BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

Education Committee

Thursday, April 4, 2024 8:45 a.m. – 10:15 a.m.

Velzy Commons, Ullsvik Hall University of Wisconsin-Platteville 1 University Plaza, Platteville, Wisconsin & via Zoom Videoconference

- A. Calling of the Roll
- B. Declaration of Conflicts
- C. Proposed Consent Agenda:
 - 1. Approval of the February 8, 2024 Meeting Minutes of the Education Committee
 - 2. UW-Madison: Approval of a Bachelor of Science in Dairy and Food Animal Management
 - 3. UW-Milwaukee: Approval of a Master of Science in Connected Systems Engineering
 - 4. UW-Stout: Approval of a Master of Professional Studies in Design, Entrepreneurship, and Sustainability
 - 5. UW-Stout: Approval of a Bachelor of Science in Physics
 - 6. UW-Stout: Approval of a Bachelor of Science in Biology
 - 7. UW-Stout: Approval of a Bachelor of Science in Chemistry
 - 8. UW-Stout: Approval of a Bachelor of Fine Arts in Illustration
- D. Approval of Continued UW System Test-optional Admissions Process in Regent Policy Document 7-3: "UW System Freshman Admissions Policy"
- E. Host Presentation by UW-Platteville: "For All Our Students"
- F. Five-Year Update on the Student Behavioral Health Initiative: Progress and Opportunity
- G. Universities of Wisconsin Dual Enrollment Taskforce Update: Taskforce Report and Recommendations Overview

Item C.2.

April 4, 2024

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF SCIENCE IN DAIRY AND FOOD ANIMAL MANAGEMENT UNIVERSITY OF WISCONSIN-MADISON

REQUESTED ACTION

Adoption of Resolution C.2., authorizing the implementation of the Bachelor of Science in Dairy and Food Animal Management at the University of Wisconsin–Madison.

Resolution C.2.

That, upon the recommendation of the Chancellor of the University of Wisconsin–Madison and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Dairy and Food Animal Management program at the University of Wisconsin–Madison.

SUMMARY

The University of Wisconsin (UW)–Madison proposes to establish a Bachelor of Science (B.S.) in Dairy and Food Animal Management. The program will replace the existing B.S. in Dairy Science. The B.S. in Dairy and Food Animal Management will feature a change in name and curriculum that responds to the career intentions and outcomes of undergraduate students, many of whom go on to the management of animal agriculturerelated businesses. It will provide students with foundations in animal science, food and animal agriculture, and the business management of animal production enterprises. The program will continue the university's long-standing investment in training future leaders in the dairy industry, as well as attract students interested in working in other industries involving food animals, such as meat science, animal genetics and nutrition, and other animal production enterprises. The B.S. in Dairy and Food Animal Management will be a 120-credit program featuring 43–44 credits of major coursework. Standard undergraduate tuition rates will apply. Graduates will be prepared to apply science concepts to management functions critical to the modern dairy and food animal industries. The occupational outlook for professions requiring this training, on average, are projected to grow at a moderate rate according to U.S. Bureau of Labor Statistics projections. It is anticipated that a small proportion of students may go on for graduate study immediately after their first degree or later in their careers.

Presenter

• Dr. Charles Lee Isbell, Jr., Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting, available at https://www.wisconsin.edu/uw-policies/uw-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related 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

ATTACHMENTS

- A) Request for Authorization to Implement
- B) Cost and Revenue Projections Worksheet
- C) Cost and Revenue Projections Narrative
- D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN DAIRY AND FOOD ANIMAL MANAGEMENT AT UNIVERSITY OF WISCONSIN-MADISON PREPARED BY UW-MADISON

ABSTRACT

The University of Wisconsin (UW)–Madison proposes to establish a Bachelor of Science (B.S.) in Dairy and Food Animal Management. The program will replace the existing B.S. in Dairy Science. The B.S. in Dairy and Food Animal Management will feature a change in name and curriculum that responds to the career intentions and outcomes of undergraduate students, many of whom go on to the management of animal agriculturerelated businesses. It will provide students with foundations in animal science, food and animal agriculture, and the business management of animal production enterprises. The program will continue the university's long-standing investment in training future leaders in the dairy industry, as well as attract students interested in working in other industries involving food animals, such as meat science, animal genetics and nutrition, and other animal production enterprises. The B.S. in Dairy and Food Animal Management will be a 120-credit program featuring 43–44 credits of major coursework. Standard undergraduate tuition rates will apply. Graduates will be prepared to apply science concepts to management functions critical to the modern dairy and food animal industries. The occupational outlook for professions requiring this training, on average, are projected to grow at a moderate rate according to U.S. Bureau of Labor Statistics projections. It is anticipated that a small proportion of students may go on for graduate study immediately after their first degree or later in their careers.

PROGRAM IDENTIFICATION

University Name

University of Wisconsin-Madison

Title of Proposed Academic Program

Dairy and Food Animal Management

Degree Designation(s)

Bachelor of Science

Proposed Classification of Instructional Program (CIP) Code

01.0905 Dairy Science

Mode of Delivery

Single university; Face-to-Face

Department or Functional Equivalent

Department of Animal and Dairy Sciences

College, School, or Functional Equivalent

College of Agricultural and Life Sciences

Proposed Date of Authorization

April 2024

Proposed Date of Implementation

September 2024

PROGRAM INFORMATION

Overview of the Program

The proposed B.S. in Dairy and Food Animal Management program is comprised of 120 credits. Students will be required to complete a total of 23–29 credits of foundational math and science coursework and 43–44 credits of courses specific to dairy and food animal management, including a coordinative internship in a relevant industry setting. Students must complete 27–30 credits of university's general education requirements, 19–20 credits of college degree requirements, and free electives to complete the 120 credits needed to earn the Bachelor of Science degree. Many courses in the proposed major can meet general education requirements and/or college degree requirements. The program incorporates multiple high-impact practices, including an internship, a capstone course, hands-on labs, and a first-year seminar.

The proposed B.S. in Dairy and Food Animal Management will not require added resources. UW–Madison currently offers all courses included in the major requirements for this program. Faculty and staff from the Department of Animal and Dairy Sciences will continue to teach required courses and expect to accommodate students in the proposed major with current staffing levels. Pending Board of Regents approval, the B.S. in Dairy Science program will have admission suspended and will be discontinued once the continuing students complete the program, anticipated to be in the spring of 2025.

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 5, it is expected that 145 students will have enrolled in the program and 53 students will have graduated from the program. Enrollment projections in Year 1 assume a combination of new and continuing students. These projections are based on feedback received from current students, indicating some students plan to move to the proposed major. Year 1 enrollment projections include 20 new students. Conservative estimates indicate that in the first year, 10 second-year students and 5 third-year students will move from the existing B.S. in Dairy Science and B.S. in Animal Sciences majors to the B.S. in Dairy and Food Animal Management program. For planning purposes, enrollment projections assume that students will formally declare the program in their first year, that students will take four years to graduate, and that interest will grow as the new program becomes established. The average student retention rate is projected to be 95% based on UW–Madison's 95% persistence rate.

Table 1: Five-Year Academic Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	20	20	30	30	30
Continuing Students	15	33	45	62	69
Total Enrollment	35	53	75	92	99
Graduating Students	0	5	10	19	19

Tuition Structure

For students enrolled in the B.S. in Dairy and Food Animal Management program, standard tuition and fee rates will apply. For the 2023–24 academic year, residential tuition and segregated fees total \$5,602.94 per semester for a full-time student enrolled in 12–18 credits per semester. Of this amount, \$4,822.20 is attributable to tuition and \$780.74 is attributable to segregated fees. Nonresident tuition and segregated fees total \$20,301.50 per semester for a full-time student enrolled in 12–18 credits per semester. Of this amount, \$19,520.76 is attributable to tuition and \$780.74 is attributable to segregated fees.

Student Learning Outcomes and Program Objectives

The B.S. in Dairy and Food Animal Management will provide students with foundations in animal science, food and animal agriculture, and the business management of animal production enterprises. Students will be prepared for employment that applies science concepts to management and other customer-facing roles in businesses focused on animal genetics, animal nutrition, animal health, or related fields. Students will also be prepared for graduate study immediately after their degree or later in their careers. The B.S. in Dairy and Food Animal Management has four program learning outcomes:

- 1. Describe biological principles and their application within dairy and food animal production systems.
- 2. Explain business, management, and economic principles and their application to dairy and food animal production systems.

- 3. Apply scientific principles and critical thinking skills to identify and solve real-world problems facing dairy and food animal production enterprises.
- 4. Demonstrate the scientific, managerial, and communication competencies needed for advanced careers in dairy and food animal management.

Program Requirements and Curriculum

Students may enroll in the B.S. in Dairy and Food Animal Management upon admission to the university as new first-year students, as transfer students, or they may declare the major later during their course of study. The program will inform students about the major through an entry in the UW–Madison Guide, new student advising, campus advising networks and events, and social media.

Table 2 illustrates the program curriculum for the proposed program. The program requirements are comprised of 120 credits and will be completed in the context of the university-wide general education requirements and the College of Agricultural and Life Sciences-specific baccalaureate degree requirements. Courses taken in the major may also be used to meet these general degree requirements. Consistent with other majors in the College of Agricultural and Life Sciences, this program governs no more than 60 of the minimum 120 credits required for a Bachelor of Science degree. To be eligible for graduation, students must maintain a minimum cumulative grade point average of 2.000 and must complete 30 degree credits in residence at UW–Madison after earning 86 credits toward their undergraduate degree.

The B.S. in Dairy and Food Animal Management major coursework will be comprised of 43–44 credits that include foundational introductory coursework in animal science; depth coursework in animal science; depth coursework in business, economics, and management; an internship; and a capstone course. In addition to these requirements, students must complete a set of introductory courses in the biological, natural, and social sciences. The introductory courses provide the building blocks for the major, and these 23–29 prerequisite/support credits include math, statistics, economics, general chemistry, introductory biology, and biochemistry.

Table 2: B.S. in Dairy and Food Animal Management Program Curriculum

General education courses required for graduation	
*can be partially fulfilled through program requirements	15 credits
Breadth: Humanities/Literature/Arts (identified with breadth attributes)	6 credits
Breadth: Natural Science (4–6 credits, identified with breadth attributes)	*0 credits
Breadth: Social Studies (3 credits, identified with breadth attributes)	*0 credits
Communication Part A and Part B	6 credits
Ethnic Studies	3 credits
Quantitative Reasoning Part A and Part B (6 credits)	*0 credits

College of Agricultural and Life Sciences requirements for graduation	
*can be largely fulfilled through program requirements	1–4 credits
CALS First Year Seminar	1 credit
CALS International Studies	
(may be fulfilled through program requirements)	0–3 credits
CHEM 103, 108, or 109	*0 credits
Biological Science (5 credits, identified with breadth attributes)	*0 credits
Additional Science (3 credits, identified with breadth attributes)	*0 credits
Science Breadth (3 credits, identified with breadth attributes)	*0 credits
CALS Capstone Learning Experience	*0 credits
Program prerequisites or support courses:	23-29 credits
Algebra: MATH 112 or MATH 114	3–5 credits
General Chemistry: CHEM 103&104 or CHEM 109	5–9 credits
Statistics: STAT 301 or 371	3 credits
Introductory Biology: BIOLOGY 151 or 101/102	5 credits
Biochemistry: BIOCHEM 301 or 501	3 credits
Economics: A A E 215 or ECON 101	4 credits
Academic degree program or major course requirements	43-44 credits
AN SCI/DY SCI 101: Introduction to Animal Sciences	3 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory	1 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management	1 credits 3 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance	1 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366,	1 credits 3 credits 3 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378)	1 credits 3 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370,	1 credits 3 credits 3 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370, 420, 431, 432, 515, DY SCI 233, 234, 534, AGRONOMY 302, FOOD SCI 301,	1 credits 3 credits 3 credits 12 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370, 420, 431, 432, 515, DY SCI 233, 234, 534, AGRONOMY 302, FOOD SCI 301, and SOIL SCI 230 or 301)	1 credits 3 credits 3 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370, 420, 431, 432, 515, DY SCI 233, 234, 534, AGRONOMY 302, FOOD SCI 301, and SOIL SCI 230 or 301) Business, Economics, and Management (6 credits from A A E 322, 335,	1 credits 3 credits 3 credits 12 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370, 420, 431, 432, 515, DY SCI 233, 234, 534, AGRONOMY 302, FOOD SCI 301, and SOIL SCI 230 or 301) Business, Economics, and Management (6 credits from A A E 322, 335, 421, 422, ACCT I S 300, GEN BUS 301, MARKETNG 300, M H R 300,	1 credits 3 credits 3 credits 12 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370, 420, 431, 432, 515, DY SCI 233, 234, 534, AGRONOMY 302, FOOD SCI 301, and SOIL SCI 230 or 301) Business, Economics, and Management (6 credits from A A E 322, 335, 421, 422, ACCT I S 300, GEN BUS 301, MARKETNG 300, M H R 300, and M H R 305)	1 credits 3 credits 3 credits 12 credits 12 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370, 420, 431, 432, 515, DY SCI 233, 234, 534, AGRONOMY 302, FOOD SCI 301, and SOIL SCI 230 or 301) Business, Economics, and Management (6 credits from A A E 322, 335, 421, 422, ACCT I S 300, GEN BUS 301, MARKETNG 300, M H R 300, and M H R 305) Internship (AN SCI 399)	1 credits 3 credits 12 credits 12 credits 6 credits 1 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370, 420, 431, 432, 515, DY SCI 233, 234, 534, AGRONOMY 302, FOOD SCI 301, and SOIL SCI 230 or 301) Business, Economics, and Management (6 credits from A A E 322, 335, 421, 422, ACCT I S 300, GEN BUS 301, MARKETNG 300, M H R 300, and M H R 305) Internship (AN SCI 399) Major Capstone (AN SCI 435 or DY SCI 535)	1 credits 3 credits 3 credits 12 credits 12 credits 6 credits 1 credits 2-3 credits
AN SCI/DY SCI 102: Introduction to Animal Sciences Laboratory A A E 320: Farming Systems Management A A E 419: Agricultural Finance Animal Science (12 credits from AN SCI 245, 311, 320, 336, 361, 363, 366, 373, 414, 415, and 434, DY SCI 378) Food and Animal Agriculture (12 credits from AN SCI 305, 321, 344, 370, 420, 431, 432, 515, DY SCI 233, 234, 534, AGRONOMY 302, FOOD SCI 301, and SOIL SCI 230 or 301) Business, Economics, and Management (6 credits from A A E 322, 335, 421, 422, ACCT I S 300, GEN BUS 301, MARKETNG 300, M H R 300, and M H R 305) Internship (AN SCI 399)	1 credits 3 credits 12 credits 12 credits 6 credits 1 credits

Collaborative Nature of the Program

This program will not rely on internal or external collaborations. No interinstitutional agreements are anticipated.

Projected Time to Degree

The B.S. in Dairy and Food Animal Management is designed to be completed within four years of full-time undergraduate study. The current B.S. in Dairy Science has averaged

3.92 years to completion over the past five years. The program expects the proposed B.S. in Dairy and Food Animal Management will meet that average and is likely to improve time-to-degree given the increased flexibility of the major.

Accreditation

The proposed program will fall under UW–Madison's institutional accreditation by the Higher Learning Commission (HLC) and will be subject to those accreditation standards. Neither advance notice nor additional approvals from the HLC will be required. The program will not be subject to specialized accreditation.

PROGRAM JUSTIFICATION

Rationale

The UW–Madison Department of Animal and Dairy Sciences currently offers a B.S. in Dairy Science. The program curriculum ensures that students develop competencies in the biology and management of dairy cows that can support improvements in dairy production, animal welfare, human nutrition, and environmental outcomes. The program supports learning core principles while embracing innovation and technology to meet needs in the dairy industry. Students in the current program are positioned to address the challenges of animal health and welfare, land and water stewardship, precision livestock farming, food safety, and biomedical advancements.

This proposed B.S. in Dairy and Food Animal Management will replace the current B.S. in Dairy Science program. While there are similarities between the proposed program and the current B.S. in Dairy Science, the proposed B.S. in Dairy and Food Animal Management is designed with key objectives in mind. First, the proposed program will allow a focus on a range of food animal species, as well as meat science. This will provide flexibility for students and their intended careers. Second, the proposed program will emphasize business management concepts. This will provide relevant preparation for students who seek to apply science concepts to management and other customer-facing roles in businesses focused on animal genetics, animal nutrition, animal health, or related fields. These objectives respond to issues in the existing B.S. in Dairy Sciences program, which does not adequately represent other animal production career objectives and incorporates significant amounts of animal biology. The university's new B.S. in Animal and Veterinary Biosciences program, authorized by the Board of Regents in June 2023, provides a home for students interested in studying dairy cattle biology and not intending a career in the business or management aspects of the dairy industry.

These fundamental changes to the program name, curriculum, and audience are supported by feedback from students and industry experts. Support for this new program has been expressed by the Department of Agricultural and Applied Economics.

Institution and Universities of Wisconsin Program Array

The proposed B.S. in Dairy and Food Animal Management will replace the current B.S. in Dairy Science, so there will be no impact on the UW–Madison Array. Upon implementation of the proposed program, admissions to the current B.S. in Dairy Science program will be suspended and the program phased out and discontinued.

Like the current B.S. in Dairy Science program, the new B.S. in Dairy and Food Animal Management will be related to the recently authorized B.S. in Animal and Veterinary Biosciences, as both programs will provide students with animal and dairy science coursework with a second emphasis in business management. These programs, in their former iterations, have co-existed and complemented each other for many years, and the B.S. in Dairy and Food Animal Management is designed to continue that relationship. The program will also fill a gap in the program array left by the suspension/discontinuation of the B.S. in Animal Sciences program at UW–Madison for students interested in the business side of non-dairy animal production.

The proposed B.S. in Dairy and Food Animal Management will have a similar relationship to animal and dairy-related science programs at other UW universities, including the B.S. in Dairy Science and B.S. in Animal Science programs at UW–Platteville and UW–River Falls. The UW–Madison B.S. in Dairy Science has co-existed with these programs for many years with sustainable enrollment, and it is expected that the proposed B.S. in Dairy and Food Animal Management will continue to do the same.

Need as Suggested by Student Demand

The B.S. in Dairy and Food Animal Management is expected to draw on a similar population as the current B.S. in Dairy Science program, but also appeal to students interested in the business side of non-dairy food animal industries. The current B.S. in Dairy Science has experienced a decline in enrollment, falling from 70 students in Academic Year (AY) 2019 to 39 students in AY 2023. The number of degrees awarded each year have subsequently declined. By responding to student and market demand, it is expected that over the first five years of the program enrollments will exceed those in AY 2019.

The proposed B.S. in Dairy and Food Animal Management is designed to respond to the needs of the dairy industry as well as other food animal industries. While the existing B.S. in Dairy Science is structured to require only dairy biology coursework with minimal economics or business coursework, the proposed program curriculum will equip graduates with skills related to biology, management, finance, commodity markets, food systems, and supply chains and as applied to a range of food animal species. The proposed B.S. in Dairy and Food Animal Management, like the existing B.S. in Dairy Science program, will meet the needs of students wishing to pursue a career in the dairy, animal, and meat industries through curricular options that focus on animal production combined with business and economics. Students interested in traditional agriculture and animal production will find a variety of coursework options to suit their interests. In a survey of students in their first or second year, 92% expressed interest in these more flexible opportunities.

The proposed B.S. in Dairy and Food Animal Management is also expected to attract students who may be seeking a meat industry career, which has not previously been developed as a program at UW–Madison. The proposed major name reflects the inclusive nature of the program for dairy, meat, and food animal production careers, underlining animal and business components to meet current industry demands.

Need as Suggested by Market Demand

Most students in the existing B.S. in Dairy Science intend to work in the management of agricultural production or related fields. The department expects the same to be true for the B.S. in Dairy and Food Animal Management. The job outlook for professions using this training is moderately favorable, with a projected national growth rate for employment from 2022 to 2032 between 2-10%, in the range of the national average of 3% for all occupations, according to Bureau of Labor Statistics.¹

The proposed B.S. in Dairy and Food Animal Management will prepare students for management in agricultural production and related post-farm occupations. Projections from the National Institute of Food and Agriculture² indicate a 2.6% annual growth rate in career opportunities in food, agriculture, and natural resources nationally.

According to data from AgCareers.com,³ graduates in dairy science most frequently work in positions with job titles such as:

- Animal Biotechnologist
- Animal Caretaker
- Animal Welfare Specialist
- Breeding Manager
- Dairy Farm Worker
- Ecologist

- *Farm Manager
- *Feed Mill Manager
- *Feedlot Manager
- *Livestock Buyer
- *Meat Inspector
- *Production Manager

¹ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Industrial Production Managers. Retrieved at https://www.bls.gov/ooh/management/industrial-production-managers.htm January 2024)

² USDA National Institute of Food and Agriculture, *Employment Opportunities for College Graduates in Food, Agriculture, Renewable Natural Resources and the Environment, United States, 2020–2025.*Retrieved at https://www.nifa.usda.gov/about-nifa/press-releases/employment-outlook-promising-new-college-graduates-agriculture (January 2024)

³ AGCareers.com, Dairy Science Education Profile. Retrieved at https://www.agcareers.com/career-profiles/dairy-farm-manager.cfm (January 2024)

The proposed program will also prepare students for a career in meat science. Per AgCareers.com,⁴ graduates with a degree in meat science most frequently work in positions with job titles listed with asterisks (*) and job titles such as:

- Beef Farm Worker
- Carcass Merchandiser
- Evisceration Processer

- Livestock Grader
- Livestock Loader

Because the proposed B.S. in Dairy and Food Animal Management prepares students for not only careers in the dairy industry, but also management careers in other food animal industries, graduates of the program may have the above job titles in a variety of industries.

Based on data from the Bureau of Labor Statistics Occupational Outlook Handbook, ⁵ B.S. in Dairy and Food Animal Management graduates will have employment opportunities in a variety of positions and industries with favorable projected job growth from 2022 to 2032:

- Advertising or Marketing Manager (agricultural or dairy related companies): 5.0%.
- Operations Managers (animal agriculture or meat processing companies): 10.9%
- Agricultural and Food Scientists: 6.0%.
- Animal Scientists: 5.7%.
- Supervisors of Farming, Fishing, and Forestry Workers: 2.7%
- Agricultural Inspectors: 2.0%.

The proposed B.S. in Dairy and Food Animal Management will continue to serve industries, organizations, and the economy of Wisconsin. Data on graduate outcomes indicate that about two-thirds of Dairy Science graduates in the last five years are employed in Wisconsin. According to the State of Wisconsin Department of Agriculture, Trade and Consumer Protection, Wisconsin agriculture provides 435,700 jobs, or 11.8% of total employment in the state, not including indirect employment linked to other industries. The university expects the proposed program to continue to fill this need for the people and companies of Wisconsin.

⁴ AGCareers.com, Meat Science Education Profile. Retrieved at https://www.agcareers.com/ageducation/meat-science.cfm (January 2024)

⁵ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*. Retrieved at https://www.bls.gov/ooh/ (January 2024)

⁶ WI DATCP, Wisconsin Agricultural Statistics. Retrieved at https://datcp.wi.gov/Pages/Publications/WIAgStatistics.aspx (January 2024)

	Cost and Revenue Projection Items	J 1 01 L	J-Dully u	IIu	1000711111		rojections			
	items	2024-25 2025-26 2026-27 2027-28 2028-29								
		-	Year 1		Year 2		Year 3		Year 4	Year 5
ı	Enrollment (New Student) Headcount		20		20		30		30	30
	Enrollment (Continuing Student) Headcount		15		33		45		62	69
	Enrollment Total FTE		35		53		75		92	99
Ш	Total Credit Hours		630		954		1350		1656	1782
Ш	FTE of Current Faculty		2.5		2.5		2.75		3.25	3.
	FTE of Current IAS		1		1		1.5		1.5	1.5
	FTE Current Admin Staff		0.5		0.5		0.5		1	
IV	Revenues									
	Tuition (based on \$401.85/credit)		\$253,166		\$383,365		\$542,498		\$665,464	\$716,09
	Additional Tuition		\$0		\$0		\$0		\$0	\$(
	Fees (indicate type)		\$0		\$0		\$0		\$0	\$
	Program Revenue (Grants)		\$0		\$0		\$0		\$0	\$(
	Program Revenue - Other		\$0		\$0		\$0		\$0	\$
	GPR (re)allocation		\$197,000		\$76,000		\$6,000		\$0	\$(
	Total Revenue		\$450,166		\$459,365		\$548,498		\$665,464	\$716,09
٧	Expenses									
	Salaries Including Fringes									
	Faculty		\$325,000		\$331,500		\$371,943		\$448,360	\$492,50
	Instructional Academic Staff		\$90,000		\$91,800		\$140,454		\$143,263	\$146,12
	Administrative and Student Support Staff		\$35,000		\$35,700		\$36,414		\$74,285	\$75,770
	Facilities and Capital Equipment									
	University buildings and space	\$	-	\$		\$		\$	-	\$ -
	Capital Equipment	\$	-	\$	-	\$	-	\$	-	\$ -
	Operations	\$	-	\$	-	\$	-	\$	-	\$ -
	Other Expenses									
	Other (please list)									
	Other (please list)									
	Total Expenses		\$450,000		\$459,000		\$548,811		\$665,908	\$714,40
	Net Revenue		\$166		\$365		-\$314		-\$444	\$1,69°

Chief Business Officer's Signature:

Date: 1/16/2024

COST AND REVENUE PROJECTIONS NARRATIVE UNIVERSITY OF WISCONSIN-MADISON BACHELOR OF SCIENCE IN DAIRY AND FOOD ANIMAL MANAGEMENT

PROGRAM INTRODUCTION

The University of Wisconsin (UW)–Madison proposes to establish a Bachelor of Science (B.S.) in Dairy and Food Animal Management. The proposed major will be offered by the Department of Animal and Dairy Sciences in the College of Agricultural and Life Sciences. This major will replace the current B.S. in Dairy Science and will thus draw on existing resources. The B.S. in Dairy Science will be suspended/discontinued concurrent with the implementation of the proposed new program. The B.S. in Dairy and Food Animal Management will be delivered in a face-to-face format. Students will pay standard undergraduate tuition and segregated fees. The costs and revenues of the proposed program will be managed as part of the UW–Madison instructional/tuition pool (i.e., Fund 101). Tuition revenues will be allocated from the pool to the College of Agricultural and Life Sciences to support the faculty and staff for instructional, advising, and administration within the regular budget allocation process.

