

BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

I.1. Education Committee Agenda

Thursday, July 11, 2019
10:30 a.m. – 12:00 p.m.
Gordon Dining & Event Center
2nd Floor, Concerto Room
Madison, Wisconsin

- a. Approval of the Minutes of the June 6, 2019 meeting of the Education Committee
- b. UW-Eau Claire:
 - Approval of the Bachelor of Science in Biomedical Engineering [Resolution I.1.b.(1)]
 - Approval of the Bachelor of Arts and Bachelor of Science in Public Health [Resolution I.1.b.(2)]
- c. UW-Green Bay: Approval of the Master of Science in Sport, Exercise, and Performance Psychology [Resolution I.1.c.]
- d. UW-Madison: Approval of the Master of Science in Design Plus Innovation [Resolution I.1.d.]
- e. UW-Platteville: Approval of the Master of Science in Strategic Management [Resolution I.1.e.]
- f. UW-River Falls:
 - Approval of the Bachelor of Science in Biomedical and Health Science [Resolution I.1.f.(1)]
 - Approval of the Master of Science in Strength and Conditioning [Resolution I.1.f.(2)]
- g. UW-Whitewater: Approval of the Master of Science in Education in Higher Education Leadership [Resolution I.1.g.]
- h. Approval of the UW-La Crosse Faculty Policies and Procedures relating to Faculty Layoff and Termination [Resolution I.1.h.]
- i. Approval of the UW-Platteville Faculty Policies and Procedures relating to Faculty Layoff and Termination [Resolution I.1.i.]
- j. Report of the Vice President for Academic and Student Affairs
 - Updates:
 - UW System Digital Learning Environment
 - UW System Task Force for Advancing Teachers and School Leaders for Wisconsin

Program Authorization (Implementation)
Bachelor of Science in Biomedical Engineering
UW-Eau Claire

EDUCATION COMMITTEE

Resolution I.1.b.(1):

That, upon the recommendation of the Chancellor of UW-Eau Claire and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Biomedical Engineering at the University of Wisconsin-Eau Claire.

**NEW PROGRAM AUTHORIZATION
BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING
AT UW-EAU CLAIRE**

EXECUTIVE SUMMARY

BACKGROUND

The University of Wisconsin-Eau Claire submits this request to establish a Bachelor of Science in Biomedical Engineering. This proposal is presented in accord with the procedures outlined in Academic Planning and Program Review (SYS 102, revised July 2016, available at <https://www.wisconsin.edu/program-planning/>).

REQUESTED ACTION

Adoption of Resolution I.1.b.(1), approving the implementation of the Bachelor of Science in Biomedical Engineering at the University of Wisconsin-Eau Claire.

DISCUSSION

Program Description. The University of Wisconsin (UW)-Eau Claire proposes to establish a Bachelor of Science in Biomedical Engineering (BME). The biomedical engineering curriculum will allow students to learn how medical devices interface to living organisms, how mechanical aspects of living organisms can be understood and augmented, how materials foreign to an organism elicit a response, and how such materials can be modified to be more biocompatible. Opportunities for experiential learning will be enhanced through the recently developed research collaboration with the Mayo Clinic Health System (MCHS). The proposed major is designed to meet Accreditation Board for Engineering and Technology, Inc. (ABET) accreditation guidelines, and includes learning opportunities required by ABET's Engineering Accreditation Commission for Biomedical Engineering. Full-time students will complete all university general education and other graduation requirements within a four-year period.

The proximity of UW-Eau Claire to major regional healthcare providers (Marshfield Clinic, Mayo Clinic) and to medical device manufacturers (Boston Scientific, Medtronic) places UW-Eau Claire in a unique position to help support economic development in regional healthcare industries. Thus, graduates of the program will help address employment and economic development needs in the region by supplying engineering talent to healthcare-related industries in the northwest quadrant of the state.

Mission. The BME program is consistent with the goals of the university's Strategic Plan and Academic Master Plan, and with its mission to provide students with a rigorous, intentional, and experiential undergraduate education experience.

The UW-Eau Claire mission statement includes a commitment to providing a rigorous, intentional, and experiential undergraduate education experience; exemplary student-faculty research; and educational opportunities responsive to the needs of its communities, state, region and beyond. The university's 2016-2020 Strategic Plan reinforces the mission statement by vowing to ensure that all students will connect and succeed and that all students will live what they study through high-impact experiential learning.

In alignment with the university's strategic plans and mission, the BME major will build upon UW-Eau Claire's academic programs in mathematics, science, and health sciences, and will provide a compelling complement to its existing Math, Science, and Engineering program. The BME curriculum will allow students to live what they study through hands-on laboratory, seminar, capstone, and embedded research experiences. With respect to research, undergraduate research opportunities for students in biomedical engineering will be enhanced by UW-Eau Claire's collaborative research agreement with the MCHS, which will provide students with unparalleled opportunities for hands-on clinical research experiences. Biomedical research, such as the design, use, and evaluation of medical devices in clinical settings, is an obvious area for collaboration.

Market and Student Demand. According to the Wisconsin Department of Workforce Development, the number of biomedical engineering jobs is expected to grow by 12.1% from 2016 to 2026. Nationally, the U.S. Bureau of Labor Statistics expects a 7.2% growth in biomedical engineering positions during the same time frame. The reason is that demand for biomedical engineers is expected to continue to grow, due to longer human life expectancies and higher rates of healthcare spending, which will increase the demand for medical and assistive devices.

Both prospective and current UW-Eau Claire students have expressed significant interest in the BME program. At the beginning of the spring 2019 semester, an email survey was sent to current students enrolled in STEM and healthcare-related programs. Of the 355 responses, 120 students indicated that they would have likely pursued the BME degree if it were offered.

Credit Load and Tuition. The proposed major in Biomedical Engineering will be comprised of 93 credits, with an additional 35 credits in the Liberal Education Core (LE Core), creating a 128-credit Bachelor of Science degree, which will allow full-time students to complete all university general education and other graduation requirements within a four-year period. The proposed major will provide students with a strong foundation in the sciences (8 classes, 36 credits) and mathematics (3 classes, 12 credits), as well as core engineering curriculum (6 courses, 15 credits) that is relevant to many engineering disciplines. First-year and transfer students will be eligible to declare a major in Biomedical Engineering upon admission. No additional exams, other than those already taken by students during admission to UW-Eau Claire, will be required.

For the 2018-19 academic year, the resident tuition and segregated fees total \$4,408 per semester for full-time students (those enrolled in 12-18 credits per term). Of this total, \$3,681 is attributable to tuition and \$727 is attributable to segregated fees. Students who enroll in the BME program will pay this tuition rate during their freshman and sophomore years (up to 60 earned credits). Consistent with the tuition structure in the MS&E program, BME students will pay the

engineering tuition rate in their junior and senior years. Using the 2018-19 academic year rate, the engineering tuition rate would be \$4,381 per semester for full-time students. This amount is \$700 per semester above the 2018-19 (and planned 2019-20) resident tuition rate. Thus, the full cost of tuition for full-time students completing the BME program in four years is \$32,248.

Students enrolled part-time, and who have earned less than 60 credits, will pay tuition and segregated fees of \$367 per credit (semester rate of \$4,408 divided by 12); part-time students who have earned more than 60 credits will pay \$426 per credit (semester rate of \$5,108 divided by 12). The latter value reflects the additional \$700 per semester for junior and senior students enrolled in the engineering curriculum. Nonresident full-time students will pay \$9,068 per semester, or \$756 per credit, assuming that they are enrolled in 12-18 credits per semester. Of this amount, \$8,341 is attributable to tuition and \$727 is attributable to segregated fees.

RELATED REGENT AND UW SYSTEM POLICIES

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

UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting.

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING
AT UW-EAU CLAIRE
PREPARED BY UW-EAU CLAIRE**

ABSTRACT

The University of Wisconsin (UW)-Eau Claire proposes to establish a Bachelor of Science in Biomedical Engineering (BME). The BME program is consistent with the goals of the university's Strategic Plan and Academic Master Plan, and with its mission to provide students with a rigorous, intentional, and experiential undergraduate education experience. The BME program will complement UW-Eau Claire's program array in the sciences and mathematics, including its existing Materials Science and Engineering (MS&E) curriculum and infrastructure. The new program will take full advantage of UW-Eau Claire's collaboration with the Mayo Clinic Health System (MCHS), which will provide BME students access to clinically relevant experiences that are unique to higher education in the United States. The BME graduates will be equipped to help address the increasing demand for biomedical solutions and to serve the healthcare needs of an aging U.S. population. The comprehensive major will be comprised of 93 credits in a 128-credit degree program, allowing full-time students to complete all university general education and other graduation requirements within a four-year period.

PROGRAM IDENTIFICATION

Institution Name

University of Wisconsin-Eau Claire

Title of Proposed Program

Biomedical Engineering

Degree/Major Designations

Bachelor of Science

Mode of Delivery

Single institution with core engineering courses and electives available to students through the Northwest Engineering Consortium (NVEC), which includes UW-River Falls and UW-Stout. The BME curriculum will be offered primarily face-to-face with the potential for online instruction of selected courses through the NVEC.

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the BME program over the next five years, beginning in 2020. Fifteen new students are expected to enroll at UW-Eau Claire in fall 2020 with BME as their declared program of study as the result of an intentional and targeted recruitment plan. An additional 15 currently enrolled UW-Eau Claire students are expected to select the BME program through internal communication and marketing efforts. University-wide, student retention rates after the freshman, sophomore, and junior years are 82%, 75%, and 70%, respectively. These university-wide retention rates are expected to

increase due to targeted student retention initiatives through the Division of Enrollment Management. That said, data indicate the number of students transferring into the Materials Science and Engineering (MS&E) program is offset by the number who transfer to another academic program. Similar trends are expected for the BME program because the two programs are related. Thus, UW-Eau Claire expects net attrition to be relatively small (2-3 students per year). These expectations are reflected in Table 1. By the end of year five, UW-Eau Claire anticipates 87 students will be enrolled in the program and 45 students will have graduated with a Bachelor of Science degree in Biomedical Engineering from UW-Eau Claire.

Table 1: Five-Year Degree Program Enrollment Projections

Students/Year	2020-21	2021-22	2022-23	2023-24	2024-25
New Students	15	20	20	25	25
Continuing Students	15	28	46	56	62
Total Enrollment	30	48	66	81	87
Graduating Students	0	0	8	17	20

Tuition Structure

For the 2018-19 academic year, the resident tuition and segregated fees total \$4,408 per semester for full-time students (those enrolled in 12-18 credits per term). Of this total, \$3,681 is attributable to tuition and \$727 is attributable to segregated fees. Students who enroll in the BME program will pay this tuition rate during their freshman and sophomore years (up to 60 earned credits). Consistent with the tuition structure in the MS&E program, BME students will pay the engineering tuition rate in their junior and senior years. Using the 2018-19 academic year rate, the engineering tuition rate would be \$4,381 per semester for full-time students. This amount is \$700 per semester above the 2018-19 (and planned 2019-20) resident tuition rate. Thus, the full cost of tuition for full-time students completing the BME program in four years is \$32,248.

Students enrolled part-time, and who have earned less than 60 credits, will pay tuition and segregated fees of \$367 per credit (semester rate of \$4,408 divided by 12); part-time students who have earned more than 60 credits will pay \$426 per credit (semester rate of \$5,108 divided by 12). The latter value reflects the additional \$700 per semester for junior and senior students enrolled in the engineering curriculum. Nonresident full-time students will pay \$9,068 per semester, or \$756 per credit, assuming they are enrolled in 12-18 credits per semester. Of this amount, \$8,341 is attributable to tuition and \$727 is attributable to segregated fees.

Department or Functional Equivalent

The BME degree will reside within the Materials Science and Engineering program at UW-Eau Claire. Like the MS&E major, the BME will be coordinated with other engineering degrees offered at UW-River Falls and UW-Stout through the NWECE.

College, School, or Functional Equivalent

College of Arts and Sciences

Proposed Date of Implementation

Fall 2020

DESCRIPTION OF PROGRAM

Overview of the Program

The proposed major in Biomedical Engineering will be comprised of 93 credits, with an additional 35 credits in the Liberal Education Core (LE Core), creating a 128-credit Bachelor of Science degree. Many of the program's prerequisite courses in chemistry, biology, physics and mathematics are part of the LE Core, and credits earned in these courses can be applied to the 36-credit LE Core requirement (Table 2). The proposed major will provide students with a strong foundation in the sciences (8 classes, 36 credits) and mathematics (3 classes, 12 credits), as well as core engineering curriculum (6 courses, 15 credits) that is relevant to many engineering disciplines. The biomedical engineering curriculum will allow students to learn how medical devices interface to living organisms, how mechanical aspects of living organisms can be understood and augmented, how materials foreign to an organism elicit a response, and how such materials can be modified to be more biocompatible. Student internships and/or co-op experiences, which are both high-impact experiences, will be strongly encouraged but are not required. Opportunities for experiential learning will be enhanced through the recently developed research collaboration with the Mayo Clinic Health System (MCHS).

Student Learning Outcomes and Program Objectives

The proposed major is designed to meet Accreditation Board for Engineering and Technology, Inc. (ABET) accreditation guidelines and includes learning opportunities required by ABET's Engineering Accreditation Commission for Biomedical Engineering (described below). ABET specifies student learning outcomes that each student from an engineering major should master as a graduate. Specifically, students should demonstrate:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics;
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors;
3. an ability to communicate effectively with a range of audiences;
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts;
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives;
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions; and
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

More broadly, ABET also expects each engineering program to define Program Educational Objectives (PEOs), such as those developed for the MS&E program (see <https://www.uwec.edu/academics/college-arts-sciences/departments-programs/materials-science-engineering/academic-offerings/ms-e-accreditation/>). UW-Eau Claire's PEOs for BME majors are to prepare graduates who:

1. are well-prepared to apply their knowledge and skills in developing effective solutions to biomedical engineering and science problems either in the workforce or in an advanced degree program;
2. use their broad education to lead responsibly, communicate effectively, collaborate respectively, and innovate;
3. address modern societal challenges in biomedical engineering within appropriate global, economic, environmental, and ethical contexts; and
4. employ their expertise with industry-standard engineering tools, including scientific instrumental and biological tools, to design solutions to real-world problems.

Furthermore, ABET's Engineering Accreditation Commission-specific requirements for Biomedical Engineering had a strong impact on the design of the proposed curriculum (Table 2). Specifically, the guidelines for biomedical engineering programs require that graduates have learned appropriate major content by:

1. applying principles of engineering, biology, human physiology, chemistry, calculus-based physics, mathematics (through differential equations) and statistics;
2. solving bio/biomedical engineering problems, including those associated with the interaction between living and non-living systems;
3. analyzing, modeling, designing, and realizing bio/biomedical engineering devices, systems, components, or processes; and
4. making measurements on and interpreting data from living systems.

Graduates of the program will be prepared to become leaders and succeed in their careers as engineers, scientists and health professionals; to further their professional development through advanced degrees and certifications; and to engage in service to their profession and community.

Program Requirements and Curriculum

First-year and transfer students will be eligible to declare a major in Biomedical Engineering upon admission. No additional exams, other than those already taken by students during admission to UW-Eau Claire, will be required. Continued enrollment in the major will require students to maintain the same level of performance that all UW-Eau Claire students must meet to remain in "good standing."

Table 2 illustrates the 128-credit curriculum for the proposed major, which includes a minimum of 93 required credits in the major and an additional 35 credits to fulfill LE Core requirements not met by courses taken in the major.¹

¹ The LE Core requires a minimum of 18 learning experiences in 12 areas (seven learning experiences in four "Knowledge" areas, four learning experiences in three "Skills" areas, four learning experiences in three "Responsibility" areas, two learning experiences in "Integration", and the University Service-Learning requirement). These courses are collectively indicated in Table 2 as LE Core credits. Note that credits earned in BIOL 214, CHEM 115, PHYS 231 and MATH 114 count towards both the major and the LE Core.

Table 2: Bachelor of Science in Biomedical Engineering Program Curriculum**General education courses required for graduation:**

LE Core credits needed to meet university requirements	35 credit(s)
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Program prerequisites or support courses:

<i>Biology</i> (Anatomy and Physiology; BIOL 214, 314)	8 credit(s)
<i>Chemistry</i> (General and Organic; CHEM 115, 325, 326)	14 credit(s)
<i>Physics</i> (Introductory; PHYS 231, 232)	10 credit(s)
<i>Math</i> (Calculus, Differential Equations and Linear Algebra; MATH 114, 215, 312)	12 credit(s)
<i>Computer Science</i> (Programming; CS 145 or 148)	4 credit(s)

Academic program or major course requirements:

Introduction to Engineering (MSE 120) [†]	2 credit(s)
Engineering Statistics (TBD)* [†]	4 credit(s)
Computer-Aided Design (MSE 256) [†]	1 credit(s)
Statics (PHYS 255) [†]	3 credit(s)
Jr. Seminar (MSE 386, 387) [†]	1 credit(s)
Sr. Capstone (MSE 486, 487) [†]	4 credit(s)
Electric and Electronic Circuits (PHYS 350)	4 credit(s)
Electronics (PHYS 360)	4 credit(s)
Soft Materials (MSE 334)	4 credit(s)
Biomaterials (TBD)*	3 credit(s)
Fundamentals of Biomedical Eng. (TBD)*	3 credit(s)
Bioinstrumentation & Medical Devices (TBD)*	4 credit(s)
Biomechanics & Biomedical Implants (TBD)*	4 credit(s)
Sensors & Physiological Signal Monitoring (TBD)*	4 credit(s)

Total Credits**128 credit(s)**

*TBD = to be developed

[†] These courses are generally applicable to all engineering majors. These are presently listed as MS&E courses because there is currently no other engineering major at UW-Eau Claire. With the development of the BME major, the 15 credits associated with these courses will be designated as ENG credits to serve all students in engineering.

Assessment of Outcomes and Objectives

The program assessment process employs a three-year cycle, in which assessment data is collected in various courses in year one, that data is evaluated in year two, and changes to the courses are implemented in year three. The assessment of student learning and performance will employ several embedded tasks (such as a project report designed to assess a student's ability to analyze and interpret data) that are aligned with the seven ABET-approved learning outcomes. Both quantitative and qualitative data will be generated. Quantitative data includes student performance in course-based assignments and lab assignments; qualitative data includes faculty perception of each student's ability to work in teams and student-reported perceptions of their own learning. These results will be compared to the program's average expected performance (determined from several cycles of assessing student work). After a discussion of the findings, BME faculty will implement any appropriate program changes. Assessment of student learning and these responsive program changes are part of the larger continuous improvement cycle required for ABET accreditation; program faculty will seek accreditation once the first student cohort has completed the program. Biomedical Engineering faculty also help evaluate how well

students meet the LE Core learning outcomes as part of the broader campus effort to evaluate student learning.²

Diversity

Faculty in the MS&E program, which will serve as the academic home for the BME degree, are fully committed to helping students overcome inclusion challenges in science and engineering, including persistent low participation by women, people of color, and members of other underrepresented groups. The program has actively used high-impact practices, such as undergraduate research, to promote the academic success of students from underrepresented populations.

In terms of engineering disciplines, the gender balance for students graduating with a biomedical engineering degree is better than other engineering fields. Nationally, women earn nearly 43% of biomedical engineering bachelor's degrees, compared to less than 14% in mechanical and electrical engineering. These data suggest that UW-Eau Claire's goal to increase the number of women graduating with an engineering degree is attainable. The data for underrepresented minorities (under 20% of all graduates) indicates biomedical engineering has approximately the same distribution as the other engineering fields. [NCES IPEDS data compiled by DataUSA: <https://datausa.io/profile/cip/1405/>]

The existing MS&E program has a long history of supporting undergraduate research and including students from underrepresented groups in their research. Overall, approximately 20 students work with MS&E faculty each summer, and approximately 25% of the students are from underrepresented groups. In addition to research stipends for students involved in collaborative projects with faculty, the program will continue to provide travel support for students presenting their research at conferences. This travel money is specifically intended to encourage students to attend professional conferences without the additional and disrupting worry of funding this expensive activity. The BME program will provide these same supports as part of UW-Eau Claire's engineering curriculum.

Since 2012, faculty in MS&E have accessed funds from the National Science Foundation's Louis Stokes Alliance for Minority Participation administered through UW-Madison; over a three-year period, 16 students of color worked with engineering faculty and were supported by approximately \$75,000 for student stipends and supplies. These awards provided students from underrepresented populations with additional opportunities to participate in collaborative research experiences with faculty. Engineering faculty have also engaged in research with underrepresented students from two-year technical schools and the former UW Colleges through a National Science Foundation Research Experiences for Undergraduates (REU) grant awarded to UW-Eau Claire. Through this grant, eight underrepresented students participated in 10-week summer research experiences with MS&E faculty, with the goal of introducing research to these students and encouraging them to continue their education to obtain their bachelor's degree. In addition, approximately 10 students in UW-Eau Claire's Ronald E. McNair scholars program have performed engineering-related research with faculty members. The federally funded McNair program provides students from historically underrepresented

² These data are collected institution-wide, using a previously developed (and periodically reviewed) assessment plan.

groups with academic and scholarship support to help them pursue graduate school and obtain an advanced degree.

Students in the BME program, like all UW-Eau Claire students, will be required to complete two learning experiences meeting the equity, diversity, and inclusivity (EDI) learning outcome of the university's liberal education program. These courses will typically be taken within the LE Core and will provide engineering students with opportunities to engage with perspectives, theories, practices, and populations different from themselves, which can be applied to engineering scenarios as well. All faculty and staff in the department, which includes two women and one person of color, are active in advancing the principles of equity, diversity, and inclusion. During annual performance reviews, each faculty and staff member is expected to provide evidence of efforts to enhance equity, diversity and inclusivity on campus, such as mentoring underrepresented students in research (e.g., McNair scholars), use of teaching methods to increase EDI awareness in students, participation in EDI workshops and training, and assistance with recruitment and retention efforts aimed at increasing the enrollment of underrepresented students. Moreover, faculty in the program participated in a campus strategic initiative *EDI in STEM*, which focused on developing resources, strategies, and professional development plans to advance inclusive practices and pedagogies and to improve the campus culture for women and minorities in science, technology, engineering, and mathematics (STEM) fields at UW-Eau Claire.

Collaborative Nature of the Program

The proposed BME program will be part of the Northwest Wisconsin Engineering Consortium in collaboration with UW-River Falls and UW-Stout. The consortium is designed to provide a cost-effective engineering education to the residents of western Wisconsin, produce an ongoing supply of engineering talent, and create an economic environment attractive to engineering-related industries. Key elements of the consortium include:

- design a science, mathematics and engineering curriculum that provides flexibility for students inside and outside the consortium, both in the first-year curriculum and upper-level electives;
- eliminate institutional barriers to provide students a seamless experience, including the ability to readily transfer during the first two years of their undergraduate degree;
- enhance the ongoing collaborative efforts, coordinate outreach activities, and identify opportunities that will benefit students outside of the consortium; and
- strengthen the connections with local industries and build a strong engineering community in western Wisconsin.

Projected Time to Degree

A student can complete the BME degree, including all liberal education and other UW-Eau Claire graduation requirements, in eight semesters with an average load of 16 credits per semester and full-time enrollment. Students who transfer to UW-Eau Claire, and who were enrolled in an engineering program at one of the NWECA participating schools, can also complete the BME degree in eight semesters. The MS&E unit, which will serve as the academic home for the BME degree, has a strong track record of graduating students in a timely manner. Over the past three academic years, the average time to degree for materials science students is 4.08 years

with a 56% four-year graduation rate, which is significantly above the university's current average four-year graduation rate of 40.3%.

Program Review

Academic programs are currently reviewed at UW-Eau Claire every seven years. The materials science programs were last reviewed in 2014-15, which was prior to the development of the MS&E curriculum. The review process includes a three-faculty internal review committee and an external evaluator who also participates in a site visit. The perspectives and recommendations for improvement from these reviewers are forwarded to the Academic Policies Committee and to the provost for consideration.

To meet UW System expectations that new academic programs be reviewed within five years, the BME program would undergo its first review in the 2025-26 academic year; this timeline is separate from the next regularly scheduled review of the majors within the MS&E unit (2021-22). The MS&E program is scheduled for its initial ABET accreditation review in 2019-20. Thereafter, ABET on-site reviews are conducted every six years. As with UW-Eau Claire's ongoing assessment process, ABET's program of continuous improvement requires yearly updates and assessment of the academic program. Once the BME program is accredited by ABET (see below), the on-campus review process will use the same reports and data as the ABET review document.

Accreditation

The proposed BME curriculum is designed to meet the strict ABET accreditation standards (<https://www.abet.org/accreditation/>). As mentioned previously, the MS&E program is expected to undergo an ABET review in 2019-20. Thus, the BME program would be the second program at UW-Eau Claire seeking accreditation by the ABET Engineering Accreditation Commission (EAC). This is important because most of the components required by the EAC are already in place or will be in place before accreditation is sought, such as instrumentation needed to offer the BME curriculum, faculty expertise in engineering-related areas, and on-campus expertise about the extensive work and processes needed for accreditation. An ABET Readiness Review and full accreditation will be requested after the first student cohort completes the BME program during the 2022-23 academic year. It is anticipated that the site visit will require at least 18 months of preparation in the form of assessment data collection, student artifact collection, and related documentation (e.g., faculty CVs, course syllabi, etc.) before the team arrives.

The provost will notify the Higher Learning Commission (HLC) of the new major after approval by the UW System Board of Regents. No separate approval from HLC is required.

JUSTIFICATION

Rationale and Relation to Mission

The proposed BME program, as articulated in this authorization request, reflects UW-Eau Claire's mission and strategic plan goals. The UW-Eau Claire mission statement includes a commitment to providing a rigorous, intentional, and experiential undergraduate education experience; exemplary student-faculty research; and educational opportunities responsive to the needs of its communities, state, region and beyond (<https://www.uwec.edu/acadaff/university->

[mission/](https://www.uwec.edu/files/60/2016-Strategic-Plan-WEB-FINAL.pdf)). The university's 2016-2020 Strategic Plan (<https://www.uwec.edu/files/60/2016-Strategic-Plan-WEB-FINAL.pdf>) reinforces the mission statement by vowing to ensure that all students will connect and succeed and that all students will live what they study through high-impact experiential learning. In addition, the 2016-2020 Academic Master Plan (<https://www.uwec.edu/acadaff/academic-master-plan/>) strives to create a program array that enhances the image and reputation of UW-Eau Claire; is aligned with the mission, values, and strengths of the university; and is attractive and relevant to current and future students.

In alignment with the university's strategic plans and mission, the BME major will build upon UW-Eau Claire's academic programs in mathematics, science, and health sciences, and will provide a compelling complement to its existing MS&E program. The BME curriculum, as outlined in Table 2, will allow students to live what they study through hands-on laboratory, seminar, capstone, and embedded research experiences. With respect to research, student-faculty collaborative research has been a hallmark of a UW-Eau Claire education since the 1970s, leading to recognitions by the UW System Board of Regents in 1988 as the Center of Excellence for Faculty and Undergraduate Student Research Collaboration within the UW System, and by the Council on Undergraduate Research in 2016 as the top master's-level university in the nation for excellence in undergraduate research programming. Undergraduate research opportunities for students in biomedical engineering will be enhanced by UW-Eau Claire's collaborative research agreement with the MCHS. The agreement is only the second of its kind in the world between the Mayo Clinic and an institution of higher education, and the only such agreement involving a comprehensive undergraduate institution. The research agreement will provide UW-Eau Claire students with unparalleled opportunities for hands-on clinical research experiences by working in collaboration with UW-Eau Claire faculty and Mayo Clinic physicians and scientists. Biomedical research, such as the design, use, and evaluation of medical devices in clinical settings, is an obvious area for collaboration. Other elements of the partnership will allow for MCHS healthcare professionals to deliver guest lectures and seminars as well as provide guidance on relevant curriculum and laboratory experiments.

Finally, the BME major is relevant to current and future students and is responsive to the needs of the region. Based on student interest (as outlined later), the program will provide an attractive area of study for today's students. Furthermore, graduates of the BME program will help address employment and economic development needs in the region by supply engineering talent to healthcare-related industries in the northwest quadrant of the state. The proximity of UW-Eau Claire to major regional healthcare providers (Marshfield Clinic, Mayo Clinic) and to medical device manufacturers (Boston Scientific, Medtronic) places UW-Eau Claire in a unique position to help support economic development in regional healthcare industries.

Institutional Program Array

The BME program will build upon UW-Eau Claire's program array in the sciences and mathematics by drawing upon curriculum and faculty expertise in chemistry, biology, physics, and mathematics. The program dovetails with the existing MS&E curriculum and infrastructure, including its faculty expertise and its array of instrumentation and processing equipment. As is common in engineering colleges across the nation, many of the foundational engineering courses will be shared between the BME and MS&E majors. The sharing of courses across engineering

disciplines provides a cost-effective strategy to deliver the BME program. These shared engineering courses will underpin the biomedical engineering curriculum.

Other Programs in the University of Wisconsin System

The proposed BME program, if approved, will be only the third biomedical engineering degree offering within the UW System and the first by a comprehensive institution. Additionally, only UW-Madison and UW-Milwaukee currently offer a biomedical engineering degree so this degree program at UW-Eau Claire will be the only such program north and west of Madison. Since the missions of UW-Madison and UW-Milwaukee are distinct from that of UW-Eau Claire, these institutions will attract different student populations. The proposed BME program will fill a significant geographic and programming gap for students who wish to pursue the degree in the northwest region of the state and within the more intimate structure of a comprehensive university focused on undergraduate education. Additionally, UW-Eau Claire's proximity to the Minneapolis/St. Paul metropolitan area aligns several of the university's primary student catchment areas within the economic umbrella of the Twin Cities and its robust biomedical industries. UW-Eau Claire students who have an interest in biomedical fields and academic programs will be able to pursue a BME degree with access to internship and employment opportunities in the region.

UW-Eau Claire's BME program will provide students with a foundation in engineering principles as they are applied to a broad range of biomedical problems and situations. The MCHS collaboration will provide students with opportunities to apply their learning in clinical and research settings within the Mayo health enterprise and to see the impact on patient health outcomes. Examples include the design and evaluation of orthotic and prosthetic devices, devices to support internal structures during surgical procedures, and realistic models (3-D printed) of organs to assist with pre-operative procedures and patient education. The program will provide a curriculum that emphasizes the engineering, design, use, and manufacture of biocompatible materials and devices (e.g., stents, sutures, drug delivery systems, prosthetics, and implants). For this reason, the BME program's connection to the MS&E major is especially relevant.

Need as Suggested by Current Student Demand

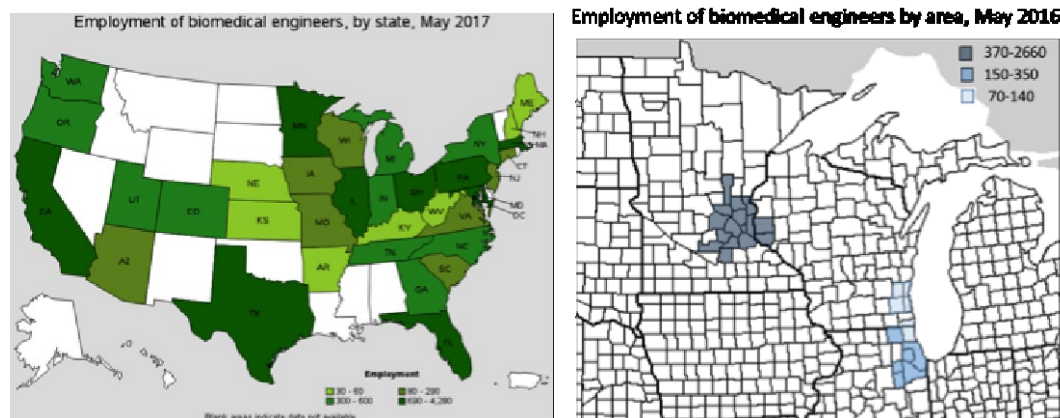
In fall 2018, UW-Eau Claire evaluated College Board data of students from Wisconsin, Minnesota, and northern Illinois who had taken science/math AP exams. Of the 587 students who listed engineering as a possible major, 62 specifically identified biomedical engineering as a possible major to pursue. Thus, there is significant interest in BME from prospective students in UW-Eau Claire's primary recruitment areas. In addition, there is a strong interest in biomedical engineering from current UW-Eau Claire students. At the beginning of the spring 2019 semester, an email survey was sent to current students enrolled in STEM and healthcare-related programs. Of the 355 responses, 120 students indicated that they would have likely pursued the BME degree if it were offered (internal UWEC survey, 2019).

Need as Suggested by Market Demand

According to the Wisconsin Department of Workforce Development, the number of biomedical engineering jobs is expected to grow by 12.1% from 2016-2026 (<https://www.jobcenterofwisconsin.com/wisconomy/query>). Nationally, the U.S. Bureau of

Labor Statistics expects a 7.2% growth in biomedical engineering positions during the same time frame (<https://www.bls.gov/oes/current/oes172031.htm#st>).

Figure 1. U.S. Bureau of Labor Statistics Data for Employment of BME Graduates



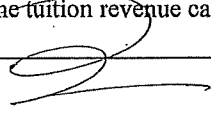
According to the U.S. Bureau of Labor Statistics (2017), the Minneapolis-St. Paul metropolitan area, which includes part of northwestern Wisconsin and is in close proximity to UW-Eau Claire, contains the second largest number of biomedical engineers in the nation (Figure 1). In addition, a search for biomedical engineer on the Job Center of Wisconsin website on January 31, 2019, identified 168 openings (<http://www.wisconsinjobcenter.org/>). An Indeed.com search the same day resulted in 53 open biomedical engineering positions in Wisconsin (<https://indeed.com/jobs?q=biomedical+engineer&l=Wisconsin>). Demand for biomedical engineers is expected to continue being strong due to longer life expectancies and higher rates of healthcare spending, which will increase the demand for medical and assistive devices. According to Business Communications Company Inc. (BCC) Research, the medical device industry is expected to grow at a compound annual growth rate of 5.3% from 2017-2022 (<https://globenewswire.com/news-release/2018/03/19/1441876/0/en/Healthy-Growth-Forecast-for-Medical-Devices-Global-Market.html>). Also, according to Coherent Market Insights, the global elderly and disabled assistive device market is expected to grow from \$14 billion in 2015, to more than \$26 billion by 2024 (<https://www.coherentmarketinsights.com/market-insight/elderly-and-disabled-assistive-devices-market-82>). These figures suggest continued strong demand for biomedical engineering professionals.

University of Wisconsin - Eau Claire
Cost and Revenue Projections For Newly Proposed Program

	Items	Projections				
		2020-21	2021-22	2022-23	2023-24	2024-25
		Year 1	Year 2	Year 3	Year 4	Year 5
I	Enrollment (New Student) Headcount	15	20	20	25	25
	Enrollment (Continuing Student) Headcount	15	28	46	56	62
	Enrollment (New Student) FTE	15	20	20	25	25
	Enrollment (Continuing Student) FTE	15	28	46	56	62
II	Total New Credit Hours	3	11	8	0	0
	Existing Credit Hours	71	74	85	93	93
III	FTE of New Faculty/Instructional Staff	2	2	2	2	2
	FTE of Current Fac/IAS	0.5	0.8	1	1.2	1.5
	FTE of New Admin Staff	0	0	0	0	0
	FTE Current Admin Staff	0	0	0	0	0
IV	Revenues					
	<i>* From Tuition</i>	\$110,400	\$250,300	\$419,300	\$653,000	\$701,400
	<i>From Fees</i>	\$600	\$960	\$1,320	\$1,620	\$1,740
	<i>Program Revenue (Grants)</i>	\$0	\$0	\$0	\$0	\$0
	<i>Program Revenue - Other</i>	\$0	\$0	\$0	\$0	\$0
	Total New Revenue	\$111,000	\$251,260	\$420,620	\$654,620	\$703,140
V	Expenses					
	Salaries plus Fringes					
	<i>Faculty/Instructional Staff</i>	\$295,000	\$337,000	\$368,000	\$400,000	\$446,000
	<i>Other Staff</i>	\$0	\$0	\$0	\$0	\$0
	Other Expenses					
	<i>Facilities</i>	\$50,000	\$0	\$0	\$0	\$0
	<i>Equipment</i>	\$80,000	\$0	\$0	\$0	\$0
	<i>Other (materials and supplies)</i>	\$600	\$30,960	\$36,320	\$41,620	\$41,740
	<i>Other (please list)</i>	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$425,600	\$367,960	\$404,320	\$441,620	\$487,740
VI	Net Revenue	-\$314,600	-\$116,700	\$16,300	\$213,000	\$215,400

*A detailed explanation for the tuition revenue calculation can be found in the Cost and Revenue Projection Narrative

Provost's Signature:



Date:

5/3/19

**UNIVERSITY OF WISCONSIN-EAU CLAIRE
COST AND REVENUE PROJECTIONS NARRATIVE
BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING**

Introduction

This proposed degree will use primarily face-to-face course delivery. While some required courses may have sections offered online, all required courses will also be available in face-to-face or hybrid delivery format. The B.S. in Biomedical Engineering (BME) includes 93 credits, including 22 credits of specialized coursework in biomedical engineering, along with 71 credits of science, math, and engineering courses that are currently part of the UW-Eau Claire curriculum. A total of 3.5 faculty FTE will be required to deliver the program, consisting of 2.0 new faculty FTE and 1.5 existing faculty FTE.

Section I – Enrollment

Enrollment figures for new students are based upon anticipated interest by new students who will be drawn to UW-Eau Claire to pursue the program. In Year 1, 15 new students are expected to enroll in the BME program, along with 15 current UW-Eau Claire students who are expected to change their major to biomedical engineering. In Years 2 and 3, 20 new students are expected to enroll in biomedical engineering each year, and the number of new students is projected to increase to 25 per year in Years 4 and 5. Enrollment figures for continuing students are estimated based on the historical attrition rate in the related Materials Science and Engineering (MS&E) program. The latter program displays net attrition of two to three students per year, which has been built into the BME enrollment figures. At the end of Year 3, the program is expected to produce its first cohort of graduates, which will be comprised primarily of continuing students who switched to the BME program in Year 1. By the end of Year 5, it is expected that 87 students will be enrolled in the BME program and that 45 students will have graduated with a B.S. in Biomedical Engineering.

Section II – Credit Hours

The proposed B.S. in Biomedical Engineering is a 128-credit major and requires 93 unique credits in engineering and support courses, along with other courses needed to fulfill UW-Eau Claire's liberal education core and other university graduation requirements. The new major will require the addition of five new courses (22 credits), which will be phased into the curriculum during Years 1-3. By the end of Year 3, all new courses will be in place. It is anticipated that all engineering courses will be delivered at least once each academic year and that supporting science and mathematics classes will typically be offered each semester.

Section III – Faculty and Staff Appointments

The biomedical engineering program will utilize existing UW-Eau Claire instructional resources to help deliver the supporting science and mathematics courses, as well as the core engineering courses that will be shared between the BME and MS&E programs. It is common for engineering programs to share core engineering curriculum since the engineering principles can be translated across various engineering disciplines. In addition to these existing resources, it is anticipated that the equivalent of two additional faculty FTE will be needed to deliver the specialized biomedical engineering curriculum. Also, as the number of BME students increases, another 1.5 instructional FTE will be needed to deliver additional sections of the supporting

science and mathematics classes. The additional 1.5 instructional FTE will be phased in during Years 1-5, aligned with the increasing number of BME students enrolled in the supporting science and mathematics courses.

Section IV – Program Revenues

Tuition Revenues

Tuition revenue is based upon continuing and new students who originally enrolled at the university to pursue the biomedical engineering major. Tuition revenue assumes constant tuition of \$7,362 per year for full-time students who have earned fewer than 60 credits, and \$8,762 per year for full-time students who have earned more than 60 credits. The additional \$700 per semester (\$1,400 per year) is necessary to cover the additional expenses of delivering an engineering program. Segregated fees are not included in the tuition revenue calculation. In Year 1, tuition revenue of \$110,400 (15 student FTE x \$7,362) is expected. This calculation does not include tuition revenue from the 15 current UW-Eau Claire students who switch to the new major in Year 1, since this tuition would have been generated in the absence of the BME program and is therefore not new revenue for the institution. Likewise, in Year 2, the tuition revenue of \$250,300 (34 student FTE x \$7,362) is based on the number of students in the program who originally enrolled at the university to pursue biomedical engineering. The calculation for Year 3 assumes that 52 students in the program originally enrolled at the university to pursue biomedical engineering and that half of these students will have earned more than 60 credits and therefore pay the engineering tuition rate (\$8,762 per year). These assumptions yield tuition revenue of \$435,300 in Year 3 (26 student FTE x \$7,362 plus 26 student FTE x \$8,762). By Years 4 and 5, it is assumed that all students in the program will have enrolled at the university to pursue the BME major and that half of the students will have earned more than 60 credits and therefore will be charged the engineering tuition rate (\$8,762 per year). With these assumptions, anticipated tuition revenue in Year 5 amounts to \$701,400.

