.)
  - Quantitative Analysis (3 cr.)
  - Introduction to Geology (2 cr.)
  - Soil Science and Conservation (4 cr.)

Total Plant Science Innovations Core Credits (20 cr.)

Plant Science Innovations Selectives

- Fourteen credits must be selected from the following courses (14-20 cr.): Molecular Cell Biology II, General Microbiology, Plant Taxonomy, Genetics, Ecology Lab, Entomology, Biotechnology, Plant Biotechnology, Advanced Biotechnology, Organic Chemistry II Lecture, Organic Chemistry II Lab, Physical Chemistry Lecture, Biochemistry, Instrumental Methods of Analysis, Environmental Chemistry, Environmental Regulations Management, Calculus I, Calculus II, College Physics I or University Physics I, College Physics II or University Physics II.
- In addition to the above selectives, students may choose from other electives and other environmental science related courses that have been approved by the student's advisor (21-22 cr.).
- B. Land Resources (55-56 cr.)
  - Plant Taxonomy (3 cr.)
  - Ecology Lab (2 cr.)
  - Plant Ecology (4 cr.)
  - Entomology, or Aquatic Ecology & Management, or Wetland Ecology (4 cr.)
  - Quantitative Analysis (3 cr.)
  - Environmental Regulations Management (3 cr.)
  - Intermediate Geographic Information Systems (4 cr.)
  - Advanced Geographic Information Systems (4 cr.)
  - Introduction to Geology (2 cr.)
  - Soil Science and Conservation (4 cr.)

Total Land Resources Core Credits (33 cr.)

Land Resources Selectives

- Nine credits must be selected from the following courses (9 cr.): Plant Pathology, Genetics, Plant Physiology, Entomology, Aquatic Ecology, Wetland Ecology, or GIS Research Applications.
- In addition to the above selectives, a student may choose other approved electives and other environmental science related courses that have been approved by the student's advisor (13-14).
- C. Aquatic Biology (55-56 cr.)
  - Ecology Lab (2 cr.)
  - Aquatic Ecology & Management (4 cr.)
  - Quantitative Analysis (3 cr.)
  - Instrumental Methods and Analysis (3 cr.)
  - Intermediate Geographic Information Systems (4 cr.)
  - Advanced Geographic Information Systems (4 cr.)
  - Introduction to Geology (2 cr.)
  - Soil Science and Conservation (4 cr.)

Total Aquatic Biology Core Credits (26 cr.)

Aquatic Biology Selectives

- Fourteen credits must be selected from the following courses (14 cr.): Ichthyology, Natural History of the Neotropics, General Microbiology, Genetics, Entomology, Wetland Ecology, Environmental Regulations Management or GIS Research Applications.
- In addition to the above selectives, the students may take other electives and other environmental science-related courses that have been approved by the student's advisor (15-16 cr.).

# D. Environmental Health (55-56 cr.)

- General Microbiology (4 cr.)
- Infection and Immunity (4 cr.)
- Environmental Toxicology (4 cr.)
- Epidemiology (3 cr.)
- Organic Chemistry I (4 cr.)
- Environmental Regulations Management (3 cr.)
- Calculus I or Calculus and Analytic Geometry I (4-5 cr.)
- College Physics I or University Physics I (5 cr.)
- College Physics II or University Physics II or Soil Science and Conservation (4-5 cr.)
- Principles of Occupational Risk Control/Safety (2-3 cr.) Total Environmental Health Core Credits (37-39 cr.)

Environmental Health Selectives (16-19 cr.)

Physiology & Anatomy, Entomology, Introductory Pharmacology, Introduction to Neuroscience, Advanced Physiology, Food Microbiology, Organic Chemistry II, Organic Chemistry II Laboratory, Biochemistry, Quantitative Analysis, Environmental Chemistry, Food Service Sanitation, Organizational Leadership, Calculus II or Calculus and Analytic Geometry II, or Occupational Health & Environmental Standards.

## **Projected Time to Degree**

Full-time students can complete the degree within four years. Students may also take advantage of the four-year graduation contract offered by UW-Stout.

## **Program Review Process**

At UW-Stout degree programs are reviewed on a seven-year cycle by the Planning and Review Committee (PRC)/Faculty Senate action (see <u>http://www.uwstout.edu/admin/provost/prcplan.cfm</u>). Academic program directors at UW-Stout submit a yearly *Assessment in the Major* report in which indirect and direct assessment data are reported to determine whether or not students acquired the needed competencies and skills while in the program. The program director of the B.S. in Environmental Science degree will use the assessments outlined previously to form the basis of this report. As students graduate from the major, the program director will survey alumni and employers in conjunction with UW-Stout's Planning, Assessment, Research and Quality Office, as is protocol for most UW-Stout programs, for inclusion in the report.

The program director, key faculty, and the Program Advisory Committee will monitor retention, time-to-graduation, graduation rates, and placement rates to further assess the overall effectiveness of the program. Questions measuring how students perform relative to the program objectives will be included as a supplement to the standard survey. Results from the yearly *Assessment in the Major* report will be examined to determine the need for future curricular and program revisions and to help assess and maintain the quality of the program.

The university-wide Planning and Review Committee (PRC) also conducts formal reviews of all university degree programs on a seven-year cycle. As part of this review, present and past students, faculty, and program advisory committee members are surveyed. The program director develops a self-assessment report which is reviewed in a formal hearing conducted by the PRC, with final results presented to the Faculty Senate and the Provost.

#### **Inclusive Excellence**

UW-Stout is committed to Inclusive Excellence as a process to cultivate an environment that fosters and promotes diversity, equity, inclusion, and accountability at every level of university life. The principles of Inclusive Excellence are intentionally woven through all aspects of the Environmental Science Program. All students in the program are required to take Environmental Science101, which introduces students to inclusivity and equity concepts as well as the skills needed to serve a global society. Junior- and senior-level students serve as mentors to incoming students in a reciprocal model that further establishes the principles of Inclusive Excellence. All of these experiences will enhance the demand by employers for future

graduates.

# **Need for External Accreditation**

No approvals by accreditation bodies or other entities beyond the Board of Regents will be needed to offer the program.

# INSTITUTIONAL COMMITMENT

A Letter of Commitment from interim Provost Jackie Weissenburger is attached.



Office of the Provost and Vice Chancellor for Academic and Student Affairs

University of Wisconsin-Stout P.O. Box 790 Menomonie, WI 54751-0790

715/232-2421 715/232-1699 fax provost@uwstout.edu

February 1, 2013

Dr. Kevin Reilly, President University of Wisconsin System Administration 1720 Van Hise Hall 1220 Linden Drive Madison, WI 53706

Dear Dr. Reilly:

I am writing to you to express my support for the University of Wisconsin-Stout's proposed B.S. in Environmental Science.

This program will prepare individuals to meet rapidly shifting global career demands and opportunities focused on environmental preservation, restoration and sustainable management. Central to our mission as a Polytechnic University, the B.S. in Environmental Science will integrate applied learning, scientific theory, creativity and research to solve real-world problems, grow the economy and serve the global society.

The program has been vetted through the Department of Biology; the Department of Chemistry; the Department of Physics; the College of Science, Technology, Engineering and Mathematics; the Curriculum and Instruction Committee and the Planning and Review Committee of the Faculty Senate; and the Academic Affairs Administrative Team. Data from the U.S. Bureau of Labor Statistics also supports the ongoing need for professionals in environmental science due to increasing demands placed on the environment by population growth and because more businesses will be expected to consult with environmental scientists in the future to minimize the impact of their operations on the environment.

As a result of dialogues both on and off campus, I am confident that UW-Stout is moving in the right direction to meet a societal need and to create meaningful educational



Page two RE: B.S. in Environmental Science

opportunities for persons interested in the field. The university has the facilities, faculty, and financial resources to implement and a plan to ensure its sustainability and maturation. The Dean of the College of Science, Technology, Engineering and Mathematics is a strong proponent of the program and has committed resources for the program's development and budgetary support for the initial course offerings. Given that the B.S. in Environmental Science is being elevated from a concentration within the B.S. in Applied Science, student demand at implementation is projected to allow the new program to be fiscally viable.

Further, UW-Stout will contact leaders at UW universities with programs and specialties in this area to pursue collaborative initiatives in the future.

Sincerely,

Jacalyn W. Weissenburger, Ph.D. Interim Provost and Vice Chancellor for Academic and Student Affairs

JWW:rm Memos 2013: 9-10 Program Authorization (Implementation) Master of Science in Construction Management UW-Stout

# EDUCATION COMMITTEE

Resolution I.1.a.(4):

That, upon the recommendation of the Chancellor of the University of Wisconsin-Stout and the President of the University of Wisconsin System, the Chancellor be authorized to implement the Master of Science in Construction Management.

## NEW PROGRAM AUTHORIZATION MASTER OF SCIENCE IN CONSTRUCTION MANAGEMENT UNIVERSITY OF WISCONSIN-STOUT

#### **EXECUTIVE SUMMARY**

#### BACKGROUND

This proposal is presented in accordance with the procedures outlined in Academic Planning and Program Review (ACIS 1.0, Revised August 2012, available at <u>http://www.uwsa.edu/acss/planning/</u>). The new program proposal for a Master of Science in Construction Management at the University of Wisconsin-Stout is presented to the Board of Regents for consideration. The institution has submitted the authorization document and a letter of institutional commitment from the university's Provost.

## **REQUESTED ACTION**

Approval of Resolution I.1.a.(4), authorizing the implementation of the Master of Science in Construction Management degree program at the University of Wisconsin-Stout.

#### DISCUSSION

The proposed online Master of Science (M.S.) in Construction Management is a careerfocused degree congruent with the polytechnic mission of UW-Stout. It is a 30-credit program of study consisting of seven 3-credit courses and one 3-credit course in research methodology. Additionally, either a 6-credit thesis or a 3-credit professional seminar and a 3-credit research paper are required. The program will integrate applied learning, scientific theory, humanistic understanding, creativity, and research to solve real-world problems in construction to help grow the economy and to serve the global construction industry.

The M.S. in Construction Management will prepare lifelong learners to become ethical and responsible leaders in society and business. It will offer a high-quality, challenging academic curriculum that responds to the changing needs of the construction industry by fostering in graduates critical thinking and creativity in problem solving and decision making in construction. Graduates will produce effective and professional oral and written communications through the use of information and communication technology and will be able to apply principles of leadership in business and management, including advanced construction management practices, complex project decision-making, and associated risk management. The program objectives are in alignment with the American Council for Construction Education Master's program learning outcome requirements.

#### RECOMMENDATION

The University of Wisconsin System recommends approval of Resolution I.1.a.(4)., authorizing the implementation of the Master of Science in Construction Management at the University of Wisconsin-Stout.

# **RELATED REGENT AND UW SYSTEM POLICIES**

Regent Policy 4-12: Academic Program Planning, Review, and Approval in the University of Wisconsin System.

Academic Information Series #1 (ACIS-1.0; revised August 2012): Statement of the UW System Policy on Academic Planning and Program Review.

# REQUEST FOR AUTHORIZATION TO IMPLEMENT A OF DEGREE MASTER OF SCIENCE IN CONSTRUCTION MANAGEMENT AT UW-STOUT PREPARED BY UW-STOUT

# ABSTRACT

The online Master of Science (M.S.) in Construction Management is a career-focused degree congruent with the polytechnic mission of UW-Stout. It offers working adults the flexibility to complete an advanced degree while keeping their jobs. The program will integrate applied learning, scientific theory, humanistic understanding, creativity, and research to solve real-world problems in construction to help grow the economy and to serve the global construction industry.

# **PROGRAM IDENTIFICATION**

**Institution Name** University of Wisconsin-Stout

**Title of Proposed Program** Construction Management

**Degree/Major Designations** Master of Science

**Mode of Delivery** Online with on-campus colloquia

# **Projected Enrollments by Year Five**

25 (20 continuing and five new)

# **Tuition Structure**

The M.S. in Construction Management will use the differential tuition/customized instruction tuition model for this online graduate program. The tuition rate has been set at \$550 per credit.

# Department or Functional Equivalent

Department of Construction

**College, School or Functional Equivalent** College of Science, Technology, Engineering, and Mathematics

**Proposed Date of Implementation** Fall, 2013

## **INTRODUCTION**

#### **Rationale and Relation to Mission**

The University of Wisconsin-Stout is known for strong connections with industry, both regionally and nationwide. At UW-Stout, the existing on-campus undergraduate degree in construction has assisted regional and national industry partners by educating quality graduates who are both team players and team leaders. In 2007, members of the UW-Stout B.S. Construction Program Industry Advisory Board voiced interest in creating a Master's in Construction Management. The current Board is comprised of 32 members representing both national and international construction professionals, and continues to actively participate in the program proposal. In 2010, a subcommittee of the Advisory Board was formed to champion the development and implementation of a M.S. in Construction Management with a focus on meeting the growing need for advanced professionals in the construction industry.