COST REVENUE NARRATIVE

Section I – Enrollment

All anticipated enrollments are expected to be FTEs, so these projections assume that headcounts will be equivalent to FTEs. Students are expected to declare the major when they matriculate to UW–Madison, and complete foundational and field-specific coursework throughout their four years. Enrollment projections assume that during the first year of the program, in addition to 20 new students, 10 second-year students and five third-year students in the existing B.S. in Dairy Science and B.S. in Animal Sciences majors will formally move to the B.S. in Dairy and Food Animal Management program. This is expected based on feedback from current students and is a conservative estimate. By the end of Year 5, it is expected that 145 students will have enrolled in the program and 53 students will have graduated from the program. For planning purposes, enrollment projections assume that students will formally declare the program in their first year, that students will take four years to graduate, and that interest will grow as the new program becomes established. The average student retention rate is projected to be 95% based on UW–Madison's 95% persistence rate.

Section II - Credit Hours

UW-Madison currently offers all courses included in the proposed program curriculum, and these courses are included in a range of programs, including the existing B.S. in Dairy Science. Students will complete a total of 23–29 credits of foundational math

and science coursework and 43–44 credits of courses specific to dairy and food animal management for the major. General Education, college degree requirements, and free electives will be taken to complete a total of 120 credits to earn the B.S. degree.

The credit hour projections for this budget exercise are based on 72 total credits per student, or 18 credits per academic year per student. Seventy-two is the number of credits out of the 120 degree credit total that will be directly related to the program and its instructional output. Specifically, the 72 credit count reflects the 43–44 major coursework credits, plus the average 28–29 additional course credits taught by the program. These will count toward the student's general education, college degree requirements, and/or free electives.

Section III - Faculty and Staff Appointments

Current faculty and staff from the Department of Animal and Dairy Sciences will teach required courses and are expected to accommodate students in the proposed program with current staffing levels following the elimination of the B.S. in Dairy Science. The department will contribute 2.5 FTEs of faculty, 1.0 FTE of instructional staff, and 0.5 FTE of non-instructional staff who will directly provide services for the program's equivalent offering(s). As enrollments grow, a modest increase in faculty FTE allocated to the program will be realized.

Section IV - Program Revenues

The B.S. in Dairy and Food Animal Management is expected to draw mostly on the existing pool of UW–Madison undergraduates. In its early years, the program will be supported by reallocation and enrollment growth in existing programs within the College of Agricultural and Life Sciences.

Tuition

The revenue projections include an estimate of revenues based on estimated student major credit hours taken annually at \$401.85 per credit tuition (excluding segregated fees). The per-credit tuition estimate is based on the 2023–24 Wisconsin resident undergraduate rate. The estimate does not account for tuition collected for credits taken above the credit plateau, credits taken by students outside of the major requirements, or tuition based on nonresident tuition rates. The model assumes the same tuition rate over the first five years and that students take an average of 18 major-related credits per year spread equally over four years.

Fees

There are no program or course fees.

Program Revenues and GPR

It is anticipated that the program will be revenue neutral by Year 5. At UW–Madison, tuition revenues are pooled with state GPR funds and certain other revenues (e.g., indirect costs, ancillary revenues) at the institution level. Funds are then apportioned to each school/college. The College of Agriculture and Life Sciences funds will be used and reallocated to fund delivery of the program. The revenue reallocation line in the cost and revenue projection table illustrates that substantial reallocation will be necessary in Years 1 and 2, decreasing annually until the program is projected to be self-sustaining by Year 4.

Section V - Program Expenses

Salary and Fringe Expenses

The proposed B.S. in Dairy and Food Animal Management initially will be staffed by existing program faculty and staff. The current related salary expenses are 2.5 faculty FTEs, averaging \$130,000 per year; 1.0 FTEs of instructional staff, averaging \$90,000 per year; and 0.5 FTE of non-instructional staff at \$70,000 per year. Salary projections apply a 2% inflationary rate. A fringe rate of 33.33% is utilized and incorporated into the expenses illustrated in this section.

Facilities and Capital Equipment

The program will use existing facilities for instruction in the department's programs, which are operated and maintained through the department's budget. No additional expenses, facilities, or capital equipment are required for the program.

Other Expenses

Expenses for supplies, marketing, program materials, and charges for university services are expected to remain at the program's current level.

Section VI - Net Revenue

The B.S. in Dairy and Food Animal Management is a traditional pooled-tuition program and will be revenue neutral. As such, tuition revenues from students in this program will be pooled at the institution level and used to support student instruction and services.



Date: 24 January 2024

To: Jay O. Rothman, President, Universities of Wisconsin

CC: Johannes Britz, Interim Senior Vice President for Academic and Student Affairs

Tracy Davidson, Associate Vice President for Academic Affairs

Diane Treis Rusk, Director of Academic Programs and Student Learning

Assessment

From: Charles Lee Isbell, Jr., Provost and Vice Chancellor for Academic Affairs

Subject: Request for Authorization to Implement: BS-Dairy and Food Animal Management

Submitted Via Email Only to: ooa@uwsa.edu

In keeping with UW System and Board of Regents policy, I am sending you a Request for Authorization to Implement a new BS-Dairy and Food Animal Management program at the University of Wisconsin–Madison.

The program is designed to meet UW–Madison's definition and standards of quality and will make a meaningful contribution to the university's mission, overall academic plan, and academic degree program array. There is university-wide support for the program, and all relevant and required governance bodies have completed their review processes. In addition, the necessary financial, capital, and human resources are in place and/or have been committed to implement and sustain the program. I thus send the proposal forward with broad university-wide support, governance approval, and my endorsement.

Contingent upon Board of Regents approval, the faculty plan to implement the new program in fall 2024 with first enrollments in the fall of 2024. We are requesting that this proposal be scheduled for consideration at the April 2024 Board of Regents meeting. Please contact Karen Mittelstadt (mittelstadt@wisc.edu) with any questions about these materials.

Attachments: Request for Authorization to Implement (Parts A and B), Cost and Revenue Projections, Cost and Revenue Projections Narrative

Copies:

Jennifer L. Mnookin, Chancellor, UW–Madison
Glenda Gillaspy, Dean, School of Human Ecology
Paul Mitchell, Interim Associate Dean for Academic Affairs and Professor
Megan Ackerman-Yost, Assistant Dean for Academic Programs and Policies
Rob Cramer, Vice Chancellor for Finance and Administration
David Murphy, Associate Vice Chancellor for Finance and Administration
Allison La Tarte, Vice Provost, Data, Academic Planning & Institutional Research
Karen Mittelstadt, Institutional Academic Planner, Data, Academic Planning & Institutional Research

Item C.3.

April 4, 2024

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) MASTER OF SCIENCE IN CONNECTED SYSTEMS ENGINEERING, UNIVERSITY OF WISCONSIN-MILWAUKEE

REQUESTED ACTION

Adoption of Resolution C.3., authorizing the implementation of the Master of Science in Connected Systems Engineering at the University of Wisconsin-Milwaukee.

Resolution C.3.

That, upon the recommendation of the Chancellor of the University of Wisconsin-Milwaukee and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Master of Science in Connected Systems Engineering program at the University of Wisconsin-Milwaukee.

SUMMARY

The University of Wisconsin-Milwaukee proposes to establish a Master of Science in Connected Systems Engineering (M.S. C.S.E.). The proposed interdisciplinary program will be offered by the Industrial and Manufacturing Engineering Department, in UW-Milwaukee's College of Engineering and Applied Sciences, in collaboration with UW-Milwaukee's Lubar College of Business and UW-Milwaukee's Connected Systems Institute (CSI). It is designed to attract students from two audiences: 1) current students completing a bachelor's degree in engineering at UW-Milwaukee; and 2) engineering professionals in Wisconsin who previously earned at least a bachelor's degree in engineering or related field and who seek to reskill or upskill to gain key knowledge necessary for current and future careers in the manufacturing and service industries. It is expected that students entering this program will possess a bachelor's degree in engineering or related field.

The M.S. in Connected Systems Engineering program will require 31 credits, consisting of a set of core courses in connected systems engineering that provide foundational knowledge and where students will be actively engaged in case scenarios from the Connected Systems Institute's automated manufacturing testbeds. Additional program requirements include a capstone course to integrate knowledge and professional skills, technical writing to ensure writing effectiveness, and a collection of technical electives that emphasize several focus

areas, including industrial engineering, manufacturing engineering, enterprise resource planning, digital supply chain management, mechatronics and robotics, artificial intelligence and machine learning, and cybersecurity. The demand for an M.S. in Connected Systems Engineering program is supported by several factors including a high number of participants in the non-credit reskilling learning pathways offered through CSI's Manufacturing Workforce Innovation Program, enrollment in connected systems undergraduate course, and a predicted 10% growth in systems engineering jobs. The proposed M.S. in Connected Systems Engineering's curriculum builds upon the Manufacturing Innovation Program, and it will equip students with the knowledge and skills necessary for careers in systems engineering, robotics, artificial intelligence (AI) and machine learning. Further, feedback from local manufacturing industry leaders indicates that an interdisciplinary program such as the proposed M.S. in Connected Systems Engineering will prepare a pipeline of future industry leaders.

Presenter

• Dr. Andrew P. Daire, Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (Revised August 2023), available at https://www.wisconsin.edu/uw-policies/uw-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related 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

ATTACHMENTS

- A) Request for Authorization to Implement
- B) Cost and Revenue Projections Worksheet
- C) Cost and Revenue Projections Narrative
- D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A MASTER OF SCIENCE IN CONNECTED SYSTEMS ENGINEERING AT UNIVERSITY OF WISCONSIN-MILWAUKEE PREPARED BY UW-MILWAUKEE

ABSTRACT

The University of Wisconsin-Milwaukee proposes to establish a Master of Science in Connected Systems Engineering (M.S. C.S.E.). The proposed interdisciplinary major will be offered by the Industrial and Manufacturing Engineering Department, in UW-Milwaukee's College of Engineering and Applied Sciences (CEAS), in collaboration with UW-Milwaukee's Lubar College of Business and UW-Milwaukee's Connected Systems Institute (CSI). This major is designed to attract students from two audiences: current students completing a bachelor's degree in engineering at UW-Milwaukee and engineering professionals in Wisconsin who previously earned at least a bachelor's degree in engineering or related field and who seek to reskill or upskill to gain key knowledge necessary for current and future careers in the manufacturing and service industries. It is expected that students entering this program will possess a bachelor's degree in engineering or related field.

The M.S. in Connected Systems Engineering program will require 31 credits, consisting of a set of core courses in connected systems engineering that provide foundational knowledge and where students will be actively engaged in case scenarios from the Connected Systems Institute's automated manufacturing testbeds. Additional program requirements include a capstone course to integrate knowledge and professional skills, technical writing to ensure writing effectiveness, and a collection of technical electives that emphasize several focus areas, including industrial engineering, manufacturing engineering, enterprise resource planning, digital supply chain management, mechatronics and robotics, artificial intelligence and machine learning, and cybersecurity. The demand for an M.S. in Connected Systems Engineering program is supported by several factors including a high number of participants in the non-credit reskilling learning pathways offered through UW-Milwaukee's Connected Systems Institute's Manufacturing Workforce Innovation Program, enrollment in connected systems undergraduate course, and a predicted 10% growth in systems engineering jobs. The proposed M.S. in Connected Systems Engineering's curriculum builds upon the Manufacturing Innovation Program, and it will equip students with the knowledge and skills necessary for careers in systems engineering, robotics, artificial intelligence (AI) and machine learning. Further, feedback from local manufacturing industry leaders indicates that an interdisciplinary program such as the proposed M.S. in Connected Systems Engineering will prepare a pipeline of future industry leaders.

PROGRAM IDENTIFICATION

University Name

University of Wisconsin-Milwaukee

Title of Proposed Academic Degree Program

Connected Systems Engineering

Degree Designation(s)

Master of Science

Suggested Classification of Instructional Program (CIP) Code

14.2701 - Systems Engineering

Mode of Delivery:

Single Institution, face-to-face delivery. While most courses will be offered in-person, approximately 25-50% of the program can be completed through distance education.

Department or Functional Equivalent

Industrial and Manufacturing Engineering Department

College, School, or Functional Equivalent

College of Engineering and Applied Sciences

Proposed Date of Authorization

April 2024

Proposed Term of Implementation:

August 2024

PROGRAM INFORMATION

Program Overview

The proposed M.S. in Connected Systems Engineering is an interdisciplinary program offered by the Industrial and Manufacturing Engineering Department in the CEAS at UW-Milwaukee, in collaboration with UW-Milwaukee's CSI and the Lubar School of Business. The program requirements are comprised of 31 credits, which include 18 credits of core courses, a three-credit capstone course, a one-credit technical writing effectiveness course, and nine credits of technical electives for which students may select electives representing focus areas including industrial engineering, manufacturing engineering, enterprise resource planning, digital supply chain management, mechatronics and robotics, artificial intelligence and machine learning, and cybersecurity, or students may

tailor their electives to entail courses of interest to meet future goals. Except for one newly developed course, the program's curriculum draws from existing courses at UW-Milwaukee. The program is the first of its kind in the state of Wisconsin, and it is designed for graduates with at least a bachelor's degree in engineering and related fields, to reskill or upskill, and gain key knowledge that is necessary for current and future jobs in the manufacturing and service industries.

Projected Enrollments and Graduates by Year Five

Table 1 provides the enrollment and graduation projections for students entering the program over the next five years. New enrollment projections are based on 5-year historical enrollment data for the existing M.S. in Engineering program at UW-Milwaukee. It is anticipated that 75% of the students enrolled in the program will be full-time students. The program is designed to be completed in three semesters of full-time enrollment with students taking 10-11 credits per semester; part-time students can complete the program in as few as five semesters. The average student retention rate is projected to be 90% based on the pattern of other Master of Science programs offered by the Industrial and Manufacturing Engineering Department at UW-Milwaukee. By the end of Year 5, it is expected that 112 students will have enrolled in the program and 67 students will have graduated.

Table 1: Five-Year Enrollment and Completion Projections by Headcount

			•	,	
Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	15	18	22	26	31
Continuing Students	-	8	12	14	17
Total Enrollment	15	26	34	40	48
Graduating Students	-	10	16	19	23

Tuition Structure

For students enrolled in the M.S. in Connected Systems Engineering program, UW-Milwaukee's CEAS graduate tuition and fees rate will apply. Graduate tuition costs at UW-Milwaukee plateau at eight credits. For the current academic year (Fall 2023 schedule), residential tuition and segregated fees for full-time students total \$7,415.45 per semester. Of this amount, \$6,633 (\$829.13 per credit) is attributable to tuition and \$782.45 (\$97.81 per credit) is attributable to segregation fees. Part-time resident students will be charged a total of \$926.94 in tuition and segregated fees per credit (\$829.13 per credit in tuition and \$97.81 per credit in segregated fees). Non-resident tuition and segregated fees total \$13,098.29 per semester for a full-time student (\$1,539.48 per credit in tuition and \$97.81 in segregated fees per credit). Non-resident part-time students will be charged \$1637.29 per credit (including \$97.81 per credit in segregated fees).

Students will pay an additional \$30.00 per credit online course fee for any online courses. Also, some schools at UW-Milwaukee charge a master's surcharge fee for their graduate courses. For instance, courses taken through the Lubar School of Business will carry an additional \$167.71 per credit charge. These additional costs (online and master's surcharges) do not plateau at eight credits.

Student Learning and Program Outcomes

The M.S. in Connected Systems Engineering program equips students with the skills to solve complex and critical system-level problems in the manufacturing and service industries. The program's curriculum emphasizes innovative and critical thinking and prepares students to "...serve those who solve complex and critical problems of the world in alignment with the mission of the Institute of Industrial and Systems Engineers (IISE), the premier professional organization for systems engineers."

Upon completion of the M.S. in Connected Systems Engineering, students will:

- 1. Understand, analyze, integrate, and validate complex systems.
- 2. Apply and integrate the appropriate data analytical skills and tools to solve industry problems under uncertain conditions.
- 3. Synthesize diverse business models and identify model features that ensure system agility.
- 4. Design coherent industrial system-level solutions using Industry Internet of Things (IIOT) solutions including data analytics, remote sensing and controls, robotics and automation, mixed reality, digital twin, and cybersecurity solutions.
- 5. Synthesize, evaluate, and apply measurable key performance indices to assess the effectiveness of the proposed system-level solutions.

Program Curriculum Requirements

The M.S. in Connected Systems Engineering program requires 31 total credits and includes 18 credits of required core courses, three credits of a capstone completion course, one credit of writing effectiveness, and nine credits of elective courses. These requirements align with existing master's programs in the CEAS at UW-Milwaukee. Additionally, students must possess a baccalaureate degree in engineering or related field from an accredited college or university to be eligible for the M.S. in Connected Systems Engineering program.

Students may select electives from a wide variety of courses from several programs at UW-Milwaukee, including courses from Industrial and Manufacturing Engineering, Lubar School of Business, Computer Science, Mechanical Engineering, and the School of Information Studies. The elective courses have been grouped by focus areas, so that a student can select all nine technical elective credits from a single focus area to gain indepth knowledge in that specific focus area. While students may opt to complete electives from a single focus area, the program's flexibility permits students to select courses from multiple focus areas to reach the required nine credits of technical elective coursework.

Table 2: M.S. in Connected Systems Engineering Program Curriculum

Acadomic dogr	ee program or major course requirements:	
Academic degr	Core Courses	18 credits
IND ENG 741		1 credit
IND ENG 741	Foundational Technologies for Connected Systems Cloud Architecture for Connected Systems	1 credit
BUS ADM 788	Digital Supply Chain Management: Tracking and Tracing	1 credit
IND ENG 540G	Foundations of Systems Engineering	3 credits
IND ENG 555G	Manufacturing Systems Integration	3 credits
IND ENG 3350	Data Acquisition and Visualization for Industrial	3 credits
IIVD EIVO 7 13	Decision Making	3 ci cuits
IND ENG 716	Engineering Statistical Analysis	3 credits
Bus Adm 811	Process and Workflow Management	3 credits
	<u>o</u>	
	Capstone Project Course Requirement	3 credits
IND ENG 999	Advanced Independent study towards the capstone	3 credits
	design-Capstone Project	
	Effective Technical Writing Requirement	1 credit
EAS 701	Effective Academic Writing	1 credit
	0	
Technical Elect	ive Courses (See endnotes below the table)	9 credits
	Industrial Engineering Focus	
Ind Eng 455G	Operations Research I	3 credits
Ind Eng 465G	Operations Research II	3 credits
Ind Eng 475G	Simulation Methodology	3 credits
Ind Eng 550G	Control of Automated Manufacturing Systems	a 11.
•		3 credits
Ind Eng 571G	Quality Control	3 credits
Ind Eng 571G Ind Eng 575G	Quality Control Design of Experiments	3 credits 3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717	Quality Control Design of Experiments Operations Research in Engineering Management	3 credits 3 credits 3 credits
Ind Eng 571G Ind Eng 575G	Quality Control Design of Experiments	3 credits 3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717	Quality Control Design of Experiments Operations Research in Engineering Management	3 credits 3 credits 3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods	3 credits 3 credits 3 credits 3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering	3 credits 3 credits 3 credits 3 credits 3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus	3 credits 3 credits 3 credits 3 credits 3 credits 3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus Control of Automated Manufacturing Systems	3 credits 3 credits 3 credits 3 credits 3 credits 3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890 Ind Eng 550G Ind Eng 572G	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus Control of Automated Manufacturing Systems Reliability Engineering	3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890 Ind Eng 550G Ind Eng 572G Ind Eng 587G	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus Control of Automated Manufacturing Systems Reliability Engineering Lean Manufacturing	3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890 Ind Eng 550G Ind Eng 572G Ind Eng 587G Ind Eng 751	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus Control of Automated Manufacturing Systems Reliability Engineering Lean Manufacturing Flexible Manufacturing Systems	3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890 Ind Eng 550G Ind Eng 572G Ind Eng 587G	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus Control of Automated Manufacturing Systems Reliability Engineering Lean Manufacturing	3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890 Ind Eng 550G Ind Eng 572G Ind Eng 587G Ind Eng 751	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus Control of Automated Manufacturing Systems Reliability Engineering Lean Manufacturing Flexible Manufacturing Systems	3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890 Ind Eng 550G Ind Eng 572G Ind Eng 587G	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus Control of Automated Manufacturing Systems Reliability Engineering Lean Manufacturing	3 credits
Ind Eng 571G Ind Eng 575G Ind Eng 717 Ind Eng 765 Ind Eng 777 Ind Eng 890 Ind Eng 550G Ind Eng 572G Ind Eng 587G Ind Eng 751	Quality Control Design of Experiments Operations Research in Engineering Management Operations Research Methods Scheduling and Realtime Resource Management Advanced Topics in Industrial and Systems Engineering Manufacturing Engineering Focus Control of Automated Manufacturing Systems Reliability Engineering Lean Manufacturing Flexible Manufacturing Systems Advanced Topics in Industrial and Systems Engineering	3 credits

Bus Adm 781 Bus Adm 816	Enabling Supply Chains with SAP Business Intelligence Technologies and Solutions	3 credits 3 credits
Bus Adm 818	Information Systems Practicum (ERP project only)	3 credits
Ind Eng 890	Advanced Topics in Industrial and Systems Engineering	3 credits
	Digital Supply Chain Management Focus	
Ind Eng 590	Global Supply Chains	3 credits
Bus Adm 781	Enabling Supply Chains with SAP	3 credits
Bus Adm 782	Supply Chain Technology and Simulation	3 credits
Bus Adm 783	Modeling and Analytics in Supply Chain	3 credits
Bus Adm 787	Managing Connected Supply Chains	3 credits
Bus Adm 789	Service Operations Management	3 credits
Ind Eng 890	Advanced Topics in Industrial and Systems Engineering	3 credits
	Mechatronics/Robotics/Digital Twin Focus	
Mech Eng 476G	Introduction to Robotics	3 credits
Mech Eng 479G	Advanced Mechatronics	3 credits
Mech Eng 733	Sensors and Systems	3 credits
Comp Sci 725	Robot Motion Planning	3 credits
Comp Sci 746	Immersive Technologies and 3D User Interfaces	3 credits
Ind Eng 890	Advanced Topics in Industrial and Systems Engineering	3 credits
	AI/Machine Learning Focus	
Comp Sci 425G	Introduction to Data Mining	3 credits
Comp Sci 710	Artificial Intelligence	3 credits
Comp Sci 711	Machine Learning	3 credits
Comp Sci 715	Programming for Machine Learning	3 credits
INFOST 582G	Introduction to Data Science	3 credits
	Cybersecurity Focus	
Comp Sci 469G	Introduction to Computer Security	3 credits
INFOST 583G	Survey of Information Security	3 credits
INFOST 695G	Ethical Hacking I	3 credits
INFOST 696G	Ethical Hacking II	3 credits
INFOST 761	Information Privacy	3 credits
INFOST 784	Information Security Management	3 credits
Ind Eng 890	Advanced Topics in Industrial and Systems Engineering	3 credits
Total Credits		31 credits

^{*}IND ENG 715 Data Acquisition and Visualization for Industrial Decision Making is a newly developed course that encompasses the processes and equipment used for data acquisition, data processing and transfer and visualization using industry standard software.

Collaborative Nature of the Program

The proposed M.S. in Connected Systems Engineering is designed to be interdisciplinary—offering students skills and knowledge across numerous disciplines, including engineering, computer science, and business. While the program will be offered through the Industrial and Manufacturing Engineering Department, in UW-Milwaukee's CEAS, courses originate from various units (departments/schools) at UW-Milwaukee and include the Lubar College of Business, the School of Information Studies, the Department of Mechanical Engineering, and the Computer Science Department. In addition, UW-Milwaukee's CSI will provide access to the testbeds, software, personnel time, and other resources to provide hands-on learning in the courses and capstone projects. External collaborators will include manufacturing and service industries that will provide case projects for the capstone course.

Projected Time to Degree

Full-time students who complete 10-11 credits a semester will be able to complete the program in three semesters. While the program is flexible in its design and part-time students may take as few as three credits per semester, it is anticipated that most part-time students will complete six-seven credits a semester and will be able to complete the program requirements in as few as five semesters. This anticipated time to degree completion is within the expected timeline for a master's degree in the CEAS. Any student enrolled must graduate within five years of enrollment, or otherwise request for exemption though the UW-Milwaukee's Graduate School.

Program Review and Accreditation

Graduate programs in the CEAS are accredited through the Higher Learning Commission (HLC), and no special accreditation or approvals beyond that provided by the HLC are required.