Program/Course Fees

All biomedical engineering students will be required to take CHEM 115 (Chemical Principles), CHEM 325 (Organic Chemistry I), and CHEM 326 (Organic Chemistry II); each course has a \$20 per student special course fee associated with the laboratory portion of the course. In Year 1, all new students are expected to complete CHEM 115, and all continuing students are expected to complete CHEM 325, resulting in revenue of \$600 (30 total student FTE x \$20 per student). In Year 2, the special course fee revenue increases to \$960 based on the assumption that each student (new and continuing) in the program will likely complete either CHEM 115, CHEM 325, or CHEM 326 during the academic year. The revenue generated from fees increases to \$1,740 in Year 5, again based on the assumption that, on average, all students in the program will need to take one of these three lab courses during the year. No other required course in the program has a special course fee.

Section V – Program Expenses

Expenses – Salary and Fringe

As stated in Section III, by Year 5 the equivalent of 3.5 faculty FTE will be needed to deliver the curriculum to students enrolled in the BME program. Salary plus fringe expenses are conservatively estimated to be \$118,000 per faculty FTE to reflect the higher salaries typically earned by STEM faculty. In Year 1, the total expected salary and fringe expense is \$295,000 (2.5

faculty FTE x \$118,000). Salary and fringe expenses for Years 2-5 also include anticipated salary increases based on a 2% pay plan each year. In an attempt to allocate instructional costs to actual delivery of the BME program, the salary/fringe expense (Section V of the Cost and Revenue Projections for New Proposed Program) has been calculated to reflect the progressively larger number of faculty FTE needed to deliver coursework to the students enrolled in the BME program. In Year 5, when the full 3.5 faculty/instructional academic staff FTE will be needed to deliver the curriculum, the estimated salary and fringe expense will be \$446,000.

Other Expenses

The facilities (\$50,000) and equipment (\$80,000) expenses in Year 1 represent costs incurred to renovate and outfit a general-purpose biomedical engineering lab to support laboratory coursework and other experiential learning opportunities for students in the proposed major. Other (materials and supplies) expenses (\$600) in Year 1 represent costs incurred for students enrolled in CHEM 115. These latter expenses match the special course fee for this course. Other (materials and supplies) expenses in Years 2-5 represent the costs associated with delivery of CHEM 115, CHEM 325, and CHEM 326 (as outlined in Section IV) as well as anticipated costs associated with maintaining and delivering the specialized, upper-level laboratory curriculum in the engineering major. These anticipated expenses will be covered, in part, by the additional \$700 tuition charged each semester to engineering students who have earned more than 60 credits and are eligible to enroll in these laboratory courses.

Section VI – Net Revenue

After covering direct instructional and program delivery expenses, the positive net revenue will be used to help offset indirect costs of instruction, such as maintaining institutional infrastructure and supporting the offices and programs (e.g., academic advising, academic skills center) that are currently in place to serve student academic needs. Additionally, positive net revenue may be used to hire additional instructional staff if student demand for the program exceeds the projections. UW-Eau Claire anticipates positive net revenue starting in Year 3 (\$16,300), which rises to \$215,400 in Year 5 as enrollment increases in the program. The negative net revenue in Year 1 (-\$314,600) is due to the smaller number of students in the program in its first year, coupled with the one-time expenses (\$130,000) to establish the general-purpose biomedical engineering laboratory.



University of Wisconsin-Eau Claire

105 Garfield Avenue • P.O. Box 4004 • Eau Claire, WI 54702-4004

May 8, 2019

Ray Cross, President
University of Wisconsin System
1720 Van Hise Hall
1220 Linden Drive
Madison, WI 53706-1559

Dear President Cross:

I am submitting this letter and associated materials in support of the University of Wisconsin-Eau Claire's proposed B.S. in Biomedical Engineering (BME) for review, consideration, and approval by University of Wisconsin System Administration and the University of Wisconsin System Board of Regents.

The UW-Eau Claire Materials Science and Engineering (MS&E) program has the required administrative structure to serve as the academic home for this degree. The degree is well-aligned with UW-Eau Claire's strategic and academic master plans, and dovetails perfectly with the existing curriculum and infrastructure in the MS&E program and other related STEM disciplines at UW-Eau Claire. This alignment will allow us to share core engineering and STEM (chemistry, physics, biology, mathematics) courses across disciplines in an efficient and cost-effective manner.

The engineering and STEM programs at UW-Eau Claire are all supported by modern facilities, and each has a long history of providing high impact undergraduate research experiences to students, including students from underrepresented groups. The university's undergraduate research infrastructure will be augmented by additional research opportunities through our collaboration with the Mayo Clinic Health System, a partnership that will provide UW-Eau Claire students with opportunities to work on cutting-edge research projects with health care professionals in a world-renowned medical organization.

The proposed BME degree will represent only the third such engineering program in the state, the only such program at a comprehensive university, and the only such program north and west of Madison. Furthermore, the proposed degree is aligned with the mission and goals of the Northwest Wisconsin Engineering Consortium, thereby providing an attractive option for students who wish to pursue an engineering degree at a comprehensive university in the region. We firmly believe the proposed BME curriculum will provide our graduates with the knowledge, skills, and hands-on experiences necessary for immediate employment in healthcare-related engineering fields or for admission to graduate and professional school programs.

Excellence. Our measure, our motto, our goal.

Office of the Provost and Vice Chancellor for Academic Affairs • Schofield 206 • 715-836-2320
fax: 715-836-2902 • www.uwec.edu/acadaff

Ray Cross, President
May 8, 2019
Page 2

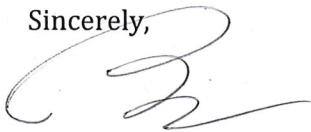
After reviewing the proposal, I am confident internal allocation and managed enrollment will align with available resources to support and sustain the program. The program will complement the engineering resources provided by the 2008 NanoSTEM DIN that created the infrastructure for UW-Eau Claire's MS&E major. As with the MS&E program, the \$700 per semester additional tuition (for BME students with junior and senior standing) will provide the necessary funds for materials, supplies, and consumables to support the upper level laboratory curriculum.

The proposed BME degree has been approved through UW-Eau Claire's shared governance program approval process (April 23, 2019). All programs at the University are subject to an in depth review every seven years. Student retention, time-to-graduate, graduation rates, and participation in high impact practices, for example, are all metrics that are monitored yearly through the reporting of strategic accountability measures (SAM) and public accountability measures (PAM). These results are used to determine the distribution of resources to individual departments. The MS&E program has been successful in garnering these resources in the past and it is anticipated the BME program will make the engineering discipline even more successful.

In closing, I enthusiastically support the BME proposal and look forward to UW System Administration and UW System Board of Regents granting UW-Eau Claire the authority to offer the program.

Thank you in advance for your consideration.

Sincerely,



Patricia A. Kleine
Provost and Vice Chancellor for Academic Affairs

jab

Program Authorization (Implementation)
Bachelor of Arts and Bachelor of Science in Public Health
UW-Eau Claire

EDUCATION COMMITTEE

Resolution I.1.b.(2):

That, upon the recommendation of the Chancellor of UW-Eau Claire and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Arts and the Bachelor of Science in Public Health at the University of Wisconsin-Eau Claire.

**NEW PROGRAM AUTHORIZATION
BACHELOR OF ARTS AND BACHELOR OF SCIENCE IN PUBLIC HEALTH
AT UW-EAU CLAIRE**

EXECUTIVE SUMMARY

BACKGROUND

The University of Wisconsin-Eau Claire submits this request to establish a Bachelor of Arts and Bachelor of Science in Public Health. This proposal is presented in accord with the procedures outlined in Academic Planning and Program Review (SYS 102, revised July 2016, available at <https://www.wisconsin.edu/program-planning/>).

REQUESTED ACTION

Adoption of Resolution I.1.b.(2), approving the implementation of the Bachelor of Arts and Bachelor of Science in Public Health at the University of Wisconsin-Eau Claire.

DISCUSSION

Program Description. The University of Wisconsin (UW)-Eau Claire proposes to establish a Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) degree in Public Health. Public health is an interdisciplinary field, which takes a population-based approach to improving the health and well-being of people and communities. Graduates from this program will be well-prepared for entry-level public health careers in the public, private, and nonprofit sectors as well as graduate-level study. A full-time student can complete the 36-credit public health major and all liberal education and university requirements in eight semesters, with an average load of 15 credits per semester.

The proposed interdisciplinary public health major will be housed in the College of Arts and Sciences and administered by the Watershed Institute. The Watershed Institute has demonstrated experience administering interdisciplinary programs of study emphasizing the health and sustainability of human and ecological communities. Additionally, Watershed faculty and collaborators from multiple departments across all four UW-Eau Claire colleges have expertise and proficiency in teaching classes across all core areas of the public health curriculum.

The proposed major will consist of three components: a set of seven core courses, elective courses from a variety of disciplines, and a capstone or culminating experience. The core courses will provide an overview of the U.S. healthcare system, the special role of public health in policies and delivery systems that affect population health, and a basic understanding of the five core areas of public health knowledge: biostatistics, epidemiology, environmental health sciences, health services administration, and social and behavioral sciences. The electives will allow students to acquire knowledge and skills in a variety of domains that reflect their academic

and professional interests, such as administration/policy, biomedical and health sciences, communications, healthy and sustainable communities, quantitative and qualitative research methods, and social sciences and humanities. The capstone experience will provide students with the opportunity to demonstrate their ability to integrate, synthesize, and apply their knowledge through a variety of mechanisms, which may be completed in collaboration with stakeholders from governmental, non-governmental, and/or private organizations in community-engaged service or research.

Mission. The proposed B.A. and B.S. in Public Health emphasis on interdisciplinary and experiential learning aligns with UW-Eau Claire's Academic Master Plan, which emphasizes transformative academic, social, and cultural high-impact experiences and a commitment to liberal education. Through collaborations with private and public institutions, including the groundbreaking research partnership established in 2017 between UW-Eau Claire and the Mayo Clinic Health System, students will have increased opportunities for civic learning and high-impact capstone experiences. UW-Eau Claire's designation as a Center of Excellence for Faculty and Undergraduate Student Research Collaboration within the UW System also ensures robust opportunities for students to engage in faculty-mentored public health research.

Market and Student Demand. The development of this program responds to demand by students for an undergraduate degree program in public health and by employers seeking well-trained public health professionals.

Currently, Wisconsin faces a shortage of trained and skilled public health workers. As the public health workforce ages, this shortage is expected to worsen. A national survey of government-funded public health workers indicated that 38% expect to retire or leave their positions by 2020. As a result, employment prospects for graduates with public health degrees are very promising. Between 2014 and 2024, the Wisconsin Department of Workforce Development projects growth rates in occupations for public health graduates to range from 9.4 to 40.4%. Over this same time frame, the U.S. Bureau of Labor Statistics projects employment in public health fields nationally to grow between 6% and 13%.

At UW-Eau Claire, interest in health-related majors has been growing. For example, between academic year 2011-12 and academic year 2017-18, the healthcare administration program grew by 145%, communication sciences and disorders by 43%, nursing by 34%, and social work by 20%. The proposed public health major will also support the UW-Eau Claire Guidepost Goal of 20% enrollment of students of color and elimination of the opportunity gap, because national enrollment trends show that public health attracts greater numbers of women and underrepresented minorities compared to all other academic majors.

Credit Load and Tuition. The 120-credit degree program will require 36 credits in the major while allowing students to complete all liberal education and other university requirements within four years. The 36-credit major is comprised of three key program components: (1) a set of core courses, (2) a coherent group of elective courses from a variety of academic domains, and (3) a capstone or culminating experience through which students will demonstrate and apply their knowledge and skills to authentic public health issues.

Students will pay standard undergraduate tuition and fees at UW-Eau Claire. For the 2018-19 academic year, tuition and segregated fees for full-time students will total \$8,900 for residents of Wisconsin and Minnesota, \$17,100 for nonresidents, \$12,000 for students participating in the *Midwest Student Exchange* program, and \$13,500 for students participating in the *Return to Wisconsin* program. These figures include segregated fees of \$727.35 per semester (including a \$75 textbook rental fee). Full-time students will be able to complete all degree requirements in eight semesters. For students enrolled part-time in the major, the residential costs of tuition and segregated fees are \$367.53 per credit. At this time UW-Eau Claire does not anticipate any additional special course fees.

RELATED REGENT AND UW SYSTEM POLICIES

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

UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting.

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
BACHELOR OF ARTS AND BACHELOR OF SCIENCE IN PUBLIC HEALTH
AT UW-EAU CLAIRE
PREPARED BY UW-EAU CLAIRE**

ABSTRACT

The University of Wisconsin (UW)-Eau Claire proposes to establish a Bachelor of Arts (B.A.) and a Bachelor of Science (B.S.) degree in Public Health within the Watershed Institute for Collaborative Environmental Studies (Watershed Institute) in the College of Arts and Sciences. Public health is an interdisciplinary field that takes a population-based approach to improving the health and well-being of people and communities. The development of this program responds to demand by students for an undergraduate degree program in public health and by employers seeking well-trained public health professionals. This interdisciplinary program will equip students with the knowledge and skills to understand the distribution and determinants of human health and disease and to develop interventions that preserve and promote health and well-being. Graduates from this program will be well-prepared for entry-level public health careers in the public, private, and nonprofit sectors as well as graduate-level study. The 120-credit degree program will require 36 credits in the major while allowing students to complete all liberal education and other university requirements within four years. The 36-credit major is comprised of three key program components: (1) a set of core courses, (2) a coherent group of elective courses from a variety of academic domains, and (3) a capstone or culminating experience through which students will demonstrate and apply their knowledge and skills to authentic public health issues.

PROGRAM IDENTIFICATION

Institution Name

University of Wisconsin-Eau Claire

Title of Proposed Program

Public Health

Degree/Major Designations

Bachelor of Arts or Bachelor of Science

Mode of Delivery

Single institution, face-to-face instruction, and possible limited distance education

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the proposed program over the next five years. By the end of year five, it is expected that slightly more than 105 students will be enrolled in the program and 29 students will have graduated from the program. These projections are based on the current university first- to second-year retention rate (82%) and four-year graduation rate (40%) and expected numbers of students transferring from other majors to the public health major.

The calculation of continuing students is slightly more complicated than it would be otherwise because it is anticipated that there will be an influx of students who transfer into the new B.S. or B.A. in Public Health, particularly among students who are currently pursuing a public health minor. All current students in the minor and transfer students will receive active, intentional advising so they can successfully transition to the new B.S. or B.A. degree programs.

New student enrollment projections are informed by the trends in enrollment levels in the new public health minor; increased enrollment in courses related to environmental public health, healthcare administration, nursing, and other health-related programs; and a review of newly established public health majors in arts and sciences colleges across the country.¹

Table 1: Five-Year Degree Program Enrollment Projections (Headcount)

	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	15	20	25	30	35
Continuing Students	6	23	42	57	70
Total Enrollment	21	43	67	87	105
Graduating Students			2	12	29

Tuition Structure

Students will be assessed the standard undergraduate tuition and fees at UW-Eau Claire. For the 2018-19 academic year, tuition and segregated fees for full-time students will total \$8,900 for residents of Wisconsin and Minnesota, \$17,100 for nonresidents, \$12,000 for students participating in the *Midwest Student Exchange* program, and \$13,500 for students participating in the *Return to Wisconsin* program. These figures include segregated fees of \$727.35 per semester (including a \$75 textbook rental fee). Full-time students will be able to complete all degree requirements in eight semesters. For students enrolled part-time in the major, the residential costs of tuition and segregated fees are \$367.53 per credit. UW-Eau Claire does not anticipate any additional special course fees at this time.

Department or Functional Equivalent

Watershed Institute for Collaborative Environmental Studies (Watershed Institute)

College, School, or Functional Equivalent

College of Arts and Sciences

Proposed Date of Implementation

Fall 2019

DESCRIPTION OF PROGRAM

Overview of Program

The proposed interdisciplinary public health major will be housed in the College of Arts and Sciences and administered by the Watershed Institute. The Watershed Institute is also the

¹ Resnick B, Selig S, Riegelman R. 2017. An examination of the growing US undergraduate public health movement. *Public Health Reviews* 38:4.

administrative home for the well-established professional major in environmental public health (ENPH) and the recently launched and quickly growing interdisciplinary public health minor. The Watershed Institute has demonstrated experience administering interdisciplinary programs of study emphasizing the health and sustainability of human and ecological communities. Additionally, Watershed faculty and collaborators from multiple departments across all four UW-Eau Claire colleges have expertise and proficiency in teaching classes across all core areas of the public health curriculum.

The proposed major will consist of three components: a set of seven core courses, elective courses from a variety of disciplines, and a capstone or culminating experience. The core courses will provide an overview of the U.S. healthcare system, the special role of public health in policies and delivery systems that affect population health, and a basic understanding of the five core areas of public health knowledge: biostatistics, epidemiology, environmental health sciences, health services administration, and social and behavioral sciences. The electives will allow students to acquire knowledge and skills in a variety of domains that reflect their academic and professional interests, such as administration/policy, biomedical and health sciences, communications, healthy and sustainable communities, quantitative and qualitative research methods, and social sciences and humanities. The capstone experience will provide students with the opportunity to demonstrate their ability to integrate, synthesize, and apply their knowledge through a variety of mechanisms, which may be completed in collaboration with stakeholders from governmental, non-governmental, and/or private organizations in community-engaged service or research. These capstone experiences may be project-based or result in seminars, portfolio projects, or research papers.

Student Learning Outcomes and Program Objectives

The interdisciplinary public health major provides a curriculum that will be structured around the following student learning outcomes:

1. Explain the fundamental concepts, values, and philosophy of public health, including the history of public health as well as its contemporary global and societal functions.
2. Describe the current U.S. healthcare system and the role of public health in addressing policies and delivery systems that affect population health.
3. Describe and apply the qualitative and quantitative methods and approaches that are employed in population-based disease prevention and health promotion.
4. Explain how the intersections of historical, socioeconomic, behavioral, biological, cultural, and environmental factors impact human health and contribute to health disparities.
5. Apply evidence-based decision-making and critical thinking skills to evaluate population health problems and their potential solutions.
6. Communicate public health concepts and issues across multiple audiences using multiple media.

The curriculum supporting these six student learning outcomes will provide foundational knowledge, opportunities to test and apply public health concepts through high-impact learning experiences, and integrative learning necessary for understanding and addressing the multiple factors associated with population health. This curriculum will also provide students with core public health knowledge that is the basis of the National Board of Public Health Examiners

Certified in Public Health examination.

Furthermore, the learning outcomes for the public health major student will support and contribute to UW-Eau Claire's four liberal education learning goals: (1) Knowledge, (2) Skills, (3) Responsibility, and (4) Integration.

1. Knowledge: Develop knowledge about foundational public health concepts, including historical and emerging trends in the field.
2. Skills: Explain and apply qualitative and quantitative methods and approaches in the study of population health and disease prevention.
3. Responsibility: Identify and address factors associated with health disparities and communicate these across multiple audiences.
4. Integration: Integrate concepts and ideas from supporting disciplines to better understand and address public health issues.

Program Requirements and Curriculum

The B.A./B.S. in Public Health requires 120 credits, including a minimum of 36 credits for the UW-Eau Claire liberal education core, 36 credits for the public health major, with the remaining credits for the complementary secondary program (certificate, minor, or second major) selected from the areas identified in the program of study (e.g., *Administration and Policy, Biomedical and Health Sciences*) and electives outside the major. The 36-credit public health major consists of 22 credits of core courses (including a 3-credit capstone or cumulating experience) and 14 credits of elective courses as shown in Table 2.

The number of credits that can overlap between the public health major and the student's second program will conform to the college policy of the student's degree. There are no admission requirements into the program beyond those required for admission to the university. All students in good academic standing will be eligible to enroll in the major. There are no noncourse-related graduation requirements.

Curricular offerings and expertise from several academic departments and programs provide a broad-based, interdisciplinary approach to understanding population health, as represented in its core curriculum, with electives that draw from biology, chemistry, communication, economics, English, environmental studies, environmental public health, geography, healthcare administration, kinesiology, mathematics, nursing, philosophy, psychology, social work, and sociology. Students in the proposed degree will also have access to the UW-Eau Claire William J. and Marian A. Klish Health Careers Center, which provides students with relevant graduate/professional school advising as well as information and advising on career opportunities in a variety of public health and related fields. The credit load for the major and the program design will encourage timely degree completion while encouraging students to engage in high-impact experiences, including laboratory and applied learning experiences, internships, study abroad, research, and travel to conferences.

At UW-Eau Claire, the College of Arts and Sciences offers the B.A./B.S. degree option, and this opportunity will extend to students enrolling in the public health major. The B.A. degree requirement is met by demonstrating language competency equivalent to a second-semester (102 level) foreign language course. The B.S. degree requirement is met by demonstrating math competency at the Math 111 (A Short Course in Calculus) or higher level.

Table 2: B.A./B.S. in Public Health Program Curriculum

Liberal Education Requirements Not Met by the Public Health Major		36 credits
Public Health Course Requirements		22 credits
ENPH 115	Global Environmental and Public Health	3 credits
NURS/ENPH 225	Introduction to Public Health	3 credits
MATH 246	Elementary Statistics ^c	4 credits
SOC 310	Principles of Demography	3 credits
ENPH 3xx	Health Care in the U.S.	3 credits
ENPH 450	Epidemiology	3 credits
ENPH 4xx	Culminating/Capstone Experience	3 credits
At Least 14 Credits Selected from Areas Different than Secondary Program*		14 credits
<i>Administration and Policy</i>		
ENV/GEORG 377	U.S. Environmental and Sustainability Policy	3 credits
ENV/GEORG 378	International Environmental Problems and Policy	3 credits
HCAD 302	Leadership and Management Practices in Health Services	3 credits
NRSG 212	Navigating Health Care	1 credit
POLS 301	State and Local Politics	3 credits
POLS 346	Public Policy in the U.S.	3 credits
SW 100	Introduction to Social Welfare	3 credits
<i>Biomedical and Health Sciences</i>		
BIOL 214	Human Anatomy and Physiology I	4 credits
BIOL 250	Microbiology	3 credits
BIOL 314	Human Anatomy and Physiology II	4 credits
HCAD 222	Multidisciplinary Perspectives on Aging	3 credits
IDIS 301	Exploring Mind/Body Connections	3 credits
KINS 335	Introduction to School Health Education and Current Health Issues	3 credits
NRSG 385	Men's Health Issues	3 credits
SW 424	Alcohol and Other Drug Abuse	3 credits
<i>Communication</i>		
CJ 203	Fundamentals of Human Communication	3 credits
CJ 301	Intercultural Communication	3 credits
CJ 318	Topics in Communication and Social Advocacy	
CJ 470	Crisis Communication	3 credits
ENGL 409	Grant Proposal Writing	3 credits
<i>Healthy and Sustainable Communities</i>		
ENV 101	Sustainability Basics and Beyond	4 credits
ENV 310	Sustainable Cities	3 credits
ENV 330	Waste & Society: Energy, Food & Efficiency	3 credits
GEOG 369	Geography of Food	3 credits
SOC 301	Environmental Sociology	3 credits
SW 290	Human Rights and Global Justice	3 credits

Quantitative and Qualitative Research Methods

BIOL 383	Statistical Analysis of Biological Data	3 credits
GEOG 135	Introduction to Geospatial Analysis	3 credits
GEOG 335	Geographic Information Systems I	3 credits
GEOG 337	Geographic Information Systems II	3 credits
MATH 345	Intro to Probability and Math. Statistics	4 credits
MATH 443	Experimental Design and Analysis	3 credits
MATH 445	Survey Sampling	2 credits
MATH 447	Nonparametric Statistics	2 credits
SOC 328	Sociological Data Analysis	3 credits
SOC 332	Sociological Research Methods	4 credits

Social Sciences and Humanities

AIS 343	Contemporary American Indian Communities	3 credits
ECON 280	Health Economics	3 credits
NRSB 389	Cross Cultural Health	3 credits
PHIL 306	Ethics of Health Care	3 credits
PSYC 353	Health Psychology	3 credits
PSYC 230	Human Development	3 credits
SW 315	Aging and the Aged	3 credits
SW 489	Social Work in Mental Health Settings	3 credits
WGSS 375	Ecofeminism and Environmental Justice	3 credits

Secondary Program (certificate, minor, or major) Selected from Areas Above 48 credits

Total 120 credits

*At least 6 elective credits need to be 300-level or higher

Assessment of Outcomes and Objectives

The public health major will be assessed at the course and program levels. At the course level, specific learning objectives will be developed that align with the six learning objectives enumerated above. Specific assignments or experiences will be identified to assess whether students are meeting the learning objectives. Information from these assessments will then be used to update and improve course content, teaching approaches, and other strategies to ensure that students successfully meet the learning outcomes. Quantitative and qualitative information from student course evaluations will also be reviewed for additional input on student learning and to ensure a high-quality learning experience.

At the program level, the public health major will be assessed alongside the Watershed Institute's other programs. A program-level assessment plan for the public health major will be developed by the Watershed Institute, reviewed by contributing programs and departments, and also reviewed and ultimately approved by the University Assessment Committee. Annual program assessment reports are submitted to the dean of the College of Arts and Sciences and the University Assessment Committee for review and feedback. The assessment report will also be shared with each of the contributing programs and departments.

Student success will be documented by tracking student involvement in student-faculty research; service learning or community-based public health initiatives; participation in

professional organizations; presentations at local, state, and national conferences; and other related high-impact experiences. Data will also be gathered from alumni to document employment and/or graduate school placements and to inform curricular adjustments, as needed.

Diversity

Because the study of public health addresses issues of privilege, justice and access to health services, this major will increase students' awareness of and engagement in issues of equity, diversity, and inclusivity. Currently, women and underrepresented minorities comprise a greater proportion of students earning a degree in public health than they do among students earning a degree in all other fields in the United States.² Therefore, recruitment and retention of women and underrepresented minorities will be positively affected by the introduction of a public health major.

Faculty across all UW-Eau Claire departments are fully committed to helping students overcome inclusion challenges in a variety of disciplines. These efforts reflect the campus-wide commitment to equity, diversity, and inclusivity. Specifically, faculty contributing to the B.A./B.S. in Public Health major have engaged in outreach programs by traveling to schools and engaging in community outreach presentations to connect faculty with a wide array of students, especially students of color and first-generation students. For example, the mathematics department sponsors an annual *Sonia Kovalevsky Day*, which brings middle and high school girls from across the region to UW-Eau Claire. This project aims to expose young women to opportunities available in math and science by creating fun and exciting experiences through hands-on activities, workshops, discussions, and a math competition. The project has been especially successful in reaching out to young women of color.

Departments collaborating on this public health major also have a long history of supporting undergraduate research and including students from underrepresented groups in their research. The Office of Research and Sponsored Programs (ORSP) and departments provide travel support for students presenting research at conferences. These funds reduce costs to students and expand access to conferences and other professional experiences. Since 2006, ORSP's diversity mentoring program has increased participation by students of color in undergraduate research. The proportion of students of color participating in research is now at parity with the proportion of students of color on campus.

In addition to the examples already provided, many students in UW-Eau Claire's Ronald E. McNair Scholars program have successfully completed, or are currently involved in, advanced research with faculty members in collaborating disciplines, including students already conducting public health studies. The McNair Scholars is part of a federally funded TRiO program to provide students from historically underrepresented groups with academic and scholarship support to help them achieve the goal of attending graduate school and obtaining an advanced degree.

² Healthy People 2020. Washington, DC: U.S. Department of Health and Human Services (HHS), Office of Disease Prevention and Health Promotion. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/public-health-infrastructure/objectives>.

Collaborative Nature of the Program

The proposed public health major will be a collaborative interdepartmental major at UW-Eau Claire. While the Watershed Institute will be the administrative home of the major, curricular offerings and expertise will draw heavily upon faculty, staff and courses in disciplines from across all four UW-Eau Claire colleges. The emerging relationship between UW-Eau Claire and the Mayo Clinic Health System and the long-standing relationships between UW-Eau Claire and regional health departments will provide additional collaborative opportunities for students enrolled in the B.A./B.S. in Public Health.

Projected Time to Degree

A full-time student can complete the 36-credit public health major and all liberal education and university requirements in eight semesters, with an average load of 15 credits per semester. This major may also be especially valuable to part-time and transfer students interested in public health. Part-time students usually require more than eight semesters to complete their degree. Selection of the 36-credit public health major may not add as much time to completion compared to other majors with higher credit requirements. For transfer students, depending on the number of courses taken that apply to the public health major, students may also be able to graduate in four years.

Program Review

Academic programs are reviewed at UW-Eau Claire every seven years. The Watershed Institute's program was last reviewed during the fall semester of 2013. The review process includes a self-study using institutional research data (e.g., 4-year graduation rate, participation rates in internships), results of internal department reviews (e.g., scholarly productivity of faculty), a report from a faculty internal review committee, results of student outcomes assessments, and an on-site review by an external evaluator from another university's public health program.

The perspectives and recommendations for improvement from these reviewers and the self-study are forwarded to the University Senate's Academic Policy Committee for review and recommendations. The proposed public health major would be included in the Institute's next program review, which is currently scheduled for the 2019-20 academic year. After obtaining the results of the Academic Policy Committee's deliberations, the provost meets formally with the program chair undergoing review to discuss his/her expectations (with deadlines) for the program moving forward. Two years after the program review process, the department chair prepares a follow-up report addressing progress in meeting the provost's expectation.

In addition, to adhere to UW System guidelines that a program review should occur approximately five years after implementing the program, the B.A./B.S. in Public Health will undergo an additional review using the same process detailed in the aforementioned UW-Eau Claire internal review process during the 2023-24 academic year. The results of the review will be shared with UW System Administration.

Accreditation

The proposed major fits naturally under the approved mission of UW-Eau Claire, the Watershed Institute and collaborating departments. Therefore, no separate Higher Learning Commission (HLC) approval will be necessary for this new program.

JUSTIFICATION

Rationale and Relation to Mission

The proposed B.A. and B.S. in Public Health emphasis on interdisciplinary and experiential learning aligns with UW-Eau Claire's Academic Master Plan, which emphasizes transformative academic, social, and cultural high-impact experiences and a commitment to liberal education. Through collaborations with community hospitals, including the groundbreaking research partnership established in 2017 between UW-Eau Claire and the Mayo Clinic Health System, and private sector and nonprofit institutions, students will have increased opportunities for civic learning and high-impact capstone experiences. UW-Eau Claire's designation as a Center of Excellence for Faculty and Undergraduate Student Research Collaboration within the UW System ensures robust opportunities for students to engage in faculty-mentored public health research.

The proposed public health major will also support the UW-Eau Claire Guidepost Goal of 20% enrollment of students of color and elimination of the opportunity gap. National enrollment trends show that public health attracts greater numbers of women and underrepresented minorities compared to all other academic majors.³

Institutional Program Array

The proposed standard major in public health leading to the B.A./B.S. degree will be built upon a liberal education framework.⁴ This will distinguish the proposed major from the long-standing, well-regarded UW-Eau Claire comprehensive major in environmental public health that leads to the Bachelor of Science in Environmental Public Health (ENPH) degree. Public health looks at the determinants of population health through the broad lens of social, economic, cultural, health, and environmental conditions in addition to policies at the global, national, state and local levels.⁵ Environmental public health is the distinctive component of public health that considers how the quality of social, built, and natural environments influence health outcomes. The proposed public health standard major and the existing ENPH comprehensive major reflect this breadth and focus, respectively. The liberal education approach of the proposed public health major and the professional education framework of the current ENPH major complement one another and will round out UW-Eau Claire's offerings in public health.

As a standard major, public health will require students to complete a secondary academic program (certificate, minor or another standard major). More students are pursuing

³ Leider JP, et al., 2015. Characterizing the growth of the undergraduate public health major: U.S., 1992-2012. *Public Health Rep*; 130(1):104-13.

⁴ Kiviniemi MT, Mackenzie SL, 2017. Framing undergraduate public health education as liberal education: Who are we training our students to be and how do we do that? *Front Public Health*; 5(9): doi: 10.3389/fpubh.2017.00009.

⁵ Institute of Medicine (IOM), 2003. *Who Will Keep the Public Healthy in the 21st Century?* Washington, DC: National Academy Press.

academic options beyond a single major to enhance their return on investment in higher education. This allows students to broaden their skills and to assemble an academic portfolio to meet their academic and professional goals without reducing enrollment in other majors. Hence, some students may prepare themselves for entry-level positions in public health, some for admission to post-baccalaureate health professional schools (e.g., medicine, dentistry, pharmacy, and optometry), and some into incorporating health into their chosen field, including those fields not thought of as traditional health sciences fields (e.g., economics, law, urban planning).

Other Programs in the University of Wisconsin System

Although several UW institutions offer programs related to public health, no UW System university offers a program comparable to the one proposed at UW-Eau Claire. UW-Oshkosh offers a B.S. in Environmental Health that prepares graduates to be registered environmental health specialists or certified safety specialists. UW-La Crosse offers the B.S. in Public Health and Community Health Education that prepares graduates to be health educators and to sit for the certified health education specialist examination. Recently, UW-Milwaukee's Zilber School of Public Health received approval for a B.S. in Public Health that is built on a professional education framework in contrast to the liberal education framework proposed for UW-Eau Claire. The proposed UW-Eau Claire liberal education B.A./B.S. in Public Health provides a distinctly different pathway for students to prepare for and contribute to the field of public health and other health-related disciplines.

Need as Suggested by Current Student Demand

High student demand for the public health major is reflected by the growth in the number of undergraduate degrees granted in this field. Nationally, degree completions among students graduating with a baccalaureate in public health have increased from 759 in 1992, to 10,938 in 2015. Between 2005 and 2015 alone, growth in completed undergraduate public health degrees exceeded 500%. From 2008–2012, the baccalaureate in public health was ranked among the top 10 fastest-growing majors among mid-size and larger undergraduate programs in the U.S.⁶

At UW-Eau Claire, interest in health-related majors has been growing. For example, between academic year 2011-12 and academic year 2017-18, the healthcare administration program grew by 145%, communication sciences and disorders by 43%, nursing by 34%, and social work by 20%. The addition of the B.A/B.S. in Public Health will complement UW-Eau Claire's existing array of health-related majors and attract additional students seeking a health-related career. Not only will the proposed public health major meet and strengthen student demand for health-related education and training, but it will also relieve pressure on highly subscribed majors such as healthcare administration, environmental public health, and the competitive nursing program, which cannot admit many highly qualified students due to limited capacity. Adding the public health major will offer an option to students not admitted to their initial, first-choice major and will likely improve retention of UW-Eau Claire students. The public health major also offers students the opportunity to engage in a non-clinical health major and career. The demand is sustainable and will not have a significant negative impact on other

⁶ Association of Schools and Programs in Public Health (ASPPH), 2017. Characterizing Undergraduate Public Health Education within the Academic Public Health Continuum [webinar]. Retrieved from <http://www.aspph.org/event/aspph-presents-characterizing-undergraduate-public-health-education-within-the-academic-public-health-continuum/>.

health-related majors. The proposed B.A./B.S. in Public Health will complement these programs and will round out UW-Eau Claire's health-related offerings.

A final indication of strong student demand for the public health major is demonstrated by the high enrollment of students during the first year of the public health minor. As of October 2018, the minor has 39 students who are pursuing a breadth of majors representing all four colleges (i.e., Arts and Sciences; Business; Education and Human Sciences; and Nursing and Health Sciences). This is without *any* marketing/promotion of the minor.

Need as Suggested by Market Demand

National organizations have identified public health as an undergraduate educational pursuit with significant unmet demand. In recognizing the need for a strong public health infrastructure and workforce, *Healthy People 2020* includes the objective to increase the proportion of four-year colleges and universities that offer public health or related majors and/or minors.⁷ The American Association of Colleges and Universities' goals are to bring undergraduate study of integrative public health to all institutions of higher education to foster interdisciplinary and interprofessional collaboration, and to link with other initiatives that address human health.⁸

Currently, Wisconsin faces a shortage of trained and skilled public health workers. As the public health workforce ages, this shortage is expected to worsen.⁹ A national survey of government-funded public health workers indicated that 38% expect to retire or leave their positions by 2020.¹⁰ Job prospects for graduates with public health degrees are very promising. Between 2014 and 2024, the Wisconsin Department of Workforce Development projects growth rates in occupations for public health graduates to range from 9.4 to 40.4%.¹¹ Over this same time frame, the U.S. Bureau of Labor Statistics projects employment in public health fields nationally to grow between 6% and 13%.¹²

A baccalaureate degree with a major in public health will prepare students for a wide variety of career options. A recent study of 1,349 graduating public health undergraduates found that 65% were employed in a variety of sectors (including for-profit organizations, healthcare organizations, government, non-profit organizations, academic institutions, and others), 26%

⁷ Healthy People 2020. Washington, DC: U.S. Department of Health and Human Services (HHS), Office of Disease Prevention and Health Promotion. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/public-health-infrastructure/objectives>.

⁸ Association of American Colleges & Universities (AAC&U). The Educated Citizen and Public Health. Retrieved from https://www.aacu.org/public_health.

⁹ Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics, Population Health Information Section, July 2011. Wisconsin Public Health Workforce Report, 2011 (P-45719-11). Retrieved from <https://www.dhs.wisconsin.gov/stats/phwreport.htm>.

¹⁰ de Beaumont Foundation and Association of State and Territorial Health Officials, 2015. Information to Action: Workforce Data of Public Health WINS-Summary Report. Retrieved from <https://www.debeaumont.org/ph-wins/>

¹¹ State of Wisconsin Department of Workforce Development. Wisconsin Long Term Occupational Employment Projections, 2014-2024. Retrieved from <https://jobcenterofwisconsin.com/wisconomy/pub/occupation>.

¹² Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17. Retrieved from <https://www.bls.gov/ooh/>.

¹³ Association of American Colleges & Universities (AAC&U). The Educated Citizen and Public Health. Retrieved from https://www.aacu.org/public_health.

were enrolled in further study, and the remaining 9% pursued other options.¹³ Also, graduates with a public health undergraduate degree are well-positioned for admission to graduate school in medicine, dentistry, public health, toxicology, urban planning, and other fields.

University of Wisconsin - Eau Claire
Cost and Revenue Projections For Newly Proposed Program

	Items	Projections				
		2019-20	2020-21	2021-22	2022-23	2023-24
		Year 1	Year 2	Year 3	Year 4	Year 5
I	Enrollment (New Student) Headcount	15	20	25	30	35
	Enrollment (Continuing Student) Headcount	6	23	42	57	70
	Enrollment (New Student) FTE	15	20	25	30	35
	Enrollment (Continuing Student) FTE	6	23	42	57	70
II	Total New Credit Hours		12	12	12	12
	Existing Credit Hours	36	24	24	24	24
III	FTE of New Faculty/Instructional Staff		1.3	1.3	2.3	2.3
	FTE of Current Fac/IAS					
	FTE of New Admin Staff					
	FTE Current Admin Staff		0.2	0.2	0.2	0.2
IV	Revenues					
	<i>From Tuition</i>	\$92,672	\$189,921	\$295,924	\$384,259	\$463,760
	<i>From Fees</i>					
	<i>Program Revenue (Grants)</i>					
	<i>Program Revenue - Other</i>					
	<i>GPR (re)allocation</i>					
	Total New Revenue	\$92,672	\$189,921	\$295,924	\$384,259	\$463,760
V	Expenses					
	Salaries plus Fringes					
	<i>Faculty/Instructional Staff</i>	\$26,250	\$147,332	\$150,027	\$257,775	\$262,678
	<i>Other Staff</i>	\$ 15,680	\$ 15,994	\$ 16,313	\$ 16,640	\$ 16,972
	Other Expenses					
	<i>Equipment</i>		\$15,000	\$5,000	\$20,000	\$10,000
	<i>Recruiting/Marketing</i>	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	<i>Association Membership Fees</i>	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
	<i>Supplies and Travel</i>		\$4,000	\$4,000	\$8,000	\$8,000
	Total Expenses	\$49,430	\$189,826	\$182,840	\$309,915	\$305,150
VI	Net Revenue	\$43,242	\$95	\$113,084	\$74,344	\$158,610

Submit budget narrative in MS Word Format

Provost's Signature: 

Date:

6/5/19

UNIVERSITY OF WISCONSIN-EAU CLAIRE
COST AND REVENUE PROJECTIONS NARRATIVE
BACHELOR OF ARTS/BACHELOR OF SCIENCE IN PUBLIC HEALTH

Introduction

This proposed degree will be primarily offered through face-to-face course delivery. While some required courses may have sections offered online, all required courses will also be available in face-to-face or hybrid delivery format. The B.A./B.S. in Public Health will include core and elective courses already part of the UW-Eau Claire curriculum. Additionally, the program will require a few new courses developed and additional faculty to deliver the program. Like other faculty in the Watershed Institute (Institute), new faculty could be housed in one of several collaborating departments. For example, a faculty member in history is also assigned to the Institute.

Section I – Enrollment

Enrollment figures for new students are based upon trends in enrollment levels in the new public health minor at UW-Eau Claire and national enrollment trends among undergraduate public health programs. Additional modest increases are anticipated given the enhanced visibility that will be associated with the new major. In Year 1, 15 new students are expected to enroll in the new B.A./B.S. in Public Health. Along with these students, it is anticipated that students in the public health minor will change to the public health major. This change will be accomplished by a formalized advising process for all students requiring an advising code to register for courses (required of students with fewer than 60 credits). In Year 2, 20 new students are expected to enroll in the public health major; the number of new students is projected to increase to 35 per year by Year 5. By the end of Year 5, it is expected that slightly more than 105 students will be enrolled in the program and 29 students will have graduated from the program. Enrollment figures for continuing students are estimated using the latest university retention and graduation rates and expected levels of students transferring from other majors to the public health major.