The online M.S. in Construction Management is well aligned with UW-Stout's mission and vision. It is a career-focused degree congruent with the polytechnic nature of the university. The program will integrate applied learning, scientific theory, humanistic understanding, creativity, and research to solve real-world problems in construction to help grow the economy, and serve the global construction industry.

Commensurate with UW-Stout's vision to build on its position as a distinguished polytechnic institution and as an international leader in higher education, this degree is designed to appeal to both nationally and internationally recognized leaders in the construction industry. The program will prepare lifelong learners to become ethical and responsible leaders in pursuing studies in the built environment.

#### **Relation to Strategic Plan**

The M.S. in Construction Management is well aligned with UW-Stout's Strategic Plan. This degree will offer a high-quality, challenging academic program that influences and responds to the changing needs of the construction industry. It will preserve and enhance the educational processes through the application of active learning principles by promoting excellence in teaching, research, scholarship, and service. The goal of the program is also to provide responsive, efficient, and cost-effective educational services. Both the undergraduate and graduate programs will continue to meet the university's goals to recruit and retain a diverse university population and to foster a collegial, trusting, and tolerant campus climate.

UW-Stout's strategic plan also places an emphasis on the incorporation of sustainability in all aspects of the curriculum. The construction industry is a leader in the incorporation of sustainable design and materials, the development of green building technologies, and the implementation of methods to reduce energy consumption. The M.S. in Construction Management curriculum is designed to incorporate such principles throughout the program.

#### Need as Suggested by Current Student Demand

Input from UW-Stout students and alumni was sought throughout the development of the proposed program. Information about the proposed curriculum was disseminated to current students through organizations including the Student Construction Association and Sigma

Lambda Chi, the construction student honors society, showing extensive interest and demand. The primary target market for this degree, however, will not be current students immediately upon graduation. Rather, this program is primarily intended for construction graduates with five or more years of experience in the construction industry.

#### Need as Suggested by Market Research

Despite the current effects of the recession on the construction industry, leaders in this field still identify a significant need for employees with undergraduate and graduate level degrees who have a solid grounding in infrastructure, sustainability, and renewable energy. According to the 2010-11 *Occupational Outlook Handbook* from the U.S. Bureau of Labor Statistics, there is a "faster than average" rate of employment growth projected until 2018, particularly for those who "have a bachelor's or higher degree in construction science, construction management, or civil engineering, plus practical work experience in construction."

During the spring of 2012, UW-Stout's Department of Construction conducted a survey of recent alumni and employers regarding their interest in the proposed M.S. in Construction Management at UW-Stout. Responses were received from 53 employers and 76 alumni. Fifty-three percent of the respondents indicated interest the M.S. degree in Construction Management being offered at UW-Stout. The purpose of the study was to determine the present and future demand for such a program, as well as to determine the curricular orientation. Responses related to the proposed program content have been incorporated into the curriculum.

Respondents were asked about their interest in pursuing or letting their employees pursue the proposed master's degree in Construction Management if the program was delivered in a way that suited their schedule. Among both groups, the mean, median, and modal averages fell well within the "interested" category with 65% of alumni and 75% percent of employees responding in either the "very interested" or "interested" categories.

When asked about when they would be likely to pursue a master's degree, 74% of alumni and 63% of employees indicated they would consider a one- to four-year timeframe, with the median response being two- to four years. Alumni were also asked how they would expect to fund their studies. Thirty-three percent indicated they would fund it themselves, 6% indicated they expect their employer to fund it, 48% indicated that they expect some assistance to fund it from their employer, and 13% indicated they were not interested in pursuing the degree.

## **DESCRIPTION OF PROGRAM**

#### **General Structure**

The Construction Department is committed to promoting excellence in teaching, research, scholarship, and service and will use the latest in online and web-based technology to deliver a first-class learning environment that is responsive to and efficient in meeting the needs of its student body. Admission requirements for the program include: a bachelor's degree in construction or a construction-related field from an accredited institution; a grade point average of 3.0 or higher; and demonstrated experience in the discipline as evidenced by a resumé. Those with a non-construction-related degree may be admitted as "Probationary Status" upon completing one of the three following conditions: completion of select coursework with a grade

of "B" or better; evidence of equivalent courses/professional knowledge; or American Institute of Constructors Certification at the Associate Constructor (Level 1); or the Certified Constructor (Level 2).

#### **Institutional Program Array**

The M.S. in Construction Management will be complementing three other graduate degree programs within the College of Science, Technology, Engineering and Mathematics: 1) the M.S. in Information and Communication Technologies, 2) the M.S. in Manufacturing Engineering, and 3) the Professional Science Masters in Industrial and Applied Mathematics. Students enrolled in the three other UW-Stout science and engineering master's programs, with the proper background, may take the new courses under development for this program.

## Other Programs in the University of Wisconsin System

No other graduate program in Construction Management exists within the University of Wisconsin System. The University of Wisconsin-Madison offers a M.S. in Construction Engineering and Management degree; however its focus is on developing the skills of an engineer performing duties as an Owner's Representative in the construction industry. This is not perceived as a duplication of degrees since the focus of the graduate degree at UW-Stout will be on leaders in the construction (contracting) side of the business.

#### **Collaborative Nature of the Program**

The program has been designed for predominantly online delivery with students attending some brief, on-campus colloquia. Due to the specialized nature of the proposed program, it is anticipated that there will be only limited opportunities for collaboration with other universities. However, within UW-Stout's existing program options, the proposed program will utilize selected existing graduate courses in the M.S. in Risk Control and the M.S. in Training and Human Resource Development programs. Collaboration with industry is central to the students' experience throughout the program.

## **Diversity**

Faculty contributing to the M.S. in the Construction Management will be dedicated to encouraging and celebrating people from all backgrounds and identities. The faculty will demonstrate this in three ways. They will: 1) infuse program curriculum with a wide variety of perspectives including, but not limited to, race, sex, gender identity, sexual orientation, religion, socioeconomic status and age; 2) recruit a diverse student population; and 3) honor the diversity within the program faculty and staff.

Students in the M.S. in Construction Management program will interact with and learn from a diverse group of faculty and academic staff in the Department of Construction and other departments at UW-Stout. In addition, students will be in contact with diverse advisory committee members, industry representatives, and practitioners in the field. It is anticipated that collaborations with the UW-Stout Ethics Center and the Discovery Center will pave the way to attract a diverse student body to the program. It is also anticipated that the campus-wide diversity initiatives, such as academic and social support for students of color, grants for minority and disadvantaged students, the Chancellor's Equity, Diversity, and Inclusion Coalition (CEDIC), and the UW System Equity Scorecard Project, will provide an edge in attracting a diverse student population. The proposed program should ultimately benefit from these efforts and contribute to the diversity of UW-Stout as a whole.

## **Student Learning Outcomes and Program Objectives**

At program completion, graduates of the program will be able to demonstrate sufficient professional skills and knowledge to engage in the construction industry at the middle- to senior management level. This will include mastery of the following:

- 1. Critical thinking and creativity in problem solving and decision making in construction.
- 2. Effective and professional oral and written communications through the use of information and communication technology.
- 3. Principles of leadership in business and management including advanced construction management practices, complex project decision making, and associated risk management.
- 4. Professional ethics including application to construction situations and choices.

These objectives are in alignment with the American Council for Construction Education Master's program learning outcome requirements.

## **Assessment of Objectives**

The program will rely heavily on case studies and assessment of real-world construction scenarios to allow assessment of the objectives. The Director of the Graduate School will help to assess the program requirements and monitor graduate policies pertaining to this degree. Assessment of the program objectives will also occur at the course level and will be conducted by the faculty and the Program Director. Methods used to assess student learning outcomes will correlate with program objectives and may include standardized tests, course-embedded assessments, or other direct measures of student learning and performance. Plans for improvement may include proposed modifications in course content, course sequencing, changes in teaching methods, or other proposed changes designed to improve student performance.

Further, the M.S. Construction Management program will have a Construction Advisory Board consisting of industry representatives and alumni who are invested in the success of the program. Departmental faculty will meet with the Advisory Board biannually to discuss industry changes and standards, curriculum, and student attainment of the learning objectives.

## **Program Curriculum Structure**

The M.S. in Construction Management is a 30-credit program of study consisting of seven 3-credit courses and a 3-credit course in research methodology. Additionally, either a 6-credit thesis or a 3-credit professional seminar and a 3-credit research paper are required to complete the course of study. The course sequence and curricular requirements are outlined below in Figure 1.

Figure 1

The following course is required:	
INMGT-700 Organizational Research Methods	3 Credits
Take seven of the following courses (21 credits):	
AEC-701 Construction Project Delivery Systems (or AEC-638)	3 Credits
AEC-702 Logistics & Project Planning (or AEC-671)	3 Credits
AEC-703 Quality Management in Construction (or INMGT-718)	3 Credits
AEC-704 Construction Strategy, Economics and Finance	3 Credits
AEC-705 Environmental Concerns in Construction	3 Credits
AEC-706 Facilities & Real Estate Project Management (or INMGT-765)	3 Credits
AEC-707 Metrics & Benchmarking in Construction	3 Credits
AEC-708 Succession Planning in Construction	3 Credits
RC-725 Process Hazard Management	3 Credits
RC-592 Construction Risk Management	3 Credits
INMGT-616 People Process Organization Cultures	3 Credits
Plan A:	
AEC-770 Thesis	6 Credits
OR	
Plan B:	
AEC-730 Professional Seminar	3 Credits
AEC-735 Research Paper	3 Credits
Total Credits	30 credits

## **Projected Time to Degree**

As the target audience is working professionals, students will be enrolled part-time. Projected time to degree will be two years. Students must complete the degree within seven years.

## **Program Review Process and Institutional Review**

Each year, program directors at UW-Stout submit an *Assessment in the Major* report in which indirect and direct assessment data are reported to determine whether students acquire needed competencies and skills while in the program. The Program Director of the M.S. in Construction Management will use the assessments outlined above to form the basis of this report. As students graduate from the major, the Program Director, in conjunction with UW-Stout's Office of Planning, Assessment, Research and Quality, will survey alumni and employers. Questions related to the program objectives for the M.S. in Construction Management will be included as a supplement to the standard survey. Results from the yearly *Assessment in the Major* report will be examined to determine the need for future curricular and program revisions and to help assess and maintain the quality of the program. The Program Director, key faculty, and the Program Advisory Board will monitor retention, time-to-

graduation, graduation rates, and placement rates to further assess the overall effectiveness of the program.

The university-wide Planning and Review Committee (PRC) also conducts formal reviews of degree programs on a seven-year cycle. As part of this review, present and past students, faculty, and program advisory committee members are surveyed. The Program Director develops a self-assessment report which is reviewed in a formal hearing conducted by the PRC, with final results presented to the Faculty Senate and the Provost.

## Quality

UW-Stout ensures program quality through systematic, continuous improvement procedures in which student learning outcomes are assessed annually to determine the need for curricular or programmatic revisions. Program quality will be confirmed through external sources once accreditation of the degree is sought through the American Council for Construction Education (ACCE). Additionally, a goal will be for 80% or more of graduates to respond with a 3 (high) or a 4 (very high) on a 4-point scale to the following Graduate Alumni Survey question: "How would you rate the overall effectiveness of your program?"

## **Equity and Inclusive Excellence**

UW-Stout is committed to Inclusive Excellence principles to cultivate an environment that fosters and promotes diversity, equity, inclusion, and accountability at every level of university life. The university values the presence and participation of diverse individuals and groups. UW-Stout is engaged in creating learning environments in which students, faculty, and staff of all backgrounds can thrive and fulfill their academic, personal, and professional potential in a diverse nation and world.

## Accreditation

ACCE has recently developed an accreditation regimen for Master's programs. Accreditation requirements include the ability of the program to meet the learning outcomes identified above and the establishment of defined minimum standards which students must obtain in order to satisfy these learning outcomes. A clearly defined assessment regimen will be utilized to establish that students and the program have met these minimum standards.

## **Institutional Commitment**

The attached Letter of Commitment from Interim Provost Jackie Weissenburger.



Office of the Provost and Vice Chancellor for Academic and Student Affairs

University of Wisconsin-Stout P.O. Box 790 Menomonie, WI 54751-0790

715/232-2421 715/232-1699 fax provost@uwstout.edu

January 29, 2013

Dr. Kevin Reilly, President University of Wisconsin System Administration 1720 Van Hise Hall 1220 Linden Drive Madison, WI 53706

Dear Dr. Reilly:

I am writing to you to express my support for the University of Wisconsin-Stout's proposed M.S. in Construction Management program.