PROGRAM JUSTIFICATION

Rationale

The UW-Milwaukee select mission values, "high quality undergraduate, graduate, and continuing education programs appropriate to a major urban doctoral university," to "attract highly qualified students who demonstrate the potential for intellectual development, innovation, and leadership for their communities...to further academic and professional opportunities at all levels for women, minority, part-time, and financially or educationally disadvantaged students...to promote public service and research efforts directed toward meeting the social, economic, and cultural needs of the state of Wisconsin and its metropolitan areas, and to "provide educational leadership in meeting future social, cultural, and technological challenges." 1

¹ The UWM Vision, Values, and Mission Statement is located at https://uwm.edu/mission

The M.S. in Connected Systems Engineering program supports these objectives from UW-Milwaukee's select mission and will: 1) prepare and graduate a workforce that is ready to lead and contribute in industry amidst disruptions brought forth by advances of technology, and other social-cultural changes; 2) provide academic and professional opportunities at all levels for students from diverse backgrounds; and 3) establish and maintain productive relationships with companies locally, regionally, nationally, and internationally.

This M.S. in Connected Systems Engineering will promote skills development to build a workforce ready for new job opportunities in advancing technologies such as artificial intelligence technology and machine learning, cybersecurity, and robotics; the program will further enable the current workforce to reskill for job opportunities in systems engineering, with specializations in automation, data analytics, artificial intelligence, digital supply chain and optimization of industry operation. This innovative program has received the endorsement of the Industrial and Manufacturing Engineering program's Industry Advisory Board, as well as the Connected Systems Institute's academic and industry advisory boards.

Institution and Universities of Wisconsin Program Array

The M.S. in Connected Systems Engineering does not duplicate any existing programs at UW-Milwaukee. However, the program will complement current master's programs offered by the CEAS such as Civil Engineering/Urban Planning, Computer Science (regular and professional track); Biomedical Engineering; Energy Engineering; Electrical and Computer Engineering; Mechanical Engineering; Industrial Engineering; Manufacturing Engineering, Occupation and Biomechanics Engineering and Materials Engineering. While this proposed program may compete with existing master's programs in the Industrial and Manufacturing Engineering department in the short-term because the program offers skills that are currently needed in the industry; however, it is anticipated that there will be limited impact in the long-term.

Within the Universities of Wisconsin, UW-Madison offers an M.S. in Manufacturing Systems Engineering that is within the same 14.2701 CIP code area (Systems Engineering); additionally, UW-Madison offers master's programs in Engineering (CIP code area 14.0101-Engineering) with emphases in related fields such as Sustainable Systems Engineering and Manufacturing Systems Engineering. None of the curriculum in these related programs offer a combination of knowledge areas that the proposed M.S. in Connected Systems Engineering will provide, including: IoT, machine learning, connected systems, multiechelon inventory optimization, blockchain, robotics, cyber-security, or real-time data analytics.

Need as Suggested by Student Demand

Student demand for this degree comes from two distinct populations. The first is current students completing bachelor's degrees in engineering at UW-Milwaukee. The Industrial and Manufacturing Engineering Department offered a topics course in connected systems (CS) at an undergraduate level, as a technical elective from Fall 2016 until Spring 2018. The course was well-received by students, and additional courses in the same area were requested. UW-Milwaukee offers Ind Eng 550 Control of Automated Manufacturing Systems, a course that provides skills in the automation of manufacturing systems. The skills learned in this course have led to several students attaining jobs upon completion.

The second population are local, regional, and international students who have completed at least a bachelor's in engineering or related field and who want to reskill or upskill to gain key knowledge necessary for current and future careers in the manufacturing and service industries. The number of participants in the non-credit reskilling learning pathways offered through the UW-Milwaukee's Connected Systems Institute's Manufacturing Workforce Innovation Program (total of 189, between summer 2022-summer 2023) suggests significant interest in the programming to enhance skills in connected systems engineering.

Need as Suggested by Market Demand

Rapid technological changes necessitate reskilling and upskilling of the current engineering workforce. The U.S. Bureau of Labor Statistics projects that from 2022-2030, the number of jobs that require STEM (Science, Technology, Engineering and Mathematics) related skills will grow faster than other employment, growing by 10.8%. Current indemand job opportunities include expert systems engineer, artificial intelligence engineer, cloud architecture engineer, data analyst, among others. The M.S. in Connected Systems Engineering program is geared toward current students pursuing a bachelor's degree in engineering or related field and the local and regional workforce with engineering and related backgrounds who wish to gain more knowledge in systems engineering and choose from among the elective focus areas. In jobs related to the program's CIP code area of Systems Engineering, market analysis showed a 6% growth in jobs in Wisconsin, with 5,413 average annual openings. For jobs requiring the specialized skill of "Industry 4.0", there were 507 job postings in Wisconsin, with 277 of them in the Milwaukee-Waukesha area.

A principal engineer from Heartland Technology Group, Inc., an engineering employer in the Milwaukee region and industry partner at UW-Milwaukee's Connected Systems Institute, highlighted the importance of knowledge and skills associated with connected systems engineering by noting, "As a leading Wisconsin employer in industrial automation, an advance degree in Industry Internet of Things (IIoT), as proposed by the

² Bureau of Labor Statistics, U.S. Department of Labor, *Employment in STEM occupations*. September 6, 2023. Retrieved at https://www.bls.gov/emp/tables/stem-employment.htm

³ University Marketing on Systems Engineering. (2024). Lightcast.

⁴ University Marketing on Specialized Skill "Industry 4.0". (2024). Lightcast.

UW-Milwaukee College of Engineering and Applied Sciences, is vital to the growth of our economy. As more industries adopt IIoT technologies to improve efficiency, reduce costs, and transform their operations, the demand for professionals with IIoT skills will grow exponentially. Beyond manufacturing, IIoT is expected to create new jobs in areas like data analysis, system management, and cybersecurity."

Additionally, directors for Global Academic Engagement and Advanced Technologies Rockwell Automation Inc. (RA), another regional employer, jointly support the establishment of the M.S. in Connected Systems Engineering and note the potential for this program to prepare a pipeline for the workforce as follows, "We believe that an interdisciplinary master's program focused on connected systems is a critical step to closing the current industry knowledge gap and preparing a pipeline of future industry leaders. Seeing this outcome was a core reason RA engaged in developing the Connected Systems Institute (CSI) and we fully support the MS program's establishment." Rockwell Automation is a leading employer of UW-Milwaukee's graduates and key industry partner to the UW-Milwaukee's Industrial and Manufacturing Department and UW-Milwaukee's Connected Systems Institute. The Connected Systems Institute offers several workshops for workforce development, whose contents are embedded in the new M.S. in Connected Systems Engineering. Data collected from these non-credit learning pathways indicated all participants were employees from local manufacturing industries and may serve as a pool for recruitment for the M.S. in Connected Systems Engineering.

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		Net Revenue	\$85,579	\$220,637	\$304,240	\$381,036	\$471,292			

Provost's Signature:

Date:

Chief Business Officer's Signature:

RV-h

Date:

02/27/2024

2-27-2024

COST AND REVENUE PROJECTIONS NARRATIVE UNIVERSITY OF WISCONSIN-MILWAUKEE MASTER OF SCIENCE IN CONNECTED SYSTEMS ENGINEERING

PROGRAM INTRODUCTION

The University of Wisconsin-Milwaukee proposes to establish a Master of Science in Connected Systems Engineering (M.S. in Connected Systems Engineering), to be offered by UW-Milwaukee's College of Engineering and Applied Sciences, in collaboration with the Lubar College of Business and the Connected Systems Institute at UW-Milwaukee. The Industrial and Manufacturing Department will serve as the home academic unit for accreditation purposes. The development of this program responds to the need to prepare students for careers in connected systems in the manufacturing and service industries.

This 31-credit program is designed to provide students with a set of core courses that give the fundamentals of connected systems, a writing effectiveness course, technical electives categorized to emphasize several focus areas, and a capstone course. For students enrolled in the M.S. in Connected Systems Engineering program, graduate tuition and fees for the College of Engineering and Applied Sciences will apply.

COST REVENUE NARRATIVE

Section I - Enrollment

UW-Milwaukee anticipates 15 new students to enroll in the program in Year 1, which is based on 5-year enrollment data for the existing M.S. in Engineering at UW-Milwaukee, and envisions a 20% increase in enrollment per year for the initial five years of the degree program. A yearly 90% retention rate is estimated, which is based on the retention rate of other Master of Science programs by the Industrial and Manufacturing Engineering Department at UW-Milwaukee. For planning purposes, 75% of the students are estimated to be full-time and will complete the program within three semesters (in Year 2), and 25% of students will be part-time, completing the program as few as 5 semesters (in as early as Year 3). Therefore, by the end of Year 5, it is expected that 112 students will have enrolled in the program and 67 students will have graduated. For calculating FTE, we count full-time students as 1.0 FTE and part-time students as 0.5 FTE.

Section II - Credit Hours

The program requires 31 total credits, consisting of 18 credits in a set of required core courses, three credits in a capstone completion course, one credit of writing effectiveness, and nine credits in elective courses. Except for one newly developed course, the program's curriculum draws from existing courses at UW-Milwaukee. Considering the array of courses that will be offered by several departments and schools, credits hours will be allocated to the respective generating unit. For the purposes of credit hour calculations,

full-time and part-time students are estimated to take 10 and six credit hours per semester, giving a three semester, and five semester time to graduation, respectively. This estimation does not include summer semesters. While the program is flexible and students may take as few as three-four credits per semester, the above assumptions were used for calculation purposes.

New credit hours are defined as the number of credits taken by new students enrolled in the program that year, and we calculated the total new credit hours by multiplying the enrollment of new students (factoring for 75% full-time students and 25% part-time students) by the credits taken (10 credits and six credits, respectively for full-time and part-time students).

Existing credit hours are defined as the number of credits taken by students who have continued in the program from the prior year. Existing credit hours are calculated by multiplying the enrollment of continuing students for that year (factoring for 75% full-time and 25% part-time students) by the credit hours taken that year by continuing students (10 credits and 6 credits, respectively for full-time and part-time students).

Section III - Faculty and Staff Appointments

There are no faculty or staff appointments required to implement this degree. Apart from one new course, existing courses offered at UW-Milwaukee will be utilized. The Industrial and Manufacturing Engineering Department has capacity to support the program, having six faculty members and two instructional academic staff. It is projected that 0.125 of each faculty and instructional staff's FTE will be dedicated to this program. It also is anticipated that 0.25 FTE of existing administrative staff will be dedicated to supporting this program.

Section IV - Program Revenues

Tuition Revenues

Tuition revenues have been calculated based on the Fall 2023 UW-Milwaukee's graduate tuition and fees schedule for graduate students enrolled in the College of Engineering and Applied Sciences. While some anticipated tuition will be drawn from non-residential students, the revenue projections have been calculated conservatively, by considering that all students will pay resident tuition rates.

Of new students, 75% are anticipated to be full-time, taking 10 credits a semester, paying a total of \$7,415.45 per semester (\$6,633 in tuition and \$782.45 in segregated fees). It is anticipated that 25% of new students will be part-time, taking six credit hours a semester, and they will be charged \$829.13 per credit in tuition for a total of \$4,974.78 in tuition per semester (not including segregated fees). Revenue calculations for Year 2 through Year 5 account for time to degree completion for full-time and part-time students (Three semesters and Five semesters, respectively).

Students will pay an additional \$30.00 per credit online course fee for any online courses taken. Also, some schools at UW-Milwaukee charge a master's surcharge fee for their graduate courses. For instance, courses taken through the Lubar School of Business will carry an additional \$167.71 per credit charge. These additional costs (online and master's surcharges) do not plateau at eight credits. Given the variety of courses offered, these added online-delivery and master's surcharge fees have not been included in the revenue projections. In addition, no tuition increase has been considered in the revenue projections, nor any program fees, grant funding, or additional program revenue.

Section V - Program Expenses

Salary and Fringe Expenses

As detailed in Section III, each existing faculty member from the Industrial and Manufacturing Department will dedicate 0.125 FTE to support this program. The combined total salaries (including 36.7 percent fringe rate) of the current six faculty members and two instructional academic staff in the department are \$626,796 and \$121,000, respectively. For expense calculations, 0.125 of the total salary has been charged to this program as an expense. We currently have 0.5 FTE administrative support (shared between two departments), which amounts to \$25,000 in salary expenses for the department. Similarly, 0.25 of the administrative salary has been charged as an expense to this program. The 5-year projections in the total salaries have incorporated a 3% increase per year.

Other Expenses

The Industrial and Manufacturing Department will use an eighth of the department's annual Supplies and Expenses allocations (approximately \$1,250) to support annual technology and software needs of the program.

Section VI - Net Revenue

The net revenues as shown in the cost and revenue projection spreadsheet will be distributed according to the UW-Milwaukee's budget model.



Academic Affairs

Provost and Vice Chancellor

Chapman 21
PO Box 413
Milwaukee, V
53201-0413
414 229-4501 phc
414 229-2481
https://uwm.edu/academicaffair

TO: Jay Rothman, President

University of Wisconsin System

FROM: Andrew P. Daire, Provost and Vice Chancellor

DATE: February 9, 2024

RE: Authorization to Implement an MS in Connected Systems Engineering

Per UW System guidelines for new program development, I am writing to you to assure the support of the University of Wisconsin-Milwaukee for the proposed Master of Science in Connected Systems Engineering.

The proposed program will be offered by the Industrial and Manufacturing Engineering Department, in UWM's College of Engineering and Applied Sciences, in collaboration with UWM's Lubar College of Business and UWM's Connected Systems Institute (CSI), in response to the need to prepare students for careers in connected systems in the manufacturing and service industries and prepare a pipeline of future industry leaders.

Though the larger society may fear that AI and automation is "coming for their jobs", we believe to the contrary that AI and automation, which are among the disruptive technologies, are not only increasing productivity, but also resulting in new job opportunities. This MS program, which will be skilling a workforce for these new job opportunities, has received the endorsement of the Industrial and Manufacturing Engineering program's Industry Advisory Board, as well as the CSI's academic and industry advisory boards. This new program will enable the current workforce to reskill for job opportunities in systems engineering, with specializations in automation, data analytics, artificial intelligence, digital supply chain and optimization of industry operation.

Aligned with several goals of UW-Milwaukee's Select Mission Statement (https://uwm.edu/mission/), the MS in Connected Systems Engineering program will:

- Prepare and graduate a workforce that is ready to lead and contribute in industry amidst disruptions that are being brought about by a proliferation of technology, and other social-cultural changes.
- Provide academic and professional opportunities at all levels for students from diverse backgrounds.
- To establish and maintain productive relationships with companies locally, regionally, nationally, and internationally.

There are no faculty or staff appointments needed to implement this degree. Considering the recent faculty hires at the Industrial and Manufacturing department and the resources available at the Connected Systems Institute, no additional resources will be required for this program.

The curriculum and other aspects of the authorization document have been vetted through campus faculty governance processes—at the department, school, and campus levels. The proposal meets all of the UWM standards and expectations for quality and rigor at the graduate level. Upon implementation, the program will be reviewed in five years and subsequently according to the regular campus program review process.

I am pleased to strongly support approval of this request for authorization.

c: Johannes Britz, Vice President, Academic and Student Affairs Tracy Davidson, Associate Vice President, Academic and Student Affairs Sheryl Zajdowicz, Director of STEM and Applied Research Initiatives Brett Peters, Dean, College of Engineering and Applied Science Suzanne Boyd, Special Assistant to the Provost, UWM Academic Affairs

Item April 4, 2024 C.4.

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) MASTER OF PROFESSIONAL STUDIES IN DESIGN, ENTREPRENEURSHIP, AND SUSTAINABILITY, UNIVERSITY OF WISCONSIN-STOUT

REQUESTED ACTION

Adoption of Resolution C.4, authorizing the implementation of the Master of Professional Studies in Design, Entrepreneurship, and Sustainability at the University of Wisconsin-Stout.

Resolution C.4.:

That, upon the recommendation of the Chancellor of the University of Wisconsin-Stout and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Master of Professional Studies in Design, Entrepreneurship, and Sustainability program at the University of Wisconsin-Stout.

SUMMARY

The University of Wisconsin (UW)-Stout proposes to establish a Master of Professional Studies (M.P.S.) in Design, Entrepreneurship, and Sustainability. Development of the program responds to UW-Stout's ongoing goals to move toward a more sustainabilityfocused operating model,¹ as well as increased industry demand for professionals with sustainability skills.² Program delivery can leverage courses and resources already in place at UW-Stout. The M.P.S. in Design, Entrepreneurship, and Sustainability will be a fully online Customized Instruction graduate program comprised of 30 credits. Graduates will be better prepared to enter or advance their careers in a wide range of occupations and fields (e.g. management, entrepreneurship, education, engineering, government, etc.), as demand continues to grow for graduates equipped with the sustainability skills to innovate and

¹ University of Wisconsin-Stout. (2010). Climate Action Plan: www2.uwstout.edu/content/bpa/planning/actionplan/climateplan.pdf

² LinkedIn. (2022). Global Green Skills Report 2022. Retrieved 2023 December, from LinkedIn: https://economicgraph.linkedin.com/research/global-green-skills-report

lead, as evidenced by "green skills" jobs growing at a rate of 8%.³ Attention to sustainability is becoming an increasingly important benchmark by which success in industry is measured. Service-based tuition pricing will apply.

Presenter

• Dr. Glendalí Rodríguez, Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (Revised August 2023), available at https://www.wisconsin.edu/uw-policies/uw-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related 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

ATTACHMENTS

- A) Request for Authorization to Implement
- B) Cost and Revenue Projections Worksheet
- C) Cost and Revenue Projections Narrative
- D) Provost's Letter

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³ Eccles, R.G., Johnstone-Louis, M., Mayer, C., & Stroehle, J.C. (2021, June 2). *The Board's role in Sustainability*. Harvard Business Review. https://hbr.org/2020/09/the-boards-role-in-sustainability

REQUEST FOR AUTHORIZATION TO IMPLEMENT A MASTER OF PROFESSIONAL STUDIES IN DESIGN, ENTREPRENEURSHIP, AND SUSTAINABILITY AT UNIVERSITY OF WISCONSIN-STOUT PREPARED BY UW-STOUT

ABSTRACT

The University of Wisconsin (UW)-Stout proposes to establish a Master of Professional Studies (M.P.S.) in Design, Entrepreneurship, and Sustainability. Development of the program responds to UW-Stout's ongoing goals to move toward a more sustainability-focused operating model, ¹ as well as increased industry demand for professionals with sustainability skills. ² Program delivery can leverage courses and resources already in place at UW-Stout. The M.P.S. in Design, Entrepreneurship, and Sustainability will be a fully online Customized Instruction graduate program comprised of 30 credits. Graduates will be better prepared to enter or advance their careers in a wide range of occupations and fields (e.g. management, entrepreneurship, education, engineering, government, etc.), as demand continues to grow for graduates equipped with the sustainability skills to innovate and lead, as evidenced by "green skills" jobs growing at a rate of 8%. ³ Attention to sustainability is becoming an increasingly important benchmark by which success in industry is measured. Service-based tuition pricing will apply.

PROGRAM IDENTIFICATION

University Name

University of Wisconsin-Stout

Title of Proposed Academic Program

Design, Entrepreneurship, and Sustainability

Degree Designation(s)

Master of Professional Studies

¹ University of Wisconsin-Stout. (2010). Climate Action Plan: www2.uwstout.edu/content/bpa/planning/actionplan/climateplan.pdf

² LinkedIn. (2022). Global Green Skills Report 2022. Retrieved 2023 December, from LinkedIn: <u>economicgraph.linkedin.com/research/global-green-skills-report</u>

³ Eccles, R.G., Johnstone-Louis, M., Mayer, C., & Stroehle, J.C. (2021, June 2). *The Board's role in Sustainability*. Harvard Business Review: https://doi.org/2020/09/the-boards-role-in-sustainability

Proposed Classification of Instructional Program (CIP) Code

50.0499, Design and Applied Arts, Other

Mode of Delivery

Single university; Fully Distance Education Delivery

Department or Functional Equivalent

Department of Design

College, School, or Functional Equivalent

College of Arts and Human Sciences

Proposed Date of Implementation

Fall 2024

PROGRAM INFORMATION

Overview of the Program

The proposed 30-credit Master of Professional Studies (M.P.S.) in Design, Entrepreneurship, and Sustainability (DES) will focus on innovation advantages found in applied sustainability explored in a design context. Students will learn the fundamentals of design for sustainability and principles of corporate social responsibility, and how to take efforts to the next level as part of a circular and regenerative economic framework. The M.P.S. in DES is built for professionals looking to not only learn about, but to demonstrate their understanding of environmental and social justice sustainability issues, and how to use that knowledge as a springboard for innovation. The program concludes with a capstone project that allows the student to fully immerse themselves in a topic they have been wanting to explore with the support of topic experts.

To encourage students to consider graduate school, the proposed program stacks with other graduate offerings in the design department at UW-Stout. The Design for Sustainability Certificate can be applied towards the M.P.S. in DES requirements so that a student who has earned the certificate can complete the M.P.S. in DES with 18 additional credits. The M.P.S. in DES can also be applied to the Master of Fine Arts in Design for students wishing to go on to complete their terminal degree in design.

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. New student enrollments were projected by referencing similar UW programs. Although the envisioned M.P.S. in DES will be a unique, interdisciplinary degree, making it difficult to find comparable programs, a degree that is similar in scope is the UW-Madison Master of Science in Design + Innovation, another

interdisciplinary degree with a design focus. In that degree's first year, it attracted ten students. While the audience for graduate degrees at UW-Stout is very different from that of UW-Madison, the reputational strength of the UW-Stout School of Art and Design makes it reasonable to project an initial enrollment of half this size: five students in the first year. This would put the program in line with UW-Stout M.F.A. in Design, which enrolled five students in its first year. For subsequent years, it is assumed that the number of new students enrolling in the M.P.S. in DES will grow by 15% each year, the same increase exhibited by the growth in jobs requiring at least one "green skill" from February 2022 to February 2023, according to the 2023 LinkedIn Green Skills Report.⁴

Implementation of this program will be an opportunity for UW-Stout to bring together high-demand topics from sustainability, business, and design thinking to create a unique learning experience within the university program array. It is not expected that the implementation of this program will negatively impact enrollment for any UW-Stout existing offerings.

To estimate continuing student enrollment, a 90% year-to-year persistence rate is assumed, which is based on the five-year average rate for the existing M.F.A. program in Design. This high persistence rate for the M.F.A. in Design is a benefit of UW-Stout's model for program direction, which allows students to receive substantial one-on-one mentorship from a faculty member serving as the program director. It is expected that this model will be applied to the proposed program and produce a similar outcome.

Similarly, the number of students who will exit the program through graduation is expected to be comparable to the M.F.A. in Design. It is assumed that 20% of the program's students would graduate each year, beginning at the end of the program's third year. Time to degree is expected to be three years because most students are expected to be working professionals who will enroll part-time. In total, the number of students enrolled in the program is projected to grow incrementally to 20 by the program's fifth year.

Table 1: Five-Year Enrollment and Completion Projections by Headcount

			•	•	
Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	5	6	6	7	7
Continuing Students	0	5	10	11	13
Total Enrollment	5	11	16	18	20
Graduating Students	0	0	3	4	4

Tuition Structure

A service-based pricing tuition model, in accordance with UW System Administrative Policy (SYS) 805 (A)(VII) and SYS 130, will be applied to this program. Students enrolled in

⁴ LinkedIn. (2022). Global Green Skills Report 2022. Retrieved 2023 December, from LinkedIn: <u>economicgraph.linkedin.com/research/global-green-skills-report</u>

the M.P.S. in DES program will pay \$850 per credit hour. This tuition rate will apply to all students, regardless of residency status. Tuition for Customized Instruction (CI) programs at UW-Stout is expected to cover all costs of instruction. Therefore, as is the case with all such programs at UW-Stout, there will be no additional fees beyond tuition.

Student Learning Outcomes and Program Objectives

Program objectives are informed by the United Nations Sustainable Development goals. ⁵ Successful completion of the M.P.S. in DES program will enable students to:

- 1. Utilize a designer's perspective to problem-solving and innovation using foundations in design thinking, circularity, and regenerative design.
- 2. Apply the ethics of environmental and social justice to professional practice, creative scholarship, and business to foster entrepreneurship and innovation.
- 3. Act on insights gained by using tools to identify problems, test ideas, model businesses, build start up teams, and present business ideas within a sustainability-focused framework.

Program Requirements and Curriculum

A series of nine required courses in design, leadership, and business management, including a capstone class, will ensure that students meet the learning objectives stated above. The capstone course will enable students to synthesize the skills they have learned to create a research-based project. Additionally, two Focus Area Elective courses will allow students to apply their knowledge to a specific area of interest aligning with their unique professional goals. Table 2 illustrates the program curriculum.

Table 2: M.P.S. in Design, Entrepreneurship, and Sustainability Program Curriculum

Academic de	Academic degree program or major course requirements:					
DES-712	Sustainable Design Practice	3 credits				
DES-725	Research Strategies in Design	3 credits				
PSYCH-577	Consumer Psychology	3 credits				
INMGT-615	Inclusivity in Leadership	3 credits				
DES-710	Ethics in Design	3 credits				
BUMGT-580	Principles of Entrepreneurship and Innovation	3 credits				
XXX-XXX	Focus Area Elective	3 credits				
XXX-XXX	Focus Area Elective	3 credits				
DES-715	Sustainable Design Practice II: Global Perspective	3 credits				
DES-870	Creative Thesis in Design	3 credits				
Total Credit	S	30 credit(s)				

⁵ United Nations Department of Economic and Social Affairs. The 17 goals. Retrieved January 12, 2024: sdgs.un.org/goals

Collaborative Nature of the Program

By its nature, the M.P.S. in DES program is a collaborative venture. Courses and electives are drawn from departments across UW-Stout, giving students an experience that allows for both cross-discipline learning and learning tailored to their industry and career goals. Additionally, inter-disciplinary collaborations are the heart of the M.P.S. in DES program. The combination of design thinking, systems thinking, and entrepreneurship are needed to drive innovation in a rapidly changing world.