Section II – Credit Hours

The proposed B.A./B.S. in Public Health is a standard, non-comprehensive major requiring 36 unique credits beyond the coursework needed to fulfill UW-Eau Claire's liberal education core and other university graduation requirements. Many of the credits required in the new major come from existing UW-Eau Claire courses. New course development and offerings in the areas of epidemiology and public health policy are anticipated. Existing course offerings are available at least once each academic year, although it is anticipated that some lower-division core courses and electives will be offered each semester.

Section III – Faculty and Staff Appointments

The instructional and advising resources for the major are primarily housed in the Watershed Institute, with others in several collaborating departments (e.g., biology, economics, nursing, etc.). Although much of the public health program is built upon currently existing courses, the equivalent of 2.30 additional FTE will be needed to deliver the curriculum to students in the major. Two faculty FTE will be required to teach core courses in epidemiology and health policy. These positions are staggered such that the epidemiology position would start

in Year 2 of the program and the health policy position in Year 4. Again, these new faculty could be housed in one of several collaborating departments. For example, the health policy course could be covered by a new faculty member in the healthcare administration program in the College of Business. The major requires a capstone experience that will involve internships or community-based research initiatives. Thus, 30% of the time of one newly hired faculty member will be devoted to developing internships and community-based partnerships for students to complete their capstone experience. A 30% time, instructional academic staff (IAS) position is proposed to provide course coverage for faculty responsible for developing internship and community-based research. The program will require one additional section of the introductory public health course and handled through overload salary to faculty in the nursing program. The program will require a 20% time, administrative support person to assist with administrative responsibilities. For Years 2-5, an additional \$3,000 supplement has been added for course updates.

Section IV – Program Revenues

Tuition Revenues

Tuition revenue is based on continuing and new students who originally enrolled at the university to pursue the public health major and assumes constant cost per credit hour of \$306.72 per year for full-time students. Segregated fees (including textbook rental fees) are not included in the calculation. Based on direction from the UW System Budget Office, UW-Eau Claire has excluded 40% of the tuition revenue to account for UW-Eau Claire students who are expected to switch to the new major in Year 1, because this tuition would have likely been generated in the absence of the public health program and is therefore not new revenue for the institution. Although there is the assumption that 40% of the students will come from existing programs, many students may not have remained at UW-Eau Claire if the public health major was not available. (This is particularly relevant to students who do not get accepted into the nursing program.) Thus, for Year 1, program revenues (21 total student FTE x 24 credits per year x \$306.72) are estimated at \$154,587 - \$61,835 (40% of students from existing programs) = \$92,672. In Year 2, total tuition revenue of \$316,535 (43 total student FTE x 24 credits per year x \$306.72) is then adjusted to accommodate the 40% of students projected to have switched from other programs into the public health major (who do not generate new revenues), thus totaling \$189,921. A similar calculation for Year 3 yields tuition revenue of \$295,924 (25 new student FTE x 24 credits per year x \$306.72, with 40% retention rate). By Years 4 and 5, it is assumed that 30 and 35 new student FTE (respectively x 24 credits per year x \$306.72, with 40% retention rate) will yield \$384,259 and \$463,760 in new revenues.

Program/Course Fees

No required courses in the proposed public health program have a special course fee.

Section V – Program Expenses

Expenses – Salary and Fringe

As stated in Section III, by Year 5, the equivalent of 2.3 new faculty/IAS FTE will be needed to deliver the curriculum to students enrolled in the public health program. Salary (Epidemiologist: \$88,326; Health Policy/Equity: \$76,500; Instructional Academic Staff: \$13,801) plus fringe (40%) expenses are expected to be \$250,078. In Year 1, the expected salary and fringe expense is \$17,850, because only the .30 IAS will be needed to staff the program.

(Note: Because it is unknown which courses students will take from the existing courses in the proposed program, the number of current instructional faculty and staff is not reported. Additionally, these courses will also be offered to students who are not enrolled in public health.) All salary/fringe rates (Section V–Program Expenses, Expenses–Salary and Fringe) include anticipated salary increases based on a 2% pay plan.

Additionally, in Years 1-5, extra sections of the introduction to public health will need to be taught each year for a total overload pay (\$6,000) and fringe (40%) expense of \$8,400 per year. It is anticipated that faculty will be updating/making substantial changes to courses, with estimated pay (\$3,000) and fringe (40%) expenses of \$4,200, beginning in Year 2 for course updates.

While not included in the instructional costs, an administrative assistant will be needed to support the program, and these expenses (salary and fringe) are as shown.

Other Expenses

UW-Eau Claire anticipates start-up costs associated with laboratory and research equipment for two new faculty hires at \$15,000 in Year 2 and Year 4 and for continuing laboratory and research support of \$5,000 per year per faculty through Year 5, for a total of \$50,000. A cost of \$4,000 per year per new faculty FTE is estimated for research and teaching supplies and travel costs to conferences, etc., through Year 5, for a total of \$28,000. Membership fees to the Association of Schools and Programs in Public Health (ASPPH) are anticipated at \$2,500 per year. Additionally, costs for recruitment and marketing activities are anticipated at \$5,000 per year, including the costs for creation of published and online materials as well as recruitment trips to several high schools in Minnesota and Wisconsin.

Section VI – Net Revenue

After covering direct instructional expenses, the positive net revenue will be used to help offset indirect costs of instruction, such as maintaining institutional infrastructure and supporting the offices and programs (e.g., academic advising, academic skills center) that are currently in place to serve student academic needs. Additionally, positive net revenue may be used to hire additional instructional staff if student demand for the program exceeds the projections. Positive net revenue of \$89,496 is anticipated in Year 1, which rises to \$389,482 in Year 5 as enrollment increases in the program.



University of Wisconsin-Eau Claire

105 Garfield Avenue • P.O. Box 4004 • Eau Claire, WI 54702-4004

May 24, 2019

Ray Cross, President
University of Wisconsin System
1720 Van Hise Hall
1220 Linden Drive
Madison, WI 53706-1559

Dear President Cross:

I am submitting this letter and associated materials in support of the University of Wisconsin-Eau Claire's proposed Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) in Public Health Watershed Institute for Collaborative Environmental Studies (Watershed Institute) for review, consideration, and approval by University of Wisconsin System Administration and the University of Wisconsin System Board of Regents.

The UW-Eau Claire Watershed Institute for Collaborative Environmental Studies is well positioned to offer baccalaureate degrees in public health. As the proposal notes, new student enrollment/demand projections are informed by the impressive enrollment levels in the public health minor and significant increases in enrollment in courses related to environmental public health, healthcare administration, nursing, and other health-related programs. A survey of students anticipating entering the aforementioned programs indicated an equally strong interest in public health in comparison to their espoused "first choice" major.

After reviewing the proposal, I am confident internal allocation and projected enrollment will align with available resources to support the program initially. Once established, the program enrollment will likely exceed expectations, additional resources/faculty lines will be given to the Watershed Institute.

The proposed degree has been approved through the UW-Eau Claire shared governance program approval process (December 11, 2018). All programs at the University are subject to an in-depth review every seven years. Student retention, time-to-graduate, four-year graduation rates, participation in high impact practices, for example, are all monitored yearly through the reporting of strategic accountability measures (SAM) and public accountability measures (PAM). These results are used to determine the distribution of resources to individual programs. The Watershed Institute has been most successful in garnering these resources; it is anticipated the public health program will be equally successful.

Excellence. Our measure, our motto, our goal.

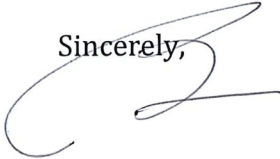
Office of the Provost and Vice Chancellor for Academic Affairs • Schofield 206 • 715-836-2320
fax: 715-836-2902 • www.uwec.edu/acadaff

Ray Cross, President
May 24, 2019
Page 2

In closing, I enthusiastically support the public health program proposal and look forward to UW System Administration and UW System Board of Regents granting UW-Eau Claire the authority to offer the program.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to be 'P. Kleine', with a large, sweeping initial 'P' and a horizontal line extending to the right.

Patricia A. Kleine
Provost and Vice Chancellor for Academic Affairs

jab

Program Authorization (Implementation)
Master of Science in Sport, Exercise, and Performance Psychology
UW-Green Bay

EDUCATION COMMITTEE

Resolution I.1.c:

That, upon the recommendation of the Chancellor of UW-Green Bay and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Master of Science in Sport, Exercise, and Performance Psychology at the University of Wisconsin-Green Bay.

**NEW PROGRAM AUTHORIZATION
MASTER OF SCIENCE IN SPORT, EXERCISE, AND PERFORMANCE
PSYCHOLOGY AT UW-GREEN BAY**

EXECUTIVE SUMMARY

BACKGROUND

The University of Wisconsin-Green Bay submits this request to establish a Master of Science in Sport, Exercise, and Performance Psychology. This proposal is presented in accord with the procedures outlined in Academic Planning and Program Review (SYS 102, revised July 2016, available at <https://www.wisconsin.edu/program-planning/>).

REQUESTED ACTION

Adoption of Resolution I.1.c., approving the implementation of the Master of Science in Sport, Exercise, and Performance Psychology at the University of Wisconsin-Green Bay.

DISCUSSION

Program Description. The University of Wisconsin (UW)-Green Bay seeks a Master of Science (M.S.) in Sport, Exercise, and Performance Psychology in the College of Arts, Humanities, and Social Sciences. The M.S. in SEPP is an interdisciplinary subfield of psychology that applies psychological knowledge and clinical approaches to optimize the performance and well-being of athletes, exercisers, and other performers (e.g., military, musicians). Program coursework satisfies the application requirements to be a certified mental performance consultant under the Association for Applied Sport Psychology. Graduates will be prepared to work as behavior coaches; as consultants in private practice or with performance improvement consulting firms; for university athletics departments, sports clubs or youth academies; or for industries such as the military, aviation, and the medical profession that include occupations focused on performance improvement.

The program complements the UW-Green Bay's large and highly acclaimed psychology program and aligns with the City of Green Bay's internationally recognized sport and entertainment industries, UW-Green Bay's Division I athletic classification, and ongoing efforts to increase graduate offerings aligned with campus and regional strengths. The projected time to degree is four semesters, including one summer course. Graduates of UW-Green Bay's Sport, Exercise, and Performance Psychology program will find numerous job opportunities within the well-developed sports and medical economy of northeast Wisconsin.

Mission. The proposed M.S. in Sport, Exercise, and Performance Psychology is consistent with UW-Green Bay's current mission to "provide problem focused educational experience that promotes critical thinking and student success" and "promote access, career success, cross-

discipline collaboration.” Sport, exercise, and performance psychology is a cross-discipline subfield of psychology that brings together aspects of counseling psychology, health psychology, kinesiology, human biology, and other disciplines. Additionally, the mission clearly addresses an intent to meet the Green Bay metropolitan region’s need for programming at the professional graduate level and build upon the regional economic and cultural strengths. Sports and performance-related industries are strong in northeast Wisconsin, allowing opportunities for the program to develop the “community-based partnerships, [and] collaborative faculty scholarship and innovation.” In addition to the Packers, northeast Wisconsin supports multiple other professional and semi-professional teams, including the Green Bay Blizzard (indoor football), Green Bay Booyah (baseball), Green Bay Gamblers (hockey), and Wisconsin Timber Rattlers (baseball). The region also supports robust and thriving performing arts communities in Door County, in the Green Bay metropolitan area, and along the Fox River Valley.

The program is also consistent with the mission of the College of Humanities, Arts, and Social Sciences in that the curricular design for student progression will create a “unique community of learners” who will work closely with faculty and their graduate colleagues to “engage critically and creatively” around the program content and education experiences. Sport, exercise, and performance psychology is a relatively new profession that has space for innovation and expansion into various performance areas, which provides a unique opportunity for creative critical thinkers to make meaningful contributions to the profession.

Market and Student Demand. UW-Green Bay is positioned to be a national leader in sport, exercise, and performance psychology. This is due to its large student body (550+ majors), and its two tenure-track faculty members with specialization in sport psychology, who are the only certified mental performance consultants in northeast Wisconsin, as well as the city of Green Bay’s international reputation for sports, and the region’s robust performance economy. It is expected that there will be high student demand for a program at UW-Green Bay, and the university is well positioned to meet a demand that currently surpasses available programmatic space.

Since this is an emerging field, there is relatively little direct market data on the demand for sport psychologists. For example, the Occupational Outlook Handbook does not list sport psychologists as a separate career from psychologists. However, the American Psychological Association describes the field as a high opportunity career and included the growing demand for sport psychologists in its 2018 Annual Trends Report (i.e., Trend #3). The Association for Applied Sport Psychology (AASP) also describes the area as an up-and-coming field that has seen a substantial increase in attention over the past decade.

The latest move by AASP involves the improvement of its certification process and the development of an accreditation process for sport psychology graduate programs. These changes are expected to build confidence within the job market for certified sport psychology professionals. This AASP initiative is ideally timed with the development and launching of this proposed M.S. degree at UW-Green Bay.

Credit Load and Tuition. To be accepted into the M.S. in Sport, Exercise, and Performance Psychology, applicants will hold an undergraduate degree in psychology, sport sciences, or

another related major, or will demonstrate equivalent professional experience as determined by the graduate selection committee. Per UW-Green Bay graduate policy, a cumulative undergraduate GPA of 3.0 or higher is required for admission.

The program requirements are comprised of 39 credits consisting of 13 graduate-level courses, with one elective. Classes will be infused with a variety of hands-on and applied activities. Supervised practicum and internships will also be offered. Students will take courses in both regular 14-week semesters (fall and spring), in addition to one course in the summer between years one and two of the program. Teaching responsibilities will be part of the regular teaching load of faculty.

Students enrolled in the program will pay the standard UW-Green Bay graduate tuition rate, which for academic year 2019 was \$432.97 per credit or \$3,896.73 per semester for students within the plateau (9 credits or more). In addition to tuition, student segregated fees are \$87.78 per credit or \$790.00 per semester for full-time students; these funds are not directly available to the program. Students who opt to take a course via distance delivery pay an additional \$25 per credit; these funds are not directly available to the program.

RELATED REGENT AND UW SYSTEM POLICIES

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

UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting.

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
MASTER OF SCIENCE IN
SPORT, EXERCISE, AND PERFORMANCE PSYCHOLOGY
AT UW-GREEN BAY
PREPARED BY UW-GREEN BAY**

ABSTRACT

The University of Wisconsin (UW)-Green Bay seeks a Master of Science (M.S.) in Sport, Exercise, and Performance Psychology in the College of Arts, Humanities, and Social Sciences. The M.S. in Sport, Exercise, and Performance Psychology (SEPP) is an interdisciplinary subfield of psychology that applies psychological knowledge and clinical approaches to optimize the performance and well-being of athletes, exercisers, and other performers. The field considers the developmental and social aspects of sport and performance participation, and systemic issues associated with sport and performance settings and organizations. The program complements the UW-Green Bay's large and highly acclaimed psychology program and aligns with the city of Green Bay's internationally recognized sport and entertainment industries, UW-Green Bay's Division I athletic classification, and ongoing efforts to increase graduate offerings aligned with campus and regional strengths. The curriculum includes 39 credits offered during the fall, spring, and summer semesters. Program coursework satisfies the application requirements to be a certified mental performance consultant under the Association for Applied Sport Psychology. Graduates will be prepared to work as behavior coaches; as consultants in private practice or with performance improvement consulting firms; for university athletics departments, sports clubs or youth academies; or for industries such as the military, aviation, and the medical profession that include occupations focused on performance improvement.

PROGRAM IDENTIFICATION

Institution Name

University of Wisconsin-Green Bay

Title of Proposed Program

Sport, Exercise, and Performance Psychology

Degree/Major Designation

Master of Science

Mode of Delivery

Single institution. The program coursework will be delivered predominantly as face-to-face instruction. Less than 50% of program coursework will be offered via distance education. The program will include independent work in the form of an internship and thesis.

Projected Enrollments and Graduates by Year Five

Table 1 illustrates enrollment projections for the M.S. in SEPP across the first five years. Student completion rates are expected to be 90%, based on retention rates for other graduate programs at UW-Green Bay; for simplicity, attrition is assumed to occur between

year one and two of the program. By the end of the fifth year, it is expected that 94 students will have enrolled and 66 students will have graduated from the program. Annual program enrollment will be capped at 38 students based on current institutional capacity to deliver this program. Additional capacity needs will be addressed based on demand.

Table 1: Five-Year Degree Program Enrollment Projections (Headcount)

Students/Year	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New Students	16	18	20	20	20
Continuing Students	0	14	16	18	18
Total Enrollment	16	32	36	38	38
Graduating Students	0	14	16	18	18

Tuition Structure

Students enrolled in the program will pay the standard UW-Green Bay graduate tuition rate, which for academic year 2019 was \$432.97 per credit or \$3,896.73 per semester for students within the plateau (9 credits or more). In addition to tuition, student segregated fees are \$87.78 per credit or \$790.00 per semester for full-time students; these funds are not directly available to the program. Students who opt to take a course via distance delivery pay an additional \$25 per credit; these funds are not directly available to the program.

Department or Functional Equivalent

Department of Psychology

College, School or Functional Equivalent

College of Arts, Humanities, and Social Sciences

Proposed Term and Year of Implementation

Fall 2020

DESCRIPTION OF PROGRAM

Overview of the Program

The M.S. in SEPP is an interdisciplinary subfield of psychology that applies psychological knowledge and clinical approaches to optimize the performance and well-being of athletes, exercisers, and other performers (e.g., military, musicians). Program coursework will prepare students to be a certified mental performance consultant (CMPC) under the Association for Applied Sport Psychology (AASP). The program requirements are comprised of 39 credits consisting of 13 graduate-level courses, with only one elective. Classes will be infused with a variety of hands-on and applied activities. Supervised practicum and internships will also be offered. Students will take courses in both regular 14-week semesters (fall and spring), in addition to one course in the summer between years one and two of the program.

Student Learning Outcomes and Program Objectives

The curriculum includes advanced specialized knowledge in the eight knowledge areas identified by AASP for the development of competence of sport psychology practitioners.¹ The proposed curriculum will advance learning outcomes within these prescribed areas so that students will be able to:

1. Professional Ethics and Knowledge
 - a. Integrate to their practice ethics and standards related to professional practice
 - b. Demonstrate techniques to develop rapport with clients, to explain their professional roles, and to adjust expectations of clients
 - c. Identify ethical and legal issues related to professional activities
 - d. Apply strategies to evaluate and resolve ethical and legal dilemmas and decision making in the professional practice
2. Sport Psychology
 - a. Demonstrate understanding of the theoretical foundation of the psychological process that influences human performance in athletic settings
 - b. Identify and apply psychological techniques and strategies to enhance performance in sport and other domains (e.g., performing arts, military)
 - c. Evaluate research in sport psychology and psychological factors related to performance and participation in sport and exercise settings
 - d. Evaluate the needs of clients and plan interventions based on this evaluation
 - e. Choose and apply sport psychology theories and research that best fit different performance and exercise psychology cases
 - f. Evaluate the effectiveness of their work with clients in sport, exercise, and performance psychology
3. Sport Science
 - a. Define, distinguish, and assess physiological principles relevant to the effect of exercise on human functioning and performance
 - b. Describe biomechanical foundations of human movement and athletic performance
 - c. Identify motor-control processes and mechanisms underlying the learning and performance of motor skills
 - d. Integrate sociocultural perspectives on sport (e.g., gender, race, economics, politics)
 - e. Explain historical foundations and philosophical questions related to the development of sport and physical activity programs
4. Psychopathology
 - a. Identify and distinguish abnormal human behavior
 - b. Assess and diagnose clients for psychopathology
 - c. Identify and implement strategies that ameliorate psychopathology symptoms

¹ Association for Applied Sport Psychology (2019). Candidate Handbook. Retrieved from <https://appliedsportpsych.org/site/assets/files/30025/cmpccandidatehandbook2019-05.pdf>

5. Helping Relationships
 - a. Demonstrate understanding of counseling theories
 - b. Develop a professional philosophy based on their theoretical approach to working with performers and exercisers
 - c. Implement skills to successfully interact with clients, such as listening, interviewing, assessment, and counseling/consulting skills
 - d. Apply counseling theories to assess and intervene in different cases
 - e. Engage in supervised practice of sport, exercise, and performance psychology
6. Research Methods and Statistics
 - a. Demonstrate understanding of research methods and design
 - b. Evaluate the strengths and weaknesses of tests and measurements
 - c. Execute and interpret basic and advanced data analyses
 - d. Engage in ethical implementation of research and program evaluation
7. Psychological Foundations of Behavior
 - a. Demonstrate understanding of basic concepts of neuroanatomy, brain development, neuropsychology, and psychopharmacology and how they may affect performance and well-being
 - b. Apply principles of theories of cognition and effect to influence behavior
 - c. Assess the influences of social aspects (e.g., group processes, persuasion) on performance and well-being
 - d. Utilize knowledge of theories of personality to assess individual differences and human lifespan development
 - e. Apply concepts of positive psychology (e.g., mindfulness, flow, grit) to the improvement of performance and well-being
8. Diversity and Culture
 - a. Demonstrate knowledge of conceptual frameworks for sociopolitical and cultural factors that impact human behavior
 - b. Assess the dimensions of personal identity and individual differences (e.g., race, ethnicity, sexual orientation) and how they may influence the professional relationship
 - c. Identify and implement intervention strategies for addressing needs of individuals from unique racial/ethnic background, religious affiliations, gender identity, etc.
 - d. Integrate culturally competent approaches to consultation with performers and exercisers

Program Requirements and Curriculum

To be accepted into the M.S. in Sport, Exercise, and Performance Psychology, applicants will hold an undergraduate degree in psychology, sport sciences, or another related major, or will demonstrate equivalent professional experience as determined by the graduate selection committee. Per UW-Green Bay graduate policy, a cumulative undergraduate GPA of 3.0 or higher is required for admission. The program requires students to complete 39 credits of

graduate coursework (Table 2), with three courses offered each 14-week session and one offered in summer. Teaching responsibilities will be part of the regular teaching load of faculty.

Table 2: Program Curriculum

First-Year Fall	
Professional Ethics in Psychology	3 credits
Counseling Theories and Practices	3 credits
Theories of Sport, Exercise, and Performance Psychology	3 credits
First-Year Spring	
Statistics	3 credits
Applied Sport and Performance Psychology	3 credits
Multicultural Counseling and Mental Health	3 credits
First-Year Summer	
Research Methods in Psychology	3 credits
Second-Year Fall	
Sport Sociology	3 credits
Internship I/Thesis I	3 credits
Abnormal Psychology OR Principles of Sport Physiology (Hum Bio 333)	3 credits
Second-Year Spring	
Internship II/Thesis II	3 credits
Psychology of Sport Injury	3 credits
Elective (Bus Adm 589, Management 750, Management 730, PU EN AF 615, Social Work 727, Social Work 767, HWM 740, HWM 750, Psych 555 Group Dynamics, Psych 589 Cogneuro)	3 credits
TOTAL	39 credits

Assessment of Outcomes and Objectives

Assessment of student learning outcomes will be managed by a psychology graduate assessment committee as appointed by the Psychology Executive Committee. The committee will establish an assessment plan for evaluating how well students are meeting the program's learning outcomes. Assessment will be carried out using an embedded assessment plan comprised of rubrics and assignments collected each semester from various instructors and courses. The committee is responsible for suggesting necessary curricular changes to the curriculum committee. Furthermore, the internship site personnel (e.g., coaches, coordinators) will be asked to provide feedback regarding students' ability to provide effective services.

Diversity

UW-Green Bay is committed to achieving a diverse workforce and to maintaining a community that welcomes and values a climate supporting equal opportunity and difference among its members. The campus engages in several strategic initiatives to recruit a more diverse student population, and offers a wide range of experiences and perspectives to students. As part of this process, the Chancellor's Council on Diversity and Inclusive Excellence offers a certificate program to develop and recognize commitment to the UW-Green Bay Inclusive Excellence Initiative. The Office of Admissions also supports recruiters specialized in working with multicultural, bilingual, and international students. In fall 2017, UW-Green Bay added a Vice Chancellor for Student Affairs and Campus Climate to the Chancellor's Cabinet to

improve, in part, campus initiatives on diversity and inclusivity. This position will play a critical role in furthering campus efforts to attract and support a diverse campus community reflective of the metropolitan area that UW-Green Bay serves.

UW-Green Bay has a broad array of student organizations and institutional resources and offices that offer resources and services to promote academic success and personal growth of students. For example, a number of student organizations provide an environment for students to share their own culture, gain leadership skills, and participate in co-curricular activities. The UW-Green Bay's Multicultural Academic Centers promote a better understanding of diverse communities and serve as resources for students, faculty, and staff. The Center for the Advancement of Teaching and Learning (CATL) also offers regular workshops and panel discussions to address the complexities of inclusivity and diversity. Finally, the Office of International Education facilitates international student success while at UW-Green Bay.

Studies in the area of diversity, multiculturalism, and cultural awareness are embedded in curricular programming for the M.S. in Sport, Exercise, and Performance Psychology program. Historically, diversity content and preparing students to work in a multicultural society has been, and will continue to be, an important part of the learning outcomes. Therefore, a number of courses that are part of the M.S. in Sport, Exercise, and Performance Psychology curricula support this content.

The UW-Green Bay graduate student applicant review process embraces diversity and inclusion by taking a holistic approach to student admission. No single metric serves as the sole basis for campus admission at the graduate level. This approach is a proven best practice for accurately predicting student readiness and academic success and, more importantly, for instilling the diversity of life and work experiences into the classrooms to build a rich graduate-level pedagogical environment for the students. Further, the College of Humanities, Arts, and Social Sciences, in collaboration with the Office of Graduate Studies, is committed to attracting diverse applicants by recruiting from professional networks that reflect the communities they serve.

Collaborative Nature of Program

The University of Wisconsin-Green Bay will be the single institution in the UW System to deliver the M.S. in Sport, Exercise, and Performance Psychology instruction. Program faculty and staff will involve industry leaders from the Green Bay area and beyond in various capacities. The M.S. in Sport, Exercise, and Performance Psychology will engage local partners as guest lecturers in curriculum development and adoption and as placement opportunities for internships and practicums.

Projected Time to Degree

The projected time to degree is four semesters (i.e., two years), including one summer course. Students will take three separate courses each 14-week session. Students failing to complete a course will need to wait for the next offering cycle.

Program Review

The UW-Green Bay Graduate Academic Affairs Council (GAAC) is charged with oversight of all graduate programs, including review and approval of all new programs and all

graduate-level credit courses. The GAAC will formally review the M.S. in Sport, Exercise, and Performance Psychology program on a seven-year cycle. In addition, the program will be formally reviewed on a five-year cycle by the department and by the Dean of the College of Arts, Humanities, and Social Sciences, and the review will coincide with the Association for Applied Sport Psychology (AASP) self-study. Informally, the program will be reviewed by students and organizations after each class to ensure the courses are having their intended impact on the various stakeholders.

Accreditation

There are currently no official accrediting bodies for Sport, Exercise, and Performance Psychology programs. However, the AASP offers a certified mental performance consultant (CMPC) credential, and many job openings will request applicants to have their credential from an institution with that accreditation. Obtaining that certificate requires students to complete particular courses, have a minimum of 400 hours of monitored experience, and complete a certification exam. The proposed M.S. curriculum is designed to help students obtain this certification. AASP is currently working on a formal accreditation, but it could take several years until it is finalized. UW-Green Bay will work with AASP to establish the program on a national stage, and to assure that students receive industry accreditation standards when available. Further, this plan has considered the expected costs for accreditation.

JUSTIFICATION

Rationale and Relation to Mission

The proposed M.S. in Sport, Exercise, and Performance Psychology is consistent with UW-Green Bay's current mission to "provide problem focused educational experience that promotes critical thinking and student success" and "promote access, career success, cross-discipline collaboration." Sport, exercise, and performance psychology is an interdisciplinary subfield of psychology that brings together aspects of counseling psychology, health psychology, kinesiology, human biology, and other disciplines. Additionally, the mission clearly addresses an intent to meet the Green Bay metropolitan region's need for professional graduate programming, and build upon the regional economic and cultural strengths. Sports and performance-related industries are strong in northeast Wisconsin, allowing opportunities for the program to develop the "community-based partnerships, [and] collaborative faculty scholarship and innovation." In addition to the Packers, northeast Wisconsin supports multiple other professional and semi-professional teams, including the Green Bay Blizzard (indoor football), Green Bay Booyah (baseball), Green Bay Gamblers (hockey), and Wisconsin Timber Rattlers (baseball). The region also supports robust and thriving performing arts communities in Door County, in the Green Bay metropolitan area, and along the Fox River Valley. As articulated by Chancellor Gary L. Miller, this vision will serve the region "through the power of innovation, the power of higher education as an agent of transformation, and the power of place...." The program is also consistent with the mission of the College of Humanities, Arts, and Social Sciences in that the curricular design for student progression will create a "unique community of learners" who will work closely with faculty and their graduate colleagues to "engage critically and creatively" around the program content and education experiences. Sport, exercise, and performance psychology is a relatively new profession that has space for innovation and expansion into various performance areas, which provides a unique opportunity for creative critical thinkers to make meaningful

contributions to the profession. The College of Humanities, Arts, and Social Sciences is the most appropriate place to develop these professionals.

The proposed program complements the suite of undergraduate, graduate, and certificate programs developed around the central theme of health, sports, and performance at UW-Green Bay (e.g., B.S. in Psychology, B.S. in Human Biology (Health Sciences, Exercise, and Nutritional Science emphases), Master's in Athletic Training, Master's in Nutrition and Integrated Health, B.A. in Theatre and Dance, B.A. in Music, M.S. in Health and Wellness, etc.). UW-Green Bay's Division I athletic status and its world-class theater, the Weidner Center for the Performing Arts, provide a valuable opportunity for partnership, allowing for high-quality, on-campus internship and consultation experiences. A similar relationship already exists between the psychology department and the athletics department. Furthermore, high school teachers and coaches in the region have expressed their interest in starting classes and/or receiving services in sport psychology. These organizations and personnel offer numerous opportunities for student internships and consultation experience. Thus, this M.S. program fits the economic signature of the region.

Institutional Program Array

Building on the existing foundation of the undergraduate programs in the College of Arts, Humanities, and Social Sciences, the proposed M.S. in Sport, Exercise, and Performance Psychology will expand available graduate coursework in research methods, statistics, counseling, and sport psychology. Curricula will align with the standards of the Association of Applied Sport Psychology for master's-level programs. The addition of graduate students in this area will further expand faculty scholarship in the Department of Psychology and partner programs. Having a graduate program in psychology will provide additional research opportunities for faculty and undergraduates as well, increasing student opportunities for high-impact experiences. Opportunities for graduate students to complete internships in the community will build upon existing partnerships.

To date, UW-Green Bay psychology students complete their undergraduate psychology degree, then apply to other schools to obtain their master's degree, many at out-of-state or private institutions. UW-Green Bay has a strong undergraduate program in psychology, and many alumni desire a UW-Green Bay master's degree. Psychology is an existing strength and area of future emphasis within the College of Arts, Humanities, and Social Sciences. The proposed M.S. in Sport, Exercise, and Performance Psychology aligns with UW-Green Bay's current array of business, health initiatives, and medical programs; the growing array of professional graduate programs; and the institutional focus to better align curriculum with the regional economy (manufacturing, sports, hospitality, entertainment, business, and healthcare). This program meets unmet student demand within the Greater Midwest. Faculty currently meet Higher Learning Commission (HLC) accreditation requirements to teach at the graduate level.

Other Programs in the University of Wisconsin System

Opportunities to pursue graduate studies in an area specific to sport psychology are limited. No UW institution offers an academic program in sport psychology, though some emphases are offered in other programs. UW-Milwaukee offers an emphasis in Integrative Human Performance concentrations through their M.S. in Kinesiology, and UW-Madison offers

an emphasis in Exercise Psychology as part of their M.S. in Kinesiology; however, the M.S. in Kinesiology programs are different than the proposed M.S. in Sport, Exercise, and Performance Psychology. For example, the UW-Milwaukee program is located in the Department of Health Science, and the UW-Madison program is located in the Department of Kinesiology rather than in a psychology department. Therefore, these programs focus more on exercise physiology and kinesiology than the proposed program, which focuses on psychological aspects of exercise and performance. Within the discipline of psychology, while four UW institutions offer M.S. degrees in general psychology or applied psychology, none offer programming specific to sport, exercise, or performance psychology. The low number of sport psychology programs in Wisconsin is unusual for the Midwest, where most states have multiple programs: Illinois (4), Indiana (2), Iowa (2), Minnesota (2), and Michigan (2).

Need as Suggested by Current Student Demand

The Association for Applied Sport Psychology (AASP), the leading organization of sport psychology in the U.S., administered a member needs assessment survey and created a strategic plan for 2016-2018.² With a 40% student membership, AASP has prioritized increasing the offerings and standardization of graduate programs aligned with specific certification requirements. This focus is linked with a call for increased awareness and connection of higher education to specific post-graduation employment opportunities. The proposed M.S. in SEPP meets this call; the minimum degree requirement is a master's degree to practice as a sport psychology professional. Additionally, UW-Green Bay will actively pursue a partnership with AASP as UW-Green Bay seeks stricter curriculum and training accreditation requirements for this field of study to ensure that its students are prepared to pass certification requirements.

Student demand for this program will be further driven by the fact that current program offerings may be insufficient to meet market demand. For example, Minnesota State University received 93 applications for fall 2019 although it could only accept 12 candidates. The Division 47 (Sport, Exercise, and Performance Psychology) of the American Psychology Association (APA) updated a petition for recognition of sport psychology,³ indicating an increasing but still insufficient number of available SEPP graduate programs. Specifically, there are currently over 100 sport psychology graduate programs in kinesiology (i.e., sport science) departments, but only 12 programs nationally (with none in Wisconsin) satisfy recognition as a sport psychology specialty in psychology. Combined, these programs provide approximately 170 graduates annually. However, AASP's Strategic Plan 2019-2022 aims to increase market demand for the profession by strengthening the certification and promoting it to the sport industry, increasing the employment of CMPCs.

With a large student body (550+ majors) and two tenure-track faculty members with specialization in sport psychology (the only certified mental performance consultants in northeast Wisconsin) within UW-Green Bay's Department of Psychology, the city of Green Bay's international reputation for sports, and the region's robust performance economy, UW-Green Bay is positioned to be a national leader in sport, exercise, and performance psychology. Subsequently, it is expected that there will be high student demand for a program at UW-Green Bay, and UW-Green Bay is well positioned to meet a demand that currently surpasses available

² Retrieved from <https://appliedsportpsych.org/about/strategic-plan/>

³ Retrieved from American Psychology Association <https://www.apa.org/ed/graduate/specialize/sport.pdf>

programmatic space. For example, each year 40-90 applicants apply to the Sport Psychology master's program at Minnesota State University in Mankato, MN, with only 10-12 students accepted. Similarly, 45-60 applicants apply to the Sport Psychology master's program at Ball State University in Muncie, IN, for 12-17 openings.

Need as Suggested by Market Demand

Since this is an emerging field, there is relatively little direct market data on the demand for sport psychologists. For example, the Occupational Outlook Handbook does not list sport psychologists as a separate career from psychologists. However, the American Psychological Association describes the field as a high opportunity career,⁴ and included the growing demand for sport psychologists in its 2018 Annual Trends Report (i.e., Trend #3). The Association for Applied Sport Psychology (AASP) also describes the area as an up-and-coming field that has seen a substantial increase in attention over the past decade.⁵

It is hard to define the exact number of sport, exercise, and performance psychologists currently working full-time in the field because many have private practices, open consulting businesses (e.g., Vision Pursue LLC), or work with a more diversified clientele (e.g., counseling). Still, AASP has reported growth in the number of professionals hired by the army, professional teams, and athletic departments across the country. In addition, AASP has seen a rise in its membership and conference attendance, especially by students who are increasingly interested in the field. The latest move by AASP involves the improvement of its certification process and the development of an accreditation process for sport psychology graduate programs. These changes are expected to build confidence within the job market for certified sport psychology professionals. This AASP initiative is ideally timed with the development and launching of this proposed M.S. degree at UW-Green Bay.

Graduates of UW-Green Bay's Sport, Exercise, and Performance Psychology program will find numerous job opportunities within the well-developed sports and medical economy of northeast Wisconsin. For instance, graduates with interest in exercise psychology could work for health programs such as Well Wisconsin as health behavior coaches; for health-related companies such as Bellin Health, Prevea, Aurora; for insurance companies (e.g., designing and implementing programs for prevention of health-related problems); or graduates could improve their personal training career by understanding psychological aspects of exercise and health. Graduates interested in working with sport psychology could also work with companies such as Bellin Health, Prevea, and Aurora to serve athletes going through various psychological issues associated with their physical problems. Graduates can work for one of the local professional or collegiate teams aforementioned or work with other performers, such as surgeons, pilots, musicians, and actors, or graduates can develop their own private practice. High school and club athletes are the largest portion of private practice clients for sport and performance psychologists. This master's program will also take advantage of its faculty's strengths in research methods and practice to prepare its students for Ph.D. or Psy.D. programs.

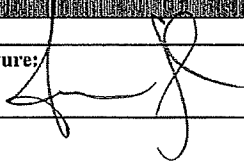
⁴ Retrieved from <http://www.apa.org/gradpsych/2012/11/sport-psychology.aspx>

⁵ Retrieved from <http://www.appliedsportpsych.org/about/about-applied-sport-and-exercise-psychology>

University of Wisconsin - Green Bay
Cost and Revenue Projections For Newly Proposed Program in Sport, Exercise, and Performance Psychology

	Items	Projections				
		2020	2021	2022	2023	2024
		Year 1	Year 2	Year 3	Year 4	Year 5
I	Enrollment (New Student) Headcount	16	18	20	20	20
	Enrollment (Continuing Student) Headcount	0	14	16	18	18
	<i>Enrollment (Total Student) Headcount</i>	16	32	36	38	38
	Enrollment (New Student) FTE	16	18	20	20	20
	Enrollment (Continuing Student) FTE	0	14	16	18	18
	<i>Enrollment (Total Student) FTE</i>	16	32	36	38	38
II	Total New Credit Hours (# new sections x credits per section)	15	15	0	0	0
	Existing Credit Hours	3	24	39	39	39
III	FTE of New Faculty/Instructional Staff	0.00	0.00	0.00	0.00	0.00
	FTE of Current Fac/IAS	1.00	2.00	2.00	2.00	2.00
	FTE of New Admin Staff	0.17	0	0	0	0
	FTE Current Admin Staff	0	0.17	0.17	0.17	0.17
IV	New Revenues					
	From Tuition (new credit hours x FTE)	\$124,695	\$267,575	\$301,347	\$319,532	\$319,532
	Total New Revenue	\$124,695	\$267,575	\$301,347	\$319,532	\$319,532
V	New Expenses					
	Salaries plus Fringes					
	Faculty/Instructional Staff	\$79,750	\$168,810	\$172,186	\$175,630	\$179,143
	Other Staff - Director of DPD	\$9,685	\$9,879	\$10,076	\$10,278	\$10,483
	Other Expenses					
	Startup	\$11,000	\$6,600	\$0	\$0	\$0
	Marketing	\$10,000	\$10,200	\$10,404	\$10,612	\$10,824
	Accreditation, travel, memberships:	\$4,000	\$6,000	\$6,120	\$6,242	\$6,367
	Profesional development, S&E:	\$4,300	\$7,752	\$7,907	\$8,065	\$8,226
	Indirect Expenses:	\$0	\$0	\$0	\$95,860	\$95,860
	Total Expenses	\$118,735	\$209,241	\$206,694	\$306,687	\$310,904
VI	Net Revenue	\$5,960	\$58,335	\$94,653	\$12,845	\$8,628

Provost's Signature:



Date:

10 June 19

**UNIVERSITY OF WISCONSIN-GREEN BAY
COST AND REVENUE PROJECTIONS NARRATIVE
MASTER OF SCIENCE IN
SPORT, EXERCISE, AND PERFORMANCE PSYCHOLOGY**

Introduction

The University of Wisconsin-Green Bay proposes the establishment of a M.S. in Sport, Exercise, and Performance Psychology in the College of Arts, Humanities, and Social Sciences. The proposed program will admit students annually and requires 39 credits offered primarily through face-to-face meetings during the fall and spring semesters. Students will complete the program in five semesters (i.e., two years), with one course required in the summer between the first and second year. The program aligns with the city of Green Bay's internationally recognized sport and entertainment industries, UW-Green Bay's Division 1 athletic classification, its large and highly acclaimed psychology program, and ongoing efforts to increase graduate offerings aligned with campus and regional strengths. Two existing tenure-track faculty lines are already in place for the proposed program. The program seeks standard UW-Green Bay graduate tuition.