This degree was developed as a career-oriented master's program designed to meet the needs of working professionals in the construction industry. The program will prepare individuals for leadership positions within the industry requiring skills in advanced construction management, complex project decision making and associated risk management practices. Central to our mission as a Polytechnic University, this career-focused program will integrate applied learning, scientific theory, creativity and research to solve real-world problems, grow the economy and serve the global society.

The program has been vetted through our Department of Construction; the College of Science, Technology, Engineering and Mathematics; the Curriculum and Instruction Committee and the Planning and Review Committee of the Faculty Senate; the Academic Affairs Administrative Team; and data from an external survey of professionals in the area who have endorsed the need, design, and value of the program.

As a result of dialogues both on and off campus, as well as survey data regarding the M.S. in Construction Management, I am confident that UW-Stout is moving in the right direction to meet an industry need and to create more meaningful educational opportunities for persons interested in the leadership and management aspects of the industry. The university has the facilities, faculty, and financial resources to implement and a plan to ensure its sustainability and



Page two RE: M.S. in Construction Management

maturation. The Dean of the College of Science, Technology, Engineering and Mathematics is a strong proponent of the program and has committed resources for the program's development and budget support for the initial course offerings. Given the program will be supported through differential (customized) tuition, we expect the program to be self-supporting in a few years. The university will work with the UW-Stout Graduate School and UW-Stout Online to partner with the academic departments to assure quality programming and advisement services. Further, UW-Stout will collaborate with UW-Madison and other universities with specialties in this area to pursue collaborative initiatives in the future.

Sincerely,

Jacalyn Weissenburger, Ph.D. Interim Provost and Vice Chancellor for Academic and Student Affairs

cc: Tricia Aspen

JWW:rm Memos 2013: 6-7

# EDUCATION COMMITTEE

## Resolution I.1.a.(5):

That, upon recommendation of the Chancellors of the University of Wisconsin-Madison and the University of Wisconsin-Milwaukee and the President of the University of Wisconsin System, the Board of Regents approves the request to the Trustees of the William F. Vilas Trust Estate for \$5,825,179 for fiscal year July 1, 2013, to June 30, 2014, subject to availability, as provided by the terms of the William F. Vilas Trust, for Support of Scholarships, Fellowships, Professorships, and Special Programs in Arts and Humanities, Social Sciences, Biological Sciences, Physical Sciences, and Music.

# APPROVAL OF REQUESTS TO TRUSTEES OF THE WILLIAM F. VILAS TRUST ESTATE FOR SUPPORT OF SCHOLARSHIPS, FELLOWSHIPS, PROFESSORSHIPS, AND SPECIAL PROGRAMS IN ARTS AND HUMANITIES, SOCIAL SCIENCES AND MUSIC

## **EXECUTIVE SUMMARY**

## BACKGROUND

The terms of the Deed of Gift and Conveyance of the estate of William F. Vilas, subsequently validated and accepted by an act of the Legislature of Wisconsin, provide in part that the trustees of the estate may proffer in writing to the Board of Regents funds for the maintenance of scholarships, fellowships and professorships, with their respective auxiliary allowances, and other like endowments specifically enumerated, defined, and provided for by the Deed.

At the beginning of each calendar year, the trustees of the William F. Vilas Trust Estate formally request that the President of the UW System ask the Chancellors of UW-Madison and UW-Milwaukee to determine from the Vilas Professors the amounts they will request for special project allowances for the ensuing academic year, and to obtain from the Chairs of the UW-Madison and UW-Milwaukee music departments their programs and requests for the next year. In addition, the Chancellor of UW-Madison is asked to determine the number of scholarships, fellowships, Vilas Associates, and any other initiatives to be requested.

The proffer is made following receipt by the trustees of a certificate or warrant from the Board of Regents showing how the funds will be expended. This request and Resolution I.1.a.(5) constitute that warrant.

Following approval of this resolution, President Reilly will send a formal request to the trustees, who will determine the amount of income that will be available for the various awards (particularly for music, which varies with the value of the trust) and respond with a proffer of funds. The value of the proffer will then be reported to the Board of Regents.

## **REQUESTED ACTION**

Approval of Resolution I.1.a.(5), a request to the trustees of the William F. Vilas Trust Estate for \$5,825,179 for fiscal year 2013-2014 for the support of scholarships, fellowships, professorships, and special programs in Arts and Humanities, Social Sciences, Biological Sciences, Physical Sciences, and Music.

## DISCUSSION

The attached documents contain the responses to the trustees' request and detail how the proposed funds will be expended. They have five components: (a) continuation of Trustee-approved programs, UW-Madison (\$3,083,051); (b) one-time program allocations, UW-Madison

(\$2,600,000); (c) support for the *Presenting a Community of Music Learners, at the Peck School of the Arts Department of Music*, UW-Milwaukee (\$79,628); (d) request to fund research support and the salary of Kumkum Sangari, Vilas Research Professor in the Department of English, UW-Milwaukee (\$60,000); and (e) continuation of the standard retirement benefit in support of Vilas Professor Emeritus Ihab Hassan, UW-Milwaukee (\$2,500).



March 14, 2013

President Kevin Reilly University of Wisconsin System 1720 Van Hise Hall CAMPUS

Dear President Reilly:

In this memo, I enumerate the request for funds from the Vilas Trust Estate for fiscal year July 1, 2013 to June 30, 2014 for the University of Wisconsin-Madison.

Our request is framed in careful accordance with both the terms of the Vilas Trust and the needs we have to fulfill the strategic goals aimed at supporting the mission of the campus as a research and teaching campus of the highest rank. We are especially mindful of the gaps in our ability to attract, retain, and support the highest quality scholars to our faculty exacerbated by recent budget cuts; and the difficulty many students have in paying for undergraduate or graduate education here because of rising tuition and increasing challenges in finding need-based aid. Our total request for 2013-2014 is: **\$5,683,051** 

The programs for which we are requesting funding follow.

## A. CONTINUATION OF APPROVED PROGRAMS

1.	Continuation of 10 Vilas Undergraduate Scholarships at \$400 each		4,000
2.	<ul><li>Continuation of 10 Vilas Graduate Fellowships:</li><li>a. 5 at \$600 each</li><li>b. 5 Traveling Fellowships at \$1,500 each</li></ul>	3,000 <u>7,500</u>	10,500
3.	Continuation of 15 Vilas Research Professors at \$10,000 salary plus \$50,000 auxiliary allowances each		900,000
4.	a. Continuation of 50 additional undergraduate	20,000	
	scholarships at \$400 each b. Continuation of 50 additional graduate fellowships at \$600 each	<u>30,000</u>	50,000
5.	Continuation of eighty (80) additional undergraduate scholarships at \$400 each under the provisions of Paragraph (3), Article 4 of the Deed of Gift and Conveyance by the Trustees of the Estate of William F. Vilas		32,000

6.	Retirement benefits for nine (9) Vilas Professors: Berkowitz, Bird, Brock, Hauser, Hermand, Keisler, Mueller, Vansina, and Weinbrot at \$2,500 each	22,500
7.	Continuation of support for encouragement of merit and talent or to promote appreciation of and taste for the art of music at UW-Madison for 2013-14.	20,368
8.	13 Vilas Associates in the Arts and Humanities	477,500
9.	11 Vilas Associates in the Social Sciences	482,656
10.	17 Vilas Associates in the Physical Sciences	797,172
11.	12 Vilas Associates in the Biological Sciences	286,355
Tot	al Continuation Request:	\$3,083,051
B.	ONE-TIME PROGRAM ALLOCATIONS	
1.	Vilas Distinguished Achievement Professorships, Twelve (12) at \$50,000 per professorship.	600,000
2.	Vilas Life Cycle Professorship Program	300,000
3.	Vilas Research Investigator Awards (up to \$30,000 per award). Pursuant to and consistent with the intent of Article 4, Section E of the Deed of Gift and Conveyance. These would go to faculty mentors of graduate students who are research assistants or project assistants. This research allocation will be used to cover some educational expenses, including tuition, for these students.	360,000
4.	Vilas Faculty Excellence Awards These are professional-expense awards ("flex funds") to faculty who excel in scholarly activity, have records of outstanding research and creative work, and show promise of continued outstanding productivity. The awards will assist our development of faculty human capital.	800,000
5.	<ul> <li>Continuation of 1998 and 2002 Expansion of Approved Programs:</li> <li>a. 750 additional undergraduate scholarships at \$400 each, pursuant to Article 4, Sections A and E of the Deed of Gift and Conveyance</li> </ul>	300,000
	<ul> <li>b. 400 additional fellowships at the \$600 level, pursuant to Article 4, Sections A and E of the Deed of Gift and Conveyance</li> </ul>	240,000

## **Total of One-time Program Allocations:**

\$2,600,000

\$5,683,051

## Total of Part A and Part B:

The list of Vilas Research Professors and Vilas Distinguished Achievement Professors is attached.

Please let me know if you have any questions.

Sincerely,

David Ward Interim Chancellor

Attachments

xc: Provost Paul M. DeLuca, Jr.
 Vice Chancellor Darrell Bazzell
 Dean Martin Cadwallader
 Asst. Vice Chancellor Tim Norris
 Vice Provost Steve Stern
 Cynthia Paine, Office of the Provost

#### **Vilas Research Professors**

<u>Vernon Barger</u> - Vilas Research Professor of Physics, College of Letters and Science

David Bethea - Vilas Research Professor of Slavic Languages, College of Letters and Science

<u>Susan Coppersmith</u> – Vilas Research Professor of Physics, College of Letters and Science

<u>William Cronon</u> – Vilas Research Professor of History and Geography, College of Letters and Science, and Gaylord Nelson Institute for Environmental Studies

<u>Richard Davidson</u> - Vilas Research Professor of Psychology and Psychiatry, College of Letters and Science and School of Medicine and Public Health

<u>Steven Durlauf</u> – Vilas Research Professor of Economics, College of Letters and Science

<u>Morton Gernsbacher</u> – Vilas Research Professor of Psychology, College of Letters and Science

<u>Judith Kimble</u> - Vilas Research Professor of Biochemistry and Medical Genetics, College of Agricultural and Life Sciences and School of Medicine and Public Health

<u>Ching Kung</u> - Vilas Research Professor of Genetics, College of Agricultural and Life Sciences

<u>Gregg Mitman</u> - Vilas Research Professor of History of Science, College of Letters and Science

<u>Emiko Ohnuki-Tierney</u> - Vilas Research Professor of Anthropology, College of Letters and Science

<u>Elliott Sober</u> - Vilas Research Professor of Philosophy, College of Letters and Science

<u>Karen Strier</u> - Vilas Research Professor of Anthropology, College of Letters and Science

Erik Olin Wright - Vilas Research Professor of Sociology, College of Letters and Science

Sau Lan Wu - Vilas Research Professor of Physics, College of Letters and Science

### Vilas Distinguished Achievement Professors, 2011-12 Cohort

<u>Clifton Conrad</u> – Vilas Distinguished Achievement Professor Educational Leadership and Policy Analysis, School of Education

<u>Michael Culbertson</u> – Vilas Distinguished Achievement Professor Lab of Genetics, College of Agricultural and Life Sciences

<u>Cynthia Czajkowski</u> – Vilas Distinguished Achievement Professor Neuroscience, School of Medicine and Public Health

<u>Suzanne Desan</u> – Vilas-Shinners Distinguished Achievement Professor Department of History, College of Letters and Science

<u>Wei Dong</u> – Vilas Distinguished Achievement Professor Design Studies, School of Human Ecology

<u>John Kao</u> – Vilas Distinguished Achievement Professor School of Pharmacy

<u>Melanie Manion</u> – Vilas Distinguished Achievement Professor Political Science, College of Letters & Science

<u>Mark Markel</u> – Vilas Distinguished Achievement Professor School of Veterinary Medicine

<u>Jonathan Martin</u> – Vilas-Hamel Distinguished Achievement Professor Atmospheric & Oceanic Sciences, College of Letters & Science

<u>Beth Meyerand</u> – Vilas Distinguished Achievement Professor Biomedical Engineering, College of Engineering

Lynn Nyhart – Vilas-Bablich-Kelch Distinguished Achievement Professor History of Science, College of Letters & Science

<u>Amy Stambach</u> – Vilas Distinguished Achievement Professor Educational Policy Studies, School of Education

<u>James Sweet</u> – Vilas Distinguished Achievement Professor History, College of Letters & Science

<u>Clifford Thurber</u> – Vilas Distinguished Achievement Professor Geoscience, College of Letters & Science

<u>Justin Williams</u> – Vilas Distinguished Achievement Professor Biomedical Engineering, College of Engineering

Susan Zahner – Vilas Distinguished Achievement Professor Nursing

## Vilas Distinguished Achievement Professors, 2012-13 Cohort

<u>Michael Bell</u> – Vilas Distinguished Achievement Professor Community and Environmental Sociology, College of Agricultural and Life Sciences

<u>Cynthia Carlsson</u> – Vilas Distinguished Achievement Professor Geriatrics, School of Medicine & Public Health

<u>Lew Friedland</u> – Vilas Distinguished Achievement Professor Journalism and Mass Communication, College of Letters and Science

<u>Jerlando Jackson</u> – Vilas Distinguished Achievement Professor Educational Leadership & Policy Analysis, School of Education

<u>Hongrui Jiang</u> – Vilas Distinguished Achievement Professor Electrical and Computer Engineering, College of Engineering

<u>Clark Johnson</u> – Vilas Distinguished Achievement Professor Geoscience, College of Letters and Science

<u>Jack Ma</u> – Vilas Distinguished Achievement Professor Electrical and Computer Engineering, College of Engineering

Four more still to be determined for this year.