Projected Time to Degree

The M.P.S. in DES program is designed for the working professional going to school part-time, although it will be available for full-time registration. Students can expect to take between two to three years to complete the program.

Accreditation

UW-Stout's Design Department programs are accredited by the National Association of Schools of Art and Design (NASAD); this new program will be reviewed along with the other art and design programs for NASAD accreditation during the next review cycle. Institutionally, UW-Stout is accredited by the Higher Learning Commission (HLC). HLC needed to be notified of an intent to offer a new degree type, which was completed and confirmed by HLC.

PROGRAM JUSTIFICATION

Rationale

UW-Stout's ongoing goals are to move toward a more sustainability-focused operating model and to build program array in sustainability areas.⁶ As industry demands for professionals with sustainability skills increases⁷ and with courses already in place in the Design and other departments at UW-Stout, there is opportunity and motivation at UW-Stout to develop new graduate programs focusing on sustainability without needing to develop new courses or hire new faculty.

This proposed degree also has an enrollment strategy as it relates to other program offerings- specifically, to invite potential students to consider going back to school with a reduced time and cost commitment compared to UW-Stout's existing 60 credit Master of Fine Arts in Design (an M.F.A. is a terminal degree for design). The entry points with the Design for Sustainability Certificate, the proposed M.P.S. in DES, and the full M.F.A. in Design allow multiple options and a pathway for prospective and current students.

⁶ University of Wisconsin-Stout. (2007). *Chancellor Signs National Pledge*. Retrieved February 2018, from Alumni Outlook Magazine:

www2.uwstout.edu/content/bpa/planning/actionplan/climateplan.pdf

⁷ LinkedIn. (2022). Global Green Skills Report 2022. Retrieved 2023 December, from LinkedIn: https://economicgraph.linkedin.com/research/global-green-skills-report

Drawing from courses already part of the M.F.A. in Design will increase enrollment in these graduate courses, helping to grow and maintain that program as well.

The M.P.S. in DES degree dovetails with UW-Stout's polytechnic tenets of applied learning, career focus, and collaboration. The proposed M.P.S. in DES degree also exemplifies the FOCUS 2030 Goals⁸ for student success, institutional stability, and equity, diversity, and inclusivity. The program's multidisciplinary approach integrates a variety of learning experiences enabling both academic and career success. The online and customizable nature of the program specifically targets a diverse population of adults who have completed their undergraduate degree for their trade but have little or no training in sustainability and tools for innovation—critical skills for today's professionals.

Institution and Universities of Wisconsin Program Array

The proposed M.P.S. in DES will complement, and leverage curriculum currently offered in the UW-Stout M.F.A. in Design. Across the Universities of Wisconsin, there are 12 graduate programs that include sustainability as part or all their curriculum focus; however, only two programs might draw from a similar target audience as the M.P.S. in DES. These programs are the Master of Science in Sustainable Management (MSMGT), and the Master of Science in Design + Innovation.

The M.S. in Sustainable Management (CIP Code 30.3301 Sustainability Studies)⁹ offered through UW-Extended Campus is an all-online program that focuses on sustainability in business, but with no additional focus on design. UW-Stout is part of the Sustainable Management graduate collaboration. Should the M.S. in Sustainable Management expand in the future to include design, program courses would be a welcome source of options for the M.P.S. in DES, helping to increase individual course enrollments for both the M.P.S. in DES and M.S. in Sustainable Management programs.

The M.S. in Design + Innovation (CIP Code 30.999 Interdisciplinary Studies) at UW-Madison is an accelerated in-person graduate program offering several interdisciplinary tracks. As an on-campus program, it serves a different student population than the proposed program. Furthermore, while the program may include sustainability as part of the overall curriculum, materials offered on the program website suggest sustainability is not the focus of the degree.¹⁰

⁸ University of Wisconsin-Stout. (2022). FOCUS 2030 Plan and Initiatives. Retrieved 2022, from University of Wisconsin-Stout: www.uwstout.edu/focus-2030-plan-initiatives

⁹ University of Wisconsin. (2021). *Lead sustainable change in any organization*. Retrieved April 2021, from University of Wisconsin Sustainable Management: <u>sustain.wisconsin.edu/get-smgt-ms-guide</u>

¹⁰ University of Wisconsin-Madison. (2023). *Master of Design + Innovation*. Retrieved from University of Wisconsin-Madison: <u>mdi.wisc.edu/program-overview/</u>

Need as Suggested by Student Demand

One of the most promising takeaways from UW-Stout's Marketing and Communications examination of potential CIP Codes and demand for the proposed program is the marked jump in demand for skills integral to sustainability, including innovation and leadership. Master's degrees in the U.S. covering comparable topics accounted for 41.5% of the degree completions in 2020, and post-baccalaureate certificates accounted for 21.0% of the completions in 2020¹¹. Trending consistently upward from 2012-2020, distance learning programs (online) saw the completions rate grow over 1,128.6%, while on-campus graduate program completions grew 110.8% in that same time period. Enrollment in other UW-Stout graduate programs with affinities with this degree also points to the increasing market for degrees in design and sustainability; over the last ten years, enrollment in the M.F.A. in Design has grown by 170%, while enrollment in the M.S. in Sustainable Management has grown by 110%.

Need as Suggested by Market Demand

Globally, sustainability (green economic practice) has become one of the metrics used to judge how well a company is managed. ¹² Around the world, and in the U.S. specifically, some of the fastest areas for job growth are happening as part of developing the New Green Economy. ¹³ As part of their sustainable development goals, the United Nations has identified *Education for Sustainability* as a critical area of focus. ¹⁴ More recently, the COVID-19 pandemic has forced people and governments to look for ways of rebuilding. Investing in the New Green Economy offers strategies to not only build a healthier, more equitable society, but directly address issues around the climate crisis. ¹⁵

According to LinkedIn's Global Green Skills report for 2022, job postings requiring green skills grew at 8% annually over the prior five years, but the share of those with green skills has only grown at roughly 6% annually in the same period. The supply of those with green skills is not keeping up with demand.¹⁶

¹¹ University of Wisconsin – Stout Marketing. (2023). Lightcast.

¹² Governance & Accountability Institute. (2016, March 15). *FLASH REPORT: 81% of the S&P 500 Index Companies Published Corporate Sustainability Reports in 2015*. Retrieved January 08, 2018, from Nasdaq GlobeNewswire: globenewswire.com/news-release/2016/03/15/819994/0/en/FLASH-REPORT-81-of-the-S-P-500-Index-Companies-Published-Corporate-Sustainability-Reports-in-2015.htm

¹³ Carrington, D. (2016, October 27). *10 years on from the Stern report: a low-carbon future is the 'only one available'*. Retrieved November 03, 2017, from The Guardian: theguardian.com/environment/2016/oct/27/10-years-on-from-the-stern-report-a-low-carbon-future-is-the-only-one-available

¹⁴ UNESCO. (2002). *Education for Sustainability - Unesco.* Retrieved March 2018, from unesco.org: <u>unesdoc.unesco.org/ark:/48223/pf0000127100</u>

¹⁵ World Economic Forum. (2021). *The great reset*. Retrieved September 2021, from World Economic Forum: https://www.weforum.org/videos/series/the-great-reset-863c8ea2d4/

¹⁶ LinkedIn. (2022). Global Green Skills Report 2022. Retrieved 2023 December, from LinkedIn: <u>economicgraph.linkedin.com/research/global-green-skills-report</u>

In addition to exposing a green skills gap, and an opportunity for education to help build the workforce needed to take on 21st century challenges, this report includes critical questions that policymakers, business leaders, and others consider as they develop regulations, programs, and policies that help create new jobs.

		of Wisconsin - St			1	
	Cost and Revenue Projections For M.P.S	5. Design, Entrep			ability	
	Items	2024.25		Projections	2227.22	2000 00
		2024-25	2025-26	2026-27	2027-28	2028-29
	Francisco (Alexa Charles A) Handarana	Year 1	Year 2	Year 3	Year 4	Year 5
ı	Enrollment (New Student) Headcount	5	6 5	6	/	12
	Enrollment (Continuing Student) Headcount	0	•	10	11	13
	Enrollment (New Student) FTE	1.94	2.32	2.32	2.71	2.71
	Enrollment (Continuing Student) FTE	0	1.94	3.87	4.26	5.03
II	Total New Credit Hours	35	42	42	49	49
	Existing Credit Hours	0	35	70	77	91
Ш	FTE of New Faculty/Instructional Staff	0	0	0	0	0.554
	FTE of Current Fac/IAS	0.162	0.356	0.421	0.486	0.551
	FTE of New Admin Staff	0.2	0	0	0	0
13.7	FTE Current Admin Staff	0	0.2	0.1	0.1	0.1
IV	Revenues	‡20.750	¢65.450	#05 200	±407.400	±440.000
	Tuition	\$29,750	\$65,450	\$95,200	\$107,100	\$119,000
	Additional Tuition					
	Fees (indicate type)					
	Fees (indicate type)					
	Program Revenue (Grants)					
	Program Revenue - Other					
	GPR (re)allocation					
	Total Revenue	\$29,750	\$65,450	\$95,200	\$107,100	\$119,000
٧	Expenses					
	Salaries plus Fringes					
	Faculty Salary	\$12,029	\$26,434	\$31,261	\$36,087	\$40,913
	Instuctional Academic Staff					
	Administrative and Student Support Staff	\$10,709	\$10,709	\$5,355	\$5,355	\$5,355
	Other Staff					
	Fringe Faculty and Academic Staff	\$8,804	\$14,048	\$13,848	\$15,673	\$17,499
	Fringe University Staff					
	Fringe Other Staff					
	Facilities and Capital Equipment					
	University buildings and space					
	Capital Equipment					
	Operations					
	Other Expenses					
	Other (Cl program assessment)	\$10,859	\$23,890	\$28,233	\$32,576	\$27,102
	Other (please list)					
	Total Expenses	\$42,400	\$75,081	\$78,697	\$89,691	\$90,869
	Net Revenue	-\$12,650	-\$9,631	\$16,504	\$17,409	\$28,131
Prov	ost's Signature:		Date: 2/8/2024			
	B. Rodniques					
Chie	Chief Business Officer's Signature: Date:					
	Min II		2/9/2024			

COST AND REVENUE PROJECTIONS NARRATIVE UNIVERSITY OF WISCONSIN-STOUT MASTER OF PROFESSIONAL STUDIES IN DESIGN, ENTREPRENEURSHIP, AND SUSTAINABILITY

PROGRAM INTRODUCTION

The University of Wisconsin (UW)-Stout proposes to establish a Master of Professional Studies (M.P.S.) in Design, Entrepreneurship, and Sustainability (DES). This will be a fully online Customized Instruction (CI) program that utilizes a service-based pricing tuition model in accordance with UW System Administrative Policy (SYS) 805 (A)(VII) and SYS 130. Because the program will share the majority of its courses with the existing M.F.A. in Design, this new program will adopt the same tuition rate as the M.F.A. program. As a CI program utilizing service-based pricing, the program will operate on a cost-recovery basis. Program revenue is expected to support the entire cost of instruction that is attributable to students enrolled in the M.P.S. in Design, Entrepreneurship, and Sustainability, administrative overhead, and any academic support. It is forecasted that the program will be revenue-positive in Year 3. The budget narrative explains the five-year projections in the accompanying Cost and Revenue Projections Table.

COST REVENUE NARRATIVE

Section I - Enrollment

Enrollment projections are based on those found at comparable interdisciplinary graduate programs in the Universities of Wisconsin, and calculated in proportion to UW-Stout's enrollments, overall. It is forecasted that five students will enroll in Year 1. In subsequent years, it is assumed that the number of new students enrolling in the degree will grow by 15% each year. This rate of growth is similar to projected growth in jobs requiring at least one "green skill", for the period of February 2022 to February 2023, according to the 2023 LinkedIn Green Skills Report. To estimate continuing student enrollment, a 90% year-to-year persistence rate is assumed. This figure is comparable to the five-year average persistence rate of students enrolled in the existing M.F.A. in Design.

Many of the program's students may be working adults, and thus are expected to enroll part-time. Therefore, FTE is calculated to be 38.7% of headcount. This percentage is comparable to the FTE/headcount ratio in the M.S. in Sustainable Management program, another degree that serves primarily working adults.

¹ LinkedIn. (2022). Global Green Skills Report 2022. Retrieved 2023 December, from LinkedIn: https://economicgraph.linkedin.com/research/global-green-skills-report

Page **1** of **4**

Section II - Credit Hours

A full-time graduate student at UW-Stout enrolls in nine credits per fall and spring semester, or 18 credits per year. Therefore, credit hour projections assume that each student FTE will enroll in 18 credit hours each year. As is the case with most graduate programs, all credits taken are attributable to program requirements and, thus, are reported in this section.

New credit hours are defined as the number of credits taken by students new to the program that year. Existing credit hours are defined as the number of credits taken by students who have continued in the program from the prior year.

Section III - Faculty and Staff Appointments

No new faculty or instructional academic staff (IAS) will be hired to deliver the instruction for this program. Existing instructors will deliver courses. All the courses in the proposed program plan are currently offered to support other graduate programs. In the first five years of the program, it is expected that these courses will have the capacity to accommodate the students enrolled in the proposed program without the addition of new sections. In the CI courses, the cost of instruction is divided proportionally among the programs, based on the number of students each program enrolls in the course. Therefore, instructional FTE charged to the program each year is calculated by dividing the number of total student credit hours (SCH) estimated for each year by 216, which is the number of SCH generated by a design faculty member teaching a full load of graduate studio courses.

A new administrative assignment will be created in the first year of the program for an academic program director; this administrative assignment will remain in effect throughout the program's existence. The provisional program director is an instructional academic staff member in the School of Art and Design. UW-Stout provides a six-credit administrative reassignment per year for faculty and staff directing graduate programs in the program's first two years, equating to 0.20 FTE for an academic staff member. This reassignment changes to three credits per year beginning in the third year, in keeping with Stout's administrative procedure on program director reassignment.

Section IV - Program Revenues

Program revenues will be entirely dependent on service-based tuition pricing. As the program is required to be self-supporting, tuition rates will be adjusted on an annual basis as part of UW-Stout's annual CI tuition review process.

Tuition & Additional Tuition

The M.P.S. in Design, Entrepreneurship, and Sustainability shares many of its courses with the M.F.A. in Design, and for this reason it will apply the same tuition rate, \$850 per credit. To determine estimated tuition revenue for each year, the values for new and existing credit hours were added and then multiplied by the per-credit tuition of \$850.

Fees

No additional fees beyond tuition will be charged to students in the program. This is typical for customized instruction programs.

Program Revenues and GPR

No grant revenue or program revenue other than tuition will be sought. Because the program will rely on existing courses utilizing in a CI program, redirection of GPR is not anticipated.

Section V - Program Expenses

Salary and Fringe

Faculty Salary

Courses in the proposed program are utilized by other CI programs at UW-Stout. Thus, course instructional costs will be covered by a combination of program revenues. For this reason, instructional cost projections represented in this budget include the proportion of the faculty and instructional FTE and costs that are attributable to credit hours produced by students enrolled in the M.P.S. in Design, Entrepreneurship, and Sustainability.

Estimated instructional salary is based on the average of all faculty in the UW-Stout Department of Design. Although some IAS may occasionally teach in the program, graduate instruction is typically provided by faculty and, therefore, only faculty were included in the average. Based on these assumptions, the salary of one instructional FTE is forecast to be \$74,253.

Administrative and Student Support Staff

An instructional staff member is the provisional program director, though, the administrative staff salary was calculated using the average senior lecture salary in the design department. The salary of one administrative FTE is forecast to be \$53,543.

<u>Fringe</u>

A fringe rate of 37.82% is assumed, based on UW-Stout's budgeting rate for instructional staff for 2023-24.

Facilities and Capital Equipment

No expenses are forecast for facilities and capital equipment. This graduate program will be using existing courses in which capital currently exists, eliminating any need for new infrastructure or equipment.

Other Expenses

All CI programs at UW-Stout are assessed at a rate of 36.5% of the annual program revenue. These funds are distributed to cover expenses including campus overhead, academic support services such as marketing and program development, and coordination of CI services. This expense was calculated utilizing the projected tuition revenue in section IV multiplied by 36.5%.

Section VI - Net Revenue

The program is forecast to operate at a loss for two years, but by the third year is expected to be revenue positive. Losses incurred during the first two years should be offset by the end of the program's fourth year.



February 8, 2024

Jay Rothman, President
University of Wisconsin System Administration
1720 Van Hise Hall, 1220 Linden Drive
Madison, WI 53706

Dear President Rothman:

I am writing to provide you with this Letter of Commitment in support of the University of Wisconsin-Stout's proposed M.P.S. in Design, Entrepreneurship and Sustainability degree.

As Wisconsin's Polytechnic University, this proposed program will allow UW-Stout to continue meet the burgeoning demand for leaders who can help their companies implement and improve sustainable business performance. Because sustainability is a key metric for many industries, graduates will be better prepared to enter or advance their careers in a wide range of occupations and fields (e.g. management, entrepreneurship, education, engineering, government, etc.).

The proposed program leverages UW-Stout's focus on sustainability, applied learning, and the strong reputation of our School of Art & Design. This interdisciplinary program will build on existing curriculum and faculty and staff expertise in the School of Art & Design and other departments across both the College of Arts and Human Sciences and the College of Science, Technology, Engineering, Mathematics, and Management. A financial review has been conducted to confirm that the necessary financial and human resources are available to launch this proposed program as a service-based pricing (customized instruction) program.

The proposed degree has been approved through the campus curriculum approval process. Governance groups confirmed that the design of the proposed program meets the definition and standards of quality at UW-Stout. All programs at UW-Stout participate in the biannual



Assessment in the Major and the four-year Planning and Review Committee program review to support continuous improvement. Assessment of the student learning objectives will be coordinated by the program director in collaboration with the faculty, staff and the program advisory committee.

Thank you for your consideration and support of this new program.

Sincerely,

Glendalí Rodríguez

Provost and Vice Chancellor

attachments

GR/tb Memos 2024

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF SCIENCE IN PHYSICS, UNIVERSITY OF WISCONSIN-STOUT

REQUESTED ACTION

Adoption of Resolution C.5., authorizing the implementation of the Bachelor of Science in Physics at the University of Wisconsin-Stout.

Resolution C.5.

That, upon the recommendation of the Chancellor of the University of Wisconsin-Stout and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Physics program at the University of Wisconsin-Stout.

SUMMARY

The University of Wisconsin-Stout proposes to establish a Bachelor of Science (B.S.) in Physics. The proposed B.S. in Physics is an elevation of the existing Applied Physics concentration within the B.S. in Applied Science program at UW-Stout, and the program's development is in response to recommendations from the UW-Stout Planning and Review Committee to further the growth of science degrees at UW-Stout. The B.S. in Physics will require a total of 120 credits, with 40 credits from the Stout Core and 80 credits within the major. In keeping with the core principle of applied hands-on learning at UW-Stout, students will engage in numerous project-based lab courses built into the curriculum, and they will be required to complete a cooperative education experience. The proposed program fits within UW-Stout's mission to offer career-focused undergraduate programs in science, and it will emphasize essential skills such as problem-solving, laboratory skills, data analysis, and computation. Through the B.S. in Physics program, students will be prepared for careers in engineering, computer hardware and software, and any career that involves general problem-solving skills. The projected strong job growth in Wisconsin (5-10%) and nationally (5%) over the next five years for careers where a physics degree will qualify underscores the need for this program.¹

¹ U.S. Bureau of Labor Statistics. (2023) Retrieved on 2/26/24 from https://www.bls.gov/ooh/life-physical-and-social-science/physicists-and-astronomers.htm

Presenter

• Dr. Glendalí Rodríguez, Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (Revised August 2023), available at https://www.wisconsin.edu/uw-policies/uw-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related 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

ATTACHMENTS

- A) Request for Authorization to Implement
- B) Cost and Revenue Projections Worksheet
- C) Cost and Revenue Projections Narrative
- D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN PHYSICS AT UNIVERSITY OF WISCONSIN-STOUT PREPARED BY UW-STOUT

ABSTRACT

The University of Wisconsin-Stout proposes to establish a Bachelor of Science (B.S.) in Physics. The proposed B.S. in Physics is an elevation of the existing Applied Physics concentration within the B.S. in Applied Science program at UW-Stout, and the program's development is in response to recommendations from the UW-Stout Planning and Review Committee to further the growth of science degrees at UW-Stout. The B.S. in Physics will require a total of 120 credits, with 40 credits from the Stout Core and 80 credits within the major. In keeping with the core principle of applied hands-on learning at UW-Stout, students will engage in numerous project-based lab courses built into the curriculum, and they will be required to complete a cooperative education experience. The proposed program fits within UW-Stout's mission to offer career-focused undergraduate programs in science, and it will emphasize essential skills such as problem-solving, laboratory skills, data analysis, and computation. Through the B.S. in Physics program, students will be prepared for careers in engineering, computer hardware and software, and any career that involves general problem-solving skills. The projected strong job growth in Wisconsin (5-10%) and nationally (5%) over the next five years for careers where a physics degree will qualify underscores the need for this program.¹

PROGRAM IDENTIFICATION

University Name

University of Wisconsin-Stout

Title of Proposed Academic Program

Physics

Degree Designation

Bachelor of Science

Suggested Classification of Instructional Programs (CIP) Code:

40.0801 Physics, General

¹ U.S. Bureau of Labor Statistics. (2023) Retrieved on 2/26/24 from https://www.bls.gov/ooh/life-physical-and-social-science/physicists-and-astronomers.htm

Mode of Delivery

Single university, face-to-face delivery

Department or Functional Equivalent

Department of Chemistry and Physics

College, School, or Functional Equivalent

College of Science, Technology, Engineering, Mathematics, and Management

Proposed Date of Authorization

April 4-5, 2024

Proposed Date of Implementation

Fall 2024

PROGRAM INFORMATION

Overview of the Program

The proposed B.S. in Physics will require 120 credits, consisting of 40 credits from the Stout Core and 80 credits in the major. The major requirements include foundational courses in physics and mathematics, a required cooperative educational experience, and electives to allow students to explore related and complementary disciplines. The comprehensive and applied nature of the program equips students with strong theoretical knowledge in physics and essential skills in problem-solving, laboratory skills, data analysis, and computation. The interdisciplinary nature of the program prepares students for careers in a wide array of high-demand and cross-disciplinary fields.

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. New enrollment projections are based on recent enrollments in the existing Applied Physics concentration of the B.S. in Applied Science program. Initial enrollment in Year 1 is set lower than other years due to the anticipated short timeframe for advertising between program approval and program launch. Continuing student headcount is based on a first-to-second year retention rate of 74% and year-to-year continuation rate of 94% from Year 2 onward in alignment with historical trends at UW-Stout.

UW-Stout predicts that enrollment in the B.S. in Physics will grow to 31 students with an estimated six graduates per year by Year 5. It is anticipated that by the end of Year 5, 45 new students will have enrolled in the program and nine will have graduated.

Table 1: Five-Year Enrollment and Completion Projections by Headcount

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	5	10	10	10	10
Continuing Students	0	4	11	18	21
Total Enrollment	5	14	21	28	31
Graduating Students	0	0	0	3	6

Tuition Structure

For students enrolled in the B.S. in Physics program, the standard tuition and fee rates will apply. For the current academic year, the residential tuition and segregated fees are approximately \$338.08 per credit per semester for a full-time Wisconsin resident student who is enrolled in 12-18 credits per term. Of this amount, \$51.93 (2023-24 rate) is attributable to segregated fees, \$28.00 (2023-24 rate) is attributable to the E-Stout fee (supporting a student laptop and software), \$13.81 (2023-24 rate) is attributable to the Textbook Rental fee, and \$244.34 (2023-24 rate) is attributable to tuition. Distance education fees will not apply, although students may incur additional incidental course fees required during a science education that includes laboratory courses.

Student Learning Outcomes and Program Objectives

All students who complete the B.S. in Physics will gain hands-on applied learning and will develop strong skills in problem-solving, data analysis, and computation to either directly enter the workforce or continue their education in graduate programs. National data on employment of graduates with bachelor's degrees in physics show job titles in a variety of fields such as various engineering fields, computer software and IT-related fields, as well as business finance, and data analysis. ² Through the B.S. in Physics, students will be prepared for careers in engineering, computer hardware and software, and any career that involves general problem-solving skills.

Upon completion of the B.S. in Physics, students will:

- 1. Demonstrate an understanding of and ability to apply the principles of physics to solve real-world problems.
- 2. Be proficient in applying experimental design, analysis and interpretation of data, and application of computational modeling to solve problems.
- 3. Be able to work effectively as members of a team and communicate through writing and oral presentations in a professional manner.

Program Requirements and Curriculum

The proposed B.S. in Physics program requires 120 credits, consisting of 40 credits in the Stout Core general education and 80 credits in the major. The major requirements

² Common job titles for physics bachelors. American Association of Physics. Retrieved on 11/30/23 from https://www.aip.org/statistics/common-job-titles-physics-bachelors

include foundational courses in physics and mathematics, a required cooperative educational experience, and electives to allow students to explore related and complementary disciplines. The B.S. in Physics has a traditional curriculum built upon theory, experiment, and computation similar to physics degrees offered at most universities. However, it uniquely embeds computation into all required physics courses to provide students with essential computational skills for use in future careers. Further, the B.S. in Physics at UW-Stout is also unique in that it combines freshman level and senior level research courses. PHYS-139 and PHYS-439 share lab time where students in the intro level course work on a team under the mentorship of a student in the upper-level course. Students learn how to: work as part of a team; lead a team; be an ethical scientist; and communicate effectively. Students who complete the B.S. in Physics are poised for entry in a multitude of careers after graduation, which is core to UW-Stout's polytechnic mission.