Section I – Enrollment

Enrollment projections assume an annual matriculation of 16 new students in Year 1, growing to 20 students annually by Year 4. A retention rate of 90% from start to finish is assumed, based on retention rates for other graduate programs. Based on these parameters, the program is expected to carry 38 students by Year 4 and to graduate 66 cumulative students by the fifth year.

Section II – Credit Hours

A total of 39 credits are required of students; 30 credits are new to the university and nine credits are available from existing courses.

Section III – Faculty and Staff Appointments

The Department of Psychology has strategically hired two tenure-track track faculty to meet student interest in Sport, Exercise, and Performance Psychology. Revenue generated from the proposed M.S. program will support additional instructional academic staff to offset instruction re-directed from the undergraduate psychology program. In total, two FTE of instructional academic staff will shift to the M.S. program when at full enrollment. In Year 1, an increase of 0.17 FTE of administrative support will coordinate and support prospective and active graduate student activities. The instructional support budget also includes chair effort during the academic year (two course releases to support clinical placement) and summer (approximately one month of support spread across the summer).

Section IV – Program Revenues

Program revenue projections are based on tuition generated at the standard UW-Green Bay tuition rate and reflect the 2018-19 graduate tuition rate of \$3,896.73 per student FTE and \$432.97 per credit. Fall and spring tuition revenues are based on per student FTE. Summer tuition revenues assume that enrolled students will take three credits.

Section V – Program Expenses

Expenses - Salary and Fringe

Direct faculty and instructional staff costs for program delivery are estimated using an average annual salary of approximately \$55,000 plus fringe (45% of salary), which reflects the salary of an average tenure-track, assistant professor line in the Department of Psychology. An additional ~\$10,000 is budgeted annually for the 17% administrative support position (university staff) at \$16.50 per hour with a fringe rate of 66% in Year 1. Annual increases of 2% to total salary and fringe are included in all estimates.

Other Expenses

Startup: Includes \$17,600 over the first two years to support the development and significant modification of new and existing courses and to cover small, general expenses.

Program Marketing: Includes \$10,000 per year (plus 2% annual increases) for integrated marketing of UW-Green Bay psychology programs via print, radio, outdoor, and digital marketing.

Accreditation, Travel, and Memberships: Assumes \$2,000 per year per faculty FTE for programmatic-based conferences, an additional \$2,000 per year for anticipated accreditation costs, plus 2% annual adjustments.

Professional Development and S&E: Assumes \$2,000 per year per faculty FTE for professional development and general program S&E, approximately \$1,300 per year per FTE for computers, licensing, and support, a \$1,000 per year for travel to clinical sites, and 2% annual adjustments.

Indirect Expenses: A central tax of 30% of total tuition will be charged to the program beginning in Year 4, once the program is established. This appropriation will cover indirect institutional costs associated with library subscriptions, facilities, administration, and systems support.

Section VI – Net Revenue

Net revenues will be directed to support continued growth within the College of Arts, Humanities, and Social Sciences.



Date: May 17, 2019

Re: Authorization to Implement a Master of Science (M.S.) in Sport, Exercise, and Performance Psychology

Dear President Cross,

I confirm the University of Wisconsin-Green Bay's strong commitment to adding a Master of Science (M.S.) in Sport, Exercise, and Performance Psychology to our graduate program array. The program gained final, formal support from shared governance at Faculty Senate on 27 March 2019. The program is an interdisciplinary subfield of psychology that applies psychological knowledge and clinical approaches to optimize the performance and well-being of athletes, exercisers, and other performers. The field considers the developmental and social aspects of sport and performance participation, and systemic issues associated with sport and performance settings and organizations.

Implementation of the MS in Sport, Exercise, and Performance Psychology at UW-Green Bay will rely largely on resources already in place at the institution. The proposal does require the addition of 2.17 FTE over the first three years, which has been included in the budget projections. The majority of courses making up the curriculum will be taught by existing faculty. Additionally, the M.S. in Sport, Exercise, and Performance Psychology will engage local partners in curriculum development and adoption, as guest lecturers, and as placement opportunities for internships and practicums. The MS in Sport, Exercise, and Performance Psychology will be housed in the College of Arts, Humanities, and Social Sciences.

The proposed program compliments the suite of undergraduate, graduate, and certificate programs developed around the central theme of health, sports, and performance at UW-Green Bay (e.g. BS in Psychology, BS in Human Biology (Health Sciences, Exercise, and Nutritional Science emphases), MS in Athletic Training, MS in Nutrition and Integrated Health, BA in Theatre & Dance, BA in Music, MS in Health and Wellness, etc.). UW-Green Bay's Division I athletic status and world-class theater, the Weidner Center for the Performing Arts, provide a valuable opportunity for partnership, allowing for high quality on-campus internship and consultation experiences. High school teachers and coaches in the region have expressed their interest in starting classes and/or receiving services in sport psychology. These organizations and personnel offer numerous opportunities for student internships and consultation experience. This M.S. program fits the economic signature of our region.

I am unequivocally supportive of the development of a MS in Sport, Exercise, and Performance Psychology. Please let me know if you require any additional information regarding the program, and thank you in advance for your consideration. I look forward to receiving authorization from the Board of Regents for the implementation of this important program.

Gregory Davis
Provost and Vice Chancellor

Program Authorization (Implementation)
Master of Science in Design Plus Innovation
UW-Madison

EDUCATION COMMITTEE

Resolution I.1.d.:

That, upon the recommendation of the Chancellor of UW-Madison and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Master of Science in Design Plus Innovation at the University of Wisconsin-Madison.

**NEW PROGRAM AUTHORIZATION
MASTER OF SCIENCE IN DESIGN PLUS INNOVATION
AT UW-MADISON**

EXECUTIVE SUMMARY

BACKGROUND

The University of Wisconsin-Madison submits this request to establish a Master of Science (M.S.) in Design Plus Innovation. This proposal is presented in accord with the procedures outlined in Academic Planning and Program Review (SYS 102, revised July 2016, available at <https://www.wisconsin.edu/program-planning/>).

REQUESTED ACTION

Adoption of Resolution I.1.d., approving the implementation of the Master of Science (M.S.) in Design Plus Innovation at the University of Wisconsin-Madison.

DISCUSSION

Program Description. The University of Wisconsin (UW)-Madison proposes to establish a Master of Science (M.S.) in Design Plus Innovation (Design + Innovation). This degree will prepare students to solve difficult problems by providing them with a robust set of design-thinking strategies and tools. Design thinking is an iterative process that seeks to understand the user of the design, challenge assumptions, and redefine problems to identify alternative strategies and solutions that might not be instantly apparent with students' initial level of understanding. The program curriculum will provide students with a robust set of design-thinking strategies and tools from multiple perspectives that will prepare them to think adaptively, as well as provide them with opportunities to practice these techniques through completion of applied, real-world projects.

The program is a collaboration among the College of Engineering, the School of Human Ecology, the School of Business, the Art Department within the School of Education, and the Information School in the College of Letters and Science. Specifically, the program will leverage the design and innovation efforts across campus, by bringing together the *Design Thinking Initiative* in the School of Human Ecology (SoHE); the engineering innovation, prototyping and manufacturing expertise in the College of Engineering (CoE); the corporate and entrepreneurial activities in the School of Business (WSB); the user experience and data analytics capabilities in the Information School (iSchool); and the digital design efforts and difficult problem-solving efforts in the Art Department within the School of Education.

This interdisciplinary approach is essential to the program's ability to combine science, creativity and innovation. This cooperative relationship allows students to choose courses in general

information and data management as part of their electives for the degree. Students also will work within interdisciplinary teams to complete projects presented by and in collaboration with industry partners. Graduates of the program will explore careers within the fields of Product Design, User Experience (UI/UX) Design, Communication Design, and Design Strategy.

Mission. The UW-Madison mission states, “[T]he university must achieve leadership in each discipline, strengthen interdisciplinary studies, and pioneer new fields of learning.” The proposed M.S. in Design + Innovation program supports the institutional mission by increasing collaboration among many departments, allowing students to take advantage of a diversity of ideas and areas of study across all five of the participating units. The proposed M.S. in Design + Innovation also fits well within state of Wisconsin appeals to develop an innovation and tech-savvy workforce, as well as attain the important educational goal of getting students to be career-ready through completing a well-rounded degree program that achieves the mission and institutional goals of UW-Madison. The program also aligns with the UW-Madison goal of offering innovative, professional, master-level degrees and other lifelong learning experiences and extends the *Wisconsin Idea*, as the curriculum emphasizes applied learning and includes live consulting projects with businesses in Wisconsin and beyond.

Student and Market Demand. This program responds to student interest and employer demand for systems thinkers and creative problem solvers. Design-thinking courses to be used in the M.S. in Design + Innovation program have been piloted with success to undergraduates, enrolling 21 students in the summer, 39 Engineering and Human Ecology students as part of a freshman interest group offering, and 35 students as a stand-alone course within the School of Human Ecology. Many students who have experienced design thinking in these courses indicate that they are interested in pursuing a more formal graduate experience that would go beyond a single course.

Prospective industry partners (e.g., American Family, CUNA Mutual, TASC, Kohler, etc.) have expressed excitement about the proposed degree offering and have proposed ways of engaging with students. These include hosting site visits, sponsoring employee fellowships through the program, and providing project content for the capstone course. Recognizing that students desire real-world challenges and interactions with employers, UW-Madison believes industry participation will support student recruitment and enrollment choice.

According to the World Economic Forum, creativity, critical thinking, and complex problem-solving will be the top three skills needed in the workforce in 2020. Nationally, between May 2017 to May 2018, over 26,000 jobs were posted for jobs that require a master’s degree and skills in design thinking, product design, creative design or interaction design. Locally, employment opportunities in interdisciplinary design range from the state’s many product manufacturers, such as S.C. Johnson and Harley-Davidson, to product development companies like Design-Concepts, IDEO, i3 Product Development, Frog, and Continuum. Because of these trends and opportunities, many major universities have an interdisciplinary design program, including Stanford University, Massachusetts Institute of Technology (MIT), University of Michigan, University of Illinois, Northwestern University, University of Minnesota, Virginia Tech and the University of Washington.

Credit Load and Tuition. Admission requirements for the M.S. in Design + Innovation will mirror Graduate School requirements. Therefore, students will be required to have a bachelor's degree or equivalent in any related subject area before the start of the program, with a minimum of a 3.0/4.0 GPA on their last 60 undergraduate credits. In addition, English proficiency scores (TOEFL/IELTS) will be required for those whose native language is not English or whose undergraduate instruction was not in English.

Structured as a cohort program, students will most likely graduate from the program in one year, enrolling in coursework over a consecutive three-semester period, beginning in the summer and finishing the following spring. Of the 30 total credits, 18 are required core curriculum, including 6 credits of hands-on application in a team project-based capstone, and 12 are elective credits. Elective options spanning the five participating schools and colleges are bundled into specializations coordinating with likely career paths—Product Design, User Experience (UI/UX) Design, Communication Design, and Design Strategy. Students are not restricted to a single specialization but may choose electives across multiple specializations to meet their individual career goals.

Service-based tuition pricing will be used for this program and charged in accord with UW System Administrative Policy SYS 805 and SYS 130 (referred to locally at UW-Madison as market-based tuition). Tuition will be set at a rate of \$1,600 per credit and will be charged at this rate without any tuition credit plateau. Students will have the same rate independent of their tuition residency. Total tuition cost to the student for the entire program is 30 credits multiplied by \$1,600 per credit, which equals \$48,000. Additionally, students will pay segregated fees. Segregated fees are not counted as program revenue. Segregated fees for this academic year are \$1,597. Therefore, the total program expense including tuition and segregated fees are \$49,597. No other program fees are anticipated, and no tuition increases are expected within the five-year planning time frame. Required textbooks will be a student expense.

This cost is comparable, if not less expensive, than costs with similar programs. The Massachusetts Institute of Technology (MIT) offers an Integrated Design and Marketing program at a tuition cost of \$77,000. The cost of Northwestern University's M.S. in Engineering Design Innovation is \$69,652 and its M.S. in Product Design and Development Management (mpd²) is \$63,264. Tuition for the University of Michigan's M.S. in Design Science is \$48,686.

RELATED REGENT AND UW SYSTEM POLICIES

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

UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting.

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
MASTER OF SCIENCE IN DESIGN PLUS INNOVATION
AT UW-MADISON
PREPARED BY UW-MADISON**

ABSTRACT

The University of Wisconsin (UW)-Madison proposes to establish a Master of Science (M.S.) in Design Plus Innovation. The development of the program responds to student interest and employer demand for systems thinkers and creative problem solvers. The program is a collaboration among the College of Engineering, the School of Human Ecology, the School of Business, the Art Department within the School of Education, and the Information School in the College of Letters and Science. This interdisciplinary approach is essential to the program's ability to combine science, creativity and innovation. The M.S. in Design Plus Innovation will prepare students to solve difficult problems by providing them with a robust set of design-thinking strategies and tools from multiple perspectives (social science, business, engineering, art, user experience, social impact, etc.), as well as the opportunity to practice these techniques with applied projects. Graduates will be better equipped to work across disciplines and innovate in their respective field. The program will be comprised of 30 credits, which will include 18 required core credits and 12 elective credits.

PROGRAM IDENTIFICATION

Institution Name

University of Wisconsin-Madison

Title of Proposed Program

Design Plus Innovation

Degree/Major Designations

Master of Science

Mode of Delivery

Single institution, face-to-face

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. By the end of year five, it is expected that 265 students will have enrolled in the program and 252 students will have graduated from the program. The average student retention rate is projected to be similar to the early retention rates of new accelerated master's degree programs housed in the College of Engineering, which is approximately 95%. It is assumed that all students complete the program in the prescribed 12-month period.

Table 1: Five-Year Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	15	25	50	75	100
Continuing Students	0	0	0	0	0
Total Enrollment	15	25	50	75	100
Graduating Students	14	24	48	71	95

Tuition Structure

Service-based tuition pricing will be used for this program and charged in accordance with UW System Administrative Policy SYS 805 and SYS 130 (referred to locally at UW-Madison as market-based tuition). Tuition will be set at a rate of \$1,600 per credit and will be charged at this rate without any tuition credit plateau. Students will have the same rate independent of their tuition residency. Total tuition cost to the student for the entire program is 30 credits multiplied by \$1,600 per credit, which equals \$48,000. Additionally, students will pay segregated fees. Segregated fees are not counted as program revenue. Segregated fees for this academic year are \$1,597. Therefore, the total program expense including tuition and segregated fees are \$49,597. No other program fees are anticipated, and no tuition increases are expected within the five-year planning time frame. Required textbooks will be a student expense.

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Department or Functional Equivalent

College of Engineering

College, School, or Functional Equivalent

College of Engineering

Proposed Date of Implementation

May 2020 (summer 2020 term enrollment)

DESCRIPTION OF PROGRAM**Overview of the Program**

Design thinking is an iterative process which seeks to understand the user of the design, challenge assumptions, and redefine problems to identify alternative strategies and solutions that might not be instantly apparent with students' initial level of understanding. Many organizations have seen the success of employing design-thinking techniques when facing some of their biggest challenges. Career opportunities for cross-disciplinary students with skills in design thinking and other forms of creative design have dramatically increased more than opportunities for students with traditionally focused degrees.

The M.S. in Design Plus Innovation (hereafter referred to as Design + Innovation) will prepare students to solve difficult problems, which are dynamic problems that present themselves in changing contexts and, thus, are not easily answered. The program curriculum will provide students with a robust set of design-thinking strategies and tools from multiple perspectives (social science, business, engineering, art, user experience, social impact, etc.) that will prepare them to think adaptively as well as provide them with opportunities to practice these techniques through completion of applied, real-world projects. Students will be exposed to the lessons and perspectives of design thinking that will be brought to instruction by faculty from five of UW-Madison's schools and colleges: Engineering, Human Ecology, Business, College of Letters & Science Information School, and School of Education Art Department, and students will work within interdisciplinary teams to complete projects presented by and in collaboration with industry partners. In addition, students will have the opportunity to explore their own unique career path within the fields of Product Design, User Experience (UI/UX) Design, Communication Design, and Design Strategy.

Because this is an interdisciplinary program, there is no single ideal department or school/college home for the program. The College of Engineering is best positioned among the partner units to be the program home because it has a long history of offering programs for professional and nontraditional audiences and a strong infrastructure for program and student support.

Student Learning Outcomes and Program Objectives

The 30-credit, master's degree program is designed as a 12-month accelerated program with a project-based core curriculum (18 credits) that builds foundational knowledge in design thinking from multiple frameworks. Elective courses (12 credits) will allow students to build depth in a design-based subject area as well as a portfolio of interdisciplinary problem-solving work in a year-long capstone. Upon program completion, students will demonstrate competence in the following learning outcomes:

1. Demonstrate creative, independent problem-solving skills and entrepreneurial thinking.
2. Apply design tools and strategies on interdisciplinary teams and projects.
3. Communicate effectively both visually and orally.
4. Implement an iterative design-thinking process.
5. Demonstrate a hands-on, iterative process that includes making, creating and designing.
6. Apply principles of ethical and professional conduct in a field experience.
7. Gain depth in a field of study that can be applied in a social, global and design context. Examples include:
 - Coders and engineers who can conceive new ideas in order to launch new apps and products quickly into market.
 - Researchers who can combine traditional research methods with real-time data to reveal user behavior.
 - Strategists who can analyze and integrate business model, channel strategy, marketing, supply chain, etc., for truly disruptive innovation.

- Social innovators who can create maximum positive impact on the planet by collaborating with entrepreneurs and non-governmental organizations to bring new innovations to those most in need.

Program Requirements and Curriculum

Admission requirements for the M.S. in Design + Innovation will mirror general graduate school requirements. Therefore, students will be required to have a bachelor's degree or equivalent in any related subject area before the start of the program, with a minimum of a 3.0/4.0 GPA on their last 60 undergraduate credits. In addition, English proficiency scores (TOEFL/IELTS) will be required for those whose native language is not English or whose undergraduate instruction was not in English.

The program curriculum will be offered in-person as a full-time, one-year accelerated program. Structured as a cohort program, the program will most often be completed in one year, and students will enroll in coursework over a consecutive three-semester period beginning in the summer (planned May 2020) and finishing the following spring. Table 2 illustrates the program curriculum for the M.S. in Design + Innovation degree. See Appendix A for an alphabetical listing of course subject abbreviations and their corresponding schools/colleges. Of the 30 total credits, 18 are required core curriculum, including 6 credits of hands-on application in a team project-based capstone, and 12 are elective credits. Elective options spanning the five participating schools and colleges are bundled into specializations coordinating with likely career paths—Product Design, User Experience (UI/UX) Design, Communication Design, and Design Strategy. Students are not restricted to a single specialization but may choose electives across multiple specializations to meet their individual career goals.

Table 2: M.S. in Design + Innovation Curriculum

Core Courses – required of all students		18 Credits
DS 641	Design Thinking for Transformation	3 credits
INTEREGR 477	Tools for Prototyping and Manufacturing	3 credits
OTM 760	Managing by Design	3 credits
INTER-HE 940	Collaborative Capstone I	3 credits
INTEREGR 941	Collaborative Capstone II	3 credits
<i>One of the following:</i>		
L I S 707	Data Visualization and Communication for Decision Making	3 credits
DS 541	Visual Thinking for Problem Solving	3 credits
Specializations		12 Credits
<i>Students select one specialization in addition to the core courses. Students may select courses across the specialization lists with approval of their faculty advisor; 12 credits minimum are required.</i>		
<u>Product Design</u>		
I SY E/PSYCH 349	Introduction to Human Factors	3 credits
I SY E/PSYCH 549	Human Factors Engineering	3 credits
M E/E C E 439	Introduction to Robotics	3 credits
M E 449	Redesign and Prototype Fabrication	3 credits
M E 549	Product Design	3 credits
I SY E/COMP SCI/		
DS 518	Wearable Technology	3 credits
I SY E 552	Human Factors Engineering Design and Evaluation	3 credits
M H R 734	Venture Creation	3 credits

M H R 741	Technology Entrepreneurship	3 credits
MARKETNG 737	Creating Breakthrough New Products	3 credits
ART 346	Basic Graphic Design	4 credits
ART 409	Digital Fabrication Studio	4 credits
ART 428	Digital Imaging Studio	4 credits
ART 429	3D Digital Studio I	4 credits
DS 527	Global Artisans	3 credits
CNSR SCI 657	Consumer Behavior	3 credits
<u>User Experience Design</u>		
L I S/COMP SCI 611	User Experience Design 1	3 credits
L I S/COMP SCI 612	User Experience Design 2	3 credits
L I S/COMP SCI 613	User Experience Design 3	3 credits
L I S 646	Introduction to Info Architecture and Interaction Design for the Web	3 credits
L I S 661	Information Ethics and Policy	3 credits
DS/COMP SCI 579	Virtual Reality	3 credits
I SY E/PSYCH 349	Introduction to Human Factors	3 credits
I SY E/COMP SCI/		
DS 518	Wearable Technology	3 credits
I SY E/PSYCH 549	Human Factors Engineering	3 credits
M H R 734	Venture Creation	3 credits
M H R 741	Technology Entrepreneurship	3 credits
ART 346	Basic Graphic Design	4 credits
ART 428	Digital Imaging Studio	4 credits
ART 438	History of Graphic Design and Typography	3 credits
ART 528	Digital Interactive Studio	4 credits
ART 529	3D Digital Studio II	4 credits
<u>Communication Design</u>		
ART 318	Introduction to Video, Performance & Installation Art	4 credits
ART 346	Basic Graphic Design	4 credits
ART 409	Digital Fabrication Studio	4 credits
ART 428	Digital Imaging Studio	4 credits
ART 429	3D Digital Studio I	4 credits
ART 438	History of Graphic Design and Typography	3 credits
ART 528	Digital Interactive Studio	4 credits
ART 529	3D Digital Studio II	4 credits
DS/COMP SCI 579	Virtual Reality	3 credits
AND ARC 639	Culture and Built Environment	3 credits
L I S 707 ¹	Data Visualization and Communication for Decision Making	3 credits
DS 541 ²	Visual Thinking for Problem Solving	3 credits
<u>Design Strategy</u>		
CSCS 335	Communicating with Key Audiences	3 credits
CNSR SCI 555	Consumer Strategy & Evaluation	3 credits
CNSR SCI 561	Retail Channel Strategy & Omni-Channel Retailing	3 credits
CNSR SCI 562	The Global Consumer	3 credits
CNSR SCI 567	Product Development Strategies in Retailing	3 credits

¹ L I S 707 may be counted as credit in the specialization area only if it was not taken as a core requirement.

Students may NOT double count L I S 707 for the core requirement and the specialization.

² DS 541 may be counted as credit in the specialization area only if it was not taken as a core requirement. Students may NOT double count DS 541 for the core requirement and the specialization.

CNSR SCI 657	Consumer Behavior	3 credits
HDFS 872	Bridging the Gap Between Research and Action	3 credits
DS 527	Global Artisans	3 credits
DS/LAND ARC 639	Culture and Built Environment	3 credits
M E 549	Product Design	3 credits
M H R 715	Strategic Management of Innovation	3 credits
M H R 723	Strategic Management	3 credits
M H R 734	Venture Creation	3 credits
M H R 741	Technology Entrepreneurship	3 credits
MARKETNG 737	Creating Breakthrough New Products	3 credits
ART 318	Introduction to Video, Performance & Installation Art	4 credits
Total Credits (minimum)		30 credits

Assessment of Outcomes and Objectives

An assessment plan has been developed to evaluate the extent to which students are meeting the learning outcomes for the program. Direct assessment will be embedded into coursework, and evidence of learning will be provided primarily by student work product and process. Indirect assessments in the capstone courses will be supported by post-degree student outcomes, including attainment of career objectives. The M.S. in Design + Innovation capstone courses (Inter-Human Ecology 940: Collaborative Capstone I and Inter-Engineering 941: Collaborative Capstone II) will be the primary source for direct assessment of student learning outcomes. Instructors for the course will come from the five participating schools and colleges and will serve as guides for student teams throughout the course, and each of them will be prepared with guidelines and rubrics for assessing students across all seven learning outcomes throughout the year. In addition, each semester's capstone will conclude with final presentations that will showcase student work and be judged by a panel of evaluators drawn from the capstone instructors, sponsoring industry partners, the M.S. in Design + Innovation steering committee, other instructors for the program, the program Advisory Board, and other relevant partners in Madison and beyond. Indirect assessment will include student evaluations of teachers and classes, which can inform program and course design, instructional strategies, and program improvement.

The Division of Continuing Studies (DCS) distributes pre- and post-program degree surveys on behalf of all programs directed to professional audiences to support program-level, indirect assessment requirements. These surveys meet the university indirect assessment requirements by (1) identifying which learning outcomes were assessed, (2) outlining what data was collected and how, and (3) summarizing key findings and recommendations. DCS compiles the survey information into various reports that programs can use for longitudinal review. The purpose of the pre-degree survey is to collect feedback on student expectations as students start their program. This survey is distributed during any term in which a program has new entering students. Some aspects of the degree program survey include students' familiarity with the degree learning outcomes, prior experience with various course formats, work experience, and expected interactions with professors and other students. This survey provides an important entry benchmark that allows the program not only to compare entry trends over time but also to cohort trends as students complete their program. The purpose of the post-degree survey is to measure student perceptions about the academic and career advising students received while enrolled, whether students believe the program met its learning outcomes, and whether students indicate

that they feel prepared for the next step in their career path. The survey is distributed every term that a program has graduating students. The post-degree survey serves as an exit benchmark that allows program administrators to evaluate which aspects of their program need attention as well as how their students have grown since entering the program.

During the implementation phase, the program will also carefully monitor student access to courses to ensure growth of course capacity to fully meet student demand, as well as student engagement and success to inform program, course and instructional design. Data collection for the annual review will be orchestrated by the program co-directors with support from the steering committee. Data collection for the annual review will include: (a) consultation with faculty in core courses regarding student performance on key assignments relevant to learning outcomes, (b) review of student evaluations of teaching for the most recent academic year, (c) student work from core capstone courses, (d) review of program evaluations in pre- and post-program surveys, and (e) updating of data on post-graduation outcomes (i.e., employment or graduate study).

In consultation with the steering committee, the program co-directors will prepare an annual report including data summaries and recommendations for program improvement. An abbreviated report will be provided to the Office of the Provost, in accordance with UW-Madison institutional guidelines on student learning assessment.³ Steering committee members will serve as liaisons to the five participating schools and colleges in reviewing and implementing recommended changes to the program. Comprehensive reviews of program outcomes will occur at the time of program review, which takes place three and five years after implementation and then at intervals of no more than 10 years thereafter.

Diversity

The M.S. in Design + Innovation curriculum is designed to teach students the practice of human-centered design and innovation. One core tenet of this practice is “empathizing with and embracing diverse viewpoints, testing new ideas with others, and observing and learning from unfamiliar contexts.”⁴ As the first step of the design-thinking process, *empathize*, students learn to seek out perspectives of those for whom they are designing, but students also learn how it teaches them deep observation skills to uncover latent needs and unsaid desires.⁵ Beyond the process and practice of design thinking is the goal of a radically innovative solution. “You cannot have groundbreaking innovation...without diversity and a collective experience of inclusion within your team or organization.”⁶ There is a growing body of evidence that supports

³ Information regarding the UW-Madison Program Assessment process may be retrieved from <https://assessment.provost.wisc.edu/undergraduate-program-assessment/>

⁴ The 8 core abilities of a design thinker as written by the Stanford d.school may be found at <https://dschool.stanford.edu/about>

⁵ The steps of the design thinking process may be found at <https://dschool.stanford.edu/resources/design-thinking-bootleg>

⁶ ‘Where inclusion meets human-centered design’ by Emi Kolawole available at <https://medium.com/stanford-d-school/where-inclusion-meets-human-centered-design-518a4c1c93a1>

this, showing diversity and inclusion is a key to more revenue growth,⁷ better problem-solving,⁸ and greater creativity.⁹ A discussion of the plan for advancing inclusive excellence within the M.S. in Design + Innovation program at UW-Madison follows.

Equity in student recruitment, retention, and completion. Working in concert with the Division of Continuing Studies, the degree will be marketed via career fairs and conferences broadly, but also will focus on events that draw together underrepresented student populations, such as the National Society of Black Engineers, Society for Advancement of Chicanos and Native Americans in Science, Inc. (SACNAS), Women in Engineering, Society of Hispanic Professional Engineers, American Indian Science and Engineering Society, Association for Women in Computing, Chinese Institute of Engineers USA, and Society of Mexican American Engineers and Scientists. The program will showcase diverse imagery in its marketing materials, as well as the diversity of the program steering committee and participating instructors at relevant recruiting events for the program.

The expected applicant pool will present a wide variety of interest areas and backgrounds spanning the areas of the five participating units and beyond, both those just completing undergraduate studies to working professionals able to stop-out for a year and those making a career change. (Occasionally a student will be permitted to enroll part-time.) The admissions committee will use each student's current area of interest/study, as well as the student's desired specialization area and future career path, to balance the student cohort with a diversity of skillsets and mindsets.

College of Engineering support services staff will provide the first line of advising for students. Staff attend professional development training on diversity and inclusion each year to gain skills that enable them to support a wide variety of student needs and goals. However, the needs of a diverse student cohort will be wide. Therefore, students will also receive advising and student support services from specialists located in each academic unit. Students will be assigned a graduate advisor from one of the five participating schools and colleges based on their backgrounds and intended specializations. Further, students will rely on the program's steering committee and their instructors, both spanning all five participating schools and colleges, for more tailored support with academic or career goals. The program also has plans to hire a full-time career services support staff member by year two of implementation.

Diversity in student learning. Once in the program, all students, regardless of background, are required to take four core courses that each teach different perspectives, theories, and practices of design and innovation. The required capstone course will give students the opportunity to work on real-world problems in diverse project teams, guided by instructors across all five participating units. Co-curricular activities will also offer students a modern diversity of opinion from a wide diversity of practitioners outside of classroom instruction.

⁷ The full McKinsey report on 'Why diversity matters' is available at <https://www.mckinsey.com/business-functions/organization/our-insights/why-diversity-matters>

⁸ Hong, Lu and Page, Scott E., November 2004, "Groups of diverse problem solvers can outperform groups of high-ability problem solvers" available at <https://sites.lsa.umich.edu/scottepage/wp-content/uploads/sites/344/2015/11/pnas.pdf>

⁹ Amabile, Teresa, September 1998, "How to kill creativity" available at <https://hbr.org/1998/09/how-to-kill-creativity>

Equity in hiring of faculty and staff. There are no immediate plans to hire new faculty and instructional staff. When hiring is needed, departmental faculty and staff will rely on the diversity and inclusion training and hiring efforts within each of the five participating units, as well as campus-wide faculty diversity initiatives offered by the Office of the Provost. These program staff assist departments to recruit and retain a demographically representative faculty. Future career services support staff or other faculty staff vacancies will be filled with a focus on diversity and inclusion, beginning with widely advertising any open positions in order to garner interest from a diverse applicant pool.

Connection to institutional strategic initiatives. The planning committee recognized that one barrier to this program may be program expense. Therefore, scholarship funds will be awarded in the second year of the program, and by the third year of the program, 8% of program net revenues will be used to support scholarships for students from under-resourced populations to support recruiting goals around diversity. This amount equates to approximately four full scholarships, or many more partial scholarships, to recruit and retain high-quality candidates from all backgrounds.

Collaborative Nature of the Program

The M.S. in Design + Innovation is a UW-Madison campus-based program. No collaborations are planned with other UW institutions. The M.S. in Design + Innovation will be housed in the College of Engineering and will operate collaboratively, through a joint steering committee, with the School of Human Ecology, the School of Business, the School of Education Art Department, and the Information School in the College of Letters and Science. The College of Engineering will serve as the home department and college because it is the best fit for this interdisciplinary program and has an infrastructure to support program and student success.

Projected Time to Degree

The M.S. in Design + Innovation is designed to be completed in 12 months of full-time study. The M.S. in Design + Innovation core courses will be offered on a predictable schedule, with enrollment priority given to students enrolled in the program. With advisor approval, students may request to extend completion of the program electives beyond 12 months.

Program Review

As for all new UW-Madison graduate programs, the program will undergo an informal review by the Graduate Faculty Executive Committee three years after implementation and a formal program review five years after implementation (chaired by a member of the UW-Madison University Academic Planning Council). Subsequently, the program will be subject to the UW-Madison requirement for program review at least once within the subsequent ten years, in accordance with the UW-Madison Academic Program Guidelines.¹⁰ The Design + Innovation Steering Committee will take the lead in addressing recommendations arising from these periodic formal reviews, and committee members will act as liaisons to the participating department chairs as needed to implement changes to program policies and practices.

¹⁰ UW-Madison Academic Program Review Guidelines may be retrieved at <https://uwmadison.app.box.com/s/dfd91v0cz92y81p2cjaxe2b5x3y16llj>

Accreditation

The M.S. in Design + Innovation will participate in the accreditation procedures of the National Association of Schools of Art and Design (NASAD), in keeping with their requirement that every program with the word Art or Design in the title must be included in NASAD accreditation. As NASAD policy states, “NASAD will grant Membership or renewal of Membership only when every curricular program in art/design of the applicant institution (including graduate work, if offered) meets the standards of the Association. The particular administrative structure used to manage or house art/design curricula in multipurpose institutions has no effect on the applicability of this rule.”¹¹ The Art Department within the School of Education, Art History within the College of Letters and Science, and Design Studies Department within the School of Human Ecology offer programs included in the most recent NASAD accreditation process in 2017, and the next comprehensive review falls within the academic year 2025-26.

JUSTIFICATION

Rationale and Relation to Mission

The proposed M.S. in Design + Innovation fits well within state of Wisconsin appeals to develop an innovative and tech-savvy workforce, as well as attain the important educational goal of getting students to be career-ready through completing a well-rounded degree program that achieves the mission and institutional goals of UW-Madison. The UW-Madison mission states, “[T]he university must achieve leadership in each discipline, strengthen interdisciplinary studies, and pioneer new fields of learning.”¹² The proposed M.S. in Design + Innovation program supports the institutional mission by increasing collaboration among many departments, allowing students to take advantage of a diversity of ideas and areas of study across all five of the participating units. The program will leverage the design and innovation efforts across the campus by bringing together the *Design Thinking Initiative* in the School of Human Ecology (SoHE); the engineering innovation, prototyping and manufacturing expertise in the College of Engineering (CoE); the corporate and entrepreneurial activities in the School of Business (WSB); the user experience and data analytics capabilities in the Information School (iSchool); and the digital design efforts and difficult problem-solving efforts in the Art Department within the School of Education. This cooperative relationship allows students to choose courses in general information and data management as part of their electives for the degree. The program aligns with the UW-Madison goal of offering innovative, professional, master-level degrees and other lifelong learning experiences and extends the *Wisconsin Idea*, as the curriculum emphasizes applied learning and includes live consulting projects with businesses in Wisconsin and beyond; this directly enables participants to have meaningful lifelong learning experiences.

Institutional Program Array

Currently UW-Madison has no degree/major programs that focus on collaborative and applied design. Within UW-Madison, the School of Human Ecology also offers a Master of Science and a Master in Fine Arts (M.F.A.) in Human Ecology with named options in Design Studies. However, these programs are offered in a research and thesis-based format rather than a

¹¹ More information on the NASAD policies and procedures may be retrieved from <https://nasad.arts-accredit.org/wp-content/uploads/sites/3/2016/03/PI-NASAD2016.pdf>

¹² The UW-Madison mission statement may be retrieved at <https://www.wisc.edu/about/mission/>

course-based and applied format as proposed in the Design + Innovation program. Design is a component of a number of programs in the collaborating units, but it is not the sole focus of any existing program.

Other Programs in the University of Wisconsin System

There are several design-focused, master's degree programs offered at other UW institutions that are distinct from the proposed program and serve more focused audiences. UW-Milwaukee offers design specializations within degree programs in other academic areas. For example, the Master of Science in Architecture (MArch) with a concentration in Ecological Design is offered within its accredited Architectural program. This MArch is focused on the built environment and "provides students with the tools to design buildings to be carbon neutral as well as resource-conserving and environmentally non-polluting." Milwaukee's Urban Planning graduate program also offers a master's degree in urban planning with a concentration area in Physical Planning and Urban Design. Finally, UW-Milwaukee's Master of Arts in Art has a specialization in Design Entrepreneurship and Innovation. This program is not currently accepting applications, however. UW-Stout offers an art-based program as part of the M.F.A. in Design offered from UW-Stout's School of Art and Design. Although cross-disciplinary with graphic, industrial, entertainment, media and interior design elements, this M.F.A. program does not include courses from Business and Engineering. Also, UW-Platteville offers an area of emphasis in Engineering Design within its online Master of Science in Engineering degree. This program provides "the fundamental areas of engineering and...skills to increase efficiencies and design optimal solutions in a variety of engineering and industrial settings" and does not provide the same intersection of business and human-centered approaches as the proposed program for students from multiple disciplinary backgrounds.

Need as Suggested by Current Student Demand

Design-thinking courses to be used in the M.S. in Design + Innovation program have been piloted with success to undergraduates, enrolling 21 students in the summer, 39 Engineering and Human Ecology students as part of a freshman interest group offering, and 35 students as a stand-alone course within the School of Human Ecology. Many students who have experienced design thinking in these courses indicate that they are interested in pursuing a more formal graduate experience that would go beyond a single course. While the degree planning committee has not formally evaluated the level of interest in this program, members of the committee have fielded inquiries from several prospective students, including current UW-Madison undergraduate students who indicated they would be interested in enrolling in the proposed program, should one be available.

The partnerships and collaborations between UW-Madison and area industries may further support student demand. Prospective industry partners (e.g., American Family, CUNA Mutual, TASC, Kohler, etc.) have expressed excitement about the proposed degree offer and have proposed ways of engaging with students; these include hosting site visits, sponsoring employee fellowships through the program, and providing project content for the capstone course. Recognizing that students desire real-world challenges and interactions with employers, UW-Madison believes industry participation will support student recruitment and enrollment choice.

Degree program searches for terms related to design and innovation are strong. A naming study conducted by the Division of Continuing Studies in June 2018, revealed that the word “design” has a high-average search volume, with over 90,000 monthly searches in the U.S. alone, and a high click-through rate among international, national, and regional audiences. Using Google’s forecasting tools for design master’s degree search terms, the anticipated number of times that ads would be seen is 2.09 million over 2 months based on current user analytics worldwide, with over 500,000 in the U.S. and 38,000 in the Midwest. Additionally, the program’s competitors are seeing average monthly searches on their sites in high volume: University of Illinois – Design Center: 40,500 average monthly searches; University of Minnesota, College of Design: 33,100 average monthly searches; and Berkeley’s Design Innovation program: 49,500 average monthly searches.

Need as Suggested by Market Demand

The program will prepare graduates to enter a broad range of career paths that include coders and engineers, researchers, entrepreneurs, strategists, and social innovators. Designers have the skills to conceive new ideas and the ability to launch new products and services quickly into the market. Design-oriented researchers can combine traditional methodologies and real-time data to reveal user behavior. Strategists are designers who look at the business model, channel strategy, marketing, supply chain, etc., to create truly disruptive innovation. Social innovators are designers who strive to create maximum positive impact on the planet by collaborating with entrepreneurs and non-governmental organizations to bring new innovations to those most in need. Graduates of the proposed program will work across a broad array of occupations; therefore, market demand cannot be illustrated well using the occupational categories offered by the U.S. Bureau of Labor Statistics.

According to the World Economic Forum, creativity, critical thinking, and complex problem-solving will be the top three skills needed in the workforce in 2020.¹³ The Harvard Business Review recently described how employers are actively seeking graduates with design skills.¹⁴ For example, IBM Design is on track to hire 1,000 designers, and G.E. Healthcare (a Wisconsin company) and Samsung have made design thinking part of their strategic mission. Nationally, between May 2017 to May 2018, over 26,000 jobs were posted for jobs that require a master’s degree and skills in design thinking, product design, creative design or interaction design. Locally, employment opportunities in interdisciplinary design range from the state’s many product manufacturers, such as S.C. Johnson and Harley-Davidson, to product development companies like Design-Concepts, IDEO, i3 Product Development, Frog, and Continuum. In a February 2018 online survey conducted by Forrester, strategic decision makers in IT, executive management, and operations in 60 U.S.-based organizations showed that broad adoption of design thinking is on the rise, with 78% of all respondents identifying that design thinking’s adoption has increased over the past two years.¹⁵ Because of these trends and opportunities, many major universities have an interdisciplinary design program, including

¹³ The full list of skills needed in the 2020 workforce according to the World Economic Forum is available at <https://www.weforum.org/agenda/2016/01/the-10-skills-you-need-to-thrive-in-the-fourth-industrial-revolution/>

¹⁴ Eisenmann, Howe and Altringer, June 2017, “What Does an Aspiring Founder Need to Know?” available at <https://hbr.org/2017/06/what-does-an-aspiring-founder-need-to-know>

¹⁵ Full Forrester report for IBM may be retrieved from <https://www.ibm.com/design/thinking/static/media/Enterprise-Design-Thinking-Report.8ab1e9e1.pdf>

Stanford University, Massachusetts Institute of Technology (MIT), University of Michigan, University of Illinois, Northwestern University, University of Minnesota, Virginia Tech and the University of Washington.