March 14, 2012

Chapman Hall 230 P.O. Box 413 Milwaukee WI 53201-0413 414-229-4503 phone 414-229-4929 fax www3.uwm.edu/dept/acad aff/

TO:	Kevin P. Reilly, President The University of Wisconsin System
FROM:	Johannes Britz Provost and Vice Chancellor

RE: UW-Milwaukee 2013-14 Vilas Trust Support

Please find requests for three proposals that UW-Milwaukee is submitting for the 2013-14 Vilas Trust Funds:

- 1. Vilas Research Professor Kumkum Sangari, Department of English. Total Request: \$60,000.00 (\$50,000 for Research Support and \$10,000 for Salary Support)
- 2. Department of Music, Peck School of the Arts. "*Presenting a Community of Music Learners*". Total Request: \$79,628 (see attached proposal).
- 3. Continuation of the standard retirement benefit of \$2,500 in support of Vilas Emeritus Ihab Hassan.

Thank you for your continued consideration and support of these activities. Both the Departments of English and Music are appreciative of this opportunity to gain funding for these activities. The proposal from the Music Department is attached.

Should you have any questions, please do not hesitate to contact me, or Associate Vice Chancellor Dev Venugopalan (229-5561).

c: Michael Lovell, Interim Chancellor Dev Venugopalan, Associate Vice Chancellor Rodney Swain, Dean, College of Letters & Science Scott Emmons, Interim Dean, Peck School of the Arts



Music Building PO Box 413 Milwaukee, WI 53201- 0413 414 229 - 5162 phone 414 229 - 2776 fax

March 8, 2013

#### **MEMORANDUM**

TO: Scott Emmons, Interim Dean Peck School of the Arts

FROM: Jon Welstead, Music Department Chair

#### RE: 2013-2014 William F. Vilas Proposal: "Presenting a Community of Music Learners"

The William F. Vilas Trust support has allowed the UW-Milwaukee Music Department to continue to provide and develop festivals, series, workshops, guest artist residencies, master classes, and planned activities with national and international professional musicians, clinicians, and scholars designed to engage and energize relationships between UWM and a broad complex of communities in Milwaukee and southeastern Wisconsin. Outreach presentations have included K-12 students; middle school, high school, and collegiate music directors, educators, and performance ensembles; and audiences for a diverse spectrum of musical genres and styles. The Vilas Trust grant for the 2012-2013 academic year presented these experiences under the umbrella of the "UWM Year of the Arts – A Celebration of the UWM Peck School of the Arts 50<sup>th</sup> Anniversary." Marking this significant milestone in the school's history brought added awareness to the department's impact on many facets of music education and performance throughout southeastern Wisconsin.

In 2012-2013 the Music Department hosted over 150 events drawing approximately 2,000 student participants in such events as Honors Bands, the Woody Herman Jazz Festival, and the Orchestral Concerto Competition (which featured three winning high school performers) in addition to music lovers of all ages. Concerts, workshops, master classes, and 12 artist residencies were featured in related presentations and festivals.

The UWM Music Department proposes in its request for 2013-2014 William F. Vilas Trust support to continue its mission to feature world-renowned performers, composers, conductors, ensembles, workshops leaders, and master classes, and an open invitation to participate will be extended to the area's pre-college and senior communities as well as members of the general public. Returning to a previous theme of **"Presenting a Community of Music Learners,"** our approach in 2013-2014 will demonstrate a shift from a majority of 'on-site' presentations on the UWM campus to one of taking performances, chamber groups, large ensemble, and workshops to the surrounding schools and colleges in southeastern Wisconsin. Chamber Music Milwaukee will play a significant role in the department's efforts to showcase small and large performance groups in the surrounding community. The Music Department's master performer-teachers and its advanced graduate and undergraduate music majors, in partnership with members of the Milwaukee Symphony Orchestra, will perform in Wisconsin communities and schools in an effort to provide and promote participation in the arts on all levels.

Guest artists next year will work directly with UWM students and invited high school students to provide artistic exploration that otherwise would not be possible. Of most importance in this effort, is the presence of masters in their professions who will stand as teacher and performer role models for future artists-performers-teachers.

As public school music programs are reduced, parents and schools are increasingly turning to private teachers for music instruction. Non-institutional performance training will require teachers with professional training and degrees in instrumental, vocal, electronic music performance and pedagogy. Through all of these changes, professional musicians will continue to provide the services of trained and experienced performers and accompanists on all instruments and configurations.

Occupational projections remain strong for professionally trained teachers, accompanists and instrumental and vocal artists with the ability to present a varied array of music styles in new and changing ensemble configurations and presentation opportunities. Changing occupational opportunities affect program content but not the demand for performance training. The changes for the professional musician are positive and serve music's dual role of performance teaching, music education, and related entrepreneurial applications.

William F. Vilas Trust support has played a very important role in helping UW-Milwaukee meet the mission of providing "activities designed to engage and build relationships with a variety of different communities surrounding UWM: K-12 students; collegiate and professional musicians; music educators; and members of the general public." UW-Milwaukee, the Peck School of the Arts, and the Music Department are more vibrant and enriched because of the generous support received over the years from the Vilas Trust and the many activities we have been able to offer with these funds.

The following proposal provides specific details for the proposed activities seeking Vilas Trust sponsorship for 2013-14.

#### "Presenting a Community of Music Learners" Activities

#### Concerts, Festivals, Workshops, Master Classes:

#### 1. Unruly Music – The City of Tomorrow Residency

The City of Tomorrow, a Chicago-based woodwind quintet specializing in contemporary music performance, will present lecture/demonstrations on composition for chamber music and contemporary woodwind performance practices. The capstone of the residency will be a pair of public concerts - the first featuring the ensemble's repertoire and the second presenting compositions written by UWM students for the group.

#### 2. Voice Science and Pedagogy - Dr. Scott McCoy & T. Kruse Ruck

Dr. Scott McCoy, an expert in the field of Voice Science and Pedagogy, will present lectures for students in the voice and choral areas and for the Student National Association of Teachers of Singing.

#### 3. Chamber Music Milwaukee

Chamber Music Milwaukee will bring outstanding professional chamber ensembles to perform for and collaborate with the UW–Milwaukee community. Concerts during the season will feature UW-Milwaukee music faculty. Music Department master performer-teachers and advanced graduate and undergraduate music majors, in partnership with members of the Milwaukee Symphony Orchestra, will take the department's mission to Wisconsin communities and schools.

#### 4. Chamber Music Milwaukee: Faculty Artist Series

Chamber Music Milwaukee: Faculty Artist Series will present a series of recitals featuring UW–Milwaukee faculty performers and composers. The project will also support outreach performances throughout Wisconsin.

#### 5. Film Series, Clive Carroll Residency and Concert

Together with Music History and Literature, the Guitar Area will present a series of three new documentary films to be shown in the UWM Union Cinema. Each award-winning film will be introduced by a visiting artist or scholar, who will speak to classes in music, film and cultural studies departments. Member of the Milwaukee community will also be invited to attend.

#### 6. Experiments in Contemporary Improvisation

A semester long project culminating in a free public performance of improvisation by guest artists who will perform with students enrolled in Mus489: Improvisation and Aleatoric Scores. Guest artists will present and work with students in Mus489 throughout the semester leading up to the concert.

#### 7. Seventh Annual Woody Herman Educational Jazz Workshop

Guest artists and clinicians will work and perform with middle school, high school, and collegiate jazz ensembles as well as UWM students.

#### 8. Jeffrey McFadden and Adam Holzman – Classical Guitar Residencies and Concerts

World-renowned classical guitarists Jeffrey McFadden and Adam Holzman will present classical guitar concerts, lectures and master classes.

#### 9. Double Reed Outreach

The all-day workshop for pre-college and college students and teachers will include master classes, lectures and sight-reading. Workshop participants will join in a final recital in the double reed ensemble.

#### 10. Nordic Song Concerts and Workshops

The UWM Voice Area, along with the Voice Area of UW-Madison, will host a guest residency by faculty members of the Sibelius Academy (Helsinki) for a concentrated study of Finnish song literature. The residency in Milwaukee would include three days of master classes, workshops and performances with Eija Järvelä, Aulikki Eerola and Pertti Eerola as guest artists/clinicians.

#### 11. High School Percussion Ensemble Festival

The High School Percussion Ensemble Festival will be a day-long event focused on presenting information about percussion performance and repertoire to high school percussion students and music directors. Activities include an evaluated performance with follow-up clinic, workshops, and a culminating concert. Event participants are students and music directors from six southeastern Wisconsin high school music programs and UWM percussion students. UWM percussion faculty and members of the guest ensemble *Africa-West* will present clinics and workshops.

#### 12. UW-Milwaukee Brass Day

Brass Day will take place on March 9 and will feature a master class and performance by Thomas Rolfs, principal trumpet with the Boston Symphony Orchestra. The day will also feature master classes by the UWM brass faculty, guest speakers and exhibits from music stores and instrument manufacturers.

#### 13. Audition Preparation Clinics for Winds

The Audition Preparation Clinics for Winds are a set of clinics designed to prepare students for auditions. The first clinic will focus on high school seniors that intend to audition for music schools and the second on all high school students preparing for the WSMA contest. Each clinic will include information about how to prepare for auditions, what to expect at your audition and performance anxiety. Students will be able would provide ability to work with faculty either individually or in a master class.

#### 14. String Day with the Pacifica String Quartet

The Pacifica String Quartet will be in residence for a day of concerts and chamber music master classes.

#### 15. UWM Opera Theatre and Milwaukee Opera Theatre Collaboration

UWM Opera Theatre program, UWM Symphony Orchestra, and Milwaukee Opera Theatre Company will combine forces to produce Ravel's opera "L'Enfant et les Sortileges."

#### 16. Early Music at UWM 2013-14

Milwaukee's own Early Music Now will present a concert of early music on the UW–Milwaukee campus featuring the Pallade Musica ensemble.

#### 17. Jonathan Kreisberg Concert & Masterclass

Internationally recognized jazz guitarist Jonathan Kreisberg will be in residence for a concert and master class for guitar and jazz performance students.

#### 18. Presentation on belt and audition prep

Karla Hughes and Gary Moss from Viterbo University will present a lecture/workshop on "healthy belting" for musical theater and classical voice master classes.

#### 19. Woodwind, Brass, Percussion High School Outreach

The Woodwind, Brass, Percussion High School Outreach project provides for faculty outreach performances, clinics and coachings at area high schools. These school visits will be solo events with single faculty member visits, or faculty chamber ensemble run-outs.