. abic 2. Ducilcio	r or science in r riysies r rogram curriculum	
Stout Core (gene	eral education) courses required for graduation:	
	Racial and Ethnic Studies	6 credits*
	Global Perspectives	6 credits*
	Communication Skills	9 credits
	COMST-100 Fundamentals of Speech (3 credits)	
	ENGL-101 Composition 1 OR	
	ENGL-111 Honors Composition 1 (3 credits)	
	ENGL-102 Composition 2 OR	
	ENGL-113 Honors Composition 2 (3 credits)	
	Analytical Reasoning and Natural Science	10 credits
	CHEM-135 College Chemistry I (5 credits)	
	MATH-153 Calculus I (4 credits) OR	
	MATH-156 Calculus & Anal. Geom. II (5 credits)	
	Social and Behavioral Sciences	6 credits
	Arts and Humanities	6 credits
	Social Responsibility and Ethical Reasoning	6 credits
	Electives	6 credits
Academic degre	e program or major course requirements:	
CEE-205 OR	Circuit Analysis and Design OR Circuits and	4 credits
ENGR-290	Devices	
CHEM-321 OR	Physical Chemistry OR	3 OR 4 credits
ENGR-275 OR	Thermodynamics & Heat Transfer OR	
ME-390	Engineering Thermodynamics	
CS-144	Computer Science I	4 credits
CS-145	Computer Science II	4 credits
MATH-154 OR	Calculus II OR	4 OR 5 credits
MATH-157	Calculus and Analytical Geometry II	

MATH-250 OR		3 OR 6 credits
MATH-255 AND	Differential Equations with Linear Algebra OR	
MATH-275	Differential Equations AND Linear Algebra	
NANO-230	Microscopy and Materials Characterization	3 credits
PHYS-139	Introduction to Research Methods in Physics	3 credits
PHYS-281 OR		5 OR 6 credits
PHYS-291 AND		
ENGR-292	University Physics I OR Statics AND Dynamics	
PHYS-282	University Physics II	5 credits
PHYS-313	Introduction to Quantum Mechanics: A Modern	3 credits
	Physics Approach	
PHYS-335	Applied Optics and Photonics	3 credits
PHYS-349	Cooperative Education Experience	1 credit
PHYS-381	Computational Classical Mechanics	3 credits
PHYS-413	Quantum Mechanics	3 credits
PHYS-427	Solid State Physics	3 credits
PHYS-439	Advanced Physics Lab	3 credits
	Electives to reach 120 credits taken from the	13-19 credits
	following: CEE-215/CEE-235/CHEM-136/CHEM-	
	201/CHEM-204/CHEM-206/CHEM-	
	241/CHEM245/CHEM-310/CHEM-311/CHEM-	
	321/CHEM-331/CHEM-353/CHEM-365/CHEM-	
	425/CHEM-435/CHEM-440/CHEM-489/CS-	
	244/MATH-262/MATH-270/MSCS-280/NANO-	
	101/NANO-301/NANO-401/PHYS-113/PHYS-	
	329/PHYS-489/PKG-150/STAT-320/STAT-330/STAT-	
	331/Any 3XX course from the following prefixes:	
	CEE, CS, ENGR, MATH, ME, or MSCS	
Total Credits		120 credit(s)

Total Credits

*Students can select courses that count for more than one requirement within General Education

Collaborative Nature of the Program

(GE), Racial and Ethnic Studies (RES), and Global Perspectives (GLP).

The variety of prefixes in the list of technical electives above shows the breadth of the physics program. Many of the students currently in the Applied Physics concentration are pursuing a dual degree in mechanical engineering, computer, and electrical engineering, or applied mathematics and computer science. The curriculum is designed to allow many other STEM majors to complete a dual degree with only one additional year of coursework.

All the engineering programs on campus, as well as chemistry and computer science, require introductory physics for their students. Additionally, students majoring in these areas frequently can take upper-level physics courses as technical electives. Faculty

in physics work closely with faculty in the other STEM departments to deliver classes whose content supports each other. Once the program is approved as a major, UW-Stout will also explore articulation and other partnership opportunities with career and technical colleges.

Projected Time to Degree

The projected time to degree for full-time students is four years, including 120 credits at 15 credits per semester. The program is typically taken by traditional, full-time students with little part-time enrollment. The completion rates and time to degree are calculated accordingly.

Accreditation

UW-Stout is accredited by the Higher Learning Commission (HLC) who were notified of adding a degree in this new CIP code area for UW-Stout. No further approval is needed from the HLC to launch the program. There is no discipline-specific accrediting body for physics programs in the United States.

PROGRAM JUSTIFICATION

Rationale

UW-Stout proposes to establish a B.S. in Physics program as part of the elevation of the three science concentrations in the B.S. in Applied Science program into individual majors, namely Applied Physics, Biology, and Industrial Chemistry. The proposed majors are in response to recommendations from the University's Planning and Review Committee after a review of the B.S. in Applied Science program. For the past 22 years, UW-Stout has offered concentrations in various science disciplines under the umbrella of the B.S. in Applied Science. Physics is the bedrock on which all other science and engineering fields are built. Among peer polytechnic institutions, UW-Stout is the only university lacking a standalone physics program. The recent growth of engineering offerings at UW-Stout needs stronger support from fields like chemistry and physics, and offering a physics major can fulfill that need.

The Applied Physics concentration is equivalent in curriculum to physics majors at most other universities, and it has prepared graduates with theoretical and hands-on skills necessary to enter the workforce. However, growth of the current Applied Physics concentration has been impeded due to a lack of visibility of the concentration within the B.S. in Applied Science program. Many prospective students are unaware that Applied Physics is an option because it is hidden under the Applied Science name, and there is limited ability to successfully market individual concentrations. Elevation of the Applied Physics concentration to a B.S. in Physics major will make the program more identifiable to prospective students.

The proposed program supports the primary tenets of the polytechnic mission to offer career-focused undergraduate programs in science.³ Classes focus on hands-on, applied learning experience, with a significant number of classes focused on problem-solving, lab experience, and computational skills. Most of the current students studying physics continue to careers in industry, and the B.S. in Physics will remain a career-focused program. The faculty in physics collaborates with faculty in computer science, mathematics, construction, and the engineering programs at UW-Stout to prepare students for varied career opportunities. In fact, many current students in the Applied Physics concentration pursue a dual major in Applied Science and either engineering, computer science, or mathematics. A B.S. in Physics will create valuable added credentials and experience for these dual majors and, due to the interdisciplinary nature of the program, it will only minimally increase the number of credits needed for dual degree completion.

Institution and Universities of Wisconsin Program Array

UW-Stout currently provides science education under the umbrella of the B.S. in Applied Science Program, with individual scientific disciplines as concentrations; two current natural science majors, the B.S. in Environmental Science and the B.S. in Applied Biochemistry and Molecular Biology, started as concentrations in the B.S. in Applied Science program. There are no existing programs within the 40.0801 CIP code (Physics, General) at UW-Stout. Elevation of the Applied Physics concentration to the B.S. in Physics, along with elevation of two other concentrations to a B.S. in Biology and a B.S. in Chemistry, will provide a full array of science majors critical for the success of the polytechnic institution. A B.S. in Physics will not compete with, but will complement existing and newly developing science majors. Moreover, with the full array of science majors, students will have the opportunity to choose a science major that is precisely tailored to their needs within UW-Stout rather than potentially transferring to another institution.

Bachelor's degrees in physics are currently offered by the following UW universities: UW-Eau Claire, UW-La Crosse, UW-Madison, UW-Milwaukee, UW Oshkosh, UW-Parkside, UW-River Falls, UW-Stevens Point, and UW-Whitewater. In addition to UW-Stout, UW-Green Bay and UW-Superior are the only UW universities without a physics major. The foundational role of physics makes a B.S. in Physics a necessity for the polytechnic mission of UW-Stout. Moreover, the B.S. in Physics at UW-Stout will be distinct from other programs in the state with its emphasis on applied, hands-on learning and its interdisciplinary nature described above.

³ UW-Stout Mission & Values. Retrieved 11/30/23 from https://www.uwstout.edu/about-us/mission-values

Need as Suggested by Current Student Demand

Market analysis of physics degree completions at nearby comprehensive UW universities (Eau Claire, La Crosse, and River Falls) between 2017 to 2021 shows completion rates with numbers ranging from 16 to 48. Conferrals at neighboring UW-Eau Claire and UW-River Falls have increased over the past four years, indicating a growing interest in physics degrees. More broadly, market analysis of physics degree completions at institutions within the Midwest shows steady completion rates with approximately ten per year. There are currently 17 students in the Applied Physics concentration of the B.S. in Applied Science program and ten students in the Physics minor, a number that has been steadily growing. While the number of graduates of the Applied Physics concentration of the B.S. Applied Science program are below regional levels, UW-Stout believes this is mainly due to the hidden nature of the concentration within the Applied Science program, and elevation of the concentration to a standalone major will result in an increase in the number of graduates similar to the regional average.

Implementation of a B.S. in Physics program is not expected to have a negative impact on other programs and may even increase enrollment in the engineering programs. Most students currently enrolled in the Applied Physics concentration pursue a dual major in either Mechanical Engineering or Computer and Electrical Engineering. Many universities have what is called a 3-2 program, where students study physics for three years at one institution and then transfer to an institution that offers an engineering program for their final two years, graduating with bachelor's degrees in both physics and engineering. However, students entering this 3-2 program frequently do not want to switch to a new institution to complete their degree. At UW-Stout, the physics program is designed to permit students to complete a dual degree in five years and has recruited students through this route. Elevating physics to a major will further drive this enrollment.

Need as Suggested by Market Demand

There is projected growth of 3.6% for jobs in the Illinois, Wisconsin, and Minnesota labor markets for jobs associated with the general physics CIP code.⁴ There is a 5% expected growth in jobs for physicists.⁵ Outside of national labs or universities, few job titles contain the word "physics" because physicists are qualified for many different fields due to their expertise in modeling and problem solving. Examples include business analyst, software engineers/developers, IT consultants, and many areas in education, research, and engineering.⁶

The wages and job outlook for common occupations for new physics majors looks promising. For example, Operations Research Analysts demand is expected to grow by 23%

⁴ University Marketing. (2023). Lightcast.

⁵ U.S. Bureau of Labor Statistics. (2023) Retrieved on 2/26/24 from https://www.bls.gov/ooh/life-physical-and-social-science/physicists-and-astronomers.htm

⁶ Common job titles for physics bachelors. American Association of Physics. Retrieved on 11/30/23 from https://www.aip.org/statistics/common-job-titles-physics-bachelors

by 2032 with a median pay rate of \$85,720 per year. In addition, the Bureau of Labor Statistics suggests strong job growth in these areas for which physics is a qualifying "related field": 5% for Electrical and Electronics Engineer; 10% for Mechanical Engineers; 4% for Architectural and Engineering Managers; 35% for Data Scientists; and 25% for Software Developers; Quality Assurance Analysts; and Testers. In summary, many occupations for physics graduates are rapidly growing and command a salary well above average, and are prepared to offer this opportunity in a more visible way to UW-Stout students with the proposed B.S. in Physics major.

⁷ U.S. Bureau of Labor Statistics, *Operations research analysts*. (2023). Retrieved on 2/26/24 from https://www.bls.gov/ooh/math/operations-research-analysts.htm

⁸ U.S. Bureau of Labor Statistics. (2023) Retrieved on 2/26/24 from https://www.bls.gov/ooh/a-z-index.htm

	University of Wisconsin - Stout					
	Cost and Revenue Pr	ojections For				
	Items	Projections				
		2025	2026	2027	2028	2029
-	Envallment (New Student) Headsount	Year 1	Year 2	Year 3	Year 4	Year 5
I	Enrollment (New Student) Headcount	5	4	10	10 18	10
	Enrollment (Continuing Student) Headcount	0	9.2	11 9.2	9.2	21 9.2
	Enrollment (New Student) FTE	4.6		10.01		
	Enrollment (Continuing Student) FTE Total New Credit Hours	92	3.4 184	184	16.22 184	19.29 184
"	Existing Credit Hours					
		0.16	68 0	200.2	324.4 0	385.8
III	FTE of New Faculty/Instructional Staff FTE of Current Fac/IAS		_		ŭ	0.20
		0	0.16	0.16	0.28	0.28
	FTE of New Admin Staff					
11/	FTE Current Admin Staff					
IV	Revenues	¢22.470	¢C1 [74	¢02.075	¢124 222	¢120.225
	Tuition	\$22,479	\$61,574	\$93,875	\$124,222	\$139,225
	Additional Tuition					
	Fees (indicate type)					
	Fees (indicate type)					
	Program Revenue (Grants)					
	Program Revenue - Other					
	GPR (re)allocation	400 470	+64 = 7.4	+00.075	+404000	+400 005
L.,	Total Revenue	\$22,479	\$61,574	\$93,875	\$124,222	\$139,225
V	Expenses					
	Salaries plus Fringes	442.702	±42.026	±22,420	#33.004	#242F0
	Faculty Salary	\$12,793	\$13,036	\$23,428	\$23,884	\$24,350
	Instuctional Academic Staff					
	Administrative and Student Support Staff					
	Other Staff	* 4 000	# 4 000	40.000	±0.000	±0.000
	Fringe Faculty and Academic Staff	\$4,838	\$4,930	\$8,860	\$9,033	\$9,209
	Fringe University Staff					
	Fringe Other Staff					
	Facilities and Capital Equipment					
	University buildings and space					
	Capital Equipment					
	Operations					
	Other Expenses	+000	+ 60 6	+05:	44.0=:	44.40=
	Other (Supplies)	\$230	\$630	\$961	\$1,271	\$1,425
	Other (Administrative Overhead)	\$6,011	\$16,465	\$25,102	\$33,217	\$37,229
	Total Expenses	\$23,872	\$35,061	\$58,351	\$67,405	\$72,212
	Net Revenue	-\$1,393	\$26,513	\$35,524	\$56,817	\$67,013

Provost's Signature:

Date:

Chief Business Officer's Signature:

Date:

2/9/2024

2/9/2024

COST AND REVENUE PROJECTIONS NARRATIVE UNIVERSITY OF WISCONSIN-STOUT BACHELOR OF SCIENCE IN PHYSICS

PROGRAM INTRODUCTION

The University of Wisconsin (UW)-Stout proposes to establish a Bachelor of Science (B.S.) in Physics, which represents an elevation of the existing Applied Physics concentration within the B.S. in Applied Science program, and the program is in response to recommendations by the UW-Stout Planning and Review Committee following review of the B.S. in Applied Science program. The proposed program will require a total of 120 credits, with 40 credits from the Stout Core and 80 credits for the major, and it will emphasize essential skills such as problem-solving, laboratory skills, data analysis, and computation. Through the B.S. in Physics program, students will be prepared for careers in engineering, computer hardware and software, and any career that involves general problem-solving skills. The projected strong job growth in Wisconsin (5-10%) and nationally (5%) over the next five years for careers where a physics degree will qualify underscores the need for this program.¹

COST REVENUE NARRATIVE

Section I - Enrollment

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. New enrollment projections are based on recent enrollments in the existing Applied Physics concentration of the B.S. in Applied Science program. Initial enrollment in Year 1 is set lower than other years due to the anticipated short timeframe for advertising between program approval and program launch. The projections are based on the following information and assumptions. First, upon approval of the B.S. in Physics, UW-Stout will suspend enrollment in the Applied Physics concentration of B.S. in Applied Science and invite current students in the concentration to move to the major. This is likely to advantage students and strengthen retention because they will be doing the same curriculum but with the B.S. in Physics major identified more prominently on their transcript. Second, offering Physics as a major is expected to add visibility to attract students that do not currently come to UW-Stout. This assumption is based on: 1) feedback the admissions office receives from high school counselors, parents, and prospective students; and 2) Google analysis from university marketing office that indicates search hits for a physics major will be much more effective than they are for a physics concentration. By the end of Year 5, it is anticipated that about 45 students will have enrolled in the program with nine graduates.

Page **1** of **4**

¹ U.S. Bureau of Labor Statistics. (2023) Retrieved on 2/26/24 from https://www.bls.gov/ooh/life-physical-and-social-science/physicists-and-astronomers.htm

Continuing student headcount is based on a first-to-second year retention rate of 74% and year-to-year continuation rate of 94% from Year 2 on in alignment with historical trends at UW-Stout. Those headcounts are rounded to whole numbers. Based on enrollment patterns at UW-Stout, student FTE is computed by taking 92% of the headcount and rounding to two decimal places (with the above continuation rates factored in before rounding).

Table 1: Five-Year Enrollment and Completion Projections by Headcount

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students Headcount	5	10	10	10	10
Continuing Students Headcount	0	4	11	18	21
New Students FTE	4.60	9.20	9.20	9.20	9.20
Continuing Students FTE	0.00	3.40	10.01	16.22	19.29
Total Enrollment FTE	4.60	12.60	19.21	25.42	28.49
Graduating Students	0	0	0	3	6

Section II - Credit Hours

Credit hours were calculated by prorating the 80 program credits across the four years. The resulting 20 program credits per year were multiplied by the student FTE to determine credit hours. New credit hours correspond to those students identified as New in Table 1 and existing credit hours correspond to those students identified as Continuing in Table 1.

Section III - Faculty and Staff Appointments

The B.S. in Physics will draw on existing expertise in the Chemistry and Physics Department. The current program director for the existing B.S. in Applied Science will take on the role of program director for the B.S. in Physics. The individual is currently allotted a 0.125 FTE reassignment for that role. One fourth of this, or 0.03125 FTE per year, will be allocated to the new program.

A small increase in the number of sections of existing coursework will need to be added over time to meet the needs of this new program, stabilizing in Year 3 based on the projected enrollment trends. This will be met with the following FTE of faculty:

- Year 1: 0.125 FTE faculty (new)
- Year 2: 0.125 FTE faculty (continuing)
- Year 3: 0.25 FTE faculty (0.125 new + 0.125 continuing)
- Year 4: 0.25 FTE faculty (continuing)
- Year 5: 0.25 FTE faculty (continuing)

Section IV - Program Revenue

The sole source of program revenue will be standard tuition revenue.

Tuition

The projected program revenue has been calculated by multiplying the total student FTE times the program credit hours, times the tuition, using the standard in-state tuition rate.

- Year 1: 4.6 FTE x 20 credits x \$244.34 per credit = \$22,479
- Year 2: 12.6 FTE x 20 credits x \$244.34 per credit = \$61,574
- Year 3: 19.21 FTE x 20 credits x \$244.34 per credit = \$93,875
- Year 4: 25.42 FTE x 20 credits x \$244.34 per credit = \$124,222
- Year 5: 28.49 FTE x 20 credits x \$244.34 per credit = \$139,225

<u>Fees</u>

There will not be any additional fees for direct support of this program.

Program Revenues and GPR

There will not be any program revenue or GPR generated or allocated from other units.

Section V - Program Expenses

The primary program expense is for faculty or instructional staff as discussed in Section III. These expenses are based on staffing costs for courses that are in addition to what is currently offered. Existing course offerings, that will also support the new B.S. in Physics, will continue to be funded by tuition revenue from other campus programs, including Stout Core science courses that support the general education requirements for all programs.

Salary and Fringe

Faculty salaries were calculated as follows. The average annual salary for discipline-specific faculty in the Chemistry and Physics Department is anticipated to be \$78,000 in Year 1. A 2% pay raise is added for each successive year. In addition to the regular salary expense, there is an additional \$625 stipend (per year) for the faculty program director. Fringes are computed at the current campus rate of 37.82%.

- Year 1: 0.156 FTE faculty x \$78,000 + \$625 = \$12,793
- Year 2: 0.156 FTE faculty x \$79,560 + \$625 = \$13,036
- Year 3: 0.281 FTE faculty x \$81,151 + \$625 = \$23,428
- Year 4: 0.281 FTE faculty x \$82,774 + \$625 = \$23,884
- Year 5: 0.281 FTE faculty x \$84,430 + \$675 = \$24,350

Facilities and Capital Equipment

Laboratories currently exist to support the program, as well as existing funding lines to support equipment maintenance and replacement. No additional funds are needed.

Other Expenses

A small additional expense for laboratory supplies is included at the rate of \$50 per student FTE per year. A second expense is the campus approved Administrative Overhead charge of 26.74% on tuition revenue.

Section VI - Net Revenue

A small negative balance is projected for the first year, but that will be recovered in the following year. Projections suggest a small positive net revenue in subsequent years. Any net revenue will be reinvested into the program and the institution.



February 8, 2024

Jay Rothman, President
University of Wisconsin System Administration
1720 Van Hise Hall, 1220 Linden Drive
Madison, WI 53706

Dear President Rothman:

I am writing to provide you with this Letter of Commitment in support of the University of Wisconsin-Stout's proposed B.S. in Physics degree.

As Wisconsin's Polytechnic University, this proposed program will allow UW-Stout to continue providing leadership and innovation to prepare graduates for careers in engineering, computer hardware and software, and any other career that requires skills in problem solving, data analysis, and computation.

The proposed program will focus on problem-solving, lab experience, and computational skills, transforming our current physics concentration in the B.S. Applied Science to a major. The program will build on existing curriculum and faculty and staff expertise in the College of Science, Technology, Engineering, Mathematics and Management. A financial review has been conducted to confirm that the necessary financial and human resources are available to launch this proposed program.

The proposed degree has been approved through the campus curriculum approval process. Governance groups confirmed that the design of the proposed program meets the definition and standards of quality at UW-Stout. All programs at UW-Stout participate in the biannual Assessment in the Major and the four-year Planning and Review Committee program review to support continuous improvement. Assessment of the student learning objectives will be



coordinated by the program director in collaboration with the faculty, staff, industry, and the program advisory committee.

Thank you for your consideration and support of this new program.

Sincerely,

Glendalí Rodríguez

Provost and Vice Chancellor

attachments

GR/tb Memos 2024

Item April 4, 2024 C.6.

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF SCIENCE IN BIOLOGY, UNIVERSITY OF WISCONSIN-STOUT

REQUESTED ACTION

Adoption of Resolution C.6., authorizing the implementation of the Bachelor of Science in Biology at the University of Wisconsin-Stout.

Resolution C.6.

That, upon the recommendation of the Chancellor of the University of Wisconsin-Stout and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Biology program at the University of Wisconsin-Stout.

SUMMARY

The University of Wisconsin-Stout proposes to establish a Bachelor of Science (B.S.) in Biology. The program's development responds to program industry advisory committee recommendations, internal UW-Stout program review feedback, faculty and student interest, and continued need for graduates in Wisconsin. This proposed B.S. in Biology program is an elevation of an existing Biology concentration within the B.S. in Applied Science program at UW-Stout, and the proposed program will be better recognized by both prospective students and potential employers.

The B.S. in Biology will require 120 credits, consisting of 40 credits of required Stout Core general education courses, 42 credits within the biology core, and 38 credits of technical electives in Biology, STEM, and a variety of related areas, including physiology, cell biology, chemistry, and physics. As graduates go into a variety of careers, these clusters of electives allow them to customize their education to their career goals. A one-credit experiential learning credit is included in the biology core, meeting the experiential learning component required of all students at UW-Stout. This interdisciplinary program emphasizes hands-on learning and will provide students with the knowledge and skills for entry into industry positions, graduate or professional schools, health professions programs, and a variety of career opportunities in molecular science, agriculture, biotechnology, and pharmaceuticals, among many others.

Demand for this program is also supported by the strong interest in the existing Biology concentration with roughly 60 students currently in the concentration. Additionally, employment opportunities for individuals who have a biology degree are predicted to grow by 4.5% regionally and 7.1% nationally within the next five years, which underscores the need for this proposed program. By offering a B.S. in Biology, UW-Stout can better serve the economic and workforce needs of the region.

Presenter

• Dr. Glendalí Rodríguez, Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (Revised August 2023), available at https://www.wisconsin.edu/uwpolicies/uw-system-administrative-policies/policy-on-university-of-wisconsin-system-arraymanagement-program-planning-delivery-review-and-reporting-2/).

Related 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

ATTACHMENTS

- A) Request for Authorization to Implement
- B) Cost and Revenue Projections Worksheet
- C) Cost and Revenue Projections Narrative
- D) Provost's Letter

¹ University Marketing. (2023). Lightcast.

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN BIOLOGY AT UNIVERSITY OF WISCONSIN-STOUT PREPARED BY UW-STOUT

ABSTRACT

The University of Wisconsin-Stout proposes to establish a Bachelor of Science (B.S.) in Biology. The program's development responds to program industry advisory committee recommendations, internal UW-Stout program review feedback, faculty, and student interest, and continued need for graduates in Wisconsin. This proposed B.S. in Biology program is an elevation of an existing Biology concentration within the B.S. in Applied Science program at UW-Stout, and the proposed program will be better recognized by both prospective students and potential employers.

The B.S. in Biology will require 120 credits, consisting of 40 credits of required Stout Core general education courses, 42 credits within the biology core, and 38 credits of technical electives in Biology, STEM, and a variety of related areas, including physiology, cell biology, chemistry, and physics. As graduates go into a variety of careers, these clusters of electives allow them to customize their education to their career goals. A one-credit experiential learning credit is included in the biology core, meeting the experiential learning component required of all students at UW-Stout. This interdisciplinary program emphasizes hands-on learning and will provide students with the knowledge and skills for entry into industry positions, graduate or professional schools, health professions programs, and a variety of career opportunities in molecular science, agriculture, biotechnology, and pharmaceuticals, among many others. Demand for this program is also supported by the strong interest in the existing Biology concentration with roughly 60 students currently in the concentration. Additionally, employment opportunities for individuals who have a biology degree are predicted to grow by 4.5% regionally and 7.1% nationally within the next five years, which underscores the need for this proposed program. 1 By offering a B.S. in Biology, UW-Stout can better serve the economic and regional workforce needs.