APPENDIX A: COURSE LISTING KEY

Table A-1 shows the full school/college and subject listing for the course curriculum.

Table A-1: Course listing key, shown by subject and school/college, in alphabetical order

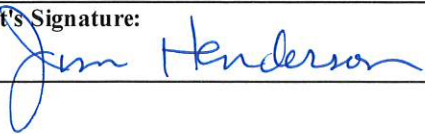
Abbreviated subject listing	Full subject listing	UW-Madison School / College
ART	Art	School of Education
CNSR SCI	Consumer Science	School of Human Ecology
COMP SCI	Computer Science	College of Letters & Science
CSCS	Civil Society & Community Studies	School of Human Ecology
DS	Design Studies	School of Human Ecology
E C E	Electrical & Computer Engineering	College of Engineering
HDFS	Human Development & Family Studies	School of Human Ecology
INTEREGR	Inter-Engineering	College of Engineering
INTER-HE	Inter-Human Ecology	School of Human Ecology
I SY E	Industrial & Systems Engineering	College of Engineering
LAND ARC	Landscape Architecture	School of Business
LIS	The Information School	College of Letters & Science
MARKETNG	Marketing	School of Business
M E	Mechanical Engineering	College of Engineering
M H R	Management & Human Resources	School of Business
OTM	Operations & Technology Management	School of Business
PSYCH	Psychology	College of Letters & Science

University of Wisconsin - Madison
Cost and Revenue Projections For MS Design plus Innovation

	Items	Projections				
		2020-21	2021-22	2022-23	2023-24	2024-25
		Year 1	Year 2	Year 3	Year 4	Year 5
I	Enrollment (New Student) Headcount	15	25	50	75	100
	Enrollment (Continuing Student) Headcount	0	0	0	0	0
	Enrollment (New Student) FTE	15	25	50	75	100
	Enrollment (Continuing Student) FTE	0	0	0	0	0
II	Total Credit Hours	450	750	1500	2250	3000
III	FTE of Faculty/Instructional Staff	1.0	2.0	3.5	5.0	6.25
	FTE of Teaching Assistants	0.75	0.75	2.5	4.5	7.0
	FTE of Academic Program Director	0.5	0.5	0.5	0.5	0.5
	FTE of Program Director	0.25	0.25	0.25	0.25	0.25
	FTE of Graduate Coordinator	0.5	0.75	1.0	1.0	1.0
	FTE of Industry Liaison/Career Services	0.5	0.75	1.0	1.0	1.0
	FTE of Administrative Support Staff	0.5	0.75	0.75	0.75	0.75
IV	Revenues					
	<i>From Tuition</i>	\$720,000	\$1,200,000	\$2,400,000	\$3,600,000	\$4,800,000
	<i>Adjusted revenue (attrition or part-time enrollment)</i>	-\$36,000	-\$60,000	-\$120,000	-\$180,000	-\$240,000
	Total New Revenue	\$684,000	\$1,140,000	\$2,280,000	\$3,420,000	\$4,560,000
V	Expenses					
	Salaries plus Fringes					
	<i>Faculty/Instructional Staff</i>	\$140,000	\$285,600	\$509,796	\$742,846	\$947,128
	<i>Teaching Assistants</i>	\$45,000	\$45,900	\$156,060	\$286,526	\$454,622
	<i>Academic Program Director</i>	\$77,500	\$79,050	\$80,631	\$82,244	\$83,888
	<i>Program Director</i>	\$35,500	\$36,210	\$36,934	\$37,673	\$38,426
	<i>Graduate Coordinator</i>	\$31,000	\$47,430	\$64,505	\$65,795	\$67,111
	<i>Industry Liaison/Career Services</i>	\$40,000	\$61,200	\$83,232	\$84,897	\$86,595
	<i>Administrative support staff</i>	\$20,000	\$30,600	\$31,212	\$31,836	\$32,473
	<i>Fringe benefits on all salaries -est 38.7%</i>	\$150,543	\$226,778	\$372,437	\$515,413	\$661,864
	Subtotal Salaries and Fringes	\$539,543	\$812,768	\$1,334,807	\$1,847,229	\$2,372,107
	Other Expenses					
	<i>Laboratory Support Costs</i>	\$13,750	\$33,500	\$62,500	\$62,500	\$62,500
	<i>Program Events</i>	\$15,000	\$25,000	\$50,000	\$50,000	\$50,000
	<i>Industry liaisons expenses</i>	\$7,500	\$17,500	\$25,000	\$25,000	\$25,000
	<i>New Course Development and Maintenance</i>	\$0	\$0	\$34,500	\$39,000	\$43,500
	<i>Scholarships (8% of tuition revenue)</i>	\$0	\$80,000	\$182,400	\$273,600	\$364,800
	<i>Marketing</i>	\$68,400	\$114,000	\$228,000	\$342,000	\$456,000
	<i>Campus allocation (10% of tuition revenue)</i>	\$68,400	\$114,000	\$228,000	\$342,000	\$456,000
	Total Expenses	\$712,593	\$1,196,768	\$2,145,207	\$2,981,329	\$3,829,907
VI	Net Revenue - Investment Margin	-\$28,593	-\$56,768	\$134,793	\$438,671	\$730,093

Submit budget narrative in MS Word Format

Provost's Signature:



Date:

6/11/19

**UNIVERSITY OF WISCONSIN-MADISON
COST AND REVENUE PROJECTIONS NARRATIVE
MASTER OF SCIENCE IN DESIGN PLUS INNOVATION**

Introduction

The proposed Master of Science (M.S.) in Design + Innovation program is a 12-month master's program (summer, fall, spring term enrollment) comprised of 30 credits. It is a joint interdisciplinary venture among five schools and colleges at UW-Madison. The curriculum is face-to-face and emphasizes human-centered, team-based design interaction in a series of capstone, core and elective courses.

The College of Engineering will serve as the program's administrative home and will manage the program budget and tuition revenue. Engineering program administrative costs will be paid directly by tuition revenue. Instruction compensation will be distributed to all program partners based on an instructional agreement. A steering committee composed of the partnering schools and colleges will oversee the program and will oversee the reinvestment plan of the investment margin.

Section I – Enrollment

All enrollments are considered new students, and each student is a full-time equivalent because the curriculum is designed as a one-year, full-time program. The curriculum is 12 months in duration, so there are no continuing students. Retention is estimated at 95%, similar to other accelerated master's programs recently implemented at the College of Engineering (see tuition revenue adjustment for 5% attrition in Section IV). The interdisciplinary aspect of the program allows for recruitment from a variety of academic and employment backgrounds. First-year enrollment is projected at 15 students, and enrollment is projected to increase to 100 students by Year 5.

Section II – Credit Hours

The program requires a total of 30 credits: 18 from core courses and 12 from a list of approved electives. All program courses are existing courses except for five new courses that have been approved and developed or are in the development stage as of June 2019. The curriculum requires that each student enroll in 6 credits in the summer, 12 credits in the fall, and 12 credits in the spring. The number of new student credit hours generated annually is a product of headcount by 30 required credits. (See below that revenue has been adjusted to account for the anticipated 5% attrition rate).

Section III – Faculty and Staff Appointments

The M.S. in Design + Innovation program will rely on existing faculty and will also add faculty and instructional staff as needed as the program grows. The distributed nature of the curriculum over five schools and colleges will also allow for student enrollments to be distributed, making use of existing capacity and allowing for instructional capacity to be added where needed. As student interest and the discipline evolve, there will be flexibility to focus instructional resources. Salaries are projected to increase at a rate of 2% annually.

Faculty and instructional FTE allocations are based on an assumption of an instructional load per instructional FTE of 480 student credit hours annually, calculated as three sections of 20 students in 3-credit classes in fall and spring and two sections of 20 students in a 3-credit class in

summer. The number of instructional FTE is the ratio of the total student credit hours divided by the student credit hours per instructional FTE. Instructional support will also include teaching assistants, which will be budgeted at 0.7 FTE in Year 1 of the program and grow to 7.0 FTE by Year 5.

Staff support will include: (1) An academic program director, who will allocate 50% time to the academic director role. The remaining time is accounted for as an instructor. (2) A program director, who will contribute 25% time to the program. The reminder of this person's time is allocated to similar duties in other College of Engineering master's programs. (3) A graduate coordinator appointed at 50% time in Year 1, at 75% time in Year 2, and at 100% thereafter. (4) An industry liaison (career services support) appointed at 50% time in Year 1, at 75% time in Year 2, and at 100% thereafter. (5) An administrative support staff appointed at 50% time in Year 1 and at 75% thereafter.

Section IV – Program Revenues

Program revenue will be generated from tuition. Service-based tuition pricing will be used and charged in accordance with UW System Administrative Policy SYS 805 and SYS 130. Tuition will be set at \$1,600 per credit and will be charged at this rate without any tuition credit plateau. Segregated fees will be charged at the regular UW-Madison rates but are not counted as program revenue. Program revenue is estimated by multiplying student headcount enrollment by 30 credits per year by \$1,600 per credit. Annual program revenues may fluctuate based on student attrition and actual enrollment patterns. For example, it is possible that a student may enroll in more than 30 credits. Working, returning adult students may take fewer credits per semester and be granted an extension to complete the program. Some students may stop-out prior to program completion. The adjusted revenue line reflects tuition loss revenue due to attrition or variance in course enrollment. The adjustment equates to revenue generated by 5% of total credits.

Section V – Program Expenses

Program expenses include salary and fringe attributable to faculty and staff FTE listed in Section III and reflect 2% annual salary increases. Fringe is estimated to be 38.7% of total salaries. Additional program expenses include costs for new course development and course renewal/maintenance, laboratory support, program events, industry liaisons, and marketing. Beginning in Year 2, program costs will include scholarship allocations. It is estimated that in the second year \$80,000 will be allocated and starting in the third year 8% of gross revenues will be set aside for scholarships. Criteria for scholarship award is in development and will likely include financial need, applicant diversity and/or Wisconsin residency. Finally, program expenses include a 10% campus assessment allocation based on gross revenue.

Section VI – Net Revenue

By the end of Year 5, the program is projected to generate more than \$700,000 in investment margin annually. This serves as a pool of funds for reinvestment by the five partnering schools/colleges. The reinvestment pool will be directed to additional scholarships for students, a program contingency fund, refurbishment and expansion of the design lab spaces and design lab equipment, and funding for faculty salaries and research assistants. In the first two years, the program will carry a relatively modest negative investment margin and will draw on cross-funding of the offering units to cover the start-up period.



Date: April 18, 2019

To: Karen Schmitt, Interim Vice President for Academic and Student Affairs, University of Wisconsin System
via email (apei@uwsa.edu)

From: Sarah C. Mangelsdorf, Provost and Vice Chancellor for Academic Affairs

RE: Authorization Proposal: MS-Design + Innovation

In keeping with UW System and Board of Regent policy, I am sending you a proposal for a Master of Science in Design + Innovation (MS-D+I) at the University of Wisconsin-Madison.

The MS-D+I program will be housed in the College of Engineering and is also a collaboration with the School of Human Ecology, the College of Letters & Science (Information School), the School of Business, and the School of Education (Department of Art). The program is designed to meet UW-Madison's standards of quality and to make a meaningful contribution to the institution's overall academic plan and program array.

In keeping with UW-Madison policy, this program proposal has been endorsed by the governance bodies of the participating departments and school/colleges. The program has the formal support of the participating deans and the Graduate School. In addition, this proposal has been approved by the University Academic Planning Council, and so I send you this proposal with wide support.

The program faculty have established a robust plan for curriculum delivery, student support, assessment of student learning, and program review. The participating units have committed the necessary financial and human resources required to continue the program. The program will be funded through tuition revenue, and we are requesting a market-based tuition of \$1600 per credit plus segregated fees, as noted in the proposal, consistent with the service-based pricing guidelines.

Contingent on Board of Regents approval, we plan to implement the new program in Summer 2020.

We are requesting that this proposal be scheduled for consideration at the July 11-12 Board of Regents meeting. The proposal, budget and a budget narrative are attached. Please contact Jocelyn Milner (jocelyn.milner@wisc.edu) with any questions about these materials. Thank you.

Attachments

Copies:

Rebecca Blank, Chancellor
Jake Blanchard, Executive Associate Dean, College of Engineering
Lee DeBaille, Program Director, College of Engineering
Laurent Heller, Vice Chancellor for Finance and Administration
Jennifer Klippel, Director of UW-Madison Budget Office
Jocelyn Milner, Vice Provost, Academic Planning and Institutional Research
Ian Robertson, Dean of College of Engineering
Diane Treis Rusk, Director of Undergraduate Education, UW System Administration
Carleen Vande Zande, Associate Vice President of Academic Programs and Educational Innovation, UW System Administration

Office of the Provost and Vice Chancellor for Academic Affairs

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Program Authorization (Implementation)
Master of Science in Strategic Management
UW-Platteville

EDUCATION COMMITTEE

Resolution I.1.e.:

That, upon the recommendation of the Chancellor of UW-Platteville and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Master of Science in Strategic Management at the University of Wisconsin-Platteville.

**NEW PROGRAM AUTHORIZATION
MASTER OF SCIENCE IN STRATEGIC MANAGEMENT
AT UW-PLATTEVILLE**

EXECUTIVE SUMMARY

BACKGROUND

The University of Wisconsin-Platteville submits this request to establish a Master of Science in Strategic Management. This proposal is presented in accord with the procedures outlined in Academic Planning and Program Review (SYS 102, revised July 2016, available at <https://www.wisconsin.edu/program-planning/>).

REQUESTED ACTION

Adoption of Resolution I.1.d., approving the implementation of the Master of Science in Strategic Management at the University of Wisconsin-Platteville.

DISCUSSION

Program Description. The University of Wisconsin (UW)-Platteville proposes to establish a Master of Science (M.S.) in Strategic Management (MSSM). The program is designed for working, mid-career professionals who seek an advanced management degree for promotion in their organizations, and it is responsive to industry's continued need for employees with advanced management education. The growing complexities in organizations suggest that a bachelor's degree in business is an entry point for organizational management, but not sufficient to fully maximize a firm's value to its stakeholders. The contemporary business environment requires employees with advanced training in organization science. Organizations are continually seeking specialized expertise in scanning and integrating for value-capturing activities across the entire firm.

The MSSM is a specialist degree, which prepares students to systematically evaluate a firm's external and internal environments to produce a range of responses that capture value for the company. Upon completion of the program, students will be able to: evaluate a firm's internal and external environment to identify opportunities for value creation; align resources, capabilities, and strategy to create sustainable or durable advantage; apply a wide range of leadership approaches to influence employees toward a common goal; and design organizational systems to create and capture value for a firm. Hence, the MSSM differs from an MBA, which teaches broad principles of administration, as the focal point of all organizational activities, resource configurations, capabilities, and processes.

Mission. The Master of Science in Strategic Management will contribute directly to the mission of the UW System by providing graduate-level management expertise for those seeking an

alternative to the Master of Business Administration degree, and by emphasizing that a firm's value comes in many forms. The program also contributes to the mission of UW-Platteville, the School of Business, and the Center for Distance Learning by providing a high-quality program that serves management-minded, mid-career professionals who, through time or location constraints, are unable to pursue further academic study and career preparation. In addition, the program supports major themes in the institution's Strategic Plan, including reaffirming and extending the 40-year commitment to place-bound students, and improving relationships with industry through distinctive and targeted programming.

Market and Student Demand. Market data indicates that the specialist management and general management markets are large, and that there is rapidly growing interest in specialized management programs. Jobs that require a master's degree for entry are expected to increase by 14% through the year 2024. In response, student and employer demand for graduate management programs continues to increase. Graduate management program enrollments have increased by 13% over the last five years, and annually comprise 27% of all business and management degrees conferred. Undergraduate management programs encompass 72% of enrollments, providing a healthy stock of future enrollments at the graduate level.

As previously noted, the annual enrollment growth rate of general graduate management programs is very low compared to enrollment growth in specialized management programs. This strongly suggests that students are increasingly seeking alternatives to the traditional MBA. The MSSM program seeks to position on the edge of both of these markets; it is a specialist degree with noteworthy appeal to generalists. The aim of the MSSM is to position students to enter senior leadership roles within organizations and organizational consulting. The U.S. Bureau of Labor Statistics projects these positions to grow faster than average (10-14%) through the year 2026.

Credit Load and Tuition. The Strategic Management program is a 30-credit, online graduate management program that comprises 24 core credits and 6 credits in one of three emphasis areas that include Strategic Marketing, Strategic Human Resources, and Strategic Sourcing. All students will be required to complete a capstone experience as part of their final course in the program. The large majority of students will progress through the program on a part-time basis. This equates to two courses per regular term (i.e., 6 credits) and one course per summer term (i.e., 3 credits). At that rate, the average time to completion will be 24 months. Because the program has few prerequisites, a full-time student could complete the program in 15 months.

For students enrolled in the Strategic Management program, UW-Platteville's standard online graduate tuition rate will apply. For the current academic year, tuition and technology fees for all students (regardless of residency) are \$695 per credit. Online students do not pay segregated fees. Students can expect to pay approximately \$200 per three-credit course for textbooks. Similar to other online graduate management programs at UW-Platteville, the Strategic Management program will be operated utilizing a service-based pricing model.

RELATED REGENT AND UW SYSTEM POLICIES

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

UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting.

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
MASTER OF SCIENCE IN STRATEGIC MANAGEMENT
AT UW-PLATTEVILLE
PREPARED BY UW-PLATTEVILLE**

ABSTRACT

The University of Wisconsin (UW)-Platteville proposes to establish a Master of Science (M.S.) in Strategic Management (MSSM). The development of the program responds to industry's continued need for employees with advanced management education. The program will provide students with a graduate management degree that is an alternative to the Master of Business Administration (MBA). Upon completion of the program, graduates will be better equipped to identify, create, and capture value for an organization. The program differs from an MBA, which teaches broad principles of administration, by making value, in all of its forms (e.g., human, financial, social, environmental, etc.), as the focal point of all organizational activities, resource configurations, capabilities, and processes. The program will be comprised of 30 credits in total, of which 24 credits will be core requirements and 6 credits will be within one of three emphasis areas: Strategic Marketing, Strategic Human Resources, or Strategic Sourcing.

PROGRAM IDENTIFICATION

Institution Name

University of Wisconsin-Platteville

Title of Proposed Program

Strategic Management

Degree/Major Designations

Master of Science

Mode of Delivery

Single institution, 100% online

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. By the end of year five, the program is expected to have an annual total enrollment of 115 students and will have graduated 67 students since the inception of the program. The average student retention rate is projected to be 84 to 86%, or 14 to 15% stop-outs in the table below, based on retention in UW-Platteville's three other online graduate business programs. The change in growth rate for new student headcount in year two reflects UW-Platteville's experience with starting new programs. Year one has a higher new influx because it efficiently taps pent-up demand whereas year two starts requiring more sophisticated marketing efforts. Starting in year three, marketing efforts will begin to gain traction, and the growth rate will accelerate.

Table 1: Five-Year Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	24	20	33	42	48
Less Stop-Outs	4	3	5	6	7
Continuing Students	---	20	37	54	74
Total Enrollment	20	40	65	90	115
Graduating Students	---	3	11	16	37

Tuition Structure

For students enrolled in the Strategic Management program, UW-Platteville's standard online graduate tuition rate will apply. For the current academic year, tuition and technology fees for all students (regardless of residency) are \$695 per credit. Online students do not pay segregated fees. Students can expect to pay approximately \$200 per three-credit course for textbooks. Similar to other online graduate management programs at UW-Platteville, the Strategic Management program will be operated utilizing a service-based pricing model.

Department or Functional Equivalent

School of Business

College, School, or Functional Equivalent

College of Business, Industry, Life Science, and Agriculture

Proposed Date of Implementation

Spring 2020

DESCRIPTION OF PROGRAM**Overview of the Program**

The Strategic Management program is a 30-credit, online graduate management program that is comprised of 24 core credits and 6 credits in one of three emphasis areas which include Strategic Marketing, Strategic Human Resources, and Strategic Sourcing. All students will be required to complete a capstone experience as part of their final course in the program. The program is designed for working, mid-career professionals who seek an advanced management degree for promotion in their organizations.

Student Learning Outcomes and Program Objectives

Strategic management is the process of identifying and capturing a unique and valuable market position. The M.S. in Strategic Management prepares students to systematically evaluate the firm's external and internal environments to produce a range of responses that capture value for the firm. The program differs from an MBA, which teaches broad principles of administration, by making value, in all of its forms (e.g., financial, human, social, environmental, etc.), as the focal point of all organizational activities, resource configurations, capabilities, and processes. Thus, the MSSM is a specialist degree. Upon completion of the program, students will be able to:

1. Evaluate the firm's internal and external environment to identify opportunities for value creation.
2. Align resources, capabilities, and strategy to create sustainable or durable advantage.
3. Apply a wide range of leadership approaches to influence employees toward a common goal.
4. Design organizational systems to create and capture value for the firm.

Program Requirements and Curriculum

The MSSM program will follow the existing admission guidelines set forth by the UW-Platteville faculty. To be admitted in good standing, applicants must have an overall undergraduate GPA of 2.75 or higher or at least a 2.90 on the last 60 credits from the bachelor's degree-granting institution of the applicant.

Table 2 illustrates the program curriculum for the proposed program. The program is comprised of 24 credits from the major core requirements and 6 credits from one of three emphasis areas. Students will be required to select one emphasis area.

Table 2: Master of Science in Strategic Management Program Curriculum

Major Core Requirements	
BUSADMIN 7000: Introduction to Strategic Management	3 credits
BUSADMIN 5530: Organizational Behavior	3 credits
OCL 7330: Organizational Change Leadership	3 credits
OCL 7500: Organizational Development	3 credits
ACCTING 7210: Applied Accounting	3 credits
ISCM 7100: International Supply Chain Management	3 credits
BUSADMIN 6630: Marketing Management	3 credits
BUSADMIN 7840: Strategic Management Capstone	3 credits
Emphasis Area 1 – Strategic Human Resources (choose two courses)	
OCL 7700: Strategic Human Resources (required)	3 credits
OCL 7710: Current Issues in Human Resources	3 credits
BUSADMIN 5500: Employee Training and Development	3 credits
BUSADMIN 6200: Employee Recruitment and Selection	3 credits
Emphasis Area 2 – Strategic Marketing (choose two courses)	
BUSADMIN 5740: Consumer Behavior	3 credits
BUSADMIN 7150: eMarketing Applications	3 credits
ISCM 7700: Customer Relationship Management	3 credits
Emphasis Area 3 – Strategic Sourcing (choose two courses)	
ISCM 7610: Outsourcing	3 credits
ISCM 7520: Warehousing and Distribution Management	3 credits
BUSADMIN 6160: Purchasing Management	3 credits

Assessment of Outcomes and Objectives

The program will seek continuous improvement through multiple approaches. First, the program will receive input from a seven-member industry advisory board that meets twice

annually. The board is comprised of representatives from core firms in the tristate region and two members from the broader service area. Second, the program will be included in the standard program review cycle conducted by the Academic Planning Council and the Graduate Council. This process examines mission-fit, resource efficiency, academic quality, and service quality for both core and historically marginalized groups. Third, the faculty of the School of Business Curriculum Committee and the program's academic director will establish an assessment plan and ongoing data collection procedures to inform revision of the program and evaluate the program's performance at meeting its stated learning objectives. Lastly, as part of a larger effort to accredit all of the institution's business programs, the faculty and program leaders intend to pursue accreditation through the Association to Advance Collegiate Schools of Business (AACSB). The initial application for accreditation for the School of Business is currently under review by AACSB.

Diversity

UW-Platteville and the School of Business strive to foster an environment of inclusive excellence and have resourced major initiatives in that regard. Specifically, the university recently restructured its diversity initiatives and multiple offices to provide improved support for students, faculty, and staff. This includes the position creation and appointment of a Chief Diversity Officer, Office of Multicultural Student Affairs, Center for Gender and Sexuality, and Office of Non-Traditional and Veteran Student Affairs.

The goal of the proposed program is to identify, nurture, and capture value in all of its forms. In the 21st century organization, much of that value is a product of diverse perspectives, ideas, and talent. Accordingly, multiple courses in the program will incorporate themes related to diversity regarding human resource management and talent development, pursuing new markets, and organizational partnerships across cultural and national boundaries.

The UW-Platteville online program model was established, in part, to increase access to higher education for primarily nontraditional students and to maximize the educational benefits of diversity. Many students from underrepresented minority groups, first-generation Americans, first-generation college students, and low-income students are included in the definition of nontraditional students. Nontraditional students may have family or work responsibilities that prevent them from attending school in traditional formats. The online delivery format will provide opportunities to those students who are time and place bound, and do not reside within close proximity to an existing UW institution. The program design recognizes that nontraditional students come to the learning environment from diverse backgrounds, with unique knowledge and experiences, looking for opportunities to share that knowledge with others. The strength of this program and the success of its students is, in large part, based on UW-Platteville's ability to attract and retain a diverse adult student audience.

The program coordinator for the M.S. in Strategic Management program employed by UW-Platteville will work with the marketing department to conduct outreach, working with employers to encourage and support the education of their employees, especially focusing on underrepresented minorities. In addition, the program advisory board will provide support in this area by helping the program extend its reach to diverse prospective students and communities.

Ensuring that diverse student populations enter the M.S. in Strategic Management program is important, but equally important is providing the support services that enable all students to feel comfortable and to succeed. The Center for Distance Learning (CDL) at UW-Platteville will have academic support staff who work closely with all students to identify barriers to their success and either help them overcome those barriers directly or point them to home campus and other resources that will be of assistance. The CDL will maintain online student environments that will allow individuals from diverse ethnic backgrounds to connect with other students over both cultural similarities and programmatic interests to help build points of commonality and understanding. Social media opportunities for student connection will be made available through Facebook, Twitter, and LinkedIn, to name a few. Simply put, an essential goal of this program is to increase both the access for diverse audiences to this degree and the success of those students once they enter the program.

While the proposed degree does not project a significant number of new faculty and staff, the CDL and the program coordinator will be committed to recruiting a culturally diverse community. The program will work toward achieving equity in the gender distribution of faculty, and faculty of color will be encouraged to participate in this program.

Projected Time to Degree

The large majority of students will progress through the program on a part-time basis. This equates to two courses per regular term (i.e., 6 credits) and one course per summer term (i.e., 3 credits). At that rate, the average time to completion will be 24 months. Because the program has few prerequisites, a full-time student could complete the program in 15 months.

Program Review

The program will follow the review cycle established by the faculty for other programs at UW-Platteville. Specifically, each program is reviewed in-depth by the Academic Planning Commission (APC) on a five-year cycle. In addition to APC, the faculty of the School Curriculum Committee will ensure that assessments are conducted annually and that the program's industry advisory board is afforded the opportunity to offer insights into the program's effectiveness and direction.

Accreditation

The program will seek accreditation from the Association to Advance Collegiate Schools of Business (AACSB). The initial accreditation procedures require a detailed self-study and site visit by AACSB representatives. Once accredited, AACSB requires a detailed self-study every 10 years to ensure innovation and attainment of the program's stated learning outcomes.

Since the program is a Master of Science program and UW-Platteville is already approved by the Higher Learning Commission to offer Master of Science degrees in a business discipline, the program will not require additional new approval by the Higher Learning Commission.

JUSTIFICATION

Rationale and Relation to Mission

The Strategic Management program contributes to the mission of the university, the School of Business, and the Center for Distance Learning by providing a high-quality program that serves management-minded, mid-career professionals who, through time or location constraints, are unable to pursue further academic study and career preparation. The overarching goal of the program is to further develop professionals who can effectively contribute to 21st century commerce and, in turn, develop the state's and region's economic vitality. Multiple sources advocate that hyper-competition and the rapidly changing business environment demand leaders who are well-versed in management science and that a bachelor's degree may not be fully sufficient to maximize a firm's value to all of its constituencies.^{1,2} The conceptualization as a Master of Science degree fits well with UW-Platteville's focus (at the graduate level) on technical degrees and complements the existing array of specialized graduate management programs. The Master of Science in Strategic Management will contribute directly to the mission of the UW System by providing graduate-level management expertise for those seeking an alternative to the Master of Business Administration degree and emphasizing that a firm's value comes in many forms.

The proposed program at UW-Platteville supports major themes in the institution's Strategic Plan. These major themes include reaffirming and extending the 40-year commitment to place-bound students and improving relationships with industry through distinctive and targeted programming.

Institutional Program Array

UW-Platteville currently offers an array of graduate Master of Science programs in management. Specifically, the array is comprised of M.S. programs in integrated supply chain management, project management, organizational change leadership, and engineering, with an emphasis in engineering management. Each of the existing programs is either accredited by or in the process of seeking accreditation with the relevant body for professional standards. The proposed Strategic Management program will significantly draw from coursework within each of these existing programs to minimize costs and leverage existing strengths within each discipline. Each of the existing programs are considered leaders in their field by notable sources so it is both valuable and efficient to extend expertise to this new market that the Strategic Management program will engage.

Other Programs in the University of Wisconsin System

The program was conceptualized as a Master of Science in light of declining student interest in general management programs.² Enrollments in general management graduate programs grew 3% annually over the last five years whereas enrollment in specialized graduate management programs posted a nearly 30% increase. The MSSM seeks to position along the

¹ U.S. Bureau of Labor Statistics. (2016). Career outlook: Business careers with high pay: <https://www.bls.gov/careeroutlook/2016/article/high-paying-business-careers.htm>

² AACSB. (2018). Business school enrollment trends: Undergraduate, generalist master's, specialized master's, and doctoral programs. <https://www.aacsb.edu/blog/2018/january/business-school-enrollment-trends-undergraduate-masters-doctoral-programs>

margin between students who desire an MBA and a specialized/technical management degree. In that regard, the proposed program could receive some competitive pressure from MBA programs but, generally, will seek to avoid MBA competition. Multiple campuses in the UW System offer MBAs, both on campus and in the online format. These include UW-Eau Claire, UW-La Crosse, UW-Madison, UW-Milwaukee, UW-Oshkosh, UW-Parkside, UW-River Falls, UW-Stevens Point, and UW-Whitewater. Many of these programs are MBAs, with specializations, but no programs are aimed specifically at strategic management. Two UW institutions, other than UW-Platteville, offer Master of Science programs in management, but neither are offered online and, again, no emphasis is placed upon strategic management. The missing emphasis on strategic management is noteworthy considering that strategy is the second-highest, potential specialist area behind international management.³

Need as Suggested by Current Student Demand

The market data indicates that the specialist management and general management markets are quite large and that there is rapidly growing interest in specialized management programs.⁴ As previously noted, the annual enrollment growth rate of general graduate management programs is very low compared to enrollment growth in specialized management programs. This strongly suggests that students are increasingly seeking alternatives to the traditional MBA. The MSSM program seeks to position on the edge of both of these markets; it is a specialist degree with noteworthy appeal to generalists. The aim of the MSSM is to position students to enter senior leadership roles within organizations and organizational consulting. The U.S. Bureau of Labor Statistics⁵ projects these positions to grow faster than average (10-14%) through the year 2026.

Need as Suggested by Market Demand

The contemporary business environment requires employees with advanced training in organization science. Organizations are continually seeking specialized expertise in scanning and integrating for value-capturing activities across the entire firm. The growing complexities in organizations suggest that a bachelor's degree in business is an entry point for organizational management but not sufficient to fully maximize a firm's value to its stakeholders. Jobs that require a master's degree for entry are expected to increase by 14% through the year 2024.⁵ In response, student and employer demand for graduate management programs continues to increase. Graduate management program enrollments have increased by 13% over the last five years and annually comprise 27% of all business and management degrees conferred.⁴ Undergraduate management programs encompass 72% of enrollments, providing a healthy stock of future enrollments at the graduate level.

³ Princeton Review. (2018). Most in-demand MBA specializations.

<https://www.princetonreview.com/business-school-advice/popular-mba-specializations>

⁴ AACSB. (2018). Business school enrollment trends: Undergraduate, generalist master's, specialized master's, and doctoral programs. <https://www.aacsb.edu/blog/2018/january/business-school-enrollment-trends-undergraduate-masters-doctoral-programs>

⁵ U.S. Bureau of Labor Statistics. (2016). Career outlook: Business careers with high pay: <https://www.bls.gov/careeroutlook/2016/article/high-paying-business-careers.htm>

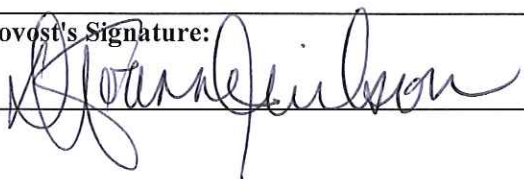
University of Wisconsin - Platteville
Cost and Revenue Projections For Newly Proposed Program

	Items	Projections				
		2020	2021	2022	2023	2024
		Year 1	Year 2	Year 3	Year 4	Year 5
I	Enrollment (New Student) Headcount	24	20	33	42	48
	Enrollment (Continuing Student) Headcount	0	20	37	54	74
	Enrollment (New Student) FTE	12	10	16	21	24
	Enrollment (Continuing Student) FTE	0	10	18	27	37
II	Total New Credit Hours	360	300	495	630	720
	Existing Credit Hours	0	300	555	810	1110
III	FTE of New Faculty/Instructional Staff	0.5	0.5	0.5	1	1.5
	FTE of Current Fac/IAS	0	0.5	1	1	1
	FTE of New Admin Staff	0.25	0	0	0.25	0
	FTE Current Admin Staff	0	0.25	0.25	0.25	0.5
IV	Revenues					
	<i>From Tuition</i>	\$250,200	\$417,000	\$729,750	\$1,000,800	\$1,271,850
	<i>From Fees</i>	\$0	\$0	\$0	\$0	\$0
	<i>Program Revenue (Grants)</i>	\$0	\$0	\$0	\$0	\$0
	<i>Program Revenue - Other</i>	\$0	\$0	\$0	\$0	\$0
	<i>GPR (re)allocation</i>	\$0	\$0	\$0	\$0	\$0
	Total New Revenue	\$250,200	\$417,000	\$729,750	\$1,000,800	\$1,271,850
V	Expenses					
	Salaries plus Fringes					
	<i>Faculty/Instructional Staff (pays per enrollment)</i>	\$46,368	\$77,280	\$135,240	\$185,472	\$235,704
	<i>Other Staff</i>	\$12,000	\$12,000	\$12,000	\$24,000	\$24,000
	Other Expenses					
	<i>Facilities</i>	\$0	\$0	\$0	\$0	\$0
	<i>Equipment</i>	\$0	\$0	\$0	\$0	\$0
	<i>Admin and Marketing</i>	\$113,400	\$170,100	\$245,205	\$324,000	\$297,675
	<i>Other (please list)</i>					
	Total Expenses	\$171,768	\$259,380	\$392,445	\$533,472	\$557,379
VI	Net Revenue	\$78,432	\$157,620	\$337,305	\$467,328	\$714,471

Submit budget narrative in MS Word Format

Provost's Signature:

Date:



July 1, 2019

UNIVERSITY OF WISCONSIN-PLATTEVILLE
COST AND REVENUE PROJECTIONS NARRATIVE
MASTER OF SCIENCE IN STRATEGIC MANAGEMENT

Introduction

The University of Wisconsin-Platteville proposes to establish a Master of Science (M.S.) in Strategic Management in response to industry's continued need for employees with advanced management education. Several long-standing practices for online graduate programs at UW-Platteville have a profound positive impact on the proposed program's budget model. First, the proposed program is offered using service-based pricing. Second, instructional wages are paid to faculty and instructors on a per-student basis of \$280 per student per three-credit course. This keeps the cost of instruction precisely linked to revenues generated for the program. Third, instructional FTE can be seamlessly moved between the campus and online environments to accommodate changes in instructional needs and, in turn, instructional budgeting.

Section I – Enrollment

The retention rate for students from the first to second year of the program is expected to be approximately 85%, based on retention in UW-Platteville's other online graduate business programs. Student FTE projections were based on the headcount of students taking five courses per year (2 x fall, 2 x spring, 1 x summer). The change in growth rate for new student headcount in Year 2 reflects experience with starting new programs. Year 1 has a higher new influx because it efficiently taps pent-up demand whereas Year 2 starts requiring more sophisticated marketing efforts. Starting in Year 3, marketing efforts will begin to gain traction, and the growth rate will accelerate.

Section II – Credit Hours

The credit hours were calculated using the headcount times the number of courses each student would take (on average) per year (5 courses per year, as described under Section I - Enrollment). The result was then multiplied times three because each course in the program is three credit hours.

Section III – Faculty and Staff Appointments

The number of instructional FTE was calculated by taking the number of credit hours and dividing by three, to determine the total course enrollments since there are three credits in each course. The resulting number was further divided by 30 to account for an assumed class size of 30 students. For example, the 360 student credit hours in Year 1 equates to 120 course enrollments, which yield four sections of students that would require instructional coverage. Each FTE assumes a 4-4 teaching load per term in fall and spring semesters.

In addition, it is anticipated that 0.25 FTE of the program coordinator duties will be assigned to existing staff for the first three years of the program. In Years 4 and 5, UW-Platteville anticipates adding an additional 0.25 FTE for program coordination.

Section IV – Program Revenues

The program will be entirely funded through tuition revenues. Tuition uses the existing graduate online tuition at \$2,085 per course (i.e., \$695 per credit), regardless of residency. The revenue projections are based on each student taking five courses per year.

Section V – Program Expenses

Instructional wages for the program will be precisely linked to the number of students that the instructor is teaching at a rate of \$280 per student. Fringes were calculated by adding 38% to the forecasted instructional costs. Technology support, advising, and marketing were also forecasted based on historical budgeted amounts for the other M.S. programs.

It is anticipated that 0.25 FTE of the program coordinator duties will be assigned to existing staff for the first three years of the program, at a cost to the program of \$12,000 (specifically, \$7,440 for salary and \$4,560 for fringe). In Years 4 and 5, UW-Platteville anticipates adding an additional 0.25 FTE for program coordination, for a total cost to the program of \$24,000.

Section VI – Net Revenue

In accordance with past graduate programs, positive net revenue is reinvested for faculty professional development, institutional memberships (e.g., Association to Advance Collegiate Schools of Business, SAP University Alliance), support for low-margin but high-need campus programs (e.g., STEM, Entrepreneurship, Internships), and other initiatives.

May 16, 2019

President Ray Cross
University of Wisconsin System
1720 Van Hise Hall
1220 Linden Dr
Madison, WI 53706

Re: Provost Letter of Commitment for Implementation of a Master in Science in Strategic Management (100% distance delivery)

Dear President Cross:

The University of Wisconsin-Platteville is pleased to request authorization to implement a Master of Science in Strategic Management. The Notice of Intent for this major was circulated to UW-System campuses in March, 2019 and was met with support. The program has been unanimously approved by all governance bodies including the budget commission, academic planning council, school of graduate studies, and faculty senate.

We are excited to offer this opportunity to students at a distance. This program will serve mid-career adults who are seeking advancement in their profession. The degree program will provide intensive study in the areas of management, strategy, organizational systems, and leadership. The program aligns with our current array of online associate, bachelor, and masters level business programs and UW-Platteville's mission to deliver quality education to time and place-bound students.

The School of Business has the necessary resources to offer and sustain this program which will operate on a cost-recovery basis. The program will be assessed according to the university's governance procedures.

As Provost, I endorse this program and recommend it to the Board of Regents for adoption.

Sincerely



Dr. D. Joanne Wilson
Provost & Vice Chancellor
for Academic Affairs

cc: Dr. Carleen Vande Zande, Associate Vice President of Academic Programs
and Educational Innovation

Academic Affairs

Program Authorization (Implementation)
Bachelor of Science in Biomedical and Health Science
UW-River Falls

EDUCATION COMMITTEE

Resolution I.1.f.(1):

That, upon the recommendation of the Chancellor of UW-River Falls and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Biomedical and Health Science at the University of Wisconsin-River Falls.

**NEW PROGRAM AUTHORIZATION
BACHELOR OF SCIENCE IN BIOMEDICAL AND HEALTH SCIENCE
AT UW-RIVER FALLS**

EXECUTIVE SUMMARY

BACKGROUND

The University of Wisconsin-River Falls submits this request to establish a Bachelor of Science in Biomedical and Health Science. This proposal is presented in accord with the procedures outlined in Academic Planning and Program Review (SYS 102, revised July 2016, available at <https://www.wisconsin.edu/program-planning/>).

REQUESTED ACTION

Adoption of Resolution I.1.f.(1), approving the implementation of the Bachelor of Science in Biomedical and Health Science at the University of Wisconsin-River Falls.

DISCUSSION

Program Description. The University of Wisconsin (UW)-River Falls proposes to establish a Bachelor of Science (B.S.) in Biomedical and Health Science. This program responds to a growing demand for students prepared for careers in the biomedical and health sciences. UW-River Falls has over 17 years of experience offering a biology major with an emphasis in biomedical sciences. The Bachelor of Science degree in Biomedical and Health Science proposes to reclassify the existing emphasis within the current biology major to a stand-alone degree program. Currently, there are about 300 students enrolled in the emphasis, and approximately 1,100 students have graduated with the emphasis since it was made available in 2001.