# Vilas Trust Funds 2013 – 2014 "Presenting a Community of Music Learners" Proposal

1.	Unruly Music – The City of Tomorrow Residency Project Coordinator: Chris Burns	\$6,000
2.	Voice Science and Pedagogy Project Coordinator: Tanya Kruse Ruck	\$1,500
3.	Chamber Music Milwaukee Project Coordinators: Greg Flint, Todd Levy	\$10,000
4.	Chamber Music Milwaukee: Faculty Artist Series Project Coordinators: Elena Abend, Jonathan Monhardt	\$4,500
5.	Film Series, Clive Carroll Residency and Concert Project Coordinators: John Stropes, Martin Rosenblum	\$6,000
6.	<b>Experiments in Contemporary Improvisation</b> Project Coordinator: Amanda Schoofs	\$2,600
7.	Seventh Annual Woody Herman Educational Jazz Workshop Project Coordinator: Curt Hanrahan	\$6,500
8.	Jeffrey McFadden and Adam Holzman – Classical Guitar Concerts Project Coordinator: Rene Izquierdo	\$6,630
9.	<b>Double Reed Day</b> Project Coordinator: Jennifer Clipp <b>ert</b>	\$1,550
10.	Nordic Song Project Coordinator: Valerie Errante	\$3,850
11.	High School Percussion Ensemble Festival Project Coordinator: Carl Storniolo	\$4,548
12.	UW–Milwaukee Brass Day Project Coordinator: Kevin Hartman	\$2,550
13.	Audition Preparation Clinics for Winds Project Coordinator: Jennifer Clippert	\$3,400
14.	String Day with the Pacifica String Quartet Project Coordinator: Bernard Zinck	\$4,000
15.	<b>UWM Opera Theatre and Milwaukee Opera Theatre Collaboration</b> Project Coordinator: Tanya Kruse Ruck	\$5,000
16.	Early Music at UWM 2013-14 Project Coordinator: Mitchell Brauner	\$2,000
17.	Jonathan Kreisberg Concert & Masterclass Project Coordinator: Peter Billmann	\$3,500
18.	<b>Presentation on belt and audition prep</b> Project Coordinator: Kerry Bieneman	\$1,500
19.	Woodwind, Brass, Percussion High School Outreach Project Coordinator: Kevin Hartman	<u>\$4,000</u>
	Total Vilas Request:	\$79,628

# UNIVERSITY OF WISCONSIN SYSTEM PROGRAM PLANNING AND REVIEW 2011-12 ANNUAL REPORT

# **INTRODUCTION**

At its April 2013 meeting, the Board of Regents Education Committee will be presented with the Program Planning and Review (PP&R) 2011-2012 Annual Report that covers the period July 1, 2011, through June 30, 2012. The report is prepared each year for review by the Education Committee and the full Board by the University of Wisconsin System Administration (UWSA) Office of Academic, Faculty, and Global Programs (AFGP) and summarizes activity related to the UW System program array, including the planning, authorization, implementation, review, elimination, and suspension of academic programs across the UW System. This report includes the following:

- Background on the History of Program Planning and Review in the UWS;
- Five-Year Summary of Program Planning and Review Activity Systemwide;
- Summary of Institutional Program Planning and Review Activity for 2011-12;
- Changes in UW Systemwide Academic Array;
- Degrees Conferred, by Level and Institution
- Initial Outcomes of the Regents' 2010 Decision to Permit Comprehensive Institutions to Confer Professional Doctorates Independently or in Collaboration with Doctoral Institutions;
- 2012 -14 Overview;
- Key Summary Points;
- Program Planning and Review Process Utilized in 2011-12 Appendix A;
- Summary of Entitlements, Authorizations, Implementation, Suspensions, and Eliminations in 2011-12 by Institution Appendix B;
- Summary of Program Planning Activities and Plans for the Future reported in 2011-12 by Institutions – Appendix C;
- Institutional Reviews and Reports on Accreditation in 2011-12 by Institution Appendix D;
- Background for the Revision of the Program Planning and Review Process Appendix E;
- Revised Program Planning and Review Process approved by the Board in August, 2012 Appendix E;
- Members of the Program Planning and Review Working Group Appendix F; and,
- Program Planning and Review Team Appendix G.

# BACKGROUND

The Board of Regents, UW System Administration, and UW institutions apply commonly shared program planning principles in the development and implementation of innovative and high-quality academic and professional programs. According to Section 36., Wis.Stats., the Board of Regents has the authority to determine academic program offerings in the University of Wisconsin System. Section 36.09(1)(c),Wis.Stats., further sets the roles and responsibilities for academic program planning, review, and approval held by the Board of Regents, the UW System Administration, and UW institutions, including administrative leaders, faculty, and staff. The UW System President's role is to recommend all new academic programs to the Board of Regents.

Proposals for new programs are submitted by the Provost or the Provost's specified designee to the Associate Vice President for Academic, Faculty, and Global Programs, who has the direct responsibility for program planning and review, as well as for systemwide array management. In carrying out this responsibility, the Associate Vice President works with the provosts, associate provosts, deans, and faculty at the UW institutions, and with the Senior Vice President for Academic and Student Affairs and the President at UW System Administration, as well as the Education Committee of the Board of Regents. All academic programs approved at the Associate Vice President level must also gain approval by the Senior Vice President prior to recommendation to the Board by the President.

Since 1984, the UW System policy guiding implementation of the oversight roles and responsibilities established in Section 36.09(1)(c), Wis.Stats. has been Academic Information Series 1.0 (ACIS 1.0, available at: <u>http://www.uwsa.edu/acss/acis/ACIS-1.rev\_Apr10.pdf</u>). ACIS 1.0 was developed at the direction of the Board of Regents and in collaboration with UW institutions. ACIS 1.0 delineates clear principles for considering new program proposals at the institutional, System, and Board levels. These principles include:

- using resources effectively to develop and maintain high-quality programs;
- providing the most cost-effective university system for the citizens of Wisconsin;
- ensuring that academic programs are consistent with UW System and institutional missions;
- reducing unnecessary program duplication; and,
- maintaining excellent undergraduate arts, humanities, social science, and science programs at each institution.

ACIS 1.0 further sets the process involved in requesting approval for and implementing new academic programs as well as procedures for the program reviews conducted at the institutional level. It also includes regulations for other academic reporting actions requiring approval or notification at the Board or System level (e.g., revisions to missions, establishment of new colleges or schools, etc.). Over the years, ACIS 1.0 has guided the institutional and UW System academic planners in their efforts to develop and bring to the Board of Regents proposals for new academic and degree programs that:

- 1. address the needs of students, institutions, the UW System, and the state;
- 2. meet national standards as well as quality processes at comparable university systems;
- 3. incorporate best practices in the field;
- 4. use UW System resources efficiently; and,
- 5. meet all requirements of accrediting organizations, such as the Higher Learning Commission (HLC), the regional accrediting agency for UW institutions.

ACIS 1.0 and its accompanying guidelines have been regularly reviewed for continued relevance and coverage of accountability targets since their inception. They have also regularly been updated by the Board of Regents, UW System Administration, and institutional staff. In addition, new policies and guidelines are periodically adapted to address new practices in higher education, state and societal priorities, and other needs. The latest revision of the program planning and review process took place in 2011-2012, and the results can be found in Appendix E.

The steps involved in the Program Planning and Review process included Entitlement to Plan, Authorization, Implementation, and a Joint Review of a program approximately five years after implementation (see Appendix A for detailed definitions and process).

# SUMMARY OF PROGRAM PLANNING AND REVIEW (PP&R) ACTIVITY SYSTEMWIDE

Changes in the program array occur because of several factors, among them changes in long-range planning by institutions, changes in supply and demand (market) for certain programs, changes in the educational landscape, and changes in the needs of the state. Institutional missions set by the Board of Regents guide all array changes.

In 2011-12, 13 programs were entitled, 15 authorized, and 13 implemented. In each of these distinct steps in the program planning process, the numbers are slightly lower if compared to the 2010-11 figures. In addition, systemwide, six programs were eliminated and four were suspended (see Table 1). Hence, for 2011-12, the net addition of programs to the UW System array of programs was three. Of the programs implemented in 2011-12, baccalaureate degrees outnumber graduate degrees. Within the baccalaureate category, Bachelor of Science degrees outnumber Bachelor of Arts and other baccalaureate degrees (such as the Bachelor of Business Administration or the Bachelor of Fine Arts).

Among the graduate degree implementations, master's-level programs outnumber doctoral programs, with Master of Science and Master of Arts degrees reaching equal numbers. Three of the 13 programs newly implemented by institutions in 2011-12 are in health-related areas, two in business, two in the environmental sciences, one in the engineering sciences, and the remaining five are distributed across a number of disciplines.

Table 1 on the next page shows summary data for the last five academic years (from July 1, 2007, to June 30, 2012) on the number of programs entitled for planning, the number of programs authorized for implementation, and the number of programs implemented systemwide. During this five-year period, 84 programs received entitlements to plan, 77 programs were authorized, 72 programs were implemented, 25 programs were discontinued, and 12 were suspended. Of the programs implemented from 2007-08 through 2011-12, 10 were doctoral degrees, six were professional degrees, 14 were master's-level degrees, and 42 were baccalaureate degrees. A summary of entitlements, authorizations, implementations, suspensions, and eliminations by institution for 2011-12 is available in Appendix B. Appendix C provides program-planning actions by institution, including the intentions of institutions to request approval for new academic programs in the future.

# SUMMARY OF INSTITUTIONAL PROGRAM REVIEW AND ACCREDITATION ACTIVITY FOR 2011-12

Once an academic program has been implemented, institutions engage in several different forms of program review, both at the individual program level and at the university or college level. As required by ACIS 1.0, each institution is responsible for comprehensive, on-going, and intensive re-evaluation of all academic programs and academic support programs, and these institutional self-reviews of programs are placed on a regular schedule within the government structure and procedures at each institution. As a means of attesting that educational quality has met standards external to the institution and external to the UW System, UW System institutions and some individual academic programs voluntarily seek evaluation by an accreditation agency or professional association. ACIS 1.0 requires that the results of institutional reviews of academic programs, along with the results of accreditation reviews and other decisions concerning accreditation, be reported to UW System Administration and included in the Annual Program Report to the Board of Regents. See Appendix D for Institutional Reviews and Accreditations by Institution. Table 1 below presents program-planning activities recorded for the last five years systemwide.

Planning Activity		Number by Academic Year					
	2007-08	2008-09	2009-10	2010-11	2011-12		
Entitled	23	14	15	19	13	84	
Authorized	9	23	14	16	15	77	
Implemented	9	16	19	15	13	72	
Eliminated	3	5	3	8	6	25	
Suspensions*	0	0	5	3	4	12	

 Table 1: Program Planning and Review Activity Over the Past Five Years Systemwide.

\*Formal Recording of Suspensions was introduced in 2009-10.

## **UW SYSTEMWIDE ARRAY**

## **Changes and Trends in the Array**

The UW System's academic array consists of associate, baccalaureate, master's, doctoral, and professional degrees. The Associate of Arts and Sciences are conferred predominantly by the University of Wisconsin Colleges (UW Colleges) via its 13 two-year institutions located in various parts of the state. Several comprehensive universities within the UW System also confer the Associate of Science and the Associate of Arts degree.

As of June 30, 2012, the systemwide array consisted of 1,196 bachelor's, master's, doctoral, and professional degree programs offered by the two doctoral and 11 comprehensive universities. Excluding associate degree programs, bachelor's degrees account for 60 percent of the entire array, whereas master's and doctoral degrees account for 28 percent and 12 percent, respectively (see Figure 1 on the next page).

In terms of trends, the total number of degree programs offered systemwide declined from 1,185 in 1982-83 to 1,104 in 1999-00 and then increased to 1,196 in 2011-12. The number

of bachelor's degree programs displayed a pattern similar to the total array. In 1982-83, the UW System offered 695 bachelor's degree programs. That number declined in the period between the 1980's and 1990's to 443 degrees, and then increased again in the 2000's. By 2011-12, the number had reached 714, which are 19 more bachelor's degrees than were offered 30 years ago.

The number of graduate degree programs, including master's, doctoral, and professional degree programs, decreased from 490 in 1982-83 to 443 in 1999-00, and then started to increase gradually to 482 in 2011-12. However, the number of master's, doctoral, and professional degree programs currently offered is still below the total number offered thirty years ago, despite the gradual increase in recent years. As a whole, the UW System's array (excluding associate degrees) has increased by only one percent when compared to the number of programs that were available in 1982-83. Figure 1 shows the distribution of UW System degree program offerings in 2011-12; Figure 2 presents the thirty-year trend in total degree offerings in the UW System; and Figures 3 and 4 provide trends in the total array over the last thirty years (1982-83 to 2011-12).

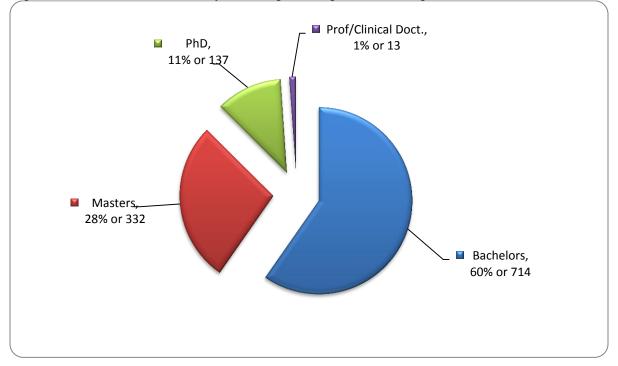


Figure 1: Distribution of UW System Degree Programs Offerings in 2011-12.