PROGRAM IDENTIFICATION

University Name

University of Wisconsin-Stout

¹ University Marketing. (2023). Lightcast.

Title of Proposed Academic Program

Biology

Degree Designation

Bachelor of Science

Proposed Classification of Instructional Program (CIP) Code

26.0101 Biology, Biological Sciences, General

Mode of Delivery

Single university, face-to-face delivery

Department or Functional Equivalent

Department of Biology

College, School, or Functional Equivalent

College of Science, Technology, Engineering, Mathematics, and Management

Proposed Date of Authorization

April 4-5, 2024

Proposed Date of Implementation

Fall 2024

PROGRAM INFORMATION

Overview of the Program

The B.S. in Biology will provide students with a foundation in the biological sciences that emphasizes hands-on learning. The interdisciplinary nature of the program will equip graduates with the knowledge and skills for entry into industry positions, graduate or professional schools, health professions programs, and a variety of career opportunities in molecular science, agriculture, biotechnology, and pharmaceuticals, among many others.

The program requires 120 credits to complete the degree including 42 credits in the biology core, 38 credits of elective courses, and 40 credits of required Stout Core general education courses. A one-credit experiential learning credit is included in the biology core, meeting the experiential learning component required of all students at UW-Stout.

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. New enrollment projections are based on recent enrollments in the existing Biology and Interdisciplinary Science concentrations for the B.S.

in Applied Science program, with possible growth over the first few years as potential students become more aware of the B.S. in Biology program. Continuing student headcount is based on a first-to-second year retention rate of 74%; and year-to-year continuation rate of 94% beyond Year 2, in alignment with historical trends at UW-Stout. Predicted enrollment in the B.S. in Biology program will grow to 86 students with an estimated 16 graduates per year by Year 5. UW-Stout anticipates that by the end of Year 5, 130 new students will have enrolled in the program and 28 will have graduated.

Table 1: Five-Year Enrollment and Completion Projections by Headcount

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	20	25	25	30	30
Continuing Students	0	15	32	49	56
Total Enrollment	20	40	57	79	86
Graduating Students	0	0	0	12	16

Tuition Structure

For students enrolled in the B.S. in Biology program, the standard tuition and fee rates will apply. For the current academic year, the residential tuition and segregated fees are approximately \$338.08 per credit per semester for a full-time Wisconsin resident student who is enrolled in 12-18 credits per term. Of this amount, \$51.93 (2023-24 rate) is attributable to segregated fees, \$28.00 (2023-24 rate) is attributable to the E-Stout fee (supporting a student laptop and software), \$13.81 (2023-24 rate) is attributable to the Textbook Rental fee, and \$244.34 (2023-24 rate) is attributable to tuition. Distance education fees will not apply, although students may incur additional incidental course fees required during a science education that includes laboratory courses.

Student Learning Outcomes and Program Objectives

All students who complete the B.S. in Biology program will be well-prepared for work in a wide variety of laboratory, field-based, and health-based industries. Many of these students will be pre-health, pursuing further education in pre-medicine, pre-chiropractic, pre-veterinary, or pre-physical therapy, for example. However, with a UW-Stout polytechnic education, students will emerge prepared to directly enter the workforce, with skills in laboratory analysis, cellular biology or microbiology, and upper-level biology coursework tailored to their career interests.

Upon completion of the B.S. in Biology, students will:

- 1. Use core biological concepts to solve problems.
- 2. Apply scientific reasoning to design, carry out, and analyze data associated with scientific studies.
- 3. Use written and spoken formats to collaborate and communicate with a variety of audiences.
- 4. Demonstrate professionalism and career-readiness.

Program Requirements and Curriculum

The B.S. in Biology program requires 120 total credits, consisting of 40 credits in the Stout Core, 42 credits in the biology core, and 38 credits of elective courses. A 1-credit experiential learning internship, either field experience or co-operative education experience, which is a hallmark of UW-Stout's polytechnic, career-focused education, is also embedded as a requirement in the biology core. The UW-Stout biology curriculum's flexible design permits students to tailor their degree toward their interests, employment, or graduate study pursuit, while still maintaining a core foundational set of biological courses.

The proposed B.S. in Biology's curriculum resembles the current Biology concentration within the B.S. in Applied Science major with a few changes. The proposed B.S. in Biology will require one instead of two semesters of physics, two instead of three semesters of chemistry, and College Algebra instead of Calculus. It is anticipated that most of the students may be pre-health, in line with current enrollments in the Biology concentration of the B.S. in Applied Science, but curriculum flexibility allows for more overlap with other majors such as Environmental Science, and students pursuing careers in laboratory research, bioinformatics, conservation biology, or toxicology among others.

The curriculum's design also allows students to extend their interests into specific, non-biological career-focused areas, such as computer science if focusing on bioinformatics, environmental science if focusing on conservation biology, or psychology and the environment if focusing on public health, for example. To better guide students within this flexible curriculum, a set of advising recommendations for students interested in different career paths, such as pre-health or bioinformatics, has been created. For example, pre-health students will be guided to take additional chemistry, physics, and calculus coursework.

Table 2: Bachelor of Science in Biology Program Curriculum

Stout Core (general education) courses required for graduation: mini	mum 40 credits
Racial and Ethnic Studies	6 credits*
Global Perspectives	6 credits*
Communication Skills	9 credits
COMST100 Fundamentals of Speech (3 credits)	
ENGL101 Composition 1 OR	
ENGL111 Honors Composition 1 (3 credits)	
ENGL102 Composition 2 OR	
ENGL113 Honors Composition 2 (3 credits)	
Analytical Reasoning and Natural Science	13-14 credits
CHEM135 College Chemistry I (5 credits)	
MATH120 College Algebra or higher (4 credits)	
BIO234 Anatomy and Physiology (4 credits) OR	
BIO242 Plant Biology (5 credits) OR	
BIO252 Zoology (5 credits)	

	Social and Behavioral Sciences	6 credits
	Arts and Humanities	6 credits
	Social Responsibility and Ethical Reasoning	3 credits
	Electives	2-3 credits
Academic de		
ABMB101	ABMB Professions	1 credit
BIO135	Organismal Biology	4 credits
BIO136	College Molecular Cell Biology I	5 credits
BIO332	Genetics	4 credits
BIO350	Ecology	4 credits
BIO386	Introduction to Biostatistical Analysis	3 credits
BIO235 OR		
BIO306	Cell and Molecular Biology II OR Microbiology	4 credits
BIO398 OR		
BIO449	Field Experience OR Cooperative Education Experience	1 credit
APSC401	Applied Science Profession II	1 credit
CHEM136		
OR		
CHEM201	College Chemistry II OR Organic Chemistry I	4-5 credits
PHYS111		
and 112 OR	Introduction to Physics & Introduction to Physics Lab OR	
PHYS241	College Physics I	4-5 credits
ENGL410	Scientific Communication	3 credits
	Biology Selectives: BIO prefix 2XX and higher	12 credits
	STEM classes (BIO/CHEM/PHYS/GEOL/NANO/ABMB/	12 credits
	CS/MATH/STAT/ENGR/HLTH/FN/GEOG/HWF/ENSC)	
	Remaining credits to reach 120 credits	12-15 credits
Total		120 credit(s)
Credits		

^{*}Students can select courses that count for more than one requirement within the Stout Core (SC), Racial and Ethnic Studies (RES), and Global Perspectives (GLP).

Collaborative Nature of the Program

The faculty in the Biology Department at UW-Stout maintain active research and teaching collaborations with faculty in the Chemistry and Physics and Social Sciences Departments at UW-Stout. Examples of these collaborations include the interdisciplinary design of the curricula for the proposed Biology, Chemistry, and Physics programs, and additional examples include the long-term NSF-funded LAKES REU interdisciplinary research program, environmental chemistry research on groundwater well contamination, and hydrologic studies of the Red Cedar Basin. These collaborations are beneficial because they promote interdisciplinary student learning, and they provide experiential learning opportunities to students.

External collaborations also exist that provide further opportunities for students. UW-Stout is part of the Freshwater Collaborative of Wisconsin, which has helped develop curriculum and undergraduate research experiences. Existing freshwater partnerships to develop and deliver curriculum and conduct undergraduate research exist with UW-Eau Claire, UW-River Falls, and UW Oshkosh. Faculty in the Biology Department are actively involved with entrepreneurial projects, including fermentation research with the Copper Crow Distillery in Bayfield, WI. Extensive community environmental restoration and management collaborations also exist and include collaborations with The Prairie Enthusiasts, Colfax-Red Cedar Preserve, Wisconsin DNR, and local watershed groups. The Biology Department also collaborates with the UW-Stout Center for Limnological Research and Rehabilitation, which delivers lake management services to local communities.

At present, UW-Stout has articulation agreements for the B.S. in Applied Science program that will be transferred to the proposed B.S. in Biology. These articulation agreements include: a 3+3 program with Northwestern Health Sciences University for Chiropractic, a 3+3 Program with Palmer College of Chiropractic, and guaranteed admission to American University of Antigua School of Medicine for students with GPA >3.0. There is also a 3+1 articulation program with Marshfield Clinic for Histotechnology that may also be transferred to the proposed B.S. in Biology. Such articulations will benefit students enrolled in the B.S. in Biology program who aspire to enter these healthcare fields.

Projected Time to Degree

Full-time students will be able to complete the proposed degree in four years, assuming the necessary pre-requisites are taken in sequence, and they complete 15 credits per semester. The program is typically taken by traditional, full-time students with little part time enrollment. The completion rates and time to degree are calculated accordingly.

Accreditation

UW-Stout is accredited by the Higher Learning Commission (HLC). No additional approvals are needed from the HLC to launch the program. There are no plans for discipline-specific accreditation of the B.S. in Biology, but this possibility will be evaluated once the program is implemented.

PROGRAM JUSTIFICATION

Rationale

UW-Stout currently offers a Biology concentration (sub-major) within the B.S. in Applied Science major, and upon review of the B.S. in Applied Science program by UW-Stout's Planning and Review Committee, elevation of the biology concentration to a B.S. in Biology degree was recommended. While there is currently high enrollment for this concentration, the B.S. in Applied Science major struggles to recruit students due to the

confusing name of the major, and the major is not readily recognized by employers, which may create barriers for students in their employment pursuit. It is anticipated that elevating the concentration to a B.S. in Biology will attract additional students that might not otherwise attend UW-Stout. The enrollment in the existing concentration is sufficient to support a major, and the curriculum is already offered.

Courses offered by the Biology Department currently serve several existing majors and General Education requirements for the students at the university. Majors at UW-Stout that currently rely on biology courses include Applied Biochemistry and Molecular Biology, Environmental Science, and Applied Science, among others. In addition, a B.S. in Biology major will better serve a significant subset of students with pre-health goals currently occupying several science sub-disciplines. Graduates are uniquely positioned to take advantage of the explosive growth of health-related industries. Career tracks are being developed to augment the B.S. in Biology Major and provide prospective and ongoing students with workforce choices and educational opportunities after their graduation.

A new B.S. in Biology major will augment the existing program array in the science disciplines at the university and better represents the diverse curricula of its polytechnic offerings. Graduates with biology expertise can tackle societal challenges ranging from public health to environmental conservation. The proposed B.S. in Biology is in line with UW-Stout's Mission of career-focused undergraduate programs in science, technology, engineering and mathematics and Enduring Goal #1 to "Offer high quality, challenging academic programs that influence and respond to a changing society".²

Additionally, the B.S. in Biology closely follows UW-Stout's polytechnic tenets of applied learning, career focus and collaboration. The degree requires extensive laboratory coursework with a required internship. UW-Stout embraces Enduring Goal #2 to "Preserve and enhance our educational processes through the application of active learning principles." Students learn cutting edge and industry-standard laboratory and field-based skills in their coursework. The UW-Stout Biology degree will prepare students for entering the workforce upon graduation.

Institution and Universities of Wisconsin Program Array

UW-Stout currently provides science education under the umbrella of the B.S. in Applied Science Program, with individual scientific disciplines as concentrations. Two current natural science majors, the B.S. in Environmental Science and the B.S. in Applied Biochemistry and Molecular Biology, started as concentrations in the B.S. in Applied Science program. The proposed B.S. in Biology does not duplicate any other existing programs at UW-Stout.

² UW-Stout Mission & Values. Retrieved 11/30/23 from https://www.uwstout.edu/about-us/mission-values

Within the 26 CIP code area (Biological and Biomedical Sciences), UW-Stout offers a B.S. in Applied Biochemistry & Molecular Biology. Elevation of the Biology concentration to the B.S. in Biology, along with elevation of two other concentrations to a B.S. in Chemistry and a B.S. in Physics, will provide a full array of science majors critical for the success of the polytechnic institution. A B.S. in Biology will not compete with, but will complement existing and newly developing science majors. Moreover, with the full array of science majors, students will have the opportunity to choose a science major that is precisely tailored to their needs within UW-Stout rather potentially transferring to another institution. UW-Stout is the only university within the Universities of Wisconsin that does not offer a general Biology major.

Need as Suggested by Student Demand

The need for the program is supported by current enrollment in the Biology concentration of the B.S. in Applied Science program. UW-Stout's Biology concentration was initiated in 2019, and it has already grown to 52 current students. Seven of these current students are freshmen. Further, there have been 23 graduates from this concentration. The Biology concentration's enrollment growth was achieved despite the relative obscurity of its location within the broader umbrella of the B.S. in Applied Science program. By developing and marketing a more visible Biology major, enrollments are expected to increase.

Despite the demographic downturn and fluctuation in student numbers during COVID, biology degrees conferred at nearby regional campuses of UW-Eau Claire and UW-River Falls have remained relatively steady in CIP code 26.01 since 2011, changing only +2%.³ This statistic indicates that UW-Stout's B.S. in Biology will most likely maintain stable numbers. Nationally, within the past five years (ending in 2020/2021), degrees conferred within CIP code 26 have increased from 116,768 to 131,499—an increase of 12.6% (Digest of Education Statistics 2022).⁴

Need as Suggested by Market Demand

Demand for a Biology major has been emphasized by prospective students, existing faculty and instructional staff, campus recruiters, existing program advisory committees, and the Dean of the College of Science, Technology, Engineering, Mathematics, and Management. According to the National Bureau of Labor Statistics, the median annual wage for life, physical, and social science occupations was \$83,640 in May 2022.⁵

³ Office of Policy Analysis & Research. Education reports & statistics. Universities of Wisconsin. Retrieved on 2/2/2024 from https://www.wisconsin.edu/education-reports-statistics/

 $^{^4}$ National Center for Educational Statistics. Digest of educational statistics. Retrieved on 2/2/2024 from $\frac{\text{https://nces.ed.gov/programs/digest/d22/tables/dt22_322.10.asp?current=yes}{\text{https://nces.ed.gov/programs/digest/d22/tables/dt22_322.10.asp?current=yes}}$

⁵ U.S. Bureau of Labor Statistics. Occupational employment and wages, May 2022. Retrieved on 2/2/2024 from https://www.bls.gov/oes/current/oes190000.htm#nat

Market analysis of Biology degree completions from comparable universities (UW-Eau Claire, Minnesota State University-Mankato, UW-Whitewater) shows a 5-8% growth over the past 5 years. Some universities were omitted from comparison due to changes in their program offerings, such as creating new offshoot majors which skewed the data, or because they draw from a very different student profile than UW-Stout. Occupational demand for jobs filled by Biology majors is expected to grow 4.5% regionally and 7.1% nationally from 2022-2027. The job market is already strong, with more than 25% of job postings listing Biology as a needed skill, compared to less than 5% of applicant profiles reporting that skill. UW-Stout can better serve the economic and workforce needs of the region with the increased recognition that a B.S. in Biology would bestow.

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 $^{^{\}rm 6}$ University Marketing. (2023). Lightcast.

	University of Wisconsin - Stout						
	Cost and Revenue Pro	ojections For		-			
	Items	Projections					
		2025 Year 1	2026	2027 Voor 2	2028	2029 Voor F	
Н	Enrollment (New Student) Headcount	20	Year 2 25	Year 3 25	Year 4 30	Year 5 30	
'	Enrollment (Continuing Student) Headcount	0	15	32	49	56	
	Enrollment (New Student) FTE	18.4	23	23	27.6	27.6	
	Enrollment (Continuing Student) FTE	0	13.62	29.82	45.05	51.73	
Ш	Total New Credit Hours	368	460	460	552	552	
"	Existing Credit Hours	0	272.4	596.4	901	1034.6	
III	FTE of New Faculty/Instructional Staff	0.1	0.55	0.45	0.49	1034.0	
'''	FTE of Current Fac/IAS	0.55	0.55	1.2	1.65	2.14	
	FTE of New Admin Staff	0.55	0.05	1.2	1.05	2.14	
	FTE Current Admin Staff						
IV	Revenues						
''	Tuition	\$89,917	\$178,955	\$258,121	\$355,026	\$387,670	
	Additional Tuition	403,317	\$170,555	Ψ230,121	4555,020	4507,070	
	Fees (indicate type)						
	Fees (indicate type)						
	Program Revenue (Grants)						
	Program Revenue - Other						
	GPR (re)allocation						
	Total Revenue	\$89,917	\$178,955	\$258,121	\$355,026	\$387,670	
V	Expenses	403,317	Ψ170,555	4230,121	4333,020	4301,010	
	Salaries plus Fringes	-					
	Faculty Salary	\$39,650	\$74,445	\$96,634	\$123,332	\$125,774	
	Instuctional Academic Staff	\$10,287	\$18,666	\$31,372	\$45,314	\$46,220	
	Administrative and Student Support Staff		,	·	,	•	
	Other Staff						
	Fringe Faculty and Academic Staff	\$18,886	\$35,215	\$48,412	\$63,782	\$65,048	
	Fringe University Staff						
	Fringe Other Staff						
	Facilities and Capital Equipment		,		'		
	University buildings and space						
	Capital Equipment						
	Operations						
	Other Expenses						
	Other (Supplies)	\$920	\$1,831	\$2,641	\$3,632	\$3,967	
	Other (Administrative Overhead)	\$24,044	\$47,853	\$69,022	\$94,934	\$103,663	
	Total Expenses	\$93,787	\$178,009	\$248,080	\$330,994	\$344,672	
	Net Revenue	-\$3,870	\$946	\$10,041	\$24,032	\$42,998	
D	vost's Signature		Date:			•	

Provost's Signature:

Date:

Chief Business Officer's Signature:

Date:

4-Mar-24

4-Mar-24

COST AND REVENUE PROJECTIONS NARRATIVE UNIVERSITY OF WISCONSIN-STOUT BACHELOR OF SCIENCE IN BIOLOGY

PROGRAM INTRODUCTION

The University of Wisconsin (UW)-Stout proposes to establish a Bachelor of Science (B.S.) in Biology. The proposed program will elevate the existing Biology concentration within the B.S. in Applied Science program at UW-Stout to a major that is better recognized by both prospective students and potential employers. Since its inception in 2019, the existing Biology concentration has had strong student interest, currently having over 50 students in the concentration. Consequently, strong enrollment from the establishment of the proposed B.S. in Biology and its subsequent increased name recognition can be expected. The program requires 120 credits to complete the degree including 42 credits in the biology core, 38 credits of elective courses, and 40 credits of required Stout Core general education courses. All credits of the major studies curriculum already exist and are being taught at UW-Stout currently; therefore, no additional resources are required initially to support the B.S. in Biology.

COST REVENUE NARRATIVE

Section I - Enrollment

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. New enrollment projections are based on recent enrollments in the existing Biology and Interdisciplinary Science concentrations of the B.S. in Applied Science program. The projections are based on the following information and assumptions. First, upon approval of the B.S. in Biology, UW-Stout will suspend enrollment in the Biology concentration of the B.S. in Applied Science and invite current students in the concentration to move to the major. This is likely to advantage students and strengthen retention because they will be doing the same curriculum but with the B.S. in Biology major identified more prominently on their transcript. Second, offering Biology as a major is expected to add visibility to attract students that do not currently come to UW-Stout. This assumption is based on: 1) feedback the admissions office receives from high school counselors, parents, and prospective students; and 2) Google analysis from university marketing office that indicates search hits for a biology major will be much more effective than they are for a biology concentration. Predicted enrollment in the B.S. in Biology program will grow to 86 students with an estimated 16 graduates per year by Year 5. It is anticipated that by the end of Year 5, 130 new students will have enrolled in the program and 28 will have graduated.

Continuing student headcount is based on a first-to-second year retention rate of 74% and year-to-year continuation rate of 94% from Year 2 on in alignment with historical

trends at UW-Stout. Those headcounts are rounded to whole numbers. Based on enrollment patterns at UW-Stout student FTE is computed by taking 92% of the headcount and rounding to two decimal places (with the above continuation rates factored in before rounding).

Table 1: Five-Year Enrollment and Completion Projections by Headcount

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students Headcount	20	25	25	30	30
Continuing Students Headcount	0	15	32	49	56
New Students FTE	18.40	23.00	23.00	27.60	27.60
Continuing Students FTE	0.00	13.62	29.82	45.05	51.73
Total Enrollment FTE	18.40	36.62	52.82	72.65	79.33
Graduating Students	0	0	0	12	16

Section II - Credit Hours

Credit hours in were calculated by prorating the 80 program credits across the four years. The resulting 20 program credits per year were multiplied by the student FTE to determine credit hours. New credit hours correspond to those students identified as New in Table 1 and existing credit hours correspond to those students identified as Continuing in Table 1.

Section III - Faculty and Staff Appointments

The B.S. in Biology will draw on existing expertise in the Biology Department, as well as from the Chemistry and Physics Department. The current program director for the existing B.S. in Applied Biochemistry and Molecular Biology will take on the role of program director for the B.S. in Biology. The faculty member is currently allotted a 0.125 FTE reassignment for that role. Half of this, or 0.0625 FTE per year, will be allocated to the new program.

It is anticipated that additional sections of courses will need to be added over time to meet the needs of this new program, stabilizing in Year 4 based on the projected enrollment trends. This will be met with the following FTE of faculty and instructional academic staff (IAS), where the program director allocation has been included as "new" in the first year and "continuing" thereafter:

- Year 1: 0.48 FTE faculty (0.105 new and 0.375 continuing) and 0.167 FTE IAS (continuing)
- Year 2: 0.897 FTE faculty (0.417 new + 0.48 continuing) and 0.3 FTE IAS (0.133 new + 0.167 continuing)

- Year 3: 1.146 FTE faculty (0.25 new + 0.896 continuing) and 0.5 FTE IAS (0.2 new + 0.3 continuing)
- Year 4: 1.438 FTE faculty (0.292 new + 1.146 continuing) and 0.7 FTE IAS (0.2 new + 0.5 continuing)
- Year 5: 1.438 FTE faculty (continuing) and 0.7 FTE IAS (continuing)

Section IV - Program Revenues

The sole source of program revenue will be standard tuition revenue.

Tuition

The projected program revenue has been calculated by multiplying the total student FTE times the program credit hours, times the tuition, using the standard in-state tuition rate.

- Year 1: 18.4 FTE x 20 credits x \$244.34 per credit = \$89,917
- Year 2: 36.62 FTE x 20 credits x \$244.34 per credit = \$178,955
- Year 3: 52.82 FTE x 20 credits x \$244.34 per credit = \$258,121
- Year 4: 72.65 FTE x 20 credits x \$244.34 per credit = \$355,026
- Year 5: 79.33 FTE x 20 credits x \$244.34 per credit = \$387,670

Fees

There will not be any additional fees for direct support of this program.

Program Revenues and GPR

There will not be any program revenue or GPR generated or allocated from other units.

Section V - Program Expenses

The primary program expense is for faculty or instructional staff as discussed in Section III. These expenses are based on staffing costs for courses that are in addition to what is currently offered. Existing course offerings, that will also support the new B.S. in Biology, will continue to be funded by tuition revenue from other campus programs, including Stout Core science courses that support the general education requirements for all programs.

Salary and Fringe

Faculty salaries were calculated as follows. The average annual salary for faculty in the Biology Department is anticipated to be \$80,000 in Year 1 with instructional academic staff (IAS) at \$61,000. A 2% pay raise is added for each successive year. In addition to the regular salary expense, there is an additional \$1,250 stipend (per year) for the faculty program director. Fringes are computed at the current campus rate of 37.82%.

Year 1: 0.48 FTE faculty x \$80,000 + \$1,250 = \$39,650; 0.167 FTE IAS x \$61,000 = \$10,287

- Year 2: 0.897 FTE faculty x \$81,600 + \$1,250 = \$74,445; 0.3 FTE IAS x \$62,220 = \$18,666
- Year 3: 1.146 FTE faculty x \$83,232 + \$1,250 = \$96,634; 0.5 FTE IAS x \$63,464 = \$31,372
- Year 4: 1.438 FTE faculty x \$84,897 + \$1,250 = \$123,332; 0.7 FTE IAS x \$64,734 = \$45,314
- Year 5: 1.438 FTE faculty x \$86,595 + \$1,250 = \$125,774; 0.7 FTE IAS x \$66,028 = \$46,220

Facilities and Capital Equipment

Laboratories currently exist to support the program, as well as existing funding lines to support equipment maintenance and replacement. No additional funds are needed.

Other Expenses

A small additional expense for laboratory supplies is included at the rate of \$50 per student FTE per year. A second expense is the campus approved Administrative Overhead charge of 26.74% on tuition revenue.

Section VI - Net Revenue

Initial projections suggest a small negative revenue in the first year that will be recovered by Year 3, with positive net revenue thereafter. Any net revenue will be reinvested into the program and the institution.



February 8, 2024

Jay Rothman, President
University of Wisconsin System Administration
1720 Van Hise Hall, 1220 Linden Drive
Madison, WI 53706

Dear President Rothman:

I am writing to provide you with this Letter of Commitment in support of the University of Wisconsin-Stout's proposed B.S. in Biology degree.