The program will provide students with a solid foundation in understanding human physiology, health and disease. Graduates will be better equipped to apply for medical schools, physician assistant programs, dental school, pharmacy school and other professional schools. Graduates will also be well equipped to enter the job market in many fast-growing professions related to healthcare and/or research in the life sciences.

The proposed program provides an opportunity to continue supporting the institution's innovation and partnerships strategic goal. Located in the St. Croix Valley, 30 minutes from the Minneapolis-St. Paul metropolitan area, many partnerships have been established over the years and continue to flourish. Currently, the Department of Biology works collaboratively with various scientific entities, including Marshfield Clinic, Wisconsin; Academia Sinica, Taiwan; University of Minnesota Stem Cell Center, Minnesota; China Medical University, China; BRTI Life Sciences, Minnesota; among others. Establishing a program directed at educating

biomedical and healthcare professionals for the region will also demonstrate the institution's commitment to civic and industry leaders.

Mission. The University of Wisconsin-River Falls mission statement states, "Our mission is to help prepare students to be productive, creative, ethical, engaged citizens and leaders with an informed global perspective." (<https://www.uwrf.edu/AboutUs/vision.cfm>) UW-River Falls' Strategic Plan supports the university's mission via three primary themes: distinctive academic excellence, global education and engagement, and innovation and partnerships.

The proposed Bachelor of Science degree in Biomedical and Health Science supports the institutional mission of University of Wisconsin-River Falls by providing an education focused on developing practical skills and knowledge in a burgeoning field through innovative science pedagogy and a liberal arts emphasis. Moreover, as an institution, the University of Wisconsin-River Falls provides students with opportunities for global education and engagement. To this end, the Department of Biology has several global perspective courses that are either study abroad or on-campus. The department provides several scholarships to students interested in studying abroad, specifically for scientific research, and faculty are actively engaged globally in scholarly activity.

Student and Market Demand. At the present time, approximately 70% of UW-River Falls biology majors choose the current Biomedical Science option over the Field Biology and General Biology options, demonstrating student interest in the proposed program. A degree in biomedical sciences prepares students for a wide variety of jobs and career paths. These careers include medicine, dentistry, optometry, pharmacy, physician assistant studies, physical therapy, occupational therapy, chiropractic, veterinary medicine, genetics counseling, as well as post-graduate training in surgical first assistant, respiratory therapy, and other allied health careers, all of which require an undergraduate degree with specific prerequisite courses.

Market demand suggests that the proposed program will be successful in attracting students to the University of Wisconsin-River Falls. According to the U.S. Bureau of Labor Statistics, these professional health careers all have projected growth rates of 18 to 37% through 2026. Through articulation agreements between the Department of Biology and the Mayo School of Health Sciences, some graduates of the Biomedical Sciences option have earned certifications in medical lab science (projected growth 13%), echocardiography (projected growth of 17%), and sonography and radiography (17% and 13%, respectively).

Credit Load and Tuition. The program will comprise 120 credits to include 44 credits in the major, several supporting-course credits (22 credits), and 40 general education credits. The projected time to degree for full-time students is four years. Students will have to take, on average, 15 credits per semester to earn the degree in four years, and there are also summer and January term options to keep a student on track.

For students enrolled in the B.S. in Biomedical and Health Science program, standard tuition and fee rates will apply. For the current academic year (2019-20), tuition totals \$267.85 per credit for Wisconsin residents and \$303.96 for Minnesota residents. It is anticipated that approximately half of the students enrolled in the proposed program will be from Wisconsin, and half will be

from Minnesota. Subsequently, an average tuition of \$285.90 per credit is used in the calculations. The major has 44 credits, and the calculations assume that students complete approximately 25% of those credits each year.

RELATED REGENT AND UW SYSTEM POLICIES

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

UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting.

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
BACHELOR OF SCIENCE IN BIOMEDICAL AND HEALTH SCIENCE
AT UW-RIVER FALLS
PREPARED BY UW-RIVER FALLS**

ABSTRACT

The University of Wisconsin (UW)-River Falls proposes to establish a Bachelor of Science (B.S.) in Biomedical and Health Science. The development of this program responds to a growing demand for students prepared for careers in the biomedical and health sciences. The program will provide students with a solid foundation in understanding human physiology, health and disease. Graduates will be better equipped to apply for medical schools, physician assistant programs, dental school, pharmacy school and other professional schools. Graduates will also be well equipped to enter the job market in many fast-growing professions related to healthcare and/or research in the life sciences. The program will be comprised of 120 credits, which will include 44 credits in the major, several supporting-course credits (22 credits), and 40 general education credits.

PROGRAM IDENTIFICATION

Institution Name

University of Wisconsin-River Falls

Title of Proposed Program

Biomedical and Health Science

Degree/Major Designations

Bachelor of Science

Mode of Delivery

Single institution; on-campus, face-to-face

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. By the end of year five, it is expected that 280 students will have enrolled in the program and 72 students will have graduated from the program. The average student retention rate within the program is projected to be 65% for students entering their second year, and 90% for students continuing in the program. These retention rates are based on enrollment data from 2012 to 2016, for the Department of Biology's current Biomedical Science option at UW-River Falls.

University-level retention rates have ranged typically from approximately 69% to 75% over the past decade, counting students who have both kept or changed their majors. University data over the past decade also show that retention within programs has ranged from approximately 62% to 66%. In that context, the projected 65% retention rate of students within the program is consistent with university data for programs overall.

Table 1: Five-Year Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	40	60	60	60	60
Continuing Students	0	26	63	95	111
Total Enrollment	40	86	123	155	171
Graduating Students	0	0	0	15	51

Tuition Structure

For students enrolled in the B.S. in Biomedical and Health Science program, standard tuition and fee rates will apply. For the current academic year (2019-20), tuition totals \$267.85 per credit for Wisconsin residents and \$303.96 for Minnesota residents. It is anticipated that approximately half of the students enrolled in the proposed program will be from Wisconsin, and half will be from Minnesota. Subsequently, an average tuition of \$285.90 per credit is used in the calculations. The major has 44 credits, and the calculations assume that students complete approximately 25% of those credits each year.

Department or Functional Equivalent

The proposed program will reside within the Department of Biology.

College, School, or Functional Equivalent

The proposed program will be housed within the College of Arts and Sciences.

Proposed Date of Implementation

September 2019

DESCRIPTION OF PROGRAM**Overview of the Program**

The program will be comprised of 120 credits, which will include credits in the major (44), several supporting-course credits (22), and general education credits (40).

Student Learning Outcomes and Program Objectives

Student learning outcomes for the proposed Biomedical and Health Science major are listed below. The outcomes are current and align with professional needs. They include:

1. Demonstrate understanding of core concepts in biology and biomedical sciences.
2. Demonstrate knowledge of important concepts in biochemical and physiological functions, anatomical and histological structures, epidemiology and public health, and pharmacology.
3. Learn how to maintain and promote human and animal health with knowledge of disease, immunology, and cellular and molecular biology.
4. Use quantitative reasoning and analyses to interpret biological data.
5. Apply the process of science through experimental and laboratory or field experiences.
6. Communicate effectively, collaborate with other disciplines, and exhibit cross-cultural awareness related to health and medicine, including in global issues.

7. Understand the relationship between science and society, including the relevance of social contexts to biological problems and the ethical implications of biomedical research and health.

Program Requirements and Curriculum

Students must maintain a 2.25 major-course GPA to remain in the program. Table 2 illustrates the program curriculum for the proposed program. The program requirements are comprised of 44 credits, of which 29 credits are from a required core group of classes and 15 are upper-division electives.

Table 2: B.S. in Biomedical and Health Science Program Curriculum

A. General education courses and college courses required for graduation:

American Cultural Diversity	3 credits
Global Perspective	3 credits
Communication-Writing	3 credits
Communication-Speaking	3 credits
Communication-Advanced	3 credits
Humanities and Fine Arts	6 credits
Social and Behavioral Sciences	6 credits
College of Arts and Science – First Year Experience	3 credits
Ethical Citizenship	3 credits
Personal Wellness	1 credit
Scientific Inquiry	6 credits
Total Credits (A)	40 credits

B. Program prerequisites or support courses:

Chemistry supporting courses (minimum 10 credits)

One-year of chemistry courses is required.

CHEM 130	Intro. to Organic Chemistry	5 credits
CHEM 233	Foundations of Organic Chemistry	5 credits

or

CHEM 111	General Chemistry 1	4 credits
CHEM 116	General Chemistry 1 Lab	1 credit
CHEM 112	General Chemistry 2	4 credits
CHEM 117	General Chemistry 2 Lab	1 credit

PHYS 121	Algebra-based Physics (or Calculus-based)	5 credits
MATH 149	Precalculus (or higher math)	4 credits
MATH 231	Biostatistics	3 credits

Total credits (B) 22 credits

C. Academic program or major core and elective course requirements:

Program Core Courses (29 credits)

BIOL 110	Freshman Colloquium	1 credit
BIOL 103	Biological Evolution	3 credits
BIOL 160	General Biology-Freshman Research	4 credits
BIOL 230	General Zoology	3 credits

BIOL 240	Cellular and Molecular Biology	3 credits
BIOL 324	Microbiology	4 credits
BIOL 341	Anatomy and Physiology I	4 credits
BIOL 342	Anatomy and Physiology II	4 credits
BIOL 350	Genetics	3 credits
Program Elective Courses (15 credits)		
BIOL 195	Freshman Research Experience	3 credits
BIOL 210	Botany	3 credits
BIOL 243	Intro. to Biological Greek and Latin	2 credits
BIOL 295	Lab Research Experiences	2 credits
BIOL 305	App. In Molecular Biology	3 credits
BIOL 307	Human Heredity	2 credits
BIOL 325	Medical Microbiology	3 credits
BIOL 345	Immunology	3 credits
BIOL 351	Epigenetics	3 credits
BIOL 353	Histology	3 credits
BIOL 356	Neurobiology	3 credits
BIOL 364	Developmental Biology	3 credits
BIOL 365	Cancer Biology	3 credits
BIOL 451	Molecular Biology	4 credits
BIOL 453	Virology	3 credits
BIOL 463	Animal Cell Culture	3 credits
BIOL 464	Stem Cells and Regenerative Medicine	3 credits
Total Program/Major Credits (C)		44 credits
D. General Electives		14 credits
Total Credits		120 credits

Assessment of Outcomes and Objectives

UW-River Falls requires that departments perform annual assessment of programs and provides departments with rubrics addressing specific assessment requirements. Thus, assessment of the program will be performed by the Department of Biology on a yearly basis. In addition, a comprehensive assessment using university assessment processes and formats will be performed every three years, summarizing all data for a program prioritization review and, every sixth year, an institutional Program Audit Review (PAR).

- Integrative direct assessments: As part of its direct assessment, the program will electronically maintain performance data for each of its courses. Aggregate trend data from courses associated with each learning outcome will be included in assessment reports.
 - *Course exam*: Understanding of core concepts associated with each learning objective will be assessed, in part, via exam and quiz questions. Faculty will identify questions that address specific core concepts and collect data on how well students answer these questions. Questions addressing core concepts will be included at different developmental levels throughout the program.

- *Course projects and other assignments*: Projects and assignments including research projects reports and presentations, various active learning assignments, class discussions, and lab exercises will be used to assess the core competencies associated with the learning objectives. Artifacts submitted by students in lectures and laboratories will be used by faculty to generate data on how well students demonstrate proficiency in each learning outcome.
- *Professional and graduate school application exam scores*: Most students applying to graduate and professional schools take an exam as part of the application process (e.g., GRE, MCAT, etc.). These exam scores are available through the online application process, provided that students give access permission, and this information is used to help track the success of UW-River Falls' majors at gaining admission to professional programs.
- *Placement into jobs, graduate school, and professional programs*: Preparation of students for employment and for graduate and professional programs will be monitored by the acceptance of students into these jobs and programs and the successful completion of the programs.
- Indirect assessment: The program will obtain feedback on the relevance of the curriculum, the appropriateness of the learning outcomes, and the effectiveness of the learning experiences from both internal and external stakeholders. To obtain the feedback, the program will use the following:
 - *Student learning outcomes feedback survey*: Student evaluations and surveys will obtain an annual snapshot of how effectively graduating students perceive the program's learning experiences/courses meet their needs.
 - *Student satisfaction survey*: Graduating seniors will complete an online survey hosted through the course management system, *Canvas*.
 - *Alumni survey*: Every three years, the program will send an electronic survey to students who have graduated in the previous five years. The survey will ask about the relevance and effectiveness of the program's curriculum in preparing students for their entry and current position and/or graduate or professional education, the relevance and effectiveness of the mix of learning experiences in preparing them for their current position, and how the program could enhance its curriculum and learning opportunities.
 - *Professional community survey*: Every two years, the program will conduct an electronic survey of representatives from industries, graduate programs, and professional schools that accept graduates of the Biomedical and Health Science program.
- Process for Assessment: Assessment plans will be submitted to the UW-River Falls assessment committee as part of its three-year cycle of review, with the term "year" referring to an academic calendar year. Aggregate assessment reports will be submitted to the campus consistent with its current three-year cycle of review.

Diversity

The proposed program in Biomedical and Health Science curriculum and learning outcomes will advance inclusive excellence by specifically addressing diverse perspectives related to health and medicine. Faculty will address how biomedicine and health science specifically impact diverse populations. In addition, UW-River Falls offers a professional development program, the Evidence-Based Teaching Fellows program, which focuses on creating inclusive learning environments for teaching and learning. The faculty in the program will be participating/applying to participate in this program. Moreover, several elective courses associated with the program include a UW-River Falls global perspective attribute.

UW-River Falls has a Center of Diversity, Inclusion, and Belonging which strives to create an inclusive campus community where all people can feel valued, respected and safe. As such, the Center of Diversity, Inclusion, and Belonging is dedicated to affirming and embracing the multiple identities, values, belief systems, and cultural practices of the campus community. Students in the program will have access to the center which works toward closing the equity gap and increasing retention of underrepresented racial or ethnic groups relative to the total student population.

The faculty members involved in the program will also work with undergraduate admissions to partner with schools that have a high potential for multicultural and disadvantaged student enrollments in the program. UW-River Falls is actively seeking to diversify its student population and will connect students not only to the program but also to the recruitment and support structures. Additional resources include National Science Foundation (NSF)-funded access and success initiatives in mathematics and the sciences, the *Pathways* programs for domestic students with English as a second language, a STEM-focused McNair Scholars Program, summer individualized research experiences, and a multicultural and economically disadvantaged retention specialist through the Center of Diversity, Inclusion, and Belonging.

Collaborative Nature of the Program

The Department of Biology works collaboratively with other programs at University of Wisconsin-River Falls including neuroscience, biotechnology, chemistry (College of Arts and Sciences), animal science, geology, horticulture, conservation, environmental sciences (College of Agriculture, Food and Environmental Science (CAFES)), and broad-field science education (College of Education and Professional Study). Also a formal articulation agreement exists between the University of Wisconsin-River Falls and the Northeast Wisconsin Technical College (NWTC) Laboratory Science Technology program for students entering the Biomedical Science option and the Field Biology option. There are no collaborations with other UW System institutions planned at this time.

Projected Time to Degree

The projected time to degree for full-time students is four years, and students should be able to complete all university and program requirements in 120 semester credit hours. Students will have to take, on average, 15 credits per semester to earn the degree in four years, and there are also summer and January term options to keep a student on track.

Program Review

Institutional processes for review include an internal Program Prioritization–Program Audit Review (PP-PAR) every three years. The Department of Biology submitted a PP-PAR report in the 2016-17 academic year and is required to submit a new report for the 2019-20 academic year. The proposed program will be reviewed through these metrics on the standard three-year cycle used by the university. In addition, the program will enter into the six-year program audit and review process also used by the university.

Accreditation

No specialized disciplinary accreditation is required.

JUSTIFICATION

Rationale and Relation to Mission

UW-River Falls has over 17 years of experience offering a biology major with an emphasis in biomedical sciences. Currently, there are about 300 students enrolled in the emphasis, and approximately 1,100 students have graduated with the emphasis since it was made available in 2001. The Bachelor of Science degree in Biomedical and Health Science proposes to reclassify the existing emphasis within the current biology major to a stand-alone degree program.

Program Description

The University of Wisconsin-River Falls mission statement states, “Our mission is to help prepare students to be productive, creative, ethical, engaged citizens and leaders with an informed global perspective.” (<https://www.uwrf.edu/AboutUs/vision.cfm>) In support of the university’s mission are three primary themes in University of Wisconsin-River Falls’ Strategic Plan: distinctive academic excellence, global education and engagement, and innovation and partnerships.

The proposed Bachelor of Science degree in Biomedical and Health Science supports the institutional mission of University of Wisconsin-River Falls by providing an education focused on developing practical skills and knowledge in a burgeoning field through innovative science pedagogy and a liberal arts emphasis.

As an institution, University of Wisconsin-River Falls provides students with opportunities for global education and engagement. To this end, the Department of Biology has several global perspective courses that are either study abroad or on-campus. The department provides several scholarships to students interested in studying abroad, specifically for scientific research, and faculty are actively engaged globally in scholarly activity.

The proposed program provides an opportunity to continue supporting the institution’s innovation and partnerships strategic goal. Located in the St. Croix Valley, 30 minutes from the Minneapolis-St. Paul metropolitan area, many partnerships have been established over the years and continue to flourish. Currently, the Department of Biology works collaboratively with various scientific entities, including Marshfield Clinic, Wisconsin; Academia Sinica, Taiwan; University of Minnesota Stem Cell Center, Minnesota; China Medical University, China; BRTI Life Sciences, Minnesota; among others. Establishing a program directed at educating

biomedical and healthcare professionals for the region will also demonstrate the institution's commitment to civic and industry leaders.

Support has been expressed by the leaders of the institution. The provost's letter of support, the passage of the proposal by the Faculty Senate, and the subsequent approval by the chancellor attest to the level of commitment from both governance and administrative leaders.

Institutional Program Array

The Department of Biology currently offers a popular emphasis in Biomedical Sciences. The proposed major will replace this emphasis with a major and refine the focus of the curriculum accordingly. UW-River Falls will continue to offer biology major options in field biology and general biology. The proposed major would focus on students interested in biomedical and health science. UW-River Falls is well-positioned to proceed based on the faculty composition and the amount of time the Biomedical Science option has been offered.

In 2014, the Department of Biology was recognized for its distinctive academic excellence and awarded *The Regents Teaching Excellence Award* for exceptional commitment to and effectiveness in teaching.

Other Programs in the University of Wisconsin System

The University of Wisconsin-River Falls is making a concerted effort to build upon the successes of its STEM disciplines. The university's geographical location, as part of the Minneapolis-St. Paul metropolitan area, provides many employment and internship opportunities for students studying biomedical and health science. The success of a Biomedical Science option in the Department of Biology underscores the need for a major in this discipline, and there currently is no similar major on campus. The Biomedical and Health Science major would complement majors in Health and Human Performance and in Animal Science; however, the proposed program would remain different from those majors and provide students with a curriculum focused on biomedical and health sciences.

Within the UW System, only UW-Milwaukee offers a biomedical sciences degree at the bachelor's level.

Need as Suggested by Current Student Demand

At the present time, approximately 70% of UW-River Falls biology majors choose the current Biomedical Science option over the Field Biology and General Biology options, demonstrating student interest in the proposed program.

Need as Suggested by Market Demand

A degree in biomedical sciences prepares students for a wide variety of jobs and career paths. About 40% of the graduates of the current Biomedical Sciences option choose, and are well prepared for, professional school programs in healthcare. These careers include medicine, dentistry, optometry, pharmacy, physician assistant studies, physical therapy, occupational therapy, chiropractic, veterinary medicine, genetics counseling, as well as post-graduate training in surgical first assistant, respiratory therapy, and other allied health careers, all of which require an undergraduate degree with specific prerequisite courses. According to the U.S. Bureau of Labor Statistics, these professional health careers all have projected growth rates of 18 to 37%

through 2026.¹ Through articulation agreements between the Department of Biology and the Mayo School of Health Sciences, some graduates of the Biomedical Sciences option have earned certifications in medical lab science (projected growth 13%), echocardiography (projected growth of 17%), and sonography and radiography (17% and 13%, respectively).

Other graduates of biomedical science programs with bachelor's degrees (including students already completing the University of Wisconsin-River Falls Biology Biomedical Sciences option) pursue careers in laboratory research, biotechnology, pharmaceuticals, and medical devices. Graduates of the program at University of Wisconsin-River Falls have gone into diverse careers ranging from pharmaceutical sales to scientific writing careers (projected growth rate 11% faster than average), forensic science (projected growth of 17%), pharmaceutical and medical device sales (adding 37,000 jobs annually through 2026), biological technicians and assistants (projected growth 10% faster than average), occupational safety and health and other careers in public health (projected growth rate of 31.6%). Market demand suggests that the proposed program will be successful in attracting students to University of Wisconsin-River Falls.

¹ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, OOH FAQs, on the Internet at <https://www.bls.gov/ooh/about/ooh-faqs.htm> (retrieved May 10, 2019).

University of Wisconsin - River Falls							
Cost and Revenue Projections For Newly Proposed Program							
	Items	Projections					
		FY20	FY21	FY22	FY23	FY24	
		Year 1	Year 2	Year 3	Year 4	Year 5	
I	Enrollment (New Student) Headcount	40	60	60	60	60	Assumes first to second year retention of 0.65 Assumes second to third year retention of 0.90 Assumes third to fourth year retention of 0.90 Assumes 15 graduating in year 2022, and 30 graduating in 2023.
	Enrollment (Continuing Student) Headcount	0	26	63	95	105	
	Enrollment (New Student) FTE	40	60	60	60	60	
	Enrollment (Continuing Student) FTE	0	26	63	95	105	
II	Total New Credit Hours	0	0	0	0	0	44 credit/4 years = 11/year * # students * in a given year
	Existing Credit Hours	440	946	1353	1705	1815	
III	FTE of New Faculty/Instructional Staff	0	0	0.75	0	0.5	Assumes transition of faculty time from existing major to new major.
	FTE of Current Fac/IAS	1	2	2.5	3.25	3.25	
	FTE of New Admin Staff	0	0	0	0	0	
	FTE Current Admin Staff	0.3	0.3	0.3	0.3	0.3	
IV	Revenues						\$267.85/credit hour, assuming WI residency, and \$303.96 for MN residents, averaging = \$285.91 Assumes \$45/class, and 4 classes/year or \$180 *# of students in a year
	From Tuition	\$125,800	\$270,471	\$386,836	\$487,477	\$518,927	
	From Fees	\$0	\$4,680	\$11,340	\$17,100	\$18,900	
	Program Revenue (Grants)	\$0	\$0	\$0	\$0	\$0	
	Program Revenue - Other	\$0	\$0	\$0	\$0	\$0	
	GPR (re)allocation	\$0	\$0	\$0	\$0	\$0	
	Total New Revenue	\$125,800	\$275,151	\$398,176	\$504,577	\$537,827	
V	Expenses						Assumes \$65000 salary and 0.58 fringes
	Salaries plus Fringes						
	Faculty/Instructional Staff	\$102,700	\$205,400	\$333,775	\$333,775	\$385,125	
	Other Staff	\$14,419	\$14,419	\$14,419	\$14,419	\$14,419	
	Other Expenses						
	Facilities	\$0	\$0	\$0	\$0	\$0	
	Equipment	\$0	\$0	\$0	\$0	\$0	
	Other (laboratory fees)	\$0	\$4,680	\$11,340	\$17,100	\$18,900	
	Other	\$0	\$0	\$0	\$0	\$0	
	Total Expenses	\$117,119	\$224,499	\$359,534	\$365,294	\$418,444	
VI	Net Revenue	\$8,681	\$50,652	\$38,642	\$139,283	\$119,383	

Submit budget narrative in MS Word Format

Provost's Signature:



Date:

May 14, 2019

**UNIVERSITY OF WISCONSIN-RIVER FALLS
COST AND REVENUE PROJECTIONS NARRATIVE
BACHELOR OF SCIENCE IN BIOMEDICAL AND HEALTH SCIENCE**

Introduction

The B.S. in Biomedical and Health Science program requires 44 credits and is designed to be completed in four years. It will replace a Biomedical Sciences option currently offered in the Department of Biology. As a result, existing faculty FTE will be transferred to account for the transition toward offering the major. It is designed for full-time students completing face-to-face courses.

Section I – Enrollment

The projected enrollment of new students into the program is 40 new students in Year 1. Subsequent years' enrollment has been projected to be 60 new students, with an anticipated 0.65, with first- to second-year retention in the program. Beyond the second year, a retention rate of 0.90 has been utilized. It is projected that nearly all students in the program will be full-time; therefore, a 1.0 FTE has been used for enrollment calculations, and student FTE equals the headcount projections.

Section II – Credit Hours

There are no new credit hours proposed for the program. Existing credit hours were calculated by taking the total major credits (44 credits), divided by 4 years, and then multiplying by the number of students enrolled. First-year, existing credit hours are projected to be 440, followed by 946, 1,353, 1,705, and 1,815 for Years 2, 3, 4, and 5, respectively.

Section III – Faculty and Staff Appointments

The FTE of faculty/staff will be 1.0 for the first year of the program, resulting from a reassignment of existing faculty. In Year 2, another reappointment of 1.0 FTE from current faculty will be allocated to meet the demands of projected enrollments. In Year 3, an additional 0.5 FTE will be reallocated from existing staff. In addition, a new 0.5 FTE faculty/instructional staff will be added to provide instruction for the proposed program, as well as a new 0.25 FTE faculty/instructional staff position that will be allocated to serve as a program coordinator to oversee advising and other program needs. Staff additions are not anticipated in Year 4. In Year 5, it is projected that an additional new 0.5 faculty/instructional FTE will be hired to meet the demands of projected enrollments. As enrollment increases, existing staff from the current authorization will be reallocated to the new authorization. Approximately 0.30 of the current administrative support person's FTE will be reassigned to the proposed program.

Section IV – Program Revenues

Tuition Revenues

Tuition revenue was calculated by using annual anticipated credit enrollment per student multiplied by the student head count, and then multiplied by \$285.91, which is the average of the per-credit Wisconsin resident rate (\$267.85) and the Minnesota resident rate (\$303.96).

Program (i.e. Course Fees)

The calculation assumes \$45 per class, and four classes per year for \$180, multiplied by the number of students in a year. These course fees will be used to pay for laboratory supplies and materials used by students.

Grants/Extramural Funding

None projected.

Program Revenue (PR)

None allocated.

General Program Revenue (GPR)

None allocated.

Section V – Program Expenses

Expenses – Salary and Fringe

The salaries of instructional staff assume an average of \$65,000 salary per FTE and 0.58 fringe costs. For the administrative support staff, a salary of \$30,420 per FTE with 0.58 fringe costs is assumed.

Other Expenses

Additional expenses include expenditure of the laboratory/special course fees and contributions to the central UW-River Falls budget, as described below.

Section VI – Net Revenue

It is anticipated that there will be some net, positive revenue each year. This will be used by the central UW-River Falls budget for institutional priorities determined by the university's senior leadership.



Office of the Provost and Vice Chancellor for Academic Affairs • 116 North Hall • (715) 425-3700

May 14, 2019

Ray Cross, President
1720 Van Hise Hall
1220 Linden Dr.
Madison, WI 53706

Dear President Cross:

The proposed BS degree in Biomedical and Health Science meets the University of Wisconsin – River Falls’ definition and standards of quality and will make a meaningful contribution to the institution’s select mission, overall academic plan, and academic degree program array. It will be housed in the Biomedical and Health Science Department. Internal assessment has indicated that it is a viable, long-term program and this request is to obtain a specific entitlement for a BS in Biomedical and Health Science.

There is institution-wide support for the program, including institutional governance approval. The proposal has been approved by the Biomedical and Health Science Department, the College of Arts and Sciences, and by the faculty governance system, including passage by the UWRF Faculty Senate.

The necessary financial and human resources are in place and/or have been committed to implement and sustain the program. Regular analyses will occur to ensure the financial stability of the program and its academic quality. Specifically, it will be reviewed every three years through the university’s program prioritization processes, and every six years through regular program evaluations.

I fully recommend the proposed BS in Biomedical and Health Science to both you and the Regents for adoption and inclusion into the System array. Thank you for providing it your most serious consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "David Travis", enclosed within a thin black rectangular border.

David Travis
Provost and Vice Chancellor
For Academic Affairs

Copies: UW System Interim Vice President Karen Schmitt
 Chancellor Dean Van Galen
 Dean Michael Harris
 Associate Provost Wes Chapin

Program Authorization (Implementation)
Master of Science in Strength and Conditioning
UW-River Falls

EDUCATION COMMITTEE

Resolution I.1.f.(2):

That, upon the recommendation of the Chancellor of UW-River Falls and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Master of Science in Strength and Conditioning at the University of Wisconsin-River Falls.

**NEW PROGRAM AUTHORIZATION
MASTER OF SCIENCE IN STRENGTH AND CONDITIONING
AT UW-RIVER FALLS**

EXECUTIVE SUMMARY

BACKGROUND

The University of Wisconsin-River Falls submits this request to establish a Master of Science in Strength and Conditioning. This proposal is presented in accord with the procedures outlined in Academic Planning and Program Review (SYS 102, revised July 2016, available at <https://www.wisconsin.edu/program-planning/>).

REQUESTED ACTION

Adoption of Resolution I.1.f.(2), approving the implementation of the Master of Science in Strength and Conditioning at the University of Wisconsin-River Falls.

DISCUSSION

Program Description. The University of Wisconsin (UW)-River Falls proposes to establish a Master of Science in Strength and Conditioning (M.S. in S&C). Development of the program responds to identified market needs, faculty and student interests, and the need for graduates with advanced strength and conditioning training. The program is designed to prepare adult learners who already possess a bachelor's degree. While a bachelor's degree is the entry-level requirement in this area, many of the more advanced positions (e.g., Division I college and professional) require a master's degree. There are few such dedicated M.S. programs in strength and conditioning in the country. The proposed program will be the second M.S. in S&C degree program in the State of Wisconsin, the first of which is offered by UW-La Crosse.

The program is built upon the recommendations of the National Strength and Conditioning Association, the premier strength and conditioning organization in the United States. As a result, graduates will demonstrate competencies and learning outcomes to include: design of tailored training programs for all athletic populations; assessment of appropriate nutritional strategies for all athletic populations; administration of strength and conditioning programs; and accurate testing of athlete performance to assess program goals.

Mission. The proposed M.S. in S&C degree program fits well with the university's mission, which aims to help prepare students to be productive, creative, ethical, engaged citizens and leaders with an informed global perspective. The program also addresses the university's three strategic goals, including academic excellence, global education and engagement, and innovation and partnership. Regarding academic excellence, the program is distinctive as one of only two M.S. in S&C programs in the State of Wisconsin. Regarding global education and engagement,

students with an M.S. in S&C degree learn from an international curriculum in that many of the advances in this field have taken place in Europe and Australia and are reflected in the curriculum. Regarding innovation and partnerships, the program will require an internship with a variety of facilities throughout Wisconsin and Minnesota, thereby expanding students' subject matter knowledge, as well as supplying these facilities with quality personnel. Examples of appropriate facilities include Catalyst Sports Medicine, River City Iron Worx, Renovation Training, Ethos Performance, Take Action Performance, St. Croix Acceleration, Torque Strength and Conditioning, and Neuro Explosion Performance Training.

Student and Market Demand. Demand for this major is strong and growing each year. UW-River Falls currently has approximately 180 undergraduate students in the B.S. in Exercise and Sport Science emphasis. Since 2012, UW-River Falls has offered a M.S. degree in Clinical Exercise Physiology (M.S. in CEP), with yearly enrollments of approximately 15 students. Similar enrollment is expected in the proposed M.S. in S&C program. An internal survey of Exercise and Sport Science majors at UW-River Falls indicated that 73.1% would be interested in pursuing this master's degree. The markets for this program will be primarily in the states of Wisconsin and Minnesota. Because Minnesota is not served by any similar programs, this program is also uniquely positioned to attract Minnesota students from rural as well as urban areas.

The emerging importance of strength and conditioning has led to increasing employment at all levels of athlete training, as well as other avenues such as personal training or corporate fitness programs. Not only do professional athletes require the services of professionals with this major, so do collegiate, high school, and even junior sports athletes who are increasingly trying to excel as athletes to obtain college scholarships and possibly professional opportunities. The United States Department of Labor (USDOL) data show a 2% increase in demand for this career during the past year, with a 12.9% increase in demand projected over the next ten years. United States Department of Labor data also show 2016 employment in this career field at 17,100 positions with 1,100 annual job openings. Salaries also remain competitive. The median annual wage for exercise physiologists was \$49,090 in May 2017. The lowest 10% earned less than \$34,250, and the highest 10% earned more than \$78,410.

Credit Load and Tuition. The program will comprise 33 credits, which includes 28 credits of specified coursework supplemented by either 6 credits of internship, or 3 credits of both internship and thesis work. All coursework will be at the 700-level (graduate only). The program is designed to be completed by full-time students in four semesters (e.g., fall, spring, summer, fall). The proposed program is specifically designed to accommodate individuals working full-time, and all classes will be offered in the evenings. Each class will meet face-to-face, once per week. Students will complete an internship at an appropriate facility in their last semester, and a thesis option will be available.

Students enrolled in the proposed M.S. in S&C degree program will pay the same tuition fee approved for the current M.S. in CEP program: \$500 per credit. This rate applies to all students regardless of state of residency. The total cost of tuition and segregated fees will be \$539.91 per credit. The program will be operated as a service-based pricing program.

RELATED REGENT AND UW SYSTEM POLICIES

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

UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting.

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
MASTER OF SCIENCE IN STRENGTH AND CONDITIONING
AT UW-RIVER FALLS
PREPARED BY UW-RIVER FALLS**

ABSTRACT

The University of Wisconsin (UW)-River Falls proposes to establish a Master of Science in Strength and Conditioning (M.S. in S&C). Development of the program responds to identified market needs, faculty and student interests, and the need for graduates with advanced strength and conditioning training. The United States Department of Labor (USDOL) data show a 2% increase in demand for this career during the past year, with a 12.9% increase in demand projected over the next ten years.¹ The proposed program will be the second M.S. in S&C degree program in the state of Wisconsin. Since 2012, UW-River Falls has offered a M.S. degree in Clinical Exercise Physiology (M.S. in CEP), with yearly enrollments of approximately 15 students. Similar enrollment is expected in the proposed M.S. in S&C program. The program will consist of 33 credits, which includes 28 credits of specified coursework supplemented by either 6 credits of internship or 3 credits of both internship and thesis work. The proposed M.S. in S&C degree program will be financially supported as a service-based pricing program.

PROGRAM IDENTIFICATION

Institution Name

University of Wisconsin-River Falls

Title of Proposed Program

Strength and Conditioning

Degree/Major Designations

Master of Science

Mode of Delivery

Single institution; face-to-face

Projected Enrollments and Graduates by Year Five

Table 1 represents projected enrollment and graduation numbers for the proposed M.S. in S&C program. Based on existing patterns for the current M.S. in CEP program, it is anticipated that by 2024, approximately 60 new students will have enrolled in the program, with about 40 students graduating. Retention in the current M.S. in CEP program has been about 85% to 90% since 2012, and 86% is the expected retention rate for the proposed M.S. in S&C program.

¹ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Exercise Physiologists, on the Internet at <https://www.bls.gov/ooh/healthcare/exercise-physiologists.htm> (visited November 7, 2018).

Table 1: Five-Year Degree Program Enrollment Projections (Head Count)

Students/Year	2019-20	2020-21	2021-22	2022-23	2023-24
New Students	12	12	12	12	12
Continuing Students	0	10*	10*	10*	10*
Total Enrollment	12	22	22	22	22
Graduating Students	0	10**	10**	10**	10**

* The program is a 16-month program, and all students will take 6 credits of internship in their last semester (of the next academic year). This results in a head count of approximately 10 students for each fall term after the initial year.

** The number of graduating students measured in head count is anticipated to be about 10 students per year.

Tuition Structure

Students enrolled in the proposed M.S. in S&C degree program will pay the same tuition fee approved for the current M.S. in CEP program: \$500 per credit. This rate applies to all students regardless of state of residency. The tuition rate is required to cover the costs related to administering the program (e.g., instruction, equipment, materials and supplies). Students will also pay segregated fees for services, programs, and facilities supporting UW-River Falls mission. For students enrolled in the program, the total cost of tuition and segregated fees is \$539.91 per credit. The proposed M.S. in S&C degree program will be operated as a service-based pricing program.

Department or Functional Equivalent

The Health and Human Performance Department is the academic and financial home of the proposed program.

College, School, or Functional Equivalent

The proposed program will be housed academically within the College of Education and Professional Studies.

Proposed Date of Implementation

January 2020

DESCRIPTION OF PROGRAM

Overview of the Program

The program requires 33 credits. All coursework will be at the 700-level (graduate only). The program is designed to be completed by full-time students in four semesters (e.g., fall, spring, summer, fall). The proposed program is specifically designed to accommodate individuals working full-time, and all classes will be offered in the evenings. Each class will meet face-to-face, once per week. Students will complete an internship at an appropriate facility in their last semester, and a thesis option will be available.

Student Learning Outcomes and Program Objectives

The proposed M.S. in S&C degree program is built upon the program recommendations of the National Strength and Conditioning Association, the premier strength and conditioning organization in the United States. Students will demonstrate competencies and the associated learning outcomes, as shown below, upon completion of the proposed M.S. in S&C program.

Learning outcomes:

1. Design appropriate training programs for all athletic populations.
2. Assess appropriate nutritional strategies for all athletic populations.
3. Administer a strength and conditioning program.
4. Accurately test athlete performance to assess program goals.

Program Requirements and Curriculum

The proposed M.S. in S&C degree will require students to take nine advanced graduate courses as well as an internship for 3-6 credits, as shown in Table 2 below. As part of the graduation requirement for the M.S. in S&C, students will have the option either to complete a thesis or to take an exit examination. All coursework will be at the 700-level (graduate only), and all students will be required to complete a 3-6 credit internship and maintain a 3.0 GPA. Students with undergraduate preparation in exercise science or its equivalent are the primary candidates for admission. Students with baccalaureates in other areas who have demonstrated appropriate academic preparation may also be admitted. In some cases, they may be required to complete necessary prerequisite coursework before enrolling in advanced courses in the program. Such prerequisites include exercise physiology, strength and conditioning, and human anatomy.

Table 2: Master of Science in Strength and Conditioning Program Curriculum

EXSS 701 - Advanced Physiology of Exercise	3 credits
EXSS 705 - Sports Nutrition	3 credits
EXSS 715 - Statistics and Research Methods in Health and Human Performance	3 credits
EXSS 725 - Muscle Physiology	3 credits
EXSS 735 - Sports Movement Analysis	3 credits
EXSS 743 - Functional Anatomy	3 credits
EXSS 760 - Sports Performance Program Design	3 credits
EXSS 761 - Advanced Strength, Speed and Power Design	3 credits
EXSS 765 - Organization and Admin. of Strength & Conditioning Programs	3 credits
EXSS 774 - Internship (3 credits with thesis or 6 credits without a thesis)	3-6 credits
EXSS 799 - Thesis	0-3 credits
Total Credits	33 credits

Two of the above courses are required of students in UW-River Falls' current M.S. in Clinical Exercise Physiology program (EXSS 701 and EXSS 715) and will serve both programs. All courses and the program have been approved by the Faculty Senate at UW-River Falls.

Assessment of Outcomes and Objectives

The M.S. in S&C will engage in course-level assessment regularly using papers, tests, quizzes, discussions, presentations, and group projects. A program-level assessment plan will be

developed and submitted to the Faculty Senate's Assessment Committee for its review. Based on the assessment plan, program-level assessment data are collected using instruments such as student exit surveys and internship supervisor surveys. Program faculty and university supervisors meet on an annual basis to discuss course and program-level outcomes, the results of which are used to inform and revise the program and its curriculum when warranted. Subsequently, this information will be compiled into an assessment report that is reviewed on a three-year cycle by the Faculty Senate's Assessment Committee. Feedback from this committee's review will also be used to revise and strengthen program-level assessment activities when merited.

Diversity

The international nature of sports naturally lends itself to the consideration of cultural diversity and diverse populations. For example, discussions in the organization and administration course will include topics such as the differences in training philosophies in other countries. Other courses will compare differing training techniques used by countries across the world. The internship sites will include many professional teams who have athletes from many countries in the world with whom students at UW-River Falls will work. Also UW-River Falls offers a professional development program, the Evidence-Based Teaching Fellows Program, which focuses on creating inclusive learning environments for teaching and learning.

In addition, the UW-River Falls Center of Diversity, Inclusion, and Belonging thrives to create an inclusive campus community where all people can feel valued, respected and safe. (<https://www.uwrf.edu/Diversity/Inclusive-Excellence-Goals.cfm>) As such, the Center of Diversity, Inclusion, and Belonging is dedicated to affirming and embracing the multiple identities, values, belief systems, and cultural practices of the campus community. The university fosters student learning through inclusive and empowering experiences in the areas of identity development, multicultural awareness, leadership workshops, campus outreach, and campus activities.