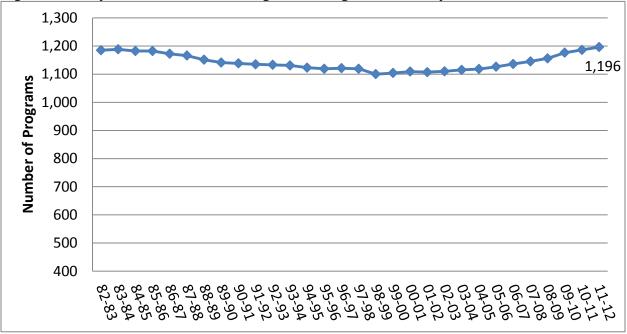
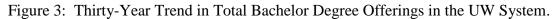
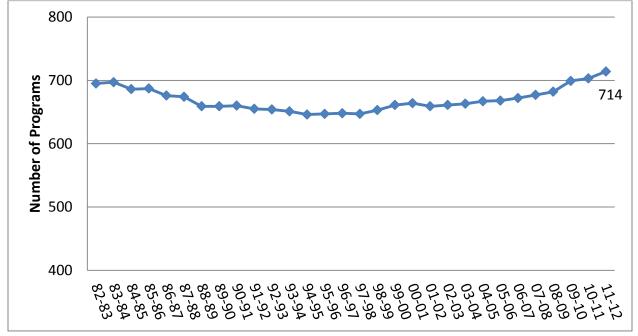


Figure 2: Thirty-Year Trend in Total Degree Offerings in the UW System.





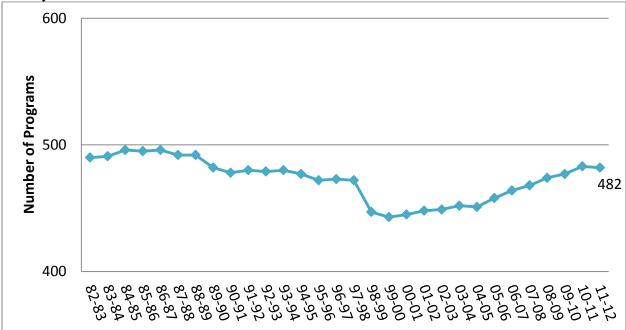


Figure 4: Thirty-Year Trend in Master's, Doctoral, and Professional Degree Offerings in the UW System.

## STEM, Health, and Business Array

Science, technology, engineering, and mathematics (STEM) remain a significant part of the UW System's academic array. In 2011-12, STEM fields accounted for 26 percent of the entire array. Health programs and business programs tied at 9 percent each of the array and all other programs constituted 56 percent of the array (see Figure 5).

## Avoiding Unnecessary Duplication in the Array

Among the critical array management functions of the UW System executive leadership is the review of the System's academic array for inefficient or unnecessary duplications. Each year, close attention is paid in the the approval process of new degrees with respect to demonstrated market need and opportunities to minimize cost through collaborations that are efficient. This effort saves taxpayers, students, and parents money.

As indicated previously, baccaulerate programs accounted for 60 percent of degree programs offered by the UW System in 2011-12. An analysis of the total number of degree programs offered shows that only one degree program (psychology) i.e. less than one percent of the bachelor's degree programs was offered by all of the doctoral and comprehensive institutions in the system. About 59 percent of the bachelor's degree programs were offered by no more that one insitution (see Figure 6), indicating that close attention is being given to matters pertaining to inefficient and unnessary duplication.

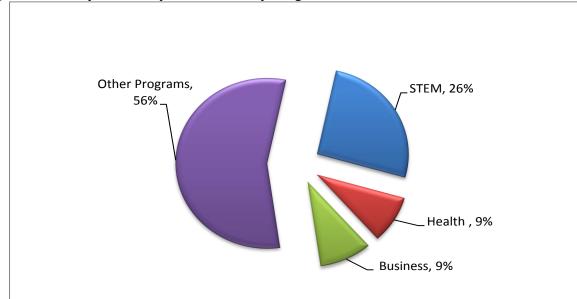
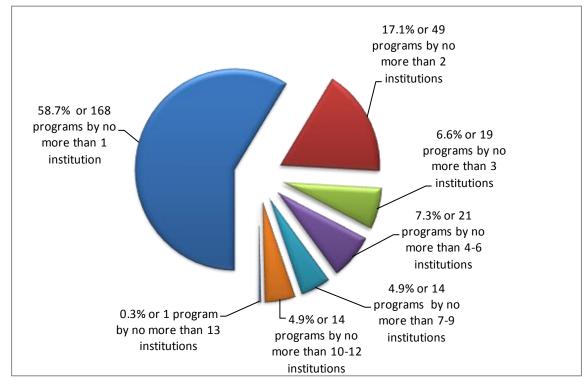


Figure 5: UW System Array Distribution by Program Area in 2011-12.

Figure 6: Frequency of Bachelor's Degree Programs Offered in 2011-12.



## **Degrees Conferred by Level and Institution**

During the 2011-12 academic year, 35,708 associate's, bachelor's, master's, and doctoral degrees were awarded. About 73 percent of the degrees were bachelor's degrees. Master's

degrees accounted for about 16 percent, associate degrees for about six percent, and doctorates for about five percent (Figure 7).

In the 2011-12 academic year, 2,011 associate degrees were conferred by eight University of Wisconsin institutions. The UW Colleges conferred 1,751, or 87 percent of the total associate degrees conferred. The second largest number of associate degrees, i.e. 167, or 8 percent, was conferred by UW-Stevens Point (see Figure 8).

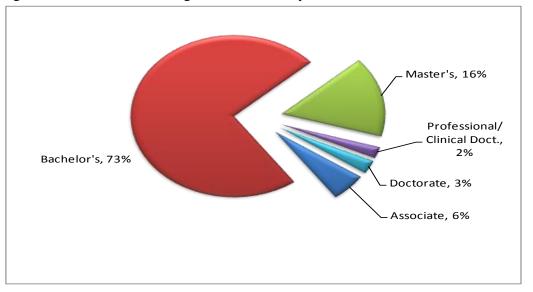
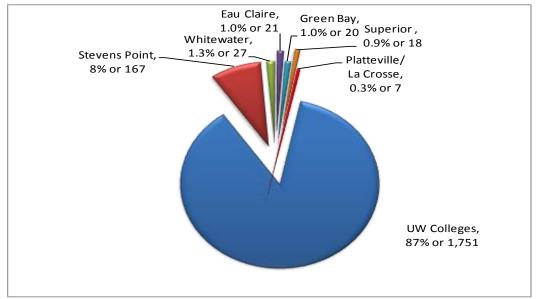


Figure 7: Distribution of Degrees Conferred by Level in 2011-12

Figure 8: Share of Associate Degrees Conferred by Institution in 2011-12.



# Initial Outcomes of the Regents' 2010 Decision to Permit Comprehensive Institutions to Confer Professional Doctorates Independently or in Collaboration with Doctoral Institutions

Prior to 2010, by Board and UW System Administration policy, comprehensive institutions were not permitted to confer professional doctorates independently. Policy did allow collaborative doctoral degree program delivery and degree conferral in cooperation with UW-Madison or UW-Milwaukee. In 2010, a change in practice approved by the Board of Regents made it possible for the comprehensive institutions to independently confer certain professional/clinical doctorates, provided the proposing institution met certain conditions.

Under this new practice, the first comprehensives approved to confer clinical doctorates independently were UW-Oshkosh and UW-Eau Claire. These two UW institutions were authorized to confer the Doctor of Nursing Practice (D.N.P.) degrees in light of changes in practice requirements in the discipline. In 2012, the consortial Doctor of Physical Therapy (D.P.T) that had been jointly offered by UW-La Crosse and UW-Milwaukee was dissolved into two separate programs by action of the Board of Regents, after it was determined that it was in the System's and the two institutions' best interest to do so.

As of the summer of 2012, the D.N.P. degree program at UW-Eau Claire had produced its first 14 degrees. In fall 2012, the D.N.P enrolled 36 students, and the program will have approximately 105 students enrolled by 2015. In the fall of 2012, the D.N.P. degree program at UW-Oshkosh produced its first four degrees. Fall 2012 enrollment was 33 students, and the new cohort size is expected to remain steady over the next five years.

## 2012-2014 Overview

As a practice, the Office of Academic, Faculty and Global Programs undertakes major initiatives aimed at keeping policies and various guidelines relevant and current. These efforts include assessments of the effectiveness of various policies and procedures. The following items will be addressed during the 2012-14 academic years:

- a. The Board of Regents approved the revised program planning process at their August 2012 meeting (see Appendix E for the revised process). The new process is being implemented in 2012-13.
- b. The last review of the entire undergraduate array for productivity and duplication concerns occurred in 2009. At the time of that comprehensive review, it was envisioned that such an assessment was needed to be conducted every five years.
- c. In an effort to increase access to more degree programs, institutions are converting some of their face-to-face degree programs to online degree programs. While work to change the approval process for converting face-to-face degree programs to online degree program has begun, it needs to be finalized and buttressed with an updating of Regent Policy on distance education.
- d. The implementation of a new process for program planning and review has created the need to conduct a comprehensive review of ACIS 1.0 for consistency and to

insure that program planning and review requirements contained in ACIS 1.0 are updated.

- e. While the new process for approving new degree programs is in its first year of usage and appears to be effective in reducing the amount of time required to authorize new degree programs, the Regents, as well as the Office of Academic, Faculty, and Global Programs, have identified a few more opportunities for making the process more efficient and effective.
- f. As part of the array management role of UW System Administration, the Office of Academic, Faculty, and Global Programs will conduct a survey regarding the interest and plans of the comprehensive institutions in developing professional doctorates.

## **Key Summary Points**

The UW System's academic array in 2011-12 consisted of 1,196 bachelor's, master's, doctoral, and professional degree programs. Bachelor's degree programs accounted for 60 percent of these programs. STEM, health-related, and business-related programs accounted for 26 percent, nine percent, and nine percent, respectively, of the array.

During the 2011-12 academic year 15 new degree programs were authorized, and 13 were implemented. The total number of programs discontinued was six, while four programs were suspended. The net change in the total systemwide array (including implementations) was three.

The distribution of bachelor's degree programs across the system has been fairly stable over the last 16 years. About 59 percent of bachelor's degree programs continue to be unique offerings and are not duplicated at more than one insitution. This suggests that close attention is being paid throughout the UW System to concerns regarding unnessary duplication.

The 2011-12 academic year saw the production of 35,708 associate, bachelor's, master's, and doctorate/Ph.D. degrees. This was the largest number of degrees conferred in a given year in the history of the UW System. Seventy-three percent of the total were bachelor's degrees. Included in the total number of degrees conferred were 2,011 associate degrees. Students attending the UW Colleges earned 87% percent of the associate degrees.

The plan to restructure the program planning and review process has brought about significant changes in the roles and responsibilities of UW System Administration in the establishment of new degree programs. The institutions have embraced the new process. As indicated above, the process will be regularly reviewed to determine if it is achieving its goals. Improvements will be implemented following each review.

# APPENDIX A PROGRAM PLANNING AND REVIEW PROCESS UTILIZED IN 2011-12

## **Entitlement to Plan**

The first step in the new program planning process is for an institution to request from the UW System Administration Office of Academic, Faculty, and Global Programs (AFGP) an entitlement to plan a new academic program leading to a degree. The request includes a proposal identifying the program and explaining how the program relates to planning issues, including:

- need for the program and market demand;
- a description of the curriculum and student learning outcomes;
- relation to institutional mission and academic plan;
- relation to other programs in the UW System and in the region; and,
- resources needed and projected source of resources.

AFGP reviews the proposal and, unless an expedited review is approved, circulates the request to the UW System's Provosts for comment. These comments may lead to further consultation with the requesting institution and other institutions to explore more deeply how the program fits into the systemwide program array and whether or not collaboration is appropriate. The request for entitlement to plan is then granted, deferred for further development, or denied.

## **Authorization to Implement**

Once an entitlement to plan has been granted, the institution then develops a more comprehensive proposal for authorization to implement the new program. The request for authorization to implement must address the following:

- Context, including history of the program, relationship to existing programs, relationship to campus mission and strategic plan, and campus program array history;
- State, regional, and national need, including comparable programs within and outside the state, student and market demand for graduates of the program, and possible collaboration or alternative program delivery possibilities;
- Program description and evaluation, including objectives, curriculum, diversity infusion, relationship to other curricula, method of assessment, and use of information technology/distance education;
- Personnel, including what steps will be taken to recruit and retain students, faculty, and staff from diverse populations and perspectives;
- Academic support services, including library and advising;
- Facilities and equipment; and,
- Budget and program financing.