As Wisconsin's Polytechnic University, this proposed program will allow UW-Stout to continue providing leadership and innovation to prepare graduates for entry into industry positions, graduate or professional schools, health professions programs, and a variety of career opportunities in molecular science, agriculture, biotechnology, pharmaceuticals, and others.

The proposed program will leverage our freshwater partnerships, community sustainability collaborations, cadaver lab, and articulations with healthcare providers, transforming our current biology concentration in the B.S. Applied Science to a major. The program will build on existing curriculum and faculty and staff expertise in the College of Science, Technology, Engineering, Mathematics and Management. A financial review has been conducted to confirm that the necessary financial and human resources are available to launch this proposed program.

The proposed degree has been approved through the campus curriculum approval process. Governance groups confirmed that the design of the proposed program meets the definition and standards of quality at UW-Stout. All programs at UW-Stout participate in the biannual Assessment in the Major and the four-year Planning and Review Committee program review to support continuous improvement. Assessment of the student learning objectives will be



coordinated by the program director in collaboration with the faculty, staff and the program advisory committee.

Thank you for your consideration and support of this new program.

Sincerely,

Glendalí Rodríguez

Provost and Vice Chancellor

attachments

GR/tb Letters 2024 April 4, 2024

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF SCIENCE IN CHEMISTRY, UNIVERSITY OF WISCONSIN-STOUT

REQUESTED ACTION

Adoption of Resolution C.7., authorizing the implementation of the Bachelor of Science in Chemistry at the University of Wisconsin-Stout.

Resolution C.7.

That, upon the recommendation of the Chancellor of the University of Wisconsin-Stout and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Chemistry program at the University of Wisconsin-Stout.

SUMMARY

The University of Wisconsin-Stout proposes to establish a Bachelor of Science (B.S.) in Chemistry. The proposed program is an elevation of the existing Industrial Chemistry concentration within the B.S. in Applied Science program at UW-Stout, and the degree is being established based on recommendations from the UW-Stout Planning and Review Committee to further the growth of the science degrees at UW-Stout. The B.S. in Chemistry will require a total of 120 credits, with 40 credits from the Stout Core and 80 credits within the major that includes a student selected interest track. In keeping with the core principle of applied learning at UW-Stout, students will also be required to complete a cooperative education experience and a laboratory capstone course. The proposed program fits within the University's mission to offer career-focused undergraduate programs in science and its Enduring Goal of offering high quality challenging academic programs that influence and respond to a changing society. Through the B.S. in Chemistry program, students will be well prepared for careers in chemical, oil, polymer, pharmaceutical, and biotechnology industries as well as any other industry that requires a strong foundation in chemistry. The expected strong job growth in the industry of 6.3% nationally over the next five years underscores the need for preparation of a new generation of chemists.

¹ UW-Stout 2020-2030 Strategic Plan. Retrieved 10/25/23 from https://www.uwstout.edu/uw-stout-2020-2030-strategic-plan

Presenter

• Dr. Glendalí Rodríguez, Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (Revised August 2023), available at https://www.wisconsin.edu/uw-policies/uw-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related 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

ATTACHMENTS

- A) Request for Authorization to Implement
- B) Cost and Revenue Projections Worksheet
- C) Cost and Revenue Projections Narrative
- D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN CHEMISTRY AT UNIVERSITY OF WISCONSIN-STOUT PREPARED BY UW-STOUT

ABSTRACT

The University of Wisconsin-Stout proposes to establish a Bachelor of Science (B.S.) in Chemistry. The proposed program is an elevation of the existing Industrial Chemistry concentration within the B.S. in Applied Science program at UW-Stout, and the degree is being established based on recommendations from the UW-Stout Planning and Review Committee to further the growth of the science degrees at UW-Stout. The B.S. in Chemistry will require a total of 120 credits, with 40 credits from the Stout Core and 80 credits within the major that includes a student selected interest track. In keeping with the core principle of applied learning at UW-Stout, students will also be required to complete a cooperative education experience and a laboratory capstone course. The proposed program fits within the University's mission to offer career-focused undergraduate programs in science and its Enduring Goal of offering high quality challenging academic programs that influence and respond to a changing society. Through the B.S. in Chemistry program, students will be well prepared for careers in chemical, oil, polymer, pharmaceutical, and biotechnology industries as well as any other industry that requires a strong foundation in chemistry. The expected strong job growth in the industry of 6.3% nationally over the next five years underscores the need for preparation of a new generation of chemists.

PROGRAM IDENTIFICATION

University Name

University of Wisconsin-Stout

Title of Proposed Academic Program

Chemistry

Degree Designation

Bachelor of Science

Suggested Classification of Instructional Programs (CIP) Code:

40.0501 Chemistry, General

¹ UW-Stout 2020-2030 Strategic Plan. Retrieved 10/25/23 from https://www.uwstout.edu/uw-stout-2020-2030-strategic-plan

Mode of Delivery

Single university, face-to-face delivery

Department or Functional Equivalent

Department of Chemistry and Physics

College, School, or Functional Equivalent

College of Science, Technology, Engineering, Mathematics, and Management

Proposed Date of Authorization

April 4-5, 2024

Proposed Date of Implementation

Fall 2024

PROGRAM INFORMATION

Overview of the Program

The B.S. in Chemistry will prepare students for careers in chemical, oil, polymer, pharmaceutical, and biotechnology industries as well as any other industry that requires a strong foundation in chemistry. The curriculum will rest on the foundation of existing course offerings, resources, and facilities developed for the Industrial Chemistry concentration of the B.S. in Applied Science program, and it will be built following the guidelines of the American Chemical Society and the tenets of polytechnic education. The B.S. in Chemistry will combine the core of chemistry, physics, and mathematics courses with opportunities to specialize in materials sciences, biochemistry and chemical biology, environmental health, and other areas at the interface of chemistry with other science disciplines.

The B.S. in Chemistry will require 120 credits, including 40 credits of Stout Core general education coursework. The 80 program credits include a student-selected interest track of 14-16 credits. In keeping with the applied nature of education at UW-Stout, all students will be required to complete a cooperative education experience where students gain paid industry experience and a laboratory capstone course.

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. New enrollment projections are based on recent enrollments in the existing Industrial Chemistry concentration of the B.S. in Applied Science program. Initial enrollment in Year 1 is set lower than other years give the anticipated short timeframe for advertising between program approval and program.

Continuing student headcount is based on a first-to-second year retention rate of 74% and year-to-year continuation rate of 94% from Year 2 on in alignment with historical trends at UW-Stout. UW-Stout predicts that enrollment in the B.S. in Chemistry program will grow to 31 students with an estimated six graduates per year by Year 5. By the end of Year 5, it is anticipated that 45 students will have enrolled in the program with nine graduates.

Table 1: Five-Year Enrollment and Completion Projections by Headcount

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	5	10	10	10	10
Continuing Students	0	4	11	18	21
Total Enrollment	5	14	21	28	31
Graduating Students	0	0	0	3	6

Tuition Structure

For students enrolled in the B.S. in Chemistry program, the standard tuition and fee rates will apply. For the current academic year, the residential tuition and segregated fees are approximately \$338.08 per credit per semester for a full-time Wisconsin resident student who is enrolled in 12-18 credits per term. Of this amount, \$51.93 (2023-24 rate) is attributable to segregated fees, \$28.00 (2023-24 rate) is attributable to the E-Stout fee (supporting a student laptop and software), \$13.81 (2023-24 rate) is attributable to the Textbook Rental fee, and \$244.34 (2023-24 rate) is attributable to tuition. Distance education fees will not apply, although students may incur additional incidental course fees required during a science education that includes laboratory courses.

Student Learning Outcomes and Program Objectives

The B.S. in Chemistry program outcomes and curriculum have been developed in close alignment with the guidelines of the American Chemical Society Committee on Professional Training. UW-Stout anticipates seeking a certification of the program within five years. The program will prepare students to immediately enter the workforce or continue their education in graduate programs in chemistry, biochemistry, materials science, and related disciplines. An emphasis on hands-on laboratory experiences will uniquely prepare students to enter the workforce right after graduation in such positions as chemical technicians, quality control and assurance laboratory technicians, forensic science technicians, and occupational health specialists.

Upon completion of the B.S. in Chemistry degree, students will:

- 1. Demonstrate knowledge of fundamental principles of chemistry, including bonding and structural theories, chemical reactivity, thermodynamics, and kinetics.
- 2. Explain how macroscale properties of substances and materials are determined by interactions of atoms, molecules, and ions.

- 3. Perform basic chemistry laboratory techniques, including synthesis, isolation, purification, and analysis of chemical substances.
- 4. Operate a variety of analytical instruments, understand the physical basis of the analytical methods, and analyze the data obtained.
- 5. Design, implement, and analyze results of a chemical experiment.
- 6. Communicate effectively orally and verbally in a variety of professional contexts.
- 7. Follow professional standards of safe and ethical conduct of experimentation, analysis, and reporting.

Program Requirements and Curriculum

The proposed B.S. in Chemistry program requires 120 credits, consisting of 40 credits in the Stout Core general education and 80 credits in the major which include a 14-16 credit student-selected interest track, a cooperative education experience where students gain paid industry experience, and a laboratory capstone course. Chemists often call their discipline a central science as basic principles of chemical structure, reactivity, synthesis, and analysis are applied in a wide variety of disciplines ranging from pharmacology and medicine to materials science and polymer chemistry to agriculture and ecology. The proposed curriculum reflects this view as students are first required to complete core courses in chemistry, mathematics, and physics and then choose a track to either further deepen their knowledge of chemistry or gain knowledge at the interface of chemistry with other natural science disciplines. In alignment with the UW-Stout core principle of applied hands-on learning, course-based undergraduate research experiences will be incorporated in many laboratory courses.

Table 2: B.S. in Chemistry Program Curriculum

Stout Core (general education) courses required for graduation:	
Racial and Ethnic Studies	6 credits*
Global Perspectives	6 credits*
Communication Skills	9 credits
COMST 100 Fundamentals of Speech (3 credits)	
ENGL 101 Composition 1 OR	
ENGL 111 Honors Composition 1 (3 credits)	
ENGL 102 Composition 2 OR	
ENGL 113 Honors Composition 2 (3 credits)	
Analytical Reasoning and Natural Science	10 credits
CHEM 135 College Chemistry I (5 credits)	
MATH 153 Calculus I (4 credits) OR	
MATH 156 Calculus & Analytic Geom. I (5 credits)	
Social and Behavioral Sciences	6 credits
Arts and Humanities	6 credits
Social Responsibility and Ethical Reasoning	3 credits
Electives	6 credits

CHEM 136 CHEM 201 CHEM 204 CHEM 206 CHEM 310 CHEM 321 CHEM 331 CHEM 425 MATH 154	College Chemistry II Organic Chemistry I Organic Chemistry II Lecture Organic Chemistry II Laboratory Biochemistry I: Enzymology and Regulation Physical Chemistry Quantitative Analysis Inorganic Chemistry Calculus II OR	5 credits 4 credits 3 credit 1 credit 4 credits 4 credits 4 credits 4 credits 4 credits 4 credits
MATH 157	Calculus and Analytic Geometry II	5 credits
PHYS 281	University Physics I	5 credits
PHYS 282	University Physics II	5 credits
ENGL 410	Scientific Communication	3 credits
CHEM 349	Cooperative Education Experience	1 credit
	TRACK IN ACS CHEMISTRY	
CHEM 245	Chemistry of Polymers	4 credits
CHEM 435	Instrumental Methods of Analysis	4 credits
MATH 158	Calculus III	4 credits
CHEM 322	Physical Chemistry II	3 credits
	OR	
	TRACK IN BIOCHEMISTRY AND CHEMICAL BIOLOGY	
CHEM 311	Biochemistry II	4 credits
CHEM 402	Bioorganic Chemistry and Chemical Biology	3 credits
BIO 136	College Molecular Cell Biology I	5 credits
BIO 235	Molecular Cell Biology II	4 credits
	OR	
	TRACK IN MATERIALS AND NANOSCIENCE	
CHEM 241	Chemistry of Materials	4 credits
CHEM 245	Chemistry of Polymers	4 credits
NANO 230	Microscopy and Materials Characterization	3 credits
NANO 301	Synthesis and Fabrication of Nanostructured	3 credits
	Materials	
	OR	
CHEM 2E2	TRACK IN ENVIRONMENTAL HEALTH	1 eredite
CHEM 353	Environmental Chemistry	4 credits 3 credits
BIO 262	Introduction to Industrial Hygiene and Occupational Health	3 Credits
BIO 460	Epidemiology	3 credits
BIO 462	Environmental Toxicology	3 credits
ENSC 352	Environmental Policy, Permits and Regulations	3 credits
LINDC JJZ	Environmental Folicy, Fermits and Regulations	J ci cuits
CHEM 414	Protein Chemistry Laboratory	2 credits

OR

CHEM 440 Advanced Materials Laboratory

3 credits 3-4 credits

Upper-level Chemistry elective: any CHEM-3xx or

CHEM-4xx course

Free electives: any ABMB, BIO, CHEM, CS, GEOL,

10-15 credits

MATH, NANO, PHYS, STAT 200-level or above to

reach 120 credits

Total Credits 120 credit(s)

*Students can select courses that count for more than one requirement within Stout Core (SC), Racial and Ethnic Studies (RES), and Global Perspectives (GLP).

Collaborative Nature of the Program

The science programs at UW-Stout have historically been developed in close collaboration between faculty in chemistry, biology, and physics. Thus, there exists a strong culture of collaboration, including joint research projects, collaboration in instructional design and development, and acquisition and use of major research equipment. These expected collaborations will continue after the creation of separate majors in Chemistry, Biology, and Physics, and, indeed, curricula for all three new majors have been developed to encourage interdisciplinary student learning. Chemistry faculty members have also had fruitful collaborations with Dietetics, Food Science, and Plastics Engineering faculty. UW-Stout anticipates working with the faculty in these programs on alignment of the programs to allow students to double major in chemistry and one of the other disciplines.

Discussion on articulation agreements or transfer pathways with technical colleges, particularly with Chippewa Valley Technical College, has already been ongoing while chemistry was a concentration in the B.S. in Applied Science program. These discussions are expected to intensify upon the elevation of the concentration to a stand-alone major, and as technical colleges move toward offering more associate degrees in science.

Projected Time to Degree

The projected time to degree for full-time students is four years, including 120 credits at 15 credits per semester. The program is typically taken by traditional, full-time students with little part time enrollment. The completion rates and time to degree are calculated accordingly.

Accreditation

UW-Stout is accredited by the Higher Learning Commission (HLC) who were notified of adding a degree in this new CIP code for UW-Stout. No additional accreditation is required to launch the program. Once the program is established, UW-Stout anticipates pursuing accreditation by the American Chemical Society Committee on Professional Training.

PROGRAM JUSTIFICATION

Rationale

The University of Wisconsin-Stout proposes to establish a B.S. in Chemistry program as part of the elevation of the three science concentrations of the existing B.S. in Applied Science (Applied Physics, Biology, and Industrial Chemistry) into individual majors. The establishment of the B.S. in Chemistry was recommended after a review of the B.S. in Applied Science program by the university's Planning and Review Committee. Over the past 20 years, the B.S. in Applied Science program has been successful in preparing graduates with theoretical and hands-on skills necessary to immediately enter the workforce or to continue their education in various graduate and professional schools. Specifically, over the last five years all students who graduated with a B.S. in Applied Science and concentration in Industrial Chemistry have either enrolled into graduate programs in Chemistry or obtained employment with chemical companies. However, the non-descriptive name of the Applied Science program and limited ability to market individual concentrations suppress the growth of the program, so none of the three science concentrations has been able to reach their full potential in fulfilling their polytechnic mission of preparing career-ready scientists. Elevation of the Industrial Chemistry concentration to the status of a full major of B.S. in Chemistry will create opportunity for more students to receive applied, hands-on training in chemistry at Wisconsin's only polytechnic university.

The proposed program fits within the University's mission to offer career-focused undergraduate programs in science, and its Enduring Goal of offering high-quality, challenging academic programs that influence and respond to a changing society.²

Institution and Universities of Wisconsin Program Array

Unlike other polytechnic institutions in the country, UW-Stout has been providing science education under the umbrella of the B.S. in Applied Science program with individual scientific disciplines as concentrations, and UW-Stout does not currently offer any existing programs in the 40.0501 CIP code (Chemistry, General). Currently, two natural science majors, the B.S. in Environmental Science and the B.S. in Applied Biochemistry and Molecular Biology, were originally concentrations in the B.S. in Applied Science program. Elevation of the Industrial Chemistry concentration to a B.S. in Chemistry, along with elevation of two other concentrations to a B.S. in Biology and a B.S. in Physics, will provide a full array of science majors critical for the success of the polytechnic institution. A B.S. in Chemistry program will not compete with, but rather will complement existing and newly developing science majors. Moreover, with the full array of science majors available to

² UW-Stout 2020-2030 Strategic Plan. Retrieved 10/25/23 from https://www.uwstout.edu/uw-stout-2020-2030-strategic-plan

students, they will have the opportunity to choose a science major within UW-Stout precisely tailored to their needs, rather than being forced to transfer to another institution.

A B.S. in Chemistry will also work synergistically with UW-Stout engineering and human health programs, providing students in the Plastics Engineering, Dietetics, and Food Science programs an opportunity to acquire strong foundation in chemistry, complementing their applied disciplines by double majoring in chemistry.

Since the science of chemistry plays a central role as a bridge between physical and life sciences, and as it provides the foundation for various scientific disciplines and industries, from polymers and materials to pharmaceuticals, agricultural chemicals, and food preservatives, it is not surprising that every other UW university and every Minnesota State University has a program in chemistry. It is this central role of chemistry that makes a B.S. in Chemistry a necessity for the polytechnic mission of UW-Stout. Moreover, the B.S. in Chemistry at UW-Stout will be distinct from other programs in the UW System with its emphasis on applied, hands-on learning and its interdisciplinary nature.

Need as Suggested by Current Student Demand

Market analysis of annual chemistry degree completions at other comprehensive Universities of Wisconsin and the Minnesota State Universities between 2017 to 2021 shows steady completion rates with numbers fluctuating between ten and twenty. While the number of graduates of the Industrial Chemistry concentration of the B.S. in Applied Science program do not reach this level, this belief is mainly due to the hidden nature of the concentration within the Applied Science program, and elevation of the concentration to a stand-alone major will result in an increase in the number of graduates to about ten per year. Transformation of a concentration focusing on Industrial Chemistry into a major emphasizing chemistry's connection to other disciplines from materials science to biochemistry and pharmacology will also lead to an increase in numbers, as current students are more interested in applications of chemistry to solving societal problems rather than in studies of the fundamentals of chemistry.

Implementation of a B.S. in Chemistry is not anticipated to negatively impact other programs (beyond the existing B.S. in Applied Science program). Indeed, the program would complement existing programs in Food Science and Plastics Engineering that would be most closely related to chemistry. UW-Stout anticipates that creation of traditional science programs at Wisconsin's Polytechnic University will lead to increased enrollment in all science (and related) programs.

Need as Suggested by Market Demand

Chemistry is at the core of the manufacturing industry. The creation and improvement of building materials, personal care products, agricultural products, foods, pharmaceuticals, oils and other petroleum products, textiles, and countless other materials require chemists who work collaboratively with engineers and other scientists. Graduates from the Industrial Chemistry concentration and other Applied Science graduates with a

strong training in chemistry, including a minor in chemistry, have acquired employment or internship experiences with such companies as Sigma-Aldrich, Fisher Scientific, and 3M.

Labor demand data shows strong continuing need for chemists with regional job growth projected at 4.5% (nationally at 6.3%) through 2027.³ Especially notable is an 8.1% expected growth of chemistry technicians, a position for which a chemistry graduate with applied hands-on training provided by UW-Stout is uniquely suited. The U.S. Bureau of Labor and Statistics projects the employment of chemists and material scientists to grow faster than the average for all occupations, with an average of 7,200 openings each year over the next decade.⁴ As with many industries, workforces continue to age. For chemistry and related occupations, Lightcast finds over 45% of the workforce to be age 45 or above, suggesting significant numbers of retirements and new labor needs in coming decades.

³ University Marketing. (2023). Lightcast.

⁴ U.S. Bureau of Labor Statistics. Occupational employment wage statistics. Retrieved on 10/25/23 from https://www.bls.gov/ooh/life-physical-and-social-science/chemists-and-materials-scientists.htm

	University of Wisconsin - Stout						
	Cost and Revenue Projections For B.S. in Chemistry						
	Items	Projections					
		2025	2026	2027	2028	2029	
	Freelingont (Nov. Ct., dont) Hondonsk	Year 1	Year 2	Year 3	Year 4	Year 5	
	Enrollment (New Student) Headcount	5	10	10 11	10 18	10 21	
	Enrollment (Continuing Student) Headcount Enrollment (New Student) FTE	0	9.2	9.2	9.2	9.2	
	Enrollment (Continuing Student) FTE	4.6	3.4	10.01			
ш	Total New Credit Hours	92	184	184	16.22 184	19.29 184	
		0	68	200.2	324.4		
III	Existing Credit Hours FTE of New Faculty/Instructional Staff	0.07	08	0.13	0.04	385.8	
""	FTE of Current Fac/IAS	0.07	0.07	0.13	0.04	0.24	
	FTE of New Admin Staff	١	0.07	0.07	0.2	0.24	
	FTE Current Admin Staff						
IV	Revenues						
''	Tuition	\$22,479	\$61,574	\$93,875	\$124,222	\$139,225	
	Additional Tuition	\$22,479	\$01,574	Ψ93,673	¥124,222	Ψ139,223	
	Fees (indicate type)						
	Fees (indicate type)						
	Program Revenue (Grants)						
	Program Revenue - Other						
	GPR (re)allocation						
	Total Revenue	\$22,479	\$61,574	\$93,875	\$124,222	\$139,225	
V	Expenses	422,173	Ψ01,974	433,013	¥121,222	Ψ133,ZZ3	
	Salaries plus Fringes						
	Faculty Salary	\$6,392	\$6,507	\$16,899	\$20,745	\$21,148	
	Instuctional Academic Staff	,	·	,	,		
	Administrative and Student Support Staff						
	Other Staff						
	Fringe Faculty and Academic Staff	\$2,417	\$2,461	\$6,391	\$7,846	\$7,998	
	Fringe University Staff						
	Fringe Other Staff						
	Facilities and Capital Equipment						
	University buildings and space						
	Capital Equipment						
	Operations						
	Other Expenses						
	Other (Supplies)	\$230	\$630	\$961	\$1,271	\$1,425	
	Other (Administrative Overhead)	\$6,011	\$16,465	\$25,102	\$33,217	\$37,229	
	Total Expenses	\$15,050	\$26,063	\$49,353	\$63,079	\$67,799	
	Net Revenue	\$7,429	\$35,511	\$44,522	\$61,144	\$71,426	
_	vostis Cianaturo	-	Dates	- L			

Provost's Signature:

Date:

Chief Business Officer's Signature:

Date:

2/9/2024

2/8/2024

COST AND REVENUE PROJECTIONS NARRATIVE UNIVERSITY OF WISCONSIN-STOUT BACHELOR OF SCIENCE IN CHEMISTRY

PROGRAM INTRODUCTION

The University of Wisconsin (UW)-Stout proposes to establish a Bachelor of Science (B.S.) in Chemistry. This is an elevation of the existing Industrial Chemistry concentration within the Applied Science program. These actions are taken because of recommendations from the UW-Stout Planning and Review Committee to further the growth of the science degrees at UW-Stout. This 120-credit degree consisting of 40 credits from the Stout Core and 80 credits within the major will prepare students for careers in chemical, oil, polymer, pharmaceutical, and biotechnology industries as well as any other industry that requires a strong foundation in chemistry. The expected strong job growth in the industry of 6.3% nationally over the next five years underscores the need for preparation of a new generation of chemists.

COST REVENUE NARRATIVE

Section I - Enrollment

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. New enrollment projections are based on recent enrollments in the existing Industrial Chemistry concentration of the B.S. in Applied Science program. The projections are based on the following information and assumptions. First, upon approval of the B.S. in Chemistry, UW-Stout will suspend enrollment in the Industrial Chemistry concentration of the B.S. in Applied Science and invite current students in the concentration to move to the major. This is likely to advantage students and strengthen retention because they will be doing the same curriculum but with the B.S. in Chemistry major identified more prominently on their transcript. Second, offering chemistry as a major is expected to add visibility to attract students that do not currently come to UW-Stout. This assumption is based on: 1) feedback the admissions office receives from high school counselors, parents, and prospective students; and 2) Google analysis from university marketing office that indicates search hits for a chemistry major will be much more effective than they are for a chemistry concentration. Initial enrollment in Year 1 is set lower than other years due to the anticipated short timeframe for advertising between program approval and program launch. By the end of Year 5, it is anticipated that approximately 45 students will have enrolled in the program with nine graduates.

Continuing student headcount is based on a first-to-second year retention rate of 74% and year-to-year continuation rate of 94% from Year 2 on in alignment with historical trends at UW-Stout. Those headcounts are rounded to whole numbers. Based on enrollment patterns at UW-Stout, student FTE is computed by taking 92% of the headcount

and rounding to two decimal places (with the above continuation rates factored in before rounding).

Table 1: Five-Year Enrollment and Completion Projections by Headcount

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students Headcount	5	10	10	10	10
Continuing Students Headcount	0	4	11	18	21
New Students FTE	4.60	9.20	9.20	9.20	9.20
Continuing Students FTE	0.00	3.40	10.01	16.22	19.29
Total Enrollment FTE	4.60	12.60	19.21	25.42	28.49
Graduating Students	0	0	0	3	6

Section II - Credit Hours

Credit hours were calculated by prorating the 80 program credits across the four years. The resulting 20 program credits per year were multiplied by the student FTE to determine credit hours. New credit hours correspond to those students identified as New in Table 1 and existing credit hours correspond to those students identified as Continuing in Table 1.