The program will actively recruit students from underrepresented populations through recruiting at conferences and direct marketing. One of the direct marketing methods is via Facebook advertising. Through this advertising, specific demographic targets are set to underrepresented populations. The new program will have students from all over the world with ethnic diversity within the student body. Students are also anticipated to range in age from early 20s to mid-50s.

This variety in life experiences among the student body creates enhanced discussions as topics affecting these different situations are explored. With a focus on student assistance, student retention will also be enhanced by ensuring students are aware of all department and university resources available to them. The program director for the proposed M.S. in S&C degree will continue student recruiting efforts focusing on diversity. Faculty hiring will also follow UW System policies for equitable recruitment of diverse staff.

Collaborative Nature of the Program

Partnerships with regional sports facilities will be instrumental to the success of the proposed M.S. in S&C. Local sports facilities will provide necessary internship opportunities for

students to apply firsthand the theoretical principles acquired in the classroom. The partner facilities benefit by having well-educated students enhance their training facility. This can include any Division I athletics departments, professional sports teams, and private specialized training facilities such as Catalyst Sports Medicine and Neuro Explosion Performance Training. There are no collaborations with other UW System institutions planned at this time.

Projected Time to Degree

The M.S. in S&C degree program is designed for people who are continuing their education beyond the bachelor's degree. Students who attend full-time are expected to take nine credits per semester and, at that rate, will finish the program in 16 months (i.e., four semesters).

Program Review

Ongoing evaluation, assessment, and review of academic programs, including graduate programs, are administered through several processes. Departments are required to have assessment plans and provide assessment reports that are reviewed every three years by the Faculty Senate Assessment Committee. In addition, every third year, each program is subject to review of the university's program prioritization processes, which focus on intellectual factors (e.g., assessment, strategic planning, and faculty qualifications), enrollment factors (e.g., percentage of graduates within the university, time and credit to degree, and retention), and financial factors (e.g., revenue over expenses). Every sixth year, programs undergo a full program audit and review process that covers the above factors and additional considerations (e.g., the role of the program in supporting the array of offerings at the university).

Accreditation

The M.S. in S&C does not require specialized accreditation.

JUSTIFICATION

Rationale and Relation to Mission

The proposed M.S. in S&C degree program fits well with the university's mission. The university's focused mission statement is to "help prepare students to be productive, creative, ethical, engaged citizens and leaders with an informed global perspective."

(<https://www.uwrf.edu/AboutUs/mission.cfm>, <https://www.uwrf.edu/AboutUs/vision.cfm>)

The proposed M.S. in S&C degree program is designed to prepare adult learners who already possess a bachelor's degree. Students must possess the knowledge, understanding, and skills necessary to exercise leadership in their field and beyond, and utilize these skills to train athletes at a high level. Ethical behavior is a key feature of strength and conditioning both at the collegiate and professional levels. While most students will go on to practice in the United States, many will train athletes in other countries as well due to the international nature of sports. In addition, the United States, being a sports leader in the world, attracts many international athletes who participate in collegiate and professional sports, which gives domestic students exposure to international athletes while there in the United States. The program also addresses the university's three strategic goals. (<https://www.uwrf.edu/PathwayToDistinction/Goals.cfm>) Regarding goal one, distinctive academic excellence, the program is distinctive as one of only two M.S. in S&C in the state of Wisconsin. Regarding goal two, global education and

engagement, students with an M.S. in S&C degree learn from an international curriculum in that many of the advances in this field have taken place in Europe and Australia and are reflected in the curriculum. Regarding goal three, innovation and partnerships, the M.S. in S&C will require an internship with a variety of facilities throughout Wisconsin and Minnesota, thereby expanding students' knowledge as well as supplying these facilities with quality personnel. Examples of appropriate facilities include Catalyst Sports Medicine, River City Iron Worx, Renovation Training, Ethos Performance, Take Action Performance, St. Croix Acceleration, Torque Strength and Conditioning, and Neuro Explosion Performance Training.

Institutional Program Array

The proposed M.S. in S&C has its academic home in the College of Education and Professional Studies, one of four colleges at the university. The College of Education and Professional Studies has five departments: (1) Communication Sciences and Disorders, (2) Counseling and School Psychology, (3) Health and Human Performance, (4) Social Work, and (5) Teacher Education. The college offers both undergraduate and graduate programs. The proposed M.S. in S&C will be a graduate program within the Health and Human Performance Department. Of the seven faculty members in this department, one tenure-track faculty member has expertise in strength and conditioning, with an additional faculty member to be hired specifically for this program. The M.S. in S&C degree will complement the other exercise science programs within the department.

Graduate study in exercise science occurs in two broad areas of study: clinical and strength/fitness. Currently, a Master of Science in Clinical Exercise Physiology (M.S. in CEP) is offered, and the proposed M.S. in S&C is complementary to the clinical program.

The proposed degree program is not dependent on general program revenue, but rather is self-funded by program revenue, and will not impact support for either undergraduate or other graduate programs. The current M.S. in CEP and the proposed M.S. in S&C have entirely different scopes of practice, with different populations (athlete vs. patients), such that enrollment in the proposed program will not influence enrollment in the M.S. in CEP program.

Other Programs in the University of Wisconsin System

While four UW System schools have master's degrees in exercise science, only UW-La Crosse has a dedicated M.S. in S&C. UW-La Crosse's program receives approximately 30-40 applications per year while accepting 15 annually (personal communication), demonstrating excess demand. All 13 UW System institutions offer undergraduate exercise science programs that produce hundreds of students each year as potential candidates for this master's degree.

In addition to the strength and conditioning programs mentioned above, both UW-Madison and UW-Milwaukee have broad-based graduate programs in exercise physiology at the master's level. Reviewing their respective curricula, UW-Milwaukee's M.S. degree in Exercise Physiology is a research-oriented program, multidisciplinary in nature, encompassing five human movement science disciplines: biomechanics, exercise physiology, motor control, sport and exercise psychology, and sociology of physical activity. This is not a strength-and-conditioning-oriented degree program. At UW-Madison, the M.S. with an emphasis in exercise physiology is designed to provide the fundamental framework for understanding and conducting research in

exercise physiology. This also is not a strength-and-conditioning-oriented program. The proposed program is uniquely different because it is specifically strength-and-conditioning-oriented, which will make UW-River Falls graduates much more marketable in the strength and conditioning job market.

Need as Suggested by Current Student Demand

UW-River Falls currently has approximately 180 undergraduate students in the B.S. in Exercise and Sport Science emphasis. An internal survey of Exercise and Sport Science majors at UW-River Falls indicated that 73.1% would be interested in pursuing this master's degree. UW-La Crosse has the only other specific M.S. in S&C program in the UW System, and accepts approximately 15 applicants per year while receiving 30-40 applications per year (personal communication). Given the demand for M.S. in S&C professionals, another program within UW System at the master's level seems warranted.

Need as Suggested by Market Demand

Demand for this major is strong and growing each year. Not only do professional athletes require the services of professionals with this major, so do collegiate, high school and even junior sports athletes who are increasingly trying to excel as athletes to obtain college scholarships and possibly professional opportunities. The emerging importance of strength and conditioning has led to increasing employment at all levels of athlete training as well as other avenues such as personal training or corporate fitness programs.

The United States Department of Labor (USDOL) data show a 2% increase in demand for this career during the past year, with a 12.9% increase in demand projected over the next ten years.² United States Department of Labor data also show 2016 employment in this career field at 17,100 positions with 1,100 annual job openings.

While a bachelor's degree is the entry-level requirement in this area, many of the more advanced positions (e.g., Division I college and professional) require a master's degree. The proposed degree program is geared towards the more advanced athlete training positions that require a master's degree. There are few such dedicated M.S. programs in strength and conditioning in the country.

The markets for this program will be primarily in the states of Wisconsin and Minnesota. Because Minnesota is not served by any similar programs, this program is also uniquely positioned to attract Minnesota students from rural as well as urban areas.

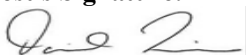
Salaries also remain competitive. The median annual wage for exercise physiologists was \$49,090 in May 2017. The lowest 10% earned less than \$34,250, and the highest 10% earned more than \$78,410.³

² Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Exercise Physiologists, on the Internet at <https://www.bls.gov/ooh/healthcare/exercise-physiologists.htm> (visited November 7, 2018).

³ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Exercise Physiologists, on the Internet at <https://www.bls.gov/ooh/healthcare/exercise-physiologists.htm> (visited November 7, 2018).

University of Wisconsin - River Falls						
Cost and Revenue Projections for Newly Proposed Program						
	Items	Projections				
		2019	2020	2021	2022	2023
		Year 1	Year 2	Year 3	Year 4	Year 5
I	Enrollment (New Student) Headcount	12.0	12.0	12.0	12.0	12.0
	Enrollment (Continuing Student) Headcount		10.0	10.0	10.0	10.0
	Enrollment (New Student) FTE	12.0	12.0	12.0	12.0	12.0
	Enrollment (Continuing Student) FTE		6.7	6.7	6.7	6.7
II	Total New Credit Hours	324.0	324.0	324.0	324.0	324.0
	Existing Credit Hours	0.0	60.0	60.0	60.0	60.0
III	FTE of New Faculty/Instructional Staff	0.75	0	0	0	0
	FTE of Current Fac/IAS	0.25	1	1	1	1
	FTE of New Admin Staff	0	0	0	0	0
	FTE Current Admin Staff	0.05	0.05	0.05	0.05	0.05
IV	Revenues					
	<i>From Tuition</i>	162,000.0	192,000.0	192,000.0	192,000.0	192,000.0
	<i>From Fees</i>	0.0	0.0	0.0	0.0	0.0
	<i>Program Revenue (Grants)</i>	0.0	0.0	0.0	0.0	0.0
	<i>Program Revenue - Other</i>	0.0	0.0	0.0	0.0	0.0
	<i>GPR (re)allocation</i>	0.0	0.0	0.0	0.0	0.0
	Total New Revenue	162,000.0	192,000.0	192,000.0	192,000.0	192,000.0
V	Expenses					
	Salaries plus Fringes					
	<i>Faculty/Instructional Staff</i>	125,521.0	125,521.0	125,521.0	125,521.0	125,521.0
	<i>Other Staff (Dept. Associate)</i>	1,875.0	1,875.0	1,875.0	1,875.0	1,875.0
	Other Expenses					
	<i>Facilities (overhead)</i>	30,160.0	35,560.0	35,560.0	35,560.0	35,560.0
	<i>Equipment</i>	2,000.0	5,000.0	5,000.0	4,000.0	4,000.0
	<i>Other (student & faculty professional development)</i>	1,000.0	5,000.0	5,000.0	5,000.0	5,000.0
	<i>Other Marketing</i>	3,000.0	2,000.0	2,000.0	2,000.0	2,000.0
	<i>Other (graduate assastantships)</i>		18,000.0	18,000.0	18,000.0	18,000.0
	Total Expenses	163,556.0	192,956.0	192,956.0	191,956.0	191,956.0
VI	Net Revenue	-1,556.0	-956.0	-956.0	44.0	44.0

Submit budget narrative in MS Word Format

Provost's Signature:


Date:
May 14, 2019

**UNIVERSITY OF WISCONSIN-RIVER FALLS
COST AND REVENUE PROJECTIONS NARRATIVE
MASTER OF SCIENCE IN STRENGTH AND CONDITIONING**

Introduction

The University of Wisconsin-River Falls proposes to establish a Master of Science in Strength and Conditioning (M.S. in S&C) degree program that requires 33 credits with all coursework at the 700-level (graduate only). The program is designed to be completed by full-time students in four semesters (e.g., fall, spring, summer, fall). The proposed program is specifically designed to accommodate individuals working full-time, and all classes will be offered once per week in the evenings and will be delivered face-to-face. The proposed M.S. in S&C will be operated as a service-based pricing program.

Section I – Enrollment

It is anticipated that 12 students will be accepted in the first year and each subsequent year (headcount) at 12 FTE. Based on enrollment patterns seen in the current M.S. in Clinical Exercise Physiology program, a first- to second-year retention rate of 86% is anticipated. In the second year, 12 students (headcount) will be admitted (i.e., 12 FTE), with an estimated 10 students (headcount) continuing for their last internship semester at 0.667 FTE, e.g., 6 credits instead of full-time 9 credits (6.7 FTE). Years 3-5 will be the same as Year 2, with similar enrollment.

Section II – Credit Hours

The M.S. in S&C is a 33-credit program, and students are expected to take 9 credits every fall, spring and summer, with an additional 6 credits of internship taken in their last semester (fall). With an enrollment rate of 12 students, 324 credits will be generated in the first year of the program (i.e., 12 months). Students in this program will not be subject to the credit tuition plateau. In the second year, 12 new students will be enrolled for 324 additional new credits, plus an estimated 10 continuing students will be taking 6 credits for an additional 60 credits. The total credits generated during the second year will be 384 credits. Credits in Years 3-5 will be identical to Year 2.

Section III – Faculty and Staff Appointments

One current faculty member will teach 0.25 FTE in this program as part of a teaching assignment that also overlaps with the established Clinical Exercise Physiology program. One additional, new instructional academic staff (IAS) will teach 0.75 FTE in the new M.S. in S&C graduate program and 0.25 FTE in the undergraduate Exercise and Sport Science program. Additionally, one ad-hoc instructor will be hired to teach one course per year in the M.S. in S&C program. The current department associate will have approximately 0.05 FTE administrative responsibility in the proposed program.

Section IV – Program Revenues

Tuition Revenues

Program revenues from student tuition in the first year consist of 12 students taking 9 credits in each of the following semesters: fall, spring and summer. For the first year, this would be a total of 324 credits at \$500 per credit for a total revenue from tuition of \$162,000. In the

second year, student credit hours consist of 12 students taking 9 credits in the fall, spring and summer terms, with 10 students taking an additional 6 credits in the fall of the following year to complete their internship. (The projection of 10 students takes into consideration a retention rate of 86%, rounded to a whole number, or 10.3 rounded to 10.0.) Thus, 384 credits are \$500 per credit yields \$192,000 in tuition revenue. Years 3-5 will be the same revenue at Year 2. There will be no course fees.

Grants/Extramural Funding

NA

Program Revenue (PR)

It is anticipated that the M.S. in S&C program will be self-sufficient in the first year based on student interest. Thus, no funds will be needed to support the program

General Program Revenue (GPR)

No GPR funds will be used for this program.

Section V – Program Expenses

Expenses - Salary and Fringe

One current faculty member will teach 0.25 FTE for the program, at a cost to the program of \$25,429. This cost assumes a full-time salary of \$69,669 with a 46% fringe rate. The program will need one additional instructional academic staff (IAS) member at a 0.75 FTE, with an approximate salary of \$55,000 per academic year and a fringe rate of 46%, for an annual total cost to the program of \$80,300. This IAS faculty member will also teach classes during the summer term, at an approximate cost of \$12,200. An additional ad-hoc faculty member will be hired to teach one course per year at a rate of \$5,200 per year and 46% fringe, for a total ad-hoc cost of \$7,592. The total instructional cost of the program per year will be \$125,521. The current department associate at a salary of \$37,500 will have approximately 0.05 FTE responsibility in the program, which equals \$1,875 per year in salary and \$862.50 in fringe (46%) costs to the program.

Other Expenses

During the first year, the university overhead (at an 18% rate) will be \$30,160. In subsequent years, overhead expenses will be \$35,732.80. Equipment purchases will be heavy in the first five years of the program, with costs varying between \$2,000 and \$5,000 each year. An important aspect of the program will be research in which students and faculty will present data at conferences, with professional development costs to be \$5,000 each year. It is anticipated that the program will have three graduate assistantships, at a cost of \$6,000 per assistantship each year (\$18,000 total), starting in Year 2. Marketing costs are estimated to be \$3,000 the first year and \$2,000 per year thereafter.

Section VI – Net Revenue

It is anticipated that net revenue will be close to zero. Any slight deficit that might occur will be addressed by modifying equipment or marketing costs appropriately during the year to ensure a balanced budget. Any slight positive revenue that occurs will be used to support the program through increased marketing and/or equipment purchases.



Office of the Provost and Vice Chancellor for Academic Affairs • 116 North Hall • (715) 425-3700

May 14, 2019

Ray Cross, President
1720 Van Hise Hall
1220 Linden Dr.
Madison, WI 53706

Dear President Cross:

The proposed MS in Strength and Conditioning meets the University of Wisconsin – River Falls’ definition and standards of quality and will make a meaningful contribution to the institution’s select mission, overall academic plan, and academic degree program array. It will be housed in the Health and Human Performance Department, which already offers the similarly-constructed and successful MS in Clinical Exercise Physiology. Internal assessment has indicated that it is a viable, long-term program and this request is to obtain a specific entitlement for an MS in Strength and Conditioning.

There is institution-wide support for the program, including institutional governance approval. The proposal has been approved by the Health and Human Performance Department, the College of Education and Professional Studies, and by the faculty governance system, including passage by the UWRF Faculty Senate.

The necessary financial and human resources are in place and/or have been committed to implement and sustain the program. Regular analyses will occur to ensure the financial stability of the program and its academic quality. Specifically, it will be reviewed every three years through the university’s program prioritization processes, and every six years through regular program evaluations.

I fully recommend the proposed MS in Strength and Conditioning to both you and the Regents for adoption and inclusion into the System array. Thank you for providing it your most serious consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "David Travis". The signature is fluid and cursive, with a large initial "D" and a stylized "T".

David Travis
Provost and Vice Chancellor
For Academic Affairs

Copies: UW System Interim Vice President Karen Schmitt
 Chancellor Dean Van Galen
 Dean Michael Harris
 Associate Provost Wes Chapin

Program Authorization (Implementation)
Master of Science in Education in Higher Education Leadership
UW-Whitewater

EDUCATION COMMITTEE

Resolution I.1.g.:

That, upon the recommendation of the Chancellor of UW-Whitewater and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Master of Science in Education in Higher Education Leadership at the University of Wisconsin-Whitewater.

**NEW PROGRAM AUTHORIZATION
MASTER OF SCIENCE IN EDUCATION IN HIGHER EDUCATION LEADERSHIP
AT UW-WHITewater**

EXECUTIVE SUMMARY

BACKGROUND

The University of Wisconsin-Whitewater submits this request to establish a Master of Science in Education in Higher Education Leadership. This proposal is presented in accord with the procedures outlined in Academic Planning and Program Review (SYS 102, revised July 2016, available at <https://www.wisconsin.edu/program-planning/>).

REQUESTED ACTION

Adoption of Resolution I.1.g., approving the implementation of the Master of Science in Education in Higher Education Leadership at the University of Wisconsin-Whitewater.

DISCUSSION

Program Description. The University of Wisconsin (UW)-Whitewater proposes to establish a Master of Science in Education (M.S.E.) in Higher Education Leadership. The proposed M.S.E. will comprise a stand-alone program, which replaces both the current Higher Education Leadership emphasis and Athletics Administration emphasis, within the M.S.E. in Professional Studies. The new stand-alone program will consist of courses focused entirely on post-secondary education, providing more focused and complete coverage of higher education issues.

This program responds to the growing professionalization of the higher education field where a post-baccalaureate degree is increasingly required for entry-level administrative positions at technical schools, colleges, and universities. Graduates will have a strong understanding of how to: analyze research related to an original problem on current issues in higher education; implement policy and use research and theory to guide and improve practice; connect scholarship from a variety of areas related to higher education and collaborate across higher education units; and engage in data-based decision making.

Mission. An M.S.E. in Higher Education Leadership will contribute to UW-Whitewater's Strategic Plan to "transform lives and impact society" by providing high quality academic programming that prepares UW-Whitewater graduates to become lifelong learners who lead successful lives and productive careers. The scholar-practitioner emphasis of this program focuses on preparing students to lead as change agents across colleges and universities. Coursework prepares graduates of the program to name and challenge inequity and develop programming that provides transformational educational experiences for students.

In addition, the proposed program also has the potential to contribute to Goal 3: Diversity and Inclusion of the Strategic Plan, by supporting the advancement of a diverse pool of higher education administrators at UW-Whitewater and across the region. Many graduates of the M.S.E. in Professional Studies transition from the practicum placements to full-time positions at UW-Whitewater. By increasing the diversity of staff on campuses, the proposed program will advance the College of Education and Professional Studies' mission "to prepare professionals to actively engage in an open democratic society inclusive of diverse populations."

Student and Market Demand. There is strong interest in the new stand-alone master's program. Enrollments in the M.S.E. in Professional Studies, with either Higher Education Leadership or Athletics Administration emphasis, have grown steadily since these programs were initiated in 2013. The Higher Education Leadership emphases began in 2013, and the Athletics Administration became a separate emphasis in spring 2016. In only five years, enrollments grew rapidly to a total of 69 students in 2017-18, with 44 students enrolled in Higher Education Leadership and 25 students in Athletics Administration.

Since the Higher Education Leadership emphasis began in 2013, 58% of its admitted students have been UW-Whitewater graduates. The undergraduate majors from which there is the greatest enrollment yield into the Higher Education Leadership programs (Communication, Marketing, and Physical Education) have grown enrollment by 26.6% from 2013-14 through 2017-18. These programs may provide a pipeline for enrollment growth from current UW-Whitewater undergraduate students.

UW-Whitewater also offers an M.S. in Counseling degree, which previously had an emphasis in higher education (60-credit program). That emphasis was recently eliminated. The elimination of this emphasis may produce additional demand for the proposed program drawn from the pool of students who may have previously considered that program. The proposed M.S.E. in Higher Education Leadership, emphasis in Athletic Administration, will allow students to select elective courses in health, physical education and coaching.

The U.S. Bureau of Labor Statistics (BLS) reports that master's degrees or higher are generally required for positions in post-secondary administration. While many of these positions may require a Ph.D., the majority are entry-level administrative positions, which require a master's degree. The Wisconsin Department of Workforce Development shows a projection from 2014 to 2024 of 3.7% growth in post-secondary education administrators from 5,868 to 6,085 jobs in Wisconsin. The U.S. Department of Labor projects a 4% increase in master's-level positions in counseling and student affairs; nationally, the number of jobs in these positions increased from 135,337 in 2012, to 177,699 in 2015 (U.S. Department of Education, IPEDS). With increased focus on student retention and support for success, advising and student affairs offices are likely to require additional workers with advanced degrees to fill these new roles.

Credit Load and Tuition. The M.S.E. in Higher Education Leadership curriculum will consist of 30 credits including 12 credits of core courses, 15 credits for the emphasis, and 3 credits of capstone work. Two emphases will be offered: a general Higher Education Leadership emphasis and an Athletics Administration emphasis. The program will take 15-24 months for students who enroll full-time. Full-time students who are expected to complete the program in 15-18 months

are typically employed part-time or as graduate assistants at UW-Whitewater and may take 9 graduate credits in spring and fall semesters, with 6 credits each in two summer sessions. Students who are working full-time typically enroll in 3-6 credits each term (fall, spring, summer, and optional winterim session). Part-time students complete the program in two to three years depending on credit enrollment.

Standard graduate tuition and segregated fee rates will apply. For the current academic year (2018-19), the tuition and segregated fees for Wisconsin residents total \$4,478.77 per semester for a full-time student enrolled in 9-12 graduate credits per term. Of this amount, \$3,974.67 is attributable to tuition and \$504.10 is attributable to segregated fees. For resident students enrolled part-time in the program, the cost of tuition and segregated fees is \$497.64 per credit, of which \$441.63 is attributable to tuition and \$56.01 attributable to segregated fees. For nonresidents, tuition and fees total \$9,227.98 for 9-12 credits, with \$8,723.88 attributable to tuition and \$504.10 attributable to segregated fees, or \$1,025.33 per credit, with \$969.32 attributable to tuition and \$56.01 attributable to fees. All UW-Whitewater students pay an additional \$50 per credit for online courses, pursuant to current policy.

RELATED REGENT AND UW SYSTEM POLICIES

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

UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting.

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
MASTER OF SCIENCE IN EDUCATION
IN HIGHER EDUCATION LEADERSHIP
AT UW-WHITEWATER
PREPARED BY UW-WHITEWATER**

ABSTRACT

The University of Wisconsin (UW)-Whitewater proposes to establish a Master of Science in Education (M.S.E.) in Higher Education Leadership. The proposed program will replace similar emphases that are currently offered as part of the M.S.E in Professional Studies. This program responds to the growing professionalization of the higher education field where a post-baccalaureate degree is increasingly required for entry-level administrative positions at technical schools, colleges and universities. Graduates will have a strong understanding of how to analyze research related to an original problem on current issues in higher education, to implement policy and use research and theory to guide and improve practice, to connect scholarship from a variety of areas related to higher education and collaborate across higher education units, to engage in data-based decision making, and to lead change. Students would be able to choose either a general Higher Education Leadership emphasis or an emphasis in Athletic Administration. The M.S.E. in Higher Education Leadership will consist of 30 credits including 12 core credits, a 15-credit emphasis, and a 3-credit capstone project.

PROGRAM IDENTIFICATION

Institution Name

University of Wisconsin-Whitewater

Title of Proposed Program

Higher Education Leadership

Degree/Major Designations

Master of Science in Education

Mode of Delivery

Single institution; face-to-face and online courses (75% of program courses will be delivered via a distance education option or in a hybrid format)

Projected Enrollments by Year Five

Table 1 illustrates projected enrollments and graduates for the first five years of the program. Anticipated new enrollments are 34 students the first year, with new enrollments increasing to 42 students per year by year five (i.e., 2024). It is anticipated that 20 students currently enrolled in the M.S.E. in Professional Development will choose to switch to the new degree program in year one. Modest attrition of approximately 5% is estimated each year. It is expected that approximately 160 students will have graduated by the end of year five.

Table 1: Five-Year Degree Program Enrollment Projections (Headcount)

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
Academic Year	2020-21	2021-22	2022-23	2023-24	2024-25
New Student Enrollment	34	36	38	40	42
Continuing (New) Student Enrollment	0	32	34	36	38
Continuing (Former) M.S.E. in Professional Studies Student Enrollment	20	0	0	0	0
Total Enrollment	54	68	72	76	80
Students Graduated	20	32	34	36	38

Tuition Structure

Standard graduate tuition and segregated fee rates will apply. For the current academic year (2018-19), the tuition and segregated fees for Wisconsin residents total \$4,478.77 per semester for a full-time student enrolled in 9-12 graduate credits per term. Of this amount, \$3,974.67 is attributable to tuition and \$504.10 is attributable to segregated fees. For resident students enrolled part-time in the program, the cost of tuition and segregated fees is \$497.64 per credit, of which \$441.63 is attributable to tuition and \$56.01 attributable to segregated fees. For nonresidents, tuition and fees total \$9,227.98 for 9-12 credits, with \$8,723.88 attributable to tuition and \$504.10 attributable to segregated fees, or \$1,025.33 per credit, with \$969.32 attributable to tuition and \$56.01 attributable to fees. All UW-Whitewater students pay an additional \$50 per credit for online courses, pursuant to current policy.

Department or Functional Equivalent

Department of Curriculum and Instruction

College, School, or Functional Equivalent

College of Education and Professional Studies

Proposed Date of Implementation

January 2020

DESCRIPTION OF PROGRAM**Overview of the Program**

The M.S.E. in Higher Education Leadership curriculum will consist of 30 credits including 12 credits of core courses, 15 credits for the emphasis, and 3 credits of capstone work. Two emphases will be offered: a general Higher Education Leadership emphasis and an Athletics Administration emphasis.

Student Learning Outcomes and Program Objectives

The program objective for the new Higher Education Leadership degree is to prepare future professionals who are highly capable of work in leadership roles in a variety of institutions of higher education. Concepts of leadership practice will be embedded across the curricula. Graduates with an M.S.E. in Higher Education Leadership from UW-Whitewater will be prepared to:

1. Understand and analyze research related to an original problem on current issues in higher education (such as equity gaps in persistence and graduation, compliance issues, and creating campus environments that promote belonging).
2. Use research and theory to guide and improve practice and develop solutions to inequitable practices and challenges facing higher education (such as naming and addressing policies that interfere with student time to degree and improving existing programming and developing new programming to enhance students' educational experiences).
3. Inform and improve leadership practice by connecting and applying scholarship from a variety of areas related to higher education leadership such as legal issues, governance issues, assessment strategies, inclusion, diversity, and organizational frameworks.
4. Communicate effectively in written, visual, and oral formats to share current knowledge in an area of higher education leadership.
5. Demonstrate understanding of issues of equity, diversity and inclusion and their impact on higher education.

Program Requirements and Curriculum

To be admitted to the program, students must have completed a bachelor's degree from an accredited institution, have an overall undergraduate GPA of at least 2.75 (to be admitted in *good standing*), submit two letters of reference and transcripts of all previous academic work, and submit a letter of interest addressing professional goals and reasons for pursuing this graduate degree. Table 2 illustrates the program curriculum. The program will consist of 30 credits including 12 credits of core courses, 15 credits for the emphasis, and 3 credits of capstone work. Principles of leadership will be incorporated into the core courses and are a part of the practicum experience. The general Higher Education Leadership emphasis requirements provide flexibility by allowing credits in the emphasis to be designed around a student's focus (such as academic or student affairs). The Athletics Administration emphasis requires nine credits of required emphasis courses and allows for six credits of other electives. Both emphases areas require the common higher education core of 12 credits and the capstone.

Table 2: Curriculum for the M.S.E. in Higher Education Leadership

Core Courses (12 credits)		
HELEAD 723	Issues, Perspectives, & Directions: Professional Seminar in Higher Ed	3 credits
HELEAD 725	Diversity and Equity in Higher Education	3 credits
HELEAD 793	Practicum	3 credits
HELEAD 780/ EDFOUND 780	Reading, Analyzing, and Evaluating Educational Research	3 credits
Higher Education Leadership Emphasis Elective Courses (Select 15 credits)		
HELEAD 700	Introduction to Higher Education and Student Affairs	3 credits
HELEAD 710	College Student Development: Theory, Assessment, and Application	3 credits
HELEAD 715	Assessment in Student Affairs	3 credits
HELEAD 720	Legal Issues in Higher Education	3 credits
HELEAD 729	Organization and Governance in Higher Education	3 credits
HELEAD 779	Career and Professional Development Strategies	3 credits
HELEAD 790	Workshop	1-3 credits
HELEAD 791	Travel Study (Comparative Higher Education)	1-3 credits

HELEAD 794	Seminar	1-3 credits
HELEAD 796	Special Studies (Common Elective Option)	1-4 credits
HELEAD 798	Individual Studies	1-4 credits
Athletics Administration Emphasis		
Required Courses (9 credits)		
HELEAD 702	Organization and Administration of Sport	3 credits
HELEAD 730	NCAA Governance and Compliance	3 credits
HELEAD 731	Budget and Financial Management in Athletics	3 credits
Elective Courses (Select 6 credits)		
HELEAD 732	Event Management, Marketing, Sponsorship in Athletics	
COACHING 660	Organization and Administration of Sport	
COACHING 661	Prevention and Care of Athletic Injuries	
COACHING 663	Children and Sports	3 credits
COACHING 680	Legal Aspects of Sport and Recreation Activities	3 credits
COACHING 690	Workshop in Intercollegiate Athletics	
COACHING 705	Principles of Psychology Applied to Coaching	
COACHING 710	Sport and Society	
COACHING 706	Current Trends and Issues in Athletics	3 credits
*Note	Students may also select from HELEAD emphasis elective courses.	
Capstone (3 credits)		
HELEAD 781	Career Application and Capstone Portfolio	3 credits
Total		30 credits

Assessment of Outcomes and Objectives

Student learning outcomes (SLOs) for the program will be assessed on a two-year cycle. The main assessment activities include the course-embedded learning assessment and assessment of learning outcomes in practicum and the final capstone project and portfolio. Information gathered from these assessment activities will be compiled for evaluation. All this information will be shared with the College Assessment Committee. Revisions will be made to the program curriculum based upon the assessment plan every two years.

Course-embedded assessments in the HELEAD 780 will track student progress toward SLO 1. Students will complete a literature review demonstrating their ability to read, analyze, and synthesize educational research and make it relevant to practice. Course-embedded assessments in HELEAD 723 will track student progress toward SLOs 2, 3, and 4. Students will connect the scholarship and their action plan (SLO 3). Students will develop an issues paper and presentation to provide evidence of written, visual, and oral communication skills (SLO 4). A course-embedded diversity action project in HELEAD 725 will track student progress toward SLO 5 by showing evidence of increased understanding of issues of equity, diversity and inclusion. SLO 1 will also be assessed through the diversity action project's literature component.

For final assessment of learning outcomes, tenure-track faculty will use course assignments in the practicum course as well as practicum supervisor evaluations to measure how students have developed scholar-practitioner skillsets and applied them to leadership environments in the field (SLOs 2 and 3). In addition, the tenure-track faculty will use the final capstone project and portfolio to assess each student's understanding and analysis of research related to an original problem worthy of examination (SLO 1). The final project will measure

how each student applies a data-driven action research project to inform and improve practice as a higher education leader (SLO 2). Communication skills will also be assessed through the written report and oral presentation (SLO 4).

Diversity

The M.S.E. in Higher Education Leadership will advance inclusive excellence through its curriculum, its recruitment of diverse faculty and students, and its practicum experiences. The current Higher Education Leadership emphasis in Professional Studies is the most diverse graduate program on the UW-Whitewater campus. In fall 2017, of the 44 students enrolled in the emphasis, 26 (i.e., 59%) were in underrepresented racial/ethnic groups. The program also intentionally serves as a pipeline for increasing the diversity of campus staff; in the past four years, five minority graduates from the Higher Education Leadership emphasis have accepted full-time positions at UW-Whitewater. The program, therefore, has the potential to continue to contribute to Goal 2, Objective 3 of the Strategic Plan “to recruit, retain, and support talented and diverse faculty and staff” with graduates who are highly qualified and committed to transforming the lives of UW-Whitewater students.

The program also benefits from university initiatives to recruit instructors from underrepresented populations. The Inclusive Excellence Fellowship program conducts national searches to bring recently graduated professionals with terminal degrees to campus to teach and contribute to inclusive excellence initiatives. One of the current tenure-track faculty in this program was hired after completing her Fellowship, and a current Inclusive Excellence Fellow is teaching now in the program. The College of Education and Professional Studies has a Diversity Coordinator (50%) and an Inclusive Excellence Committee to plan these efforts. The School of Graduate Studies participates in programs to recruit graduate students to the campus, and racial/ethnic minority graduates are supported with funding from the Advanced Opportunity Program and other grants. Of all racial/ethnic minority graduate students, 81% receive financial support as either grants, campus employment or a graduate assistantship.

Inclusivity and diversity are also essential components to the coursework and practicum experience in this proposed program. In this way, the program addresses Goal 3 of the University of Wisconsin-Whitewater Strategic Plan, which is to foster diversity and inclusion. “Diversity and Equity in Higher Education” is a required core course that emphasizes knowledge and skills necessary for engaging in a diverse democracy. Students will have opportunities to pursue practicum experiences in diversity-related offices or programs at both two- and four-year college campuses. Examples of past practicum sites include Waukesha County Technical College’s multicultural office, Edgewood College’s multicultural office, and UW-Whitewater’s Office of Student Diversity, Engagement and Success.

Collaborative Nature of the Program

For student practicum placements, the new M.S.E. program in Higher Education Leadership will be able to draw from the informal relationships already established with offices at: UW-Whitewater, Madison College’s Disability Resource Center, Waukesha County Technical College, UW-Madison, Blackhawk Technical College’s Advising Services Office, and Edgewood College’s Diversity and Inclusion Office for field placement sites. UW-Eau Claire has offered to provide practicum opportunities.

Projected Time to Degree

The program will take 15-24 months for students who enroll full-time. Full-time students who are expected to complete the program in 15-18 months are typically employed part-time or as graduate assistants at UW-Whitewater and may take 9 graduate credits in spring and fall semesters, with 6 credits each in two summer sessions. Students who are working full-time typically enroll in 3-6 credits each term (fall, spring, summer, and optional winterim session). Part-time students complete the program in two to three years depending on credit enrollment.

Program Review

The program will be reviewed via the UW-Whitewater audit and review process. The audit and review process is intended to facilitate continuous program improvement and is conducted for all academic programs on a five-year cycle. As part of the process, the program's faculty engage in a self-study review of the program. That review is then forwarded to the Graduate Audit and Review Committee, which provides critical feedback and makes recommendations for improvement. An evaluation report is presented to and discussed with the faculty, audit and review committee, dean, and provost.

The Audit and Review self-study will also identify how the program has addressed at least two of the goals identified in the UW-Whitewater Inclusive Excellence Guidelines: to recruit and retain diverse students and faculty. It will also address progress toward improving graduates' achievement of the UW-Whitewater master's-level learning objectives.

Accreditation

The program will not seek accreditation in a discipline-specific area. It will participate in the university-wide accreditation processes with the Higher Learning Commission. The program content will be guided by the standards laid out by the American College Personnel Association (ACPA) and the National Association of Student Personnel Administrators (NASPA), who jointly develop professional competency areas for student affairs educators. The Athletics Administration emphasis will be guided by the National Collegiate Athletic Association (NCAA) and the National Association of Collegiate Directors of Athletics (NACDA) professional standards listed across NCAA Division I, II, and III to obtain core competencies in the functional areas of compliance, academics, student development, marketing, fundraising, and communications.

JUSTIFICATION**Rationale and Relation to Mission**

The proposed M.S.E. in Higher Education Leadership program will comprise a stand-alone program for UW-Whitewater that replaces the current Higher Education Leadership emphasis and Athletics Administration emphasis within the M.S.E. in Professional Studies. Enrollments in the M.S.E. in Professional Studies, with either Higher Education Leadership or Athletics Administration emphasis, have grown steadily since these programs were initiated in 2013. Sixty-nine students enrolled in fall 2017 in these emphases: 44 in Higher Education Leadership and 25 in Athletics Administration. While the current emphases emerged from the M.S.E. in Professional Studies, that program focuses on issues in K-12 education, and many core

courses still cover K-12 issues. The new stand-alone program will consist of courses focused entirely on post-secondary education, providing more focused and complete coverage of higher education issues.

An M.S.E. in Higher Education Leadership will contribute to UW-Whitewater's Strategic Plan (specifically, Goal 2) to "transform lives and impact society" by providing "high quality academic programming that prepares UW-Whitewater graduates to become lifelong learners who lead successful lives and productive careers...."¹ The scholar-practitioner emphasis of this program focuses on preparing students to lead as change agents across colleges and universities. Coursework prepares graduates of the program to name and challenge inequity and develop programming that provides transformational educational experiences for students.

In addition, the proposed program also has the potential to contribute to Goal 3 (Diversity and Inclusion) of the Strategic Plan,² by supporting the advancement of a diverse pool of higher education administrators at UW-Whitewater and across the region. The Higher Education Leadership emphasis is the most racially and ethnically diverse graduate program at UW-Whitewater. This program will serve as one avenue to prepare a more diverse professional staff within higher education. Many graduates of the M.S.E. in Professional Studies transition from the practicum placements to full-time positions at UW-Whitewater. By increasing the diversity of staff on campuses, the proposed program will advance the College of Education and Professional Studies' mission "to prepare professionals to actively engage in an open democratic society inclusive of diverse populations."³

Institutional Program Array

A self-standing and self-supporting M.S.E. in Higher Education Leadership, with emphases in general Higher Education Leadership and Athletics Administration, will permit coursework to focus exclusively on preparing graduate students for work in institutions of higher learning rather than utilizing the current core courses which focus on K-12 educational issues. The new program will replace the previous emphasis within the M.S.E. in Professional Studies. Currently, UW-Whitewater offers an M.S. in Counseling degree, which previously had an emphasis in higher education (60-credit program), but this emphasis was recently eliminated. Students enrolled in the counseling programs can enroll in Higher Education Leadership courses as electives.

The proposed changes align with the UW-Whitewater Academic Values and Guidance⁴ document which encourages the development of "programs to meet the growing needs and changing demographics of the region" (i.e., Goal 1) and "professional and graduate programs that offer students the opportunity to develop into professional leaders within specific fields of expertise" (i.e., Goal 4). Other goals partially addressed also include: Goal 6. Develop academic programs that forge new regional partnerships through short-term, self-supporting credit and non-credit courses; Goal 7. Develop new programs and continuously evaluate the program array in consultation with faculty and departments, adjusting programs as necessary to meet societal,

¹ See <http://www.uww.edu/strategic-plan/goal-2>

² See <http://www.uww.edu/strategic-plan/goal-3>

³ See <http://www.uww.edu/coeps/about-us>

⁴ See <http://www.uww.edu/acadaff/initiatives>

economic, and student demands while continuing to recognize a commitment to a strong liberal education; Goal 8. Work with regional community, business, and nonprofit partners to identify regional needs and to develop mutually beneficial educational partnerships; and Goal 9. Use innovative approaches and new technologies for the design and delivery of programs, courses and pedagogical practices to assure high-quality affordable educational experiences.

The creation of an M.S.E. degree in Higher Education Leadership will attract new students, with its career-oriented focus and its ability to prepare students for existing employment needs in this region.