The program proposal undergoes several levels of review, including review by: external consultants; appropriate governance bodies; and a Program Review Committee that consists of a representative from UW System Administration and representatives of the proposing institution(s). If the program proposal receives positive reviews from the governance groups and the Program Review Committee, the committee recommends that the Provost of the institution

seek authorization to implement the program. The Provost submits the authorization proposal and related materials to AFGP, whereupon a decision is made as to whether the program warrants submission to the Board of Regents. Following a positive decision, the program is presented to the Education Committee and the Board of Regents for approval.

## **Implementation by the Institution**

Once authorized to implement the program, the institution sets an implementation date. Campuses sometimes choose to delay implementation, and on occasion, a campus makes a decision not to go forward with an authorized program because of changed circumstances.

## Joint Program Review

The final step in the approval of new academic programs is a joint program review conducted approximately five years after the program is implemented. The review is designed to determine how well the program has met its goals and objectives, and whether it has achieved these goals with the resources anticipated.

When the joint program review is completed, the report is submitted to AFGP for formal action on whether or not to continue the program. If the program is approved for continuation, it is then placed into the institution's regular program review cycle.

# APPENDIX B SUMMARY OF ENTITLEMENTS, AUTHORIZATIONS, IMPLEMENTATIONS, SUSPENSIONS, AND ELIMINATIONS IN 2011-12 BY INSTITUTION

	Entitled	Authorized	Implemented	Eliminated	Suspended
UW Colleges			1		<b>^</b>
UW-Eau Claire			2		
UW-Extension					
UW-Green Bay		1			
UW-La Crosse				1	
UW-Madison		1	2	1	
UW-Milwaukee	2	2	2	1	
UW-Oshkosh	1	1			
UW-Parkside	1	1			
UW-Platteville		1	4		
UW-River Falls	1				1
UW-Stevens Point	3				
UW-Stout	1	4	1		2
UW-Superior					
UW-Whitewater		3		4	
Collaborative: LAX,					
RVF, STP, SUP & EXT					
(Health & Wellness			1		
Management)					
Collaborative: EAU,					
GBY, PKS, STP & EXT		1			
(Health Info Mgt. &		1			
Technology)					
Collaborative: OSH &			1		
WTW (Japanese Studies)			1		
Electrical Engineering					
Technology (GBY,OSH)	1				
Environmental					
Engineering Technology					
(GBY,OSH)	1				
Mechanical Engineering					
Technology (GBY,OSH)	1				
Sustainable					
Management, Online					
(GBY					
OSH,PKS,STO,SUP &					
EXT)	1				
TOTALS	13	15	13	7	3

# APPENDIX C SUMMARY OF PROGRAM PLANNING ACTIVITIES AND PLANS FOR THE FUTURE REPORTED IN 2011-12 BY INSTITUTION

# **UW Colleges**

Program Name	Degree	Action	Date
No activities reported for 2011-12			

# **UW-Eau Claire**

Program Name	Degree	Action	Date		
International Business	B.B.A.	Implemented	Fall 2011		
Organizational Leadership and					
Communication	B.P.S.	Implemented	Fall 2011		
New academic programs in the initial planning stage or under consideration for the future:					
None reported					

## **UW-Green Bay**

Program Name	Degree	Action	Date
Nursing Leadership and Management in Health			
Systems, Online	M.S.N.	Authorized	6/7/2012

## **UW-La Crosse**

Program Name	Degree	Action	Date		
Physical Therapy	M.S.	Eliminated	Summer 2011		
New academic programs in the initial planning stage or under consideration for the future:					
Special Education					

## **UW-Madison**

Program Name	Degree	Action	Date		
Epidemiology	M.S./Ph.D.	Authorized	2/10/2012		
Environmental Studies	B.A./B.S.	Implemented	Fall 2011		
Environmental Sciences	B.A./B.S.	Implemented	Fall 2011		
Medical Microbiology & Immunology	B.S.	Eliminated	Summer 2011		
New academic programs in the initial planning stage or under consideration for the future:					
Ph.D. – Evolutionary Biology					

# **UW-Milwaukee**

Program Name	Degree	Action	Date
Kinesiology	Ph.D.	Entitled	2/2/2012
Sustainable Peacebuilding	M.S.	Entitled	4/23/2012
Nutritional Sciences	B.S.	Authorized	2/10/2012
Public Health, Community and Behavioral			
Health Promotion	Ph.D.	Authorized	4/13/2012
Sociology	Ph.D.	Implemented	Fall 2011
Public Health	Masters	Implemented	Fall 2011
Applied Mathematics and Physics	B.S.	Eliminated	Spring 2012
New academic programs in the initial planning stage or under consideration for the future:			

a)	Ph.D Civil Engineering
b)	Ph.D. – Computer Science
c)	Ph.D Electrical Engineering
d)	Master's - Healthcare Administration
e)	Ph.D Industrial Engineering
f)	Ph.D. – Materials Engineering
g)	Ph.D Mechanical Engineering
h)	Doctorate - Prosthetics and Orthotics
i)	Master - Prosthetics and Orthotics

# UW-Oshkosh

Program Name	Degree	Action	Date
Transnational Human Service Leadership	M.S.	Entitled	7/22/2011
	B.B.A./B.A./		
Interactive Web Management	B.S.	Authorized	4/13/2012
New academic programs in the initial planning stage or under consideration for the future:			
a) Bachelor's - Insurance			
b) Bachelor's - Management			

# **UW-Parkside**

Program Name	Degree	Action	Date
Sport Management	M.S.	Entitled	5/8/2012
Environmental Studies	B.S.	Authorized	6/7/2012
New academic programs in the initial planning stage or under consideration for the future:			
a) M.S Physician's Assistant			
b) B.A Music Education			
c) M.S Clinical Psychology and Counseling			

# **UW-Platteville**

Program Name	Degree	Action	Date
Sustainable and Renewable Energy Systems	B.S.	Authorized	2/10/2012
Distance Education Leadership, Online	M.S.	Implemented	Fall 2011
Integrated Supply Chain Management, Online	M.S.	Implemented	Fall 2011
Microsystems and Nanotechnology	B.A./B.S.	Implemented	Fall 2011
Organizational Change Management, Online	M.S.	Implemented	Fall 2011

# **UW-River Falls**

Program Name	Degree	Action	Date
Clinical Exercise Physiology	M.S.	Entitled	10/14/2011
Food Science and Technology	B.S.	Suspended	Summer 2011
New academic programs in the initial planning stage or under consideration for the future:			
a) B.S Digital Film and Television			
b) M.S Computer Science			

# **UW-Stevens Point**

Program Name	Degree	Action	Date
Natural Resources	M.N.R.	Entitled	7/14/2011
Nursing	B.S.N.	Entitled	4/5/2012
Nursing, BSN@Home, Collaborative Online	B.S.N.	Entitled	4/16/2012
New academic programs in the initial planning stage or under consideration for the future:			
B.A Food and Nutrition			

# **UW-Stout**

Program Name	Degree	Action	Date	
Construction Management	M.S.	Entitled	4/6/2012	
Entertainment Design	B.F.A.	Authorized	2/10/2012	
Graphic Design and Interactive Media	B.F.A.	Authorized	2/10/2012	
Industrial Design	Industrial Design B.F.A. Authorized 4/13/2012			
Interior Design	Interior Design B.F.A. Authorized 4/13/2012			
Health, Wellness and Fitness B.S. Implemented Fall 2011				
Service Management B.S. Suspended Summer 201				
Technology Education B.S. Suspended Summer 20				
New academic programs in the initial planning stage or under consideration for the future:				
a) M.S Biomedical Sciences				
b) Ed.D. – Career Education and Training				
c) B.S Criminal Justice				
d) B.S. – Environmental Science				

# **UW-Superior**

Program Name	Degree	Action	Date
No activities reported for 2011-12			
New academic programs in the initial planning stage or under consideration for the future:			
Ed.D. – Educational Administration			

# **UW-Whitewater**

Program Name	Degree	Action	Date
Computer Science	B.S.	Authorized	12/9/2011
Environmental Science	B.A./B.S.	Authorized	12/9/2011
International Business	B.B.A.	Authorized	6/7/2012
Computer Information Systems	M.S.	Eliminated	Summer 2011
Journalism	B.S.E.	Eliminated	Summer 2011
Music Education	M.M.E.	Eliminated	Summer 2011
Reading	M.S.E.	Eliminated	Summer 2011
New academic programs in the initial planning stage or under consideration for the future:			
a) B.S NanoScience/Nanotechnology			
b) B.F.A Graphic Design			
c) B.S.E Non-Licensure			

# **Collaborative Degrees**

Program Name	Degree	Action	Date
Electrical Engineering Technology	B.S.	Entitled	5/3/2012

(GBY,OSH)			
Environmental Engineering Technology			
(GBY,OSH)	B.S.	Entitled	5/3/2012
Mechanical Engineering Technology			
(GBY,OSH)	B.S.	Entitled	5/3/2012
Sustainable Management, Online (GBY			
OSH,PKS,STO,SUP & EXT)	M.S.	Entitled	4/25/2012
Health Information Management and			
Technology, Online (GBY, PKS, STP, LAX,			
& EXT)	B.S.	Authorized	12/9/2012
Health & Wellness Management, Online			
(LAX,RVF,STP,SUP & EXT)	B.S.	Implemented	Spring 2012
Japanese Studies (OSH,WTW)	B.A.	Implemented	Winterim 2012

## **APPENDIX D**

## **INSTITUTIONAL REVIEWS AND REPORTS ON ACCREDITATION IN 2011-12 BY**

#### **UW Colleges**

Program Accreditations: No (re-)accreditations occurred in 2011-12. Joint Reviews: No joint reviews occurred in 2011-12.

Institutional Reviews: Two programs underwent review, one was approved for continuation and one is in process.

#### **UW-Eau Claire**

Program Accreditations: Four programs underwent review, one is awaiting recertification, two have licensures pending, and one meets recognition guidelines.

Joint Reviews: No joint reviews occurred in 2011-12.

Institutional Reviews: Four programs underwent review, all were recommended for continuation. Eight programs are scheduled for review in 2012-13.

#### **UW-Green Bay**

Program Accreditations: No (re-)accreditations occurred in 2011-12.

Joint Reviews: One collaborative program underwent review and is in process.

Institutional Reviews: Seven programs underwent review, one was recommended for continuation, and six are in process. Seven programs are scheduled for review in 2012-13.

#### **UW-La Crosse**

Program Accreditations: No (re-)accreditations occurred in 2011-12.

Joint Reviews: One program underwent review and is in process.

Institutional Reviews: Sixteen programs underwent review, five were recommended for continuation, two were recommended for conditional continuation, and nine are in process. Six programs are scheduled for review in 2012-13.

#### **UW-Madison:**

Program Accreditations: Seven programs underwent review, six were approved for accreditation, and one is in process.

Joint Reviews: Six programs underwent review, one was approved for continuation, and five are in process.

Institutional Reviews: Fifty programs underwent review, 25 were recommended for continuation, four were recommended for discontinuation, admissions suspended for one, and 20 are in process. Two programs were approved for extension and six programs are scheduled for review in 2012-13.

#### **UW-Milwaukee**

Program Accreditations: No (re-)accreditations occurred in 2011-12.

Joint Reviews: Three programs, one collaborative, underwent review, and all are in process.

Institutional Reviews: Twelve programs underwent review, six were recommended for continuation, and six are in process. Thirteen programs are scheduled for review in 2012-13.

#### **UW-Oshkosh**

Program Accreditations: Five programs underwent review, two were accredited, two were reaccredited, and required reports submitted for one.

Joint Reviews: Four programs, one collaborative, underwent review, and all are in process.

Institutional Reviews: 24 programs underwent review, 14 were recommended for continuation, and ten are in process. Ten programs are scheduled for review in 2012-13.

#### **UW-Parkside**

Program Accreditations: No (re-)accreditations occurred in 2011-12.

Joint Reviews: Two programs underwent review and both are in process.

Institutional Reviews: Thirteen programs underwent review, and all are in process. Two programs are scheduled for review in 2012-13.

#### **UW Platteville**

Program Accreditations: One program underwent review and was approved for continuation.

Joint Reviews: No joint reviews occurred in 2011-12.

Institutional Reviews: No programs underwent review in 2011-12 because of a selfassessment by the Academic Planning Council. Nine programs are scheduled for review in 2012-13.

#### **UW-River Falls**

Program Accreditations: Two programs underwent review and both were successful. Joint Reviews: No joint reviews occurred in 2011-12.