Other Programs in the University of Wisconsin System

UW-La Crosse is the only UW institution that offers graduate programs specific to higher education: an M.S.Ed. in Student Affairs Administration in Higher Education and an Ed.D. in Student Affairs in Administration and Leadership. This fact is significant, given market demand. Ruffalo Noel Levitz provided demand data for the CIP codes related to Higher Education Administration. That program classification (CIP 13.0406) has a standardized market demand score of 0.11 (where 0 is average). The proposed program differs from the UW-La Crosse's M.S.Ed. program in that the latter requires 40-48 credits and two practicum experiences whereas the proposed program is comprised of 30 credits. Further, while the proposed program does prepare students for careers in student affairs, it also prepares students for positions in academic and administrative affairs. Finally, the proposed program could complement the UW-La Crosse graduate array by preparing students for entry to the Ed.D. program.

Four other UW institutions offer master's programs that include curricular options in areas of post-secondary/higher education. The University of Wisconsin-Madison offers an M.S. in Educational Leadership and Policy Analysis, with an academic focus area in Higher, Post-secondary, and Continuing Education. Within this option, students may choose coursework in areas of intercollegiate athletic administration, two-year colleges, and student affairs administration. Coursework in athletic administration includes one foundational course in athletic administration, one capstone course, and an optional field experience, while the Athletic Administration emphasis proposed for the UW-Whitewater program will require four courses (with the capstone course as one of the four), up to two elective courses in athletic administration, and a required practicum experience. UW-Milwaukee offers an M.S. in Administrative Leadership and Supervision in Education with a concentration in Adult, Continuing, and Higher Education Administration. Its focus differs from the proposed program by preparing leaders for business, community, and higher education environments. UW-Oshkosh offers an M.S. in Educational Leadership and Policy, and the curriculum combines K-12 and university themes, whereas the proposed program curriculum is focused on higher education.

The M.S. in Higher Education Leadership will differentiate itself from other programs in two ways. First, the scholar-practitioner model offers a core curriculum that will prepare graduates to use research theory to guide and improve practices and connect scholarship from a variety of areas related to higher education leadership. Further, the emphasis on diversity, equity, and inclusion weaved in throughout the program and the student learning outcomes distinguish this program from others in the UW System. Moreover, the program intends to attract and serve a racially and ethnically diverse student population, one that is needed as colleges and universities in Wisconsin and the nation grow more diverse. Additionally, the option of an

emphasis in Athletic Administration is unique from other educational leadership programs in the UW System.

Need as Suggested by Current Student Demand

There is strong interest in the new stand-alone master's program. Since the Higher Education Leadership emphasis began in 2013, 58% of its admitted students have been UW-Whitewater graduates. The program largely has served students coming from the state of Wisconsin. A fall 2017 survey conducted of current UW-Whitewater undergraduate students in majors that have been strong pipelines for the degree (Communication, Health/Physical Education/Recreation/Coaching, Sociology, and Marketing) revealed that of the 104 respondents, 54 students indicated that they were interested or very interested in the programs (19 in Higher Education Leadership and 35 in Athletic Administration). The undergraduate majors from which there is the greatest enrollment yield into the Higher Education Leadership programs (Communication, Marketing, and Physical Education) have grown enrollment by 26.6% from 2013-14 through 2017-18. These programs may provide a pipeline for enrollment growth from current UW-Whitewater undergraduate students.

Data from these surveys and the rapid growth of the current M.S.E. in Professional Studies emphases suggest that a new stand-alone graduate program will be successful in attracting and enrolling students. Of the current graduate students enrolled in the M.S.E. in Professional Studies, with an emphasis in Higher Education Leadership or Athletics Administration, 26 of 41 respondents were interested or very interested in changing to the new degree designed exclusively to prepare students for post-secondary careers. Table 3 shows enrollment for the Higher Education Leadership and Athletic Administration emphases in the current M.S.E. in Professional Studies. The Higher Education Leadership emphases began in 2013, and the Athletics Administration became a separate emphasis in spring 2016. In only five years, enrollments grew rapidly to a total of 69 students in 2017-18. The large increase in 2015-16 followed by a decrease in 2016-17 is an artifact of recoding graduate students already enrolled in Coaching; Health, Human Performance and Recreation; and Educational Administration emphases to Higher Education Leadership.

Table 3: Headcount Enrollments in M.S.E. in P.S.–Higher Education Leadership Emphasis

Academic Year	2013-14	2014-15	2015-16	2016-17	2017-18
Higher Education Leadership	2	19	52	31	44
Athletic Administration			28	33	25

UW-Whitewater offers an M.S. in Counseling degree, which previously had an emphasis in higher education (60-credit program). That emphasis was recently eliminated. The elimination of this emphasis may produce additional demand for the proposed program drawn from the pool of students who may have previously considered that program. The proposed M.S.E. in Higher Education Leadership, emphasis in Athletic Administration, will allow students to select elective courses in health, physical education and coaching.

Need as Suggested by Market Demand

The U.S. Bureau of Labor Statistics (BLS) reports that master's degrees or higher are generally required for positions in post-secondary administration. The BLS predicts national

growth of 9% in post-secondary education administration (SOC code 11-9033).⁵ The Wisconsin Department of Workforce Development⁶ shows a projection from 2014 to 2024 of 3.7% growth in post-secondary education administrators from 5,868 to 6,085 jobs in Wisconsin. While many of these positions may require a Ph.D., the majority are entry-level administrative positions, which require a master's degree. The U.S. Department of Labor projects a 4% increase in master's-level positions in counseling and student affairs; nationally, the number of jobs in these positions increased from 135,337 in 2012, to 177,699 in 2015 (U.S. Department of Education, IPEDS).⁷ With increased focus on student retention and support for success, advising and student affairs offices are likely to require additional workers with advanced degrees to fill these new roles.⁸ EMSI reports in Wisconsin, Illinois, Michigan, Minnesota, and Iowa for "student advisors" and "academic affairs specialists" showed 361 unique job postings during calendar year 2018.⁹

A 2016 market analysis conducted by the UW-Whitewater Student Marketing Association, Creative Marketing Unlimited, identified nearly 9,000 national job openings in June 2016, related to Higher Education Leadership on HigherEdJobs, with 13% from the Midwest. An analysis of higher education positions in the Midwest from this study indicated the top three areas for higher education administrative positions were business and financial services (158), admissions and enrollment (136), and student affairs and services (125). Of all positions posted for June 2016 in higher education administration, 28 were at Wisconsin institutions. A survey of open positions in Athletics Administration posted on the NCAA and NACDA job board between January and March 2018, indicated 210 positions in the Midwest, with 36 (i.e., 17%) in Wisconsin. The top three positions included coaching (64), development/corporate relations (40), and marketing and sales (38).¹⁰

Of the graduates over the past three years in the current Higher Education Leadership emphasis, 63% are employed in Wisconsin. This includes one athletics director at a small private college, 6 admissions counselors, 6 advisors, 13 assistant or higher-level coaches, 4 residence life professionals, and 11 directors (e.g., assistant complex directors, complex directors, directors of digital content for UW-Madison).

⁵ See <https://www.bls.gov/oes/current/oes119033.htm>

⁶ See <https://www.jobcenterofwisconsin.com/wisconomy/pub/occupation.htm#>

Viz Occupation Group: Management Occupations, Occupation Title: Education Administrators, Postsecondary

⁷ Retrieved from <https://nces.ed.gov/ipeds/trendgenerator/tganswer.aspx?sid=5&qid=30> Trend Terms: Number of people employed by postsecondary institutions by occupational category (Student and academic affairs and other)

⁸ Retrieved from <https://www.chronicle.com/article/A-Third-of-Your-Freshmen/243560>;
<https://www.chronicle.com/article/Student-Needs-Have-Changed/243797>

⁹ See <https://www.economicmodeling.com/>

¹⁰ Retrieved from <http://jobcenter.nacda.com/> and

https://naamarket.ncaa.org/jobseekers/index.cfm?_ga=2.99159198.1825060765.1493235490-1003912372.1426037771

Cost and Revenue Projections For Higher Education Leadership (M.S.E.)

Items		Projections				
		2020-21 Year 1	2021-22 Year 2	2022-23 Year 3	2023-24 Year 4	2024-25 Year 5
I	Enrollment (New Student) Headcount	34	36	38	40	42
	Enrollment (Continuing Student) Headcount	20	32	34	36	38
	Enrollment (New Student) FTE	25.5	27.0	28.5	30.0	31.5
	Enrollment (Continuing Student) FTE	15.0	24.0	25.5	27.0	28.5
II	Total Credit Hours (# total FTE x credits per year)	729	918	972	1026	1080
III	FTE of New Faculty/Instructional Staff	0	0	0	0	0
	FTE of Current Fac/IAS	2.5	2.5	2.5	2.5	2.5
	FTE of New Admin Staff	0.15	0.15	0.15	0.15	0.15
	FTE Current Admin Staff	0.25	0.25	0.25	0.25	0.25
IV	Revenues					
	<i>From Tuition (new credit hours x \$441.63/credit)</i>	\$321,948	\$405,416	\$429,264	\$453,112	\$476,960
	<i>From Fees</i>	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000
	<i>Program Revenue - Grants</i>					
	<i>Program Revenue - Other</i>					
	<i>Reallocation</i>					
	Total New Revenue	\$333,948	\$417,416	\$441,264	\$465,112	\$488,960
V	Expenses					
	Salaries plus Fringes					
	<i>Faculty/Instructional Staff</i>	\$242,735	\$242,735	\$242,735	\$280,960	\$280,960
	<i>Other Staff (program coordinator, clerical support)</i>	\$26,590	\$26,590	\$26,590	\$26,590	\$26,590
	Other Expenses					
	<i>Marketing</i>	\$15,000	\$12,000	\$12,000	\$12,000	\$12,000
	<i>Graduate Assistants (3)</i>	\$44,510	\$44,510	\$44,510	\$44,510	\$44,510
	<i>Supplies and services</i>	\$5,000	\$5,000	\$5,000	\$6,000	\$6,000
	<i>Professional Development (AIS and Program Faculty)</i>	\$6,000	\$6,000	\$6,000	\$8,000	\$8,000
	<i>Program Evaluation and Advisory Board</i>	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
	Total Expenses	\$346,835	\$343,835	\$343,835	\$385,060	\$385,060
VI	Net Revenue	-\$12,886	\$73,582	\$97,430	\$80,053	\$103,901

Provost's Signature:

Greg Cook

Date:

6-13-19

**UNIVERSITY OF WISCONSIN-WHITEWATER
COST AND REVENUE PROJECTIONS NARRATIVE
MASTER OF SCIENCE IN EDUCATION (M. S. E.)
IN HIGHER EDUCATION LEADERSHIP**

UW-Whitewater is seeking to elevate two emphases in its current M.S.E. in Professional Studies (Higher Education Leadership and Athletics Administration) into the M.S.E. in Higher Education Leadership. The courses are currently being taught by a full-time faculty member in the Department of Curriculum and Instruction and by qualified adjunct instructors who hold other relevant positions on campus in higher education administration.

Section I – Enrollment

Enrollment numbers are estimated based on the current enrollment headcount of 69 students in the M.S.E. in Professional Studies emphases areas in Higher Education Leadership and Athletics Administration. UW-Whitewater anticipates that some students will choose to switch to the new degree from the two existing M.S.E. in Professional Studies emphases. In addition, the existing emphasis areas have a history of attracting new cohorts of the size projected for the new program.

New student headcount reflects first-time, re-entering, or transfer students who will enroll in the program. The 20 continuing students in Year 1 are students anticipated to switch from the Professional Studies Higher Education Leadership (HELEAD) emphasis to the new program. Based on a sample of students in the current emphases in HELEAD/Athletics Administration, it is estimated that about half these students will enroll full-time and take 9 credits in each fall and spring semester and one winter/summer course. The other half will enroll for about 5 credits per semester (both fall and spring), on average. Using this as a benchmark, the student headcount is adjusted to student FTE by assuming that half of the students are full-time and the other half are half-time. Thus, the student FTE count is 0.75 times the headcount (e.g., 34 student headcount = 17 full-time and 17 half-time = 25.5 FTE students). The same factor of 0.75 is used to convert continuing students to FTE. Modest attrition of 2 students per year is anticipated. No appreciable nonresident enrollments are anticipated.

Section II – Credit Hours

Credit hours were calculated by multiplying the total student FTE count by the full-time credit load of 18 credits per academic year. Students enrolling part-time have already been accounted for by adjusting the FTE count to include them. This matches data from the current M.S.E. in Professional Studies Higher Education emphasis for students' credit hour loads.

Section III – Faculty and Staff Appointments

Instructors who are currently teaching courses in the HELEAD/Athletics Administration emphases will continue to teach in the new program. In Years 1-3, it is anticipated that 20 course sections will be offered in the academic year and 5 courses in the summer/winter sessions. On average, full-time faculty will teach 12 of those sections (1.5 FTE). The remainder will be taught by approved qualified adjuncts (1.0 FTE). Total instructional FTE is anticipated to be 2.5.

A faculty coordinator is required to administer the program (hire and evaluate instructional academic staff, develop practicum experiences, and advise students). Currently, the faculty coordinator receives a one-course reassignment (.25 FTE) and a summer stipend of \$3,000 to meet all academic obligations. New administrative staffing equivalent to 0.15 FTE (\$8,300 salary and fringe) is also required to assist the Department of Curriculum and Instruction in supporting the program with scheduling, hiring, and program evaluation.

Section IV – Program Revenues

Revenue accrues from resident graduate tuition charged at \$441.63 per credit for residents (excluding segregated student fees). It is anticipated that one course will be delivered online each term (including winterim and summer terms), with average enrollment of 20 students per course. All UW-Whitewater students pay an additional \$50 per credit for online courses, pursuant to current policy.

Section V – Program Expenses

Program expenses include 1.5 FTE program faculty, assuming average salaries of \$70,000 and an academic year fringe rate of 39%. Instructional academic staff are included, assuming compensation of \$5,500 per course plus 39% fringe rate for eight course, academic year sections in Years 1-3 and 13 sections in Years 4-5. On average, it is expected that five courses will be taught in summer or winterim terms (\$5,700 per course); 25% fringe rate is added for these terms. Other staff expenses include a program coordinator who receives a 25% (one course) reassignment each semester that is replaced with an instructional staff member paid \$5,500 plus 39% fringe. The program coordinator also receives a summer stipend of \$3,000, and the program has additional administrative support at \$8,300 per year for salary and fringe.

Program operational expenses are estimated to be \$18,000 to \$21,000 per year and include marketing (more in Year 1 for the transition to the new program), supplies and services (including materials for a continual professional development series for students outside of courses with topics such as job preparation, resume reviewing, job panels, and mock interviews; new student orientation; and commencement events), professional development for program academic instructional staff and faculty, and expenses related to program assessment and effectively coordinating a new advisory board. The program will also support three graduate assistants who have administrative and research support roles.

Section VI – Projected Revenues

The projected net revenues from the program will be used to support programmatic and curricular innovation, especially to review and revise blended learning and online courses and implement revisions within the program. Revenues will also be used to support the growth and design of other graduate programs identified for development by the institution's program array. Revenues will also support additional research stipends for graduate students who qualify to present their work at professional conferences. Any shortfall in revenue in the first year(s) of the program will be covered by revenues from other programs in the college or graduate school, then later those shortfalls will be repaid as the program generates positive net revenue.



Office of the Provost

May 16, 2019

Dr. Raymond Cross
President, UW System
1720 Van Hise Hall
1220 Linden Drive
Madison, WI 53706

Dear President Cross:

Please accept this as UW-Whitewater's Letter of Commitment for our new Master of Science in Education (MSE) program in Higher Education Leadership. This new graduate program grew from two popular and successful emphases within the MSE-Professional Studies program that already exists at UW-Whitewater. We are proud of the achievements of our students, faculty, and staff in our College of Education and Professional Studies. With this new program, the College will be able to provide another level of educational opportunity to support workforce development in Wisconsin and the surrounding region.

With this letter, we assert and make a firm commitment to the following:

1. The MSE program in Higher Education Leadership is designed to meet UW-Whitewater's definition and standards of quality and to make a meaningful contribution to our select mission, overall academic plan, and our academic program array. The program builds on and replaces two emphases in our MSE-Professional Studies program. Both emphases have a history of good enrollment. They have been particularly attractive to underrepresented minority students, with good success in retention and graduation. As the proposal was developed, faculty and staff consulted with our Director of Academic Assessment and their college assessment leaders to assure a high level of quality in curriculum and program assessment. Our campus is currently engaged in strategic planning and campus academic planning activities. As part of these processes, we have been intensively reviewing all of our academic programs. It is clear that the new MSE in Higher Education Leadership will provide a meaningful addition to our campus program array, and our College of Education and Professional Studies is poised for a successful launch of this new program. The program responds to the growing professionalization of the higher education field where a post-baccalaureate degree is increasingly required for entry-level administrative positions at technical schools, colleges and universities.
2. We have institution-wide support and approval for this new program through every phase of our campus governance process. The proposal was approved by the Department of Curriculum and Instruction, the curriculum committee in the College of Education and Professional Studies, the Dean of the College of Education and Professional Studies, and the Graduate Council. The proposal has firm support from the Provost's office, from the college dean, and from the Chancellor. All required approvals have been obtained on campus, with enthusiastic support.
3. The necessary financial and human resources are in place or have been committed to implement and sustain this new master's program. Department and college staff have thoroughly considered and provided for all of the resources needed to launch and maintain the program. A financial plan is in place to support and sustaining the program.

Hyer Hall, Suite 420 | 800 West Main Street | Whitewater, WI 53190 | www.uww.edu | p 262-472-1672 | f 262-472-1670



Inspire. Engage. Transform.

4. A high-quality system for program evaluation is in place. As soon as the new program is implemented, it will enter our 5-year campus cycle for audit and review to support continuous evaluation and improvement. The program proposal includes a fully defined list of student learning outcomes and a plan for assessment of those outcomes. As noted above, these plans have been reviewed and approved by our Director of Academic Assessment who also supports the Audit and Review Committee for graduate programs. Members of the college curriculum committee and the Graduate Council have also reviewed the program's assessment plan as an integral part of the curriculum proposal. We are confident this new program has the plans in place for successful program evaluation that will assure a high level of quality and continuous improvement.

The proposal for the new MSE program in Higher Education Leadership was developed using a very thorough and careful process. We have all of the necessary resources in place or firmly planned, and we are confident the program will be a success. This program will be a significant addition for UW-Whitewater, an attractive offering for students wishing to pursue graduate education, and a benefit for workforce development in Wisconsin and the surrounding region. We are proud to recommend this new program for your approval, and for approval by the members of the Board of Regents. We believe this is a strong and needed addition to the University of Wisconsin System program array.

Sincerely,



Susan Elrod, Ph.D.
Provost and Executive Vice Chancellor
for Academic Affairs



Greg Cook, Ph.D.
Interim Provost and Executive Vice Chancellor
for Academic Affairs (incoming)

SE/GC/has Encl.

cc: Cheryl Green, Interim Chancellor
Joan Littlefield Cook, Interim Associate Vice Chancellor for Academic Affairs
Robin Fox, Interim Dean, College of Education and Professional Studies
Carleen Vande Zande, Interim AVP of APEI, UW System

Approval of the UW-La Crosse Faculty Policies and Procedures
relating to Faculty Layoff and Termination

EDUCATION COMMITTEE

Resolution I.1.h.:

That, upon the recommendation of the President of the University of Wisconsin System, the Board of Regents approves the University of Wisconsin-La Crosse Faculty Policies and Procedures relating to Faculty Layoff and Termination.

UW-LA CROSSE FACULTY POLICIES AND PROCEDURES RELATING TO FACULTY LAYOFF AND TERMINATION

EXECUTIVE SUMMARY

BACKGROUND

Section UWS 2.02, Wis. Admin. Code (“Faculty Rules: Coverage and Delegation”), states that: “Rules and procedures developed pursuant to UWS 3, 4, 5, 6, 7, and 8 by the faculty of each institution shall be forwarded by the chancellor to the president and by the president to the board for its approval prior to their taking effect. Such policies and procedures, unless disapproved or altered by the regents, shall be in force and effect as rules of the regents.”

On March 10, 2016, the UW System Board of Regents created Regent Policy Document (RPD) 20-24, Procedures Relating to Financial Emergency or Program Discontinuance Requiring Faculty Layoff and Termination. (Available for review at: <https://www.wisconsin.edu/regents/policies/procedures-relating-to-financial-emergency-or-program-discontinuance-requiring-faculty-layoff-and-termination/>) RPD 20-24 states that: “UW System institutions shall submit to the Board of Regents for approval any institutional policy developed in accordance with this Regent policy. The chancellor at each institution, with the advice and counsel of the faculty, shall be responsible for implementation of this Regent policy.”

Accordingly, attached to this document is a memo from Chancellor Gow requesting approval from the Board of Regents for the UW-La Crosse Policies and Procedures Relating to Faculty Layoff and Termination. The UW System Office of General Counsel and the Office of Academic and Student Affairs have reviewed the proposed procedures. The President recommends approval of the UW-La Crosse Policies and Procedures Relating to Faculty Layoff and Termination.

REQUESTED ACTION

Adoption of Resolution I.1.h., approving the UW-La Crosse Policies and Procedures Relating to Faculty Layoff and Termination.

DISCUSSION

The UW-La Crosse Faculty Senate approved UW-La Crosse Policies and Procedures Relating to Faculty Layoff and Termination on April 25, 2019. Thereafter, Chancellor Gow approved these same policies, and thereafter, submitted them to President Cross for review and approval on May 16, 2019. Attached to this document is Appendix A, containing the UW-La Crosse Policies and Procedures Relating to Faculty Layoff and Termination.

RELATED REGENT POLICIES AND LAWS

Section 36, Wis. Stats.

Chapters UWS 2, 3, and 5, Wis. Admin. Code

Regent Policy Documents, 20-23 and 20-24

APPENDIX A

UWL: Procedures Relating to Financial Emergency or Program Discontinuance Requiring Faculty Layoff and Termination

The University of Wisconsin's Board of Regents passed a layoff policy (Regent Policy 20-24) in 2016 that applies to all campuses. UWL provides the following clarifications and/or extensions to the policy based on campus policies and procedures.

- (1) Definition of Program: As indicated in Regent Policy 20-24, "program" shall mean a related cluster of credit-bearing courses that constitute a coherent body of study within a discipline or set of related disciplines. When feasible, the term shall designate a department or similar administrative unit that offers majors and has been officially recognized by the UW institution. In addition, at UWL "program" can be used to designate a department or functional equivalent that offers majors or minors and can refer to 1) a discipline or similar disciplines closely related by academic interest; and/or 2) an interdisciplinary unit that consists of faculty members from diverse disciplines with a shared problem orientation.
- (2) Definition of Seniority: Seniority, for the purposes of Wis. Stat. 36.22(3)(b), is defined according to rank, and within rank, according to length of service at the University of Wisconsin- La Crosse and time at rank.
 - a) Length of service shall be computed from the effective date of the appointment at the University of Wisconsin-La Crosse.
 - b) The period of an approved leave of absence is included in determining length of service.
 - c) If a faculty member is reappointed after having left the university, the new appointment shall be treated as an initial appointment in the determination of seniority.
- (3) Lay off/Status/Termination/Retained Rights:
 - (a) The chancellor may lay off or terminate a tenured faculty member, or lay off or terminate a probationary faculty member prior to the end of their appointment, under extraordinary circumstances because of a financial emergency, or because of program discontinuance based on educational considerations. Such layoffs or terminations will be made in accordance with the provisions of UWS Chapter 5, Wis. Stat. 36.22, and this chapter and imply the retention of rights indicated therein. A nonrenewal under **UWL 3.07**, regardless of reasons, is not a layoff or termination under this section.
 - (b) Faculty members on voluntary or compulsory reduction of appointment under this chapter retain full membership in the faculty regardless of the percent of appointment and continue to be governed by Faculty Senate policy and procedure; in addition, the annual notice required in Wis. Stat. 36.22(11)(b)(5) shall be deemed to be given automatically by virtue of the continued part-time appointment. In the event that a faculty member on voluntary or compulsory reduction of appointment shall accept an appointment at a greater fraction of full time as specified in UWS 5.16(2)(b)1, then any subsequent claim to increased appointment shall be forfeited.
- (4) Safeguards for Students in the Event of Academic Program Discontinuance: Regent Policy 20-24 states that UW System institutions will make every effort to accommodate students adversely affected by discontinuance of an academic program for reasons of financial emergency or because of educational considerations. Discontinuance of a program should be phased in over a reasonable time period to provide students with the opportunity to complete the program or transfer to another program. Completion of a program or transfer to another program cannot be guaranteed by the university.

UWL will also adhere to the following additional safeguards associated with students and the

event of academic program discontinuance, and every effort will be made to be attentive to the students' needs:

- (a) Students should have opportunities to participate in discussions about programs proposed for termination.
- (b) A discontinued program should be phased out over a reasonable period of time, preferably in a way that allows all or most students who are currently (and continuously) enrolled in the program to complete it.
- (c) New students should not be permitted to enroll in programs that are being considered for discontinuance.
- (d) All students enrolled in the affected program shall be informed in a timely fashion that a program is being discontinued. This communication should include the timeline for discontinuance and options that students have for either completing the program or transferring to another program.

RELATED REGENT POLICIES AND APPLICABLE LAWS

Section 36, Wis. Stats.

Chapters UWS 3 and 5, Wis. Admin. Code

Regent Policy Document 20-23 --<https://www.wisconsin.edu/regents/policies/faculty-tenure/>

Regent Policy Document 20-24 <https://www.wisconsin.edu/regents/policies/procedures-relating-to-financial-emergency-or-program-discontinuance-requiring-faculty-layoff-and-termination/>



May 16, 2019

Karen Schmidt
Interim Vice President for Academic and Student Affairs
1730 Van Hise Hall
1220 Linden Dr.
Madison, WI 53706

Dear Karen,

Please find the attached document that constitutes UWL's campus-specific extensions and clarifications to Regent Policy 20-24 "Procedures Relating to Financial Emergency or Program Discontinuance Requiring Faculty Layoff and Termination." I endorse this policy that has been reviewed by UW System Office of General Counsel and approved by faculty governance on 4/25/2019. UWL had no prior policy so there is no copy with changes indicated.

We would appreciate the submission of this policy to the Board of Regents for review and approval. Either the July or October meeting would be fine. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Gow".

Joe Gow
Chancellor

cc: Laura Dunek, Special Assistant for Governance and Strategic Initiatives

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Approval of the UW-Platteville Faculty Policies and Procedures
relating to Faculty Layoff and Termination

EDUCATION COMMITTEE

Resolution I.1.i.:

That, upon the recommendation of the President of the University of Wisconsin System, the Board of Regents approves the University of Wisconsin-Platteville Faculty Policies and Procedures relating to Faculty Layoff and Termination.

UW-PLATTEVILLE FACULTY POLICIES AND PROCEDURES RELATING TO FACULTY LAYOFF AND TERMINATION

EXECUTIVE SUMMARY

BACKGROUND

Section UWS 2.02, Wis. Admin. Code (“Faculty Rules: Coverage and Delegation”), states that: “Rules and procedures developed pursuant to UWS 3, 4, 5, 6, 7, and 8 by the faculty of each institution shall be forwarded by the chancellor to the president and by the president to the board for its approval prior to their taking effect. Such policies and procedures, unless disapproved or altered by the regents, shall be in force and effect as rules of the regents.”

On March 10, 2016, the UW System Board of Regents created Regent Policy Document (RPD) 20-24, Procedures Relating to Financial Emergency or Program Discontinuance Requiring Faculty Layoff and Termination. (Available for review at: <https://www.wisconsin.edu/regents/policies/procedures-relating-to-financial-emergency-or-program-discontinuance-requiring-faculty-layoff-and-termination/>) RPD 20-24 states that: “UW System institutions shall submit to the Board of Regents for approval any institutional policy developed in accordance with this Regent policy. The chancellor at each institution, with the advice and counsel of the faculty, shall be responsible for implementation of this Regent policy.”

Accordingly, attached to this document is a memo from Chancellor Shields requesting approval from the Board of Regents for the UW-Platteville Policies and Procedures Relating to Faculty Layoff and Termination. The UW System Office of General Counsel and the Office of Academic and Student Affairs have reviewed the proposed procedures. The President recommends approval of the UW-Platteville Policies and Procedures Relating to Faculty Layoff and Termination.

REQUESTED ACTION

Adoption of Resolution I.1.i., approving the UW-Platteville Policies and Procedures Relating to Faculty Layoff and Termination.

DISCUSSION

The UW-Platteville Faculty Senate approved UW-Platteville Policies and Procedures Relating to Faculty Layoff and Termination on December 11, 2018. Thereafter, Chancellor Shields approved these same policies, and thereafter, submitted them to President Cross for review and approval on April 2, 2019. Attached to this document is Appendix A, containing the UW-Platteville Policies and Procedures Relating to Faculty Layoff and Termination.

RELATED REGENT POLICIES AND LAWS

Section 36, Wis. Stats.

Chapters UWS 2, 3, and 5, Wis. Admin. Code

Regent Policy Documents, 20-23 and 20-24

APPENDIX A

Presented to Faculty Senate December 11, 2018

Approved New Version

6.3.14 Procedures Relating to Financial Emergency or Program Discontinuance Requiring Faculty Layoff and Termination

6.3.14.1 Definitions

(1) For the purposes of this chapter, "program" shall mean a related cluster of credit-bearing courses that constitute a coherent body of study within a discipline or set of related disciplines. When feasible, the term shall designate a department or functional equivalent, that offers majors. Academic programs cannot be defined ad hoc, at any size, but should be recognized academic units; programs shall not be defined to single out particular faculty members for layoff.

(2) For the purposes of this chapter, "program discontinuance" as described in Wis. Stat. 36.21–22 shall mean formal program elimination or closure.

(3) For the purposes of this chapter, "curtailment" as described in Wis. Stat. 36.21–22 shall mean a reduction in the size of a program.

(4) For the purposes of this chapter, "modification" or "redirection" as described in Wis. Stat. 36.21–22 shall mean great changes in the disciplinary content and focus of a program.

(5) For the purposes of this chapter, "financial emergency" is defined and may be declared as described in UWS 5.02.

(6) For the purposes of this chapter, "educational considerations" shall not include cyclical or temporary variations in enrollment. Educational considerations must reflect long-range judgments that the educational mission of the institution as a whole will be enhanced by a program's discontinuance.

(7) For the purposes of this chapter, "layoff" is the indefinite suspension or involuntary reduction in services and compensation of a faculty member's employment by the University of Wisconsin System (Wis. Stat. 36.22(1)(a)). A laid off faculty member retains the rights specified in Wis. Stat. 36.22(11)–36.22 (15).

(8) For the purposes of this chapter, "termination" is the permanent elimination of a faculty member's employment by the University of Wisconsin System (Wis. Stat. 36.22(1)(c)). A faculty member whose position has been terminated retains the rights specified in Wis. Stat. 36.22(13)–(14).

6.3.14.2 Layoff and Termination for Reasons of Financial Emergency or Educational Considerations

(1) Except as provided in 6.3.14.2(2) below, no faculty member shall be laid off or terminated due to curtailment, modification, and/or redirection of a department. Faculty displaced due to restructuring of a program or discontinuance of a program for reasons other than financial emergency or educational considerations will be placed in another suitable position, at the same rank. If placement in another position would be facilitated by a reasonable period of training, such retraining and relocation will be provided and the institution will bear the cost.

(2) The chancellor may lay off or terminate a tenured faculty member, or lay off or terminate a probationary faculty member prior to the end of their appointment, under extraordinary circumstances because of a financial emergency, or because of program discontinuance based on educational considerations. Such layoffs or terminations will be made in accordance with the provisions of UWS Chapter 5, Wis. Stat. 36.22, and this chapter and imply the retention of rights indicated therein. A nonrenewal under Section 6.3.12, regardless of reasons, is not a layoff or termination under this section.

(3) Any decision to discontinue a program should take a broad and inclusive view of both the financial costs and the academic contributions of the program and its faculty, with the following principles in mind:

(a) The primary mission of an academic program is to provide high quality academic and professional instruction. The professional contributions of the faculty, the design of the academic program, and the performance of the students in the program should all be considered.

(b) Academic programs can provide significant contributions to the primary mission of other units and to the university as a whole, this includes the strategic priorities of the university. The quality of and the need for these contributions should be part of any evaluation of an academic program.

(c) Academic programs can serve other programs and the university as a whole not only through courses but also through scholarship, outreach, and service activities. The value of these activities should be considered in the evaluation of an academic program.

(d) The cost of an academic program may be included in the evaluation of a program for discontinuation in combination with the criteria given above. This evaluation should not be limited to the cost of the resources needed to provide the academic program but should include the value of all of the contributions that the academic program makes to the mission and strategic priorities of the university. The university may determine to support a high cost program that is critical to the mission, strategic priorities and

marketability of the university and not to support a low cost program that does not meet its primary mission.

6.3.14.3 Financial Emergency: Consultation and Recommendations

(1) The chancellor shall consult with the Academic Planning Council (APC) if at any time a declaration of financial emergency is to be considered. The APC shall function as specified in UWS 5.04 through 5.06. It is the right and responsibility of the APC to represent the faculty if a declaration of a state of financial emergency for the campus is being considered and to assure that the procedures of UWS 5.05 and 5.06 are followed.

(2) Consultation shall proceed in accordance with UWS 5.05 and shall include consultation with the Academic Staff Senate and the University Staff Senate, as well as those other individuals and groups who may be able to provide valuable advice, including groups of students who might be affected by the changes (see UWS 5.05(1)(e) and Regent Policy 20-24, section III).

(3) The chancellor and the APC shall consider all feasible alternatives to termination of appointments such as the voluntary reduction of full-time faculty members to part-time status, expenditure of one-time money or reserves as bridge funding, furloughs, pay cuts, early-retirement packages, deferral of nonessential capital expenditures, and cuts to non-educational programs and services, including expenses for administration.

(4) If the chancellor decides to recommend the declaration of a state of financial emergency for the campus, that recommendation to the system president and the Board of Regents shall be accompanied by a report which shall be in conformity with UWS 5.06(1).

(5) Before any proposal to declare a financial emergency is made, the Faculty Senate will have opportunity to render an assessment in writing of the institution's financial condition. The Faculty Senate will have access to at least five years of audited financial statements, current and following-year budgets, and detailed cash-flow estimates for future years as well as detailed program, department, and administrative-unit budgets. The Faculty Senate will then share the assessment with the Chancellor and the APC Chair.

(6) The chancellor and the chair of the APC (or their designees), and representatives of affected colleges, schools, departments, and programs may appear before the Board of Regents at the time the recommendation is considered. Other interested parties may submit alternative recommendations or challenges to any part of the report in writing.

6.3.14.4 Financial Emergency: Individual Designations

Once the Board of Regents has accepted the chancellor's declaration of a state of financial emergency, it shall be the primary responsibility of the Department Chair or School Director in consultation with the Dean of the affected program(s) to recommend which individuals shall

have their appointments reduced or terminated. Such recommendations shall be made in accordance with the provisions of UWS 5.07 and this chapter.

6.3.14.5 Educational Considerations

(1) The chancellor's recommendation to the Board of Regents to discontinue formally a program will be based upon educational considerations, as determined primarily by the faculty as a whole or an appropriate committee thereof, as described in Regent Policy Document 20-24, Section II, Paragraphs A through G.

(2) Faculty members in a program being considered for discontinuance for educational considerations will promptly be informed of this activity in writing and provided at least thirty days in which to respond to it. Tenured and probationary faculty and academic staff will be invited to participate in these deliberations.

(3) Before the chancellor issues notice to a faculty member of an intention to terminate an appointment because of discontinuance of a program, the institution will devote its best efforts to place the faculty member concerned in another suitable faculty position. If placement in another position would be facilitated by a reasonable period of training, such retraining and relocation will be provided and the institution will bear the cost where readaptation is feasible as provided in Wis. Stat. 36.22(12). If no position is available within the institution, with or without retraining, the faculty member's appointment then may be terminated, but only with provision for severance as indicated in 6.3.14.11.

(4) Faculty members may contest a proposed relocation under the hearing procedures described in section 6.3.14.8 below.

(5) Faculty members recommended for layoff or termination due to discontinuance of a program for educational considerations shall have the same rights of notification, hearing, and review described in 6.3.14.7-6.3.14.10. below.

6.3.14.6 Seniority

(1) In the case of any faculty layoffs or terminations due to financial emergency or program discontinuance, the recommendations described in 6.3.14.5(5) shall follow seniority, unless a clear and convincing case is made that program or budget needs dictate other considerations.

(2) Seniority, for the purposes of Wis. Stat. 36.22(3)(b), is defined according to rank, and within rank, according to length of service at the University of Wisconsin-Platteville (including branch campuses) and at that rank.

(3) Length of service shall be computed from the effective date of the appointment at the University of Wisconsin-Platteville. The period of an approved leave of absence is included in determining length of service. If a faculty member is reappointed after having left the

university, the new appointment shall be treated as an initial appointment in the determination of length of service.

(4) If two or more individuals have identical seniority, then a process of random selection will be employed to give each a unique seniority position. The random process to be used will be determined by the Faculty Senate.

6.3.14.7 Notification

Each faculty member whose position is recommended for layoff or termination shall be notified in accordance with Wis. Stat. 36.22(4) and 36.22(5).

6.3.14.8 Hearing

(1) A faculty member whose position is recommended for layoff or termination is entitled to a full, on-the-record adjudicative hearing as provided in Wis. Stats. 36.22(7) and 36.22(8). The issues in the hearing may only include those described in Wis. Stat. 36.22(7)(b).

(2) The Appeals Commission shall operate as the hearing agent pursuant to Wis. Stat. 36.22(6), and conduct the hearing, make a verbatim record of the hearing, prepare a summary of the evidence, and transmit such record and summary along with its recommended findings of fact and decision to the Board of Regents.

6.3.14.9 Recommendations and Board Review

(1) The recommendations of the chancellor and the recommendations, if any, of the Appeals Commission shall be forwarded to the UW-System President and the Board of Regents and acted upon by the Board of Regents in accordance with Wis. Stat. 36.22(9).

(2) Review by the Board of Regents is governed by Wis. Stat. 36.22(9) and 36.22(10).

6.3.14.10 Layoff Status and Retained Rights

(1) A faculty member whose position has been eliminated or reduced in accordance with the provisions of this chapter shall be placed on layoff status and shall so remain until removed according to Wis. Stat. 36.22(11).

(2) A faculty member designated for layoff or on layoff status shall have the rights provided in Wis. Stat. 36.22(12)–36.22(15).

(3) Faculty members on voluntary or compulsory reduction of appointment under this chapter retain full membership in the faculty regardless of the percent of appointment and continue to be governed by the UW-Platteville Faculty Handbook; in addition, the annual notice required in Wis. Stat. 36.22(11)(b)(5) shall be deemed to be given automatically by virtue of the continued

part-time appointment. In the event that a faculty member on voluntary or compulsory reduction of appointment shall accept an appointment at a greater fraction of full time as specified in UWS 5.16(2)(b)1, then any subsequent claim to increased appointment shall be forfeited.

6.3.14.11 Severance

A faculty member who is to be laid off or terminated under this policy has a statutory right to at least twelve months' notice under Wis. Stat. 36.22(5)(a) at the faculty member's current salary. At the discretion of the chancellor or designee, in consultation with the faculty member, the faculty member may be granted up to twelve months' salary as severance pay in lieu of part or all of the statutory notice period.

6.3.14.12 Safeguards for Students in the Event of Academic Program Discontinuance

(1) Regent Policy Document 20-24 specifies the following:

UW System institutions will make every effort to accommodate students adversely affected by discontinuance of an academic program for reasons of financial emergency or because of educational considerations. Discontinuance of a program should be phased in over a reasonable time period to provide students with the opportunity to complete the program or transfer to another program. Completion of a program or transfer to another program cannot be guaranteed by the university.

(2) UW-Platteville will adhere to the following safeguards, and every effort will be made to be attentive to the students' needs:

(a) Students should have opportunities to participate in discussions about programs proposed for termination.

(b) A discontinued program should be phased out over a reasonable period of time, preferably in a way that allows all or most students who are currently (and continuously) enrolled in the program to complete it.

(c) New students should not be permitted to enroll in programs that have been discontinued.

(d) All students enrolled in the affected program shall be informed in a timely fashion that a program is being discontinued. This communication should include the timeline for discontinuance and options that students have for either completing the program or transferring to another program.

Presented to Faculty Senate December 11, 2018

RELATED REGENT POLICIES AND APPLICABLE LAWS

Section 36, Wis. Stats.

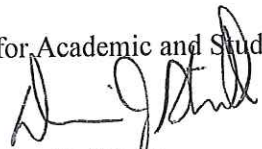
Chapters UWS 3 and 5, Wis. Admin. Code

Regent Policy Document 20-23

Regent Policy Document 20-24

April 2, 2019

MEMORANDUM

TO: Karen Schmitt, Vice President for Academic and Student Affairs
FROM: Dennis J. Shields, Chancellor 
SUBJECT: Changes to UW-Platteville Faculty Codification

It is my pleasure to submit for your consideration proposed changes in the UW-Platteville Faculty Codification, Chapter 6 - Layoff and Termination for Reasons of Financial Emergency of the University of Wisconsin, as adopted by the Faculty Senate on December 11, 2018.

Thank you.

Enclosures: UW-Platteville Faculty Handbook Section Chapter 6.3.14

cc: Regina Pauly, Secretary of the Faculty Senate