Institutional Reviews: Eight programs underwent review and all were recommended for continuation. Two programs were approved for extension and ten are scheduled for review in 2012-13.

#### **UW-Stevens Point**

Program Accreditations: One program underwent review and was re-accredited. Joint Review: One collaborative program underwent review and is in process. Institutional Reviews: Five programs underwent review, two were approved for

continuation, and three are in process. One program was approved for extension and four programs are scheduled for review in 2012-13.

#### **UW-Stout**

Program Accreditations: Eleven underwent review, two were re-accredited, five were newly accredited, and four are in process.

Joint Review: One program underwent review and is in process.

Institutional Reviews: Nine programs underwent review, and all were recommended for continuation. Ten programs are scheduled for review in 2012-13.

#### **UW-Superior**

Program Accreditations: One program underwent review and is in process. Joint Reviews: No joint reviews occurred in 2011-12.

Institutional Reviews: Five programs underwent review, two were approved for continuation, one received conditional approval, and two are in process. Five programs were approved for extension and two are scheduled for review in 2012-13.

## **UW-Whitewater**

Program Accreditations: One program underwent review and is in process.

Joint Review: No joint reviews occurred in 2011-12.

Institutional Reviews: Twenty programs underwent review, two were recommended for continuation, twelve were recommended for continuation with minor concerns, four were recommended for continuation with major concerns, and two are in process. Fourteen programs are scheduled to be reviewed in 2012-13.

## APPENDIX E REVISED PROCESS FOR PROGRAM PLANNING, REVIEW, AND APPROVAL IN THE UW SYSTEM

# Following approval by the Board of Regents in August 2012, the process detailed below replaces the previous process contained in ACIS 1.0 (Revised June 2010), the UW System's policy statement on academic program planning, review, and approval.

Each University of Wisconsin System institution has its own internal processes for developing, approving, and reviewing new degree programs. The policies outlined in this document are intended to guide degree program approval as determined by the UW System on behalf of the System Board of Regents.

The process for program approval includes: 1) <u>a pre-authorization phase</u> in which the institution submits a Notice of Intent; 2) an <u>authorization phase</u> in which the institution submits a brief proposal and a Letter of Commitment from the proposing institution's Chancellor, Provost, or specified designees to the UW System President for BOR approval; and 3) an <u>implementation phase</u> in which the institution will notify the Associate Vice President (AVP) of the UW System Administration Office of Academic, Faculty, and Global Programs or its successor when it will implement the new program.

Good practice dictates that UW institutional leaders informally update the AFGP about nascent and emerging ideas for new programs before planning is well advanced to allow for consultation and exchange of information that may be relevant to the early planning process. Provosts or specified designees will have an opportunity to provide this information in the annual program planning report that is provided to UW System Administration. Alternatively, at any time, provosts or specified designees are invited to consult informally with AFGP on new program planning.

## I. Pre-Authorization: Notice of Intent

#### Audience

The intended audience for the Notice of Intent is UW chancellors, provosts and their staff members, as well as UWSA administrators and staff.

## **Content/Structure of the Notice of Intent**

This public document should be no longer than two pages and include the following information:

- A. Name of proposed degree, institutional setting, mode of delivery, and institutional contact information. Information on other required approvals to offer the program beyond the BOR (such as accreditation bodies, including the Higher Learning Commission) should be included.
- B. Clear statement on how the program fits with institutional mission, strategic plan, and existing program array.
- C. Program description.

D. Need for program (brief description of programs in the context of local, regional and systemwide programs).

# Process

- A. After completing preliminary institutional planning processes, as required, the proposing institution's Chancellor, Provost, or specified designees will send the Notice of Intent to the AVP of AFGP and to the provosts or specified designees at all UW System institutions.
- B. Institutions will have 10 working days to review the Notice of Intent and respond to the proposing institution's Provost or specified designees with the following:
  - 1. Opportunities for potential collaboration.
  - 2. Serious concerns, including questions of duplication.
  - 3. General comments regarding other aspects, such as the compatibility of the proposed program with the institution's mission.
- C. Institutions may request from the proposing institution's Provost or specified designees additional time to respond, typically no longer than 10 working days. Concurrent with the institutional review, the AVP of AFGP will have 10 working days to conduct a review of the Notice of Intent focusing on overall systemwide program array and other matters in accordance with BOR and UWSA policy (see attached "Components of UWSA Program Array Management"). A response to the Notice of Intent will be shared with the proposing institution's Provost or specified designees and the Senior Vice President of the UW System Office of Academic and Student Affairs.
- D. At the end of the comment period, the proposing institution's Provost or specified designees will compile all responses and forward them to the AVP of AFGP and to the provosts or specified designees at all UW institutions.
  - 1. If an institution has not responded with comments or concerns by the end of the comment period, this will be interpreted to mean that it has no serious concerns or issues.
  - 2. If there are concerns, issues, or opportunities for collaboration, within 20 working days, the proposing institution's Provost or specified designees will consult with those institutions raising them, and submit a document to the AVP of AFGP that outlines how the concerns, issues, or opportunities for collaboration will be addressed.
    - a. If any institution judges that the concerns, issues, or opportunities for collaboration are not adequately addressed, that party will notify the proposing institution's Provost or specified designees and the AVP of AFGP, and request mediation by the AVP of AFGP. The issue will be resolved within 10 working days.
- E. If no mediation is requested, or after the mediation period, the AVP of AFGP will approve or deny the request for pre-authorization within 10 working days, following receipt of comments. The pre-authorization will expire after five years.

1. In the event that a request for pre-authorization is denied, the institution may appeal to the Senior Vice President of the UW System Office of Academic and Student Affairs. The decision of the Senior Vice President is final.

# II. Authorization

## Audience

The intended audience for the Authorization is the members of the BOR, administrators, and other interested parties. The use of technical jargon should be minimized and acronyms should be avoided. The proposing institution's Provost or specified designees will submit the authorization document to the AVP of AFGP for review.

## Content/Structure

The proposal, no longer than 10 pages in length, will address foundational elements: who, what, where, when, and why. The document should be clearly written to convey the purpose and need for the proposed program; the benefits of the program to the institution; the ability of the institution to carry out the program; and the likely value to, and impact on, students and the residents of Wisconsin.

A. *Abstract*: A description of the proposed program in 50 words or less.

# B. *Program Identification:*

- 1. Institution name
- 2. Title of proposed program
- 3. Degree/major designation
- 4. Mode of delivery
- 5. Single institution or collaboration
- 6. Projected enrollment by year five of the program
- 7. Tuition structure (i.e., standard tuition, differential tuition, etc.)
- 8. Department or functional equivalent
- 9. College, School, or functional equivalent
- 10. Proposed date of implementation

# C. *Introduction*:

- 1. Why is the program being proposed? What is its relation to the institution's mission?
- 2. How does it fit into the institution's overall strategic plan?
- 3. Do current students need or want the program?
- 4. Does market research indicate demand?
- 5. How does the program represent emerging knowledge, or new directions in professions and disciplines?

# D. Description of Program:

1. Describe the general structure of the program, including:

- a. The ways in which the program fits into the institutional program array and academic plan.
- b. The extent to which the program is duplicative of existing programs in the University of Wisconsin System.
- c. The collaborative nature of the program, if appropriate, including specific institutional responsibilities.
- d. The ways in which the program prepares students through diverse elements in the curriculum for an integrated and multicultural society (may include inclusion of diversity issues in the curriculum or other approaches).
- 2. Explain briefly program's plan for assessing student learning outcomes, including:
  - a. Specifying what students will know and be able to do as a result of completing the program.
  - b. How the program will continuously assess (using both direct and indirect assessment measures) the extent to which the learning outcomes are accomplished.
- 3. Describe the programmatic curriculum, including:
  - a. How the curriculum is structured (include web links to courses, prerequisites, and other programmatic components).
  - b. Projected time to degree
- 4. Summarize the program review process, including:
  - a. How and when the program will be reviewed by the institution.
  - b. A discussion of what aspects will be evaluated to determine the quality of the program.
  - c. How the review will provide consideration to equity and inclusive excellence, as appropriate.
  - d. Need for external accreditation.

# E. Institutional Commitment:

A Letter of Commitment submitted with all accompanying documents (i.e., the authorization materials) from the proposing institution's or institutions' Provost(s) to the President of the UW System should affirm that:

- 1. the program has been designed to meet the institution's definition and standards of quality and to make a meaningful contribution to the institution's overall academic plan and program array.
- 2. there is institution-wide support for the program, including faculty governance approval.
- 3. the necessary financial and human resources are in place and/or have been committed to implement and sustain the program.
- 4. program evaluations are in place.

## Recommendation

The AVP of AFGP will notify the proposing institution's Provost and Chancellor of the President's decision whether or not to recommend the proposed program to the BOR for approval.

## Approval

A. The BOR will decide whether or not to authorize the program. The BOR's policies can be found at <u>http://www.wisconsin.edu/bor/policies/rpd</u>

## III. Implementation Process

The proposing institution's Provost will notify the AVP of AFGP of the implementation date for the approved program. Authorizations will expire five years after the date of BOR approval.

## IV. Institutional Quality Control

The UW faculty, with oversight by deans, provosts, chancellors, and higher education accreditation agencies, are responsible for developing, implementing, and reviewing high-quality degree offerings in ways that leverage academic strengths and respond to emerging workplace and societal needs. Institutions will assist the BOR in meeting its statutory requirement for assuring academic quality by demonstrating commitment to the following practices:

- A. Establish and maintain a website with the institution's definitions of and standards for quality in academic programming; and the program planning and review process, including general information on how program evaluation and assessment of student learning are conducted (where applicable, through evaluation by external accreditation agencies).
- B. Submit a brief report to the AVP of AFGP about the results of the first institutional or external review of new academic programs. This report is provided in the context of the annual institutional report on program review to UWSA. If the external or institutional review bodies identify areas of concern, the AVP of AFGP will review the institution's action plan for addressing them.

Approved by Board of Regents, August 24, 2012

# APPENDIX F UW SYSTEMPROGRAM PLANNING AND REVIEW WORKING GROUP MEMBERS

Name	Title	Institution
Julie Furst-Bowe, Co-chair	Provost and Vice Chancellor	UW-Stout
Stephen H. Kolison Jr., Co-chair	Associate Vice President	UWSA
Aric Dutelle	Assistant Professor	UW-Platteville
Sandy Grunwald	Professor	UW-La Crosse
Rebecca Karoff	Special Asst. to the Sr. Vice President	UWSA
Bryan Lewis	Director	UW-Parkside
Jocelyn Milner	Associate Vice Provost	UW-Madison
Peter Nordgren	Interim Associate Vice Chancellor	UW-Superior
Randy Olson	Professor	UW-Stevens Point/UW
		Faculty Representatives
David Schejbal	Dean	UW- Extension
Lisa Seale	Associate Vice Chancellor	UW Colleges
Glenn Spiczak,	Professor	UW-River Falls
John Stone	Interim Assoc. Vice Chancellor and Dean	UW-Whitewater
Carleen Vande Zande	Assistant Vice Chancellor	UW-Oshkosh
Dev Venugopalan	Associate Vice Chancellor	UW-Milwaukee
Julia Wallace	Provost and Vice Chancellor	UW-Green Bay
Marty Wood	Dean	UW-Eau Claire
Carmen Faymonville, Staff	Academic Planner	UWSA

## APPENDIX G PROGRAM PLANNING AND REVIEW TEAM

Program Planning and Review at the System level requires the combined efforts of dedicated individuals in various offices in Academic Affairs and Business and Finance. The Office of Academic, Faculty, and Global Programs relies on its colleagues in the Business and Finance division to help address questions regarding institutional costs for establishing new degree programs and proposed costs to students. The table below lists the core program planning and review team during the year under review.

Name	Role	System Office
Stephen H. Kolison, Jr.	Associate Vice President	Academic, Faculty, and Global
1		Programs
Lisa Beckstrand*	System Academic Planner	Academic, Faculty, and Global
		Programs
Gail Bergman	Senior Policy and Planning	Policy Analysis and Research
	Analyst and Director of OPAR	
Yufeng Duan	Senior Institutional Planner	Policy Analysis and Research
Carmen Faymonville	Special Assistant to the Senior	Academic, Faculty, and Global
	Vice President	Programs
Ann Fisher	Program Associate	Academic, Faculty, and Global
		Programs
Rebecca Karoff	Senior Special Assistant to the	Academic and Student Affairs
	Senior Vice President	
Rae McCormick**	Program Associate	Academic, Faculty, and Global
		Programs
Janice Sheppard**	Senior System Academic	Student Services and Academic
	Planner	Support

\*Deceased

\*\*Retired