Section III - Faculty and Staff Appointments

The B.S. in Chemistry will draw on existing expertise in the Chemistry and Physics Department. The current program director for the existing B.S. in Applied Science will take on the role of program director for the B.S. in Chemistry. The individual is currently allotted a 0.125 FTE reassignment for that role. One fourth of this, or 0.03125 FTE per year, will be allocated to the new program.

A small amount of new coursework will need to be added over time to meet the needs of this new program, stabilizing in Year 4 based on the projected enrollment trends. This will be met with the following FTE of faculty:

- Year 1: 0.042 FTE faculty (new)
- Year 2: 0.042 FTE faculty (continuing)
- Year 3: 0.167 FTE faculty (0.125 new + 0.042 continuing)
- Year 4: 0.209 FTE faculty (0.042 new + 0.167 continuing)
- Year 5: 0.209 FTE faculty (continuing)

Section IV - Program Revenues

The sole source of program revenue will be standard tuition revenue.

Tuition

The projected program revenue has been calculated by multiplying the total student FTE by the program credit hours, multiplied by the tuition, using the standard in-state tuition rate of \$244.34 per credit.

- Year 1: 4.6 FTE x 20 credits x \$244.34 per credit = \$22,479
- Year 2: 12.6 FTE x 20 credits x \$244.34 per credit = \$61,574
- Year 3: 19.21 FTE x 20 credits x \$244.34 per credit = \$93,875
- Year 4: 25.42 FTE x 20 credits x \$244.34 per credit = \$124,222
- Year 5: 28.49 FTE x 20 credits x \$244.34 per credit = \$139,225

<u>Fees</u>

There will not be any additional fees for direct support of this program.

Program Revenues and GPR

There will not be any program revenue or GPR generated or allocated from other units.

Section V - Program Expenses

The primary program expense is for faculty or instructional staff. These expenses are based on staffing costs for courses that are in addition to what is currently offered. Existing course offerings, that will also support the new B.S. in Chemistry, will continue to be funded by tuition revenue from other campus programs, including Stout Core science courses that support the general education requirements for all programs.

Salary and Fringe

The average annual salary for discipline-specific faculty in the Chemistry and Physics Department is anticipated to be \$79,000 in Year 1. A 2% pay raise is added for each successive year. In addition to the regular salary expense, there is an additional \$625 stipend (per year) for the faculty program director. Fringes are computed at the current campus rate of 37.82%.

- Year 1: 0.073 FTE faculty x \$79,000 + \$625 = \$6,392
- Year 2: 0.073 FTE faculty x \$80,580 + \$625 = \$6,507
- Year 3: 0.198 FTE faculty x \$82,192 + \$625 = \$16,899
- Year 4: 0.24 FTE faculty x \$83,835 + \$625 = \$20,745
- Year 5: 0.24 FTE faculty x \$85,512 + \$625 = \$21,148

Facilities and Capital Equipment

Laboratories currently exist to support the program, as well as existing funding lines to support equipment maintenance and replacement. No additional funds are needed.

Other Expenses

A small additional expense for laboratory supplies is included at the rate of \$50 per student FTE per year. A second expense is the campus approved Administrative Overhead charge of 26.74% of tuition revenue.

Section VI - Net Revenue

Initial projections suggest a small positive net revenue. Any net revenue will be reinvested into the program and the institution.



February 8, 2024

Jay Rothman, President
University of Wisconsin System Administration
1720 Van Hise Hall, 1220 Linden Drive
Madison, WI 53706

Dear President Rothman:

I am writing to provide you with this Letter of Commitment in support of the University of Wisconsin-Stout's proposed B.S. in Chemistry degree.

As Wisconsin's Polytechnic University, this proposed program will allow UW-Stout to continue providing leadership and innovation to prepare graduates for careers in chemical, oil, polymer, pharmaceutical, and biotechnology industries as well as any other industry that requires a strong foundation in chemistry.

The proposed program will follow the guidelines of the American Chemical Society and the tenets of polytechnic education, transforming our current chemistry concentration in the B.S. Applied Science to a major with emphasis areas in materials sciences, biochemistry and chemical biology, environmental health, and other areas of intersection with science disciplines. The program will build on existing curriculum and faculty and staff expertise in the College of Science, Technology, Engineering, Mathematics and Management. A financial review has been conducted to confirm that the necessary financial and human resources are available to launch this proposed program.

The proposed degree has been approved through the campus curriculum approval process. Governance groups confirmed that the design of the proposed program meets the definition and standards of quality at UW-Stout. All programs at UW-Stout participate in the biannual Assessment in the Major and the four-year Planning and Review Committee program review to



support continuous improvement. Assessment of the student learning objectives will be coordinated by the program director in collaboration with the faculty, staff and the program advisory committee.

Thank you for your consideration and support of this new program.

Sincerely,

Glendalí Rodríguez

Provost and Vice Chancellor

attachments

GR/tb Memos 2024 April 4, 2024

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF FINE ARTS IN ILLUSTRATION, UNIVERSITY OF WISCONSIN-STOUT

REQUESTED ACTION

Adoption of Resolution C.8., authorizing the implementation of the Bachelor of Fine Arts in Illustration at the University of Wisconsin-Stout.

Resolution C.8.

That, upon the recommendation of the Chancellor of the University of Wisconsin-Stout and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Fine Arts in Illustration program at the University of Wisconsin-Stout.

SUMMARY

The University of Wisconsin–Stout (UW-Stout) proposes to establish a Bachelor of Fine Arts (BFA) in Illustration. This program is intended to grow institutional enrollment as well as provide balance to the existing program array in UW-Stout's School of Art & Design, an academic unit with 1,299 students. This is a new, distinct area of growth for the university, taking advantage of existing course offerings in the School of Art & Design, with additional coursework to add disciplinary specialization as required by the National Association of Schools of Art and Design (NASAD) accreditation board. The 120-credit degree consists of 40 general education requirements and 80 credits in required and elective credits in the major. Upon completion of this degree, students will be prepared to enter creative practice as illustrators in industries such as advertising, publishing, and entertainment, as well as engage in independent arts practice and consulting. The Minneapolis Creative Index shows the Twin Cities region's growing creative economy spends an overall estimated \$2.78B per year. 1 Nationally, according to the Bureau of Labor Statistics, growth in these sectors is projected at 5% over the next decade. Regarding student demand, regional statistics on degree completions with the Illustration Classification of Instructional Programs (CIP) code (50.0410) show a growth of 25%–137% in recent years at competitor institutions in

¹ Office of Arts, Culture, and the Creative Economy, City of Minneapolis, *Minneapolis Creative Index 2018.* Retrieved at https://mplsartsandculture.org/research (October 2023)

Wisconsin, Minnesota, Illinois, and Michigan.² There is an estimated overall combined enrollment of approximately 750 students among these same programs, indicating a healthy and consistent pool of potential applicants in the upper Midwest.

Presenter

• Dr. Glendalí Rodríguez, Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (Revised August 2023), available at https://www.wisconsin.edu/uw-policies/uw-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related 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

ATTACHMENTS

A) Request for Authorization to Implement

- B) Cost and Revenue Projections Worksheet
- C) Cost and Revenue Projections Narrative
- D) Provost's Letter

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² Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Craft and Fine Artists. Retrieved September 30, 2023 from https://www.bls.gov/ooh/arts-and-design/craft-and-fine-artists.htm#tab-6

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF FINE ARTS IN ILLUSTRATION AT UNIVERSITY OF WISCONSIN-STOUT PREPARED BY UW-STOUT

ABSTRACT

The University of Wisconsin–Stout (UW-Stout) proposes to establish a Bachelor of Fine Arts (BFA) in Illustration. This program is intended to grow institutional enrollment as well as provide balance to the existing program array in UW-Stout's School of Art & Design, an academic unit with 1,299 students. This is a new, distinct area of growth for the university, taking advantage of existing course offerings in the School of Art & Design, with additional coursework to add disciplinary specialization as required by the National Association of Schools of Art and Design (NASAD) accreditation board. The 120-credit degree consists of 40 general education requirements and 80 credits in required and elective credits in the major. Upon completion of this degree, students will be prepared to enter creative practice as illustrators in industries such as advertising, publishing, and entertainment, as well as engage in independent arts practice and consulting. The Minneapolis Creative Index shows the growing Twin Cities region's creative economy spends overall estimated \$2.78B per year. 1 Nationally, according to the Bureau of Labor Statistics, growth in these sectors is projected at 5% over the next decade. Regarding student demand, regional statistics on degree completions with the Illustration Classification of Instructional Programs (CIP) code (50.0410) show a growth of 25%-137% in recent years at competitor institutions in Wisconsin, Minnesota, Illinois, and Michigan.² There is an estimated overall combined enrollment of approximately 750 students among these same programs, indicating a healthy and consistent pool of potential applicants in the upper Midwest.

PROGRAM IDENTIFICATION

University Name

University of Wisconsin-Stout

Title of Proposed Academic Program

Illustration

¹ Office of Arts, Culture, and the Creative Economy, City of Minneapolis, *Minneapolis Creative Index 2018*. Retrieved at https://mplsartsandculture.org/research (October 2023)

² Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Craft and Fine Artists. Retrieved September 30, 2023 from https://www.bls.gov/ooh/arts-and-design/craft-and-fine-artists.htm#tab-6

Degree Designation(s)

Bachelor of Fine Arts

Proposed Classification of Instructional Program (CIP) Code

50.0410 –Illustration. Definition: A program that prepares individuals to use artistic techniques to develop and execute interpretations of the concepts of authors and designers to specifications.

Mode of Delivery

Single university; face to face delivery

Department or Functional Equivalent

School of Art and Design

College, School, or Functional Equivalent

College of Arts and Human Sciences

Proposed Date of Authorization

April 4-5, 2024

Proposed Date of Implementation

Fall, 2024

PROGRAM INFORMATION

Overview of the Program

The proposed BFA in Illustration is a comprehensive major that will be available in a traditional, in-person format. The degree will consist of 120 total credits and include 40 Stout Core (general education) and 80 credits in the major. Students will be required to select an additional literature course that can be part of the total 40 core credits when properly planned. Students will begin in the pre-BFA program before applying to their major.

As pre-BFA students, they will take a standard first-year array of Art & Design Foundation classes on topics such as drawing fundamentals, form language, and color theory. Following acceptance into the program, students will begin with an Introduction to Illustration course, engage in a series of introductory and intermediate courses in Studio Art and Design, and choose from a series of advanced topic electives using an individualized combination of traditional and digital tools. The content of these electives will include anatomy, gesture, staging, and an understanding of visual storytelling to develop authentic representations of real and imagined locations, scenarios, and characters for narrative applications. Students will engage in research and visual

development; gain an understanding of perspective, light logic, material indication, and color; and develop a personal approach to creative expression. Students will be required to take an applied capstone course.

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. Enrollment was calculated by referring to comparable regional programs and determining likely market share. Graduation and retention rates used in the projections were based on the rates from a closely-aligned program, the BFA in Graphic Design and Interactive Media—77% for first-year students, and 94.5% for continuing students, with 8% graduating beginning in Year 4.

By the end of the program's fifth year, UW-Stout anticipates the program will reach an enrollment of 99. This does not include the seven students projected to graduate in Year 4, but it does include the eight students expected to graduate in Year 5. In total, it is anticipated that 15 students will have graduated by the end of the fifth year.

Table 1: Five-Year Enrollment and Completion Projections by Headcount

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	20	23	26	30	30
Continuing Students	0	15	32	50	69
Total Enrollment	20	38	58	80	99
Graduating Students	0	0	0	7	8

Tuition Structure

For students enrolled in the Bachelor of Fine Arts (BFA) in Illustration program, standard university tuition and fee rates will apply. University-level segregated fees will not impact this program's budget and have not been included in budget modeling.

To estimate tuition revenue per year, UW-Stouts referred to the most comparable program, the BFA in Graphic design to project what percentage of students will pay each tuition-by-residency rate.

- 51.23% of students will pay the WI resident rate (\$244.34 per credit)
- 42.75% of students pay the MN Reciprocity rate (\$244.34 per credit)
- 3.66% of students pay the non-resident rate (\$529.79 per credit)
- 1.38% of students pay the Midwest rate (\$360.70 per credit)
- 0.99% of students pay the Midwest Student Exchange Program (MSEP) rate (\$360.70 per credit)

For each year, the sum of the new and existing credit hours was multiplied by the percentage of students anticipated to fall into that residency type, and then the product

was multiplied by the corresponding per-credit tuition rate. The sum of these five products constitutes the total annual projected tuition.

Student Learning Outcomes and Program Objectives

Upon completion of this degree, students will be able to enter the professional field of illustration as entry-level practitioners of illustration. Through creative work, they will be able to conceptualize, iterate, execute, and refine visual messaging using individually developed images. Through research skills, they will be able to analyze visual elements, identify common visual vocabulary, and examine their place in the landscape of contemporary visual communication and visual culture, and synthesize this knowledge into the creation of their own work. Through integrated, interdisciplinary coursework, students will be prepared for ever-changing technological developments and new trends and techniques in the discipline. Students will further learn best practices and fundamentals of the business of creative freelance work and development of a personal professional identity, one of the primary modes of professional employment in this field. Upon completion of this program, graduates will:

- Establish a personal illustration style and technique that uses both traditional and digital media fluency to develop a flexible practice-based approach to the craft of illustration.
- Think critically, solve problems creatively, and demonstrate professionalism.
- Demonstrate an awareness of the culture at large, including historical and current contexts relevant to individualized creative practice.
- Apply historical and cultural perspectives, art and design history, global culture, and literature in producing work for effective visual storytelling.
- Demonstrate the ability to meet current standards as a working professional in relation to conceptual development and final execution of creative projects.
- Create portfolios with industry-oriented professional goals toward the entertainment industry, editorial publications, in sequential work, and/or in graphic design and advertising.
- Research, visualize, and develop creative illustrated solutions for purposes of visual communication.

Program Requirements and Curriculum

Students will complete 40 credits in general education coursework and 80 credits in the major. After completing first-year pre-BFA courses in Art & Design Foundation courses, they will continue their study of illustration and design concepts. In addition, they will select advanced topic electives. The program also requires an applied capstone experience. Table 2 illustrates the program curriculum.

Table 2: Bachelor	of Fine Arts in	Illustration	Program (Curriculum
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Table 2: Bac	helor of Fine Arts in Illustration Program Curriculum	
General edu	ication courses required for graduation	
	Communication Skills:	
ENGL-101	Composition 1 (or ENGL-101HON)	3 credit(s)
ENGL-102	Composition 2 (or ENGL-102HON)	3 credit(s)
COMST-100	Fundamentals of Speech	3 credit(s)
	Analytical Reasoning & Natural Sciences	10 credit(s)
	Arts and Humanities	3 credit(s)
ARTH-223	Survey of Art – Ancient Through Medieval (ARHU)	3 credit(s)
	Social and Behavioral Sciences	6 credit(s)
	Social Responsibility and Ethical Reasoning	3 credit(s)
	Stout Core Selective	6 credit(s)
	Students must also take courses with the following	
	designations:	
	Racial and Ethnic Studies (2 courses)	
	Global Perspective (2 courses)	
	Literature requirement (1 course)	
Program pro	erequisites or support courses:	
	N/A	0 credit(s)
	egree program or major course requirements:	
ART-100	Drawing I	4 credit(s)
ART-101	Two-Dimensional Design Foundations	4 credit(s)
ART-200	Drawing II	4 credit(s)
ART-103	Three-Dimensional Design Foundations	4 credit(s)
ART-279	Comics I	3 credit(s)
ART-301	Life Drawing I	3 credit(s)
DES-205	Design Drawing and Concept Visualization	3 credit(s)
DES-220	Introduction to 2D Digital Imaging	3 credit(s)
DES-321	Digital Imagery Studio	3 credit(s)
DES-323	Digital Illustration	3 credit(s)
ILL-200	Fundamentals of Illustration	4 credit(s)
ILL-300	Illustration Concepts	3 credit(s)
ILL-490	Illustration Portfolio Development	4 credit(s)
ILL-495	Illustration Capstone	4 credit(s)
ART-209	Painting I (or)	3 credit(s)
ART-219	Relief Printmaking	3 credit(s)
ART-275	Film and Darkroom Photography (or)	3 credit(s)
PHOTO-130	Introduction to Still and Moving Image	3 credit(s)
	Photography	
ARTH-224	Survey of Art – Renaissance Through 20 th Century	3 credit(s)
ARTH-319	History of Design	3 credit(s)

Total Credits	120 credit(s)
Elective Studio (Open)	10 credit(s)
Elective Studio (Art)	3 credit(s)
Elective Studio (Design)	3 credit(s)
Art History Selective	3 credit(s)

Collaborative Nature of the Program

The BFA in Illustration is designed to be a shared program between the Department of Design (DES) and the Department of Visual and Performing Arts (VPA), taking advantage of a well-balanced combination of existing, shared curriculum. The existing curriculum will pull from courses across departments, with the addition of new courses developed specifically for the Illustration program. The collaborative, shared approach with this program is purposeful, reflecting the philosophical role of Illustration as a creative practice that often transcends disciplinary practice.

Projected Time to Degree

Students can complete this degree in four years. UW-Stout will also investigate transfer opportunities from aligned programs and community and technical colleges to provide an efficient path to the BFA.

Accreditation

UW-Stout is accredited by the Higher Learning Commission (HLC) and the National Association of Schools of Art & Design (NASAD). Following NASAD guidelines, the institution will communicate with NASAD to have the program officially approved by the accrediting body after gaining approval of the UW System Board of Regents.

PROGRAM JUSTIFICATION

Rationale

The proposed degree was developed in response to a Provost call to action for new programs to increase enrollment and align with current program array, emerging areas of demand, and polytechnic identity. This initiative was in response to recommendations from Strategic Enrollment Plan (SEP) and Comprehensive Academic Plan (CAP).

Illustration is a field that borrows artistic skillsets from Drawing, Painting, and Printmaking (traditionally aligned with Studio Art), Comics, Animation, and Graphic Design (traditionally aligned with Design). Currently, UW-Stout's roster of alumni already includes professional illustrators, albeit with degrees in other creative disciplines. In response, the BFA in Illustration would provide a rigorous, NASAD-accredited major for students who might enroll in private art and design institutions in the region, or otherwise seek out a less appropriate fit in another major.

One of UW-Stout's Focus 2030 goals that was also a CAP focus area to, "Advance UW-Stout's reputation as an innovative polytechnic, offering a foundation of skills, liberal arts, and knowledge, cutting-edge technology and programs, and cross-disciplinary learning in an inclusive and supportive environment." The program does so innately, through interdisciplinary coursework, creative research, and communication principles, as well as the cutting-edge technology available within the School of Art & Design's computer labs and studio facilities. Illustration brings clarity to complex ideas, communicates stories, and explores new and creative ways of analyzing and presenting information applicable across multiple professional disciplines. The BFA in Illustration program brings together artistic excellence and applied problem-solving skills inherent to the practical design industry.

Another focus area of the CAP was student success, which aligns with UW-Stout's Focus 2030 goals to, "Deliver valuable holistic support and integrated learning experiences that engage students in envisioning new possibilities, achieving their goals, and excelling in our global and diverse society" and "Preserve and enhance our educational processes through the application of active learning principles." The proposed program includes field-experience and internship opportunities as well as the business and entrepreneurial skills needed to manage an independent professional practice in a creative field. With skills in communication, analytical reasoning, and technical expertise, graduates will go on to forge new career paths in the growing landscape of creative fields operating today, specializing in industries where illustration is integrated into a standardized workflow.

The program is well situated within the School of Art & Design which has grown beyond the capacity of current programs and attracted students with interests that are more varied than current offerings. This program expects to build on the overall success of the School of Art & Design by attracting new student enrollment while also taking pressure off current offerings that are turning away students, such as the BFA in Animation and Digital Media and the BFA in Game Design and Development-Art.

Institution and Universities of Wisconsin Program Array

UW-Stout offers six BFAs in the School of Art & Design, including: Animation and Digital Media; Game Design and Development; Art, Graphic Design & Interactive Media; Industrial and Product Design; Interior Design; Studio Art, and two BS programs: Video Production; and Arts Administration and Entrepreneurship. The proposed degree is distinct from these offerings but utilizes existing coursework from each, especially the BFAs in Studio Art, Graphic Design and Interactive Media, and Animation and Digital Media, in addition to the shared first-year foundational courses taught by the Studio Art area. This type of course array is standard among existing programs with this CIP code and reflects an interdisciplinary utility that is inherent to the practice.

³ University of Wisconsin-Stout. (2022). FOCUS 2030 Plan and Initiatives. Retrieved 2022, from University of Wisconsin-Stout: https://www.uwstout.edu/focus-2030-plan-initiatives

A BFA in Illustration prepares students specifically for this industry, and allows them to specialize in this area, rather than exploring one or two elective courses within a different program. Because of this interdisciplinary utility and curricular adaptability, illustration programs are typically offered by larger institutions specializing in Art & Design, and UW-Stout is perfectly sized for such an offering. Providing more varied offerings will allow enrollment growth in the School of Art and Design, and the University as a whole, in a deliberate, purposeful manner. With approval, this program would be the only Universities of Wisconsin campus with the Illustration CIP code (50.0410).

Need as Suggested by Student Demand

The best example of student demand is likely the growth in the Illustration CIP code (50.0410) among regional competitors. Although UW-Stout competes with other Universities of Wisconsin campuses, no other UW campus uses this CIP code. As a result, the most notable competitor programs with the 50.0410 CIP code are at private Art & and Design institutions. Specific institutions that were investigated include nearest geographical competitor, Minneapolis College of Art and Design (MCAD), the leading competitor in the state, Milwaukee Institute of Art and Design (MIAD), Columbia College Chicago, and the College of Creative Studies in Detroit, MI.⁴ Combined, these four competitor programs had 188 degree completions within the 50.0410 CIP code in 2021, with MCAD and MIAD seeing the majority with 50 degree completions at each institution. In addition, each of these four competitor institutions has seen notable enrollment growth in degree completions with this CIP code: MCAD's growth is 25%, MIAD's is 127%, Columbia College of Chicago's is 30%, and CCS's is 32%.⁴ These numbers suggest there are currently 700–800 students working toward a BFA in Illustration in the upper Midwest.

UW-Stout's School of Art and Design is of a substantial size and competes directly with competitor institutions. UW-Stout's School of Art & Design is 1,272 (as per Fall 2023) 10th day data) compared to MCAD's undergraduate enrollment of 675 and MIAD's of 900. Tuition at these four private institutions ranges from \$30,000-\$50,000 per year. UW-Stout's reputation in the region, overall size and breadth of art and design programs, and lower tuition rates already make us aggressively competitive against each of these private institutions. UW-Stout projects a potential enrollment of 30 new students per year in this CIP code. The addition of the BFA Illustration may result in some enrollment shifts from the BFA in Animation and Digital Media, BFA in Game Design and Development-Art, and the BFA in Graphic Design & Interactive Media into the Illustration major. These programs have robust enrollment that includes a modest number of students for whom Illustration is a better fit with their educational and career goals. There are also wait lists for admittance into programs in the School of Art & Design, so any shifts in enrollment from existing programs to this program will allow other programs to admit students on the wait list. For this reason, UW-Stout expects zero to modest reductions in the overall major counts by adding this degree while building more enrollment in the School of Art & Design overall.

⁴ University of Wisconsin-Stout Marketing. (2023).

Need as Suggested by Market Demand

It is difficult to obtain employment data from the U.S. Bureau of Labor Statistics (BLS), as Illustration is included within the statistics for both Graphic Designers and Craft and Fine Artists, without itemization. However, BLS projects growth of 3% and 5% in these areas respectively between 2022-2032.2 The Minneapolis Creative Index report is a research report from the Office of Arts, Culture, and the Creative Economy at the City of Minneapolis, and is publicly available at their website. ⁵ Their most recent report was published in 2018, and it reports there are 3,218 jobs in the Twin Cities area under the header of "Fine Artists, including Painters, Sculptors, and Illustrators." This compares to 2,167 Interior Designers, 13,168 Photographers, and 7,600 Graphic Designers. It is worth noting that many illustrators also work as Graphic Designers and may choose to selfidentify with that industry instead. Advertising and publishing make up 24% and 19% of all creative industry sales, with the generalized "design services" making up 13%. These comprise 56% of all economic spending in the creative sectors in the Minneapolis area and are the three areas most likely to employ illustrators in the Twin Cities area. These sectors combined represent approximately \$2,785,979,052 in creative industry sales per year. The creative industry sales in the Minneapolis area overall saw a \$4M increase between 2011 and 2018.1

⁵ Minneapolis Arts & Cultural Affairs. (2022). Retrieved on 2/16/2024 from http://mplsartsandculture.org.

	University of Wisconsin - Stout					
	Cost and Revenue Projections For B.F.A. Illustration					
	Items	Projections				
		2024-25	2025-26	2026-27	2027-28	2028-29
-	Franklin and Olem Charles N. Handraue	Year 1	Year 2	Year 3	Year 4	Year 5
1	Enrollment (New Student) Headcount	20	23	26	30	30
	Enrollment (Continuing Student) Headcount	0	15	32	50	69
	Enrollment (New Student) FTE	17.4	20	22.6	26.1	26.1
	Enrollment (Continuing Student) FTE	0	13.1	27.8	43.5	60
II	Total New Credit Hours	244	280	317	366	366
	Existing Credit Hours	0	183	390	609	840
1111	FTE of New Faculty/Instructional Staff	1	-	0	0.5	
	FTE of Current Fac/IAS	0.167	0.33	0.5	0.833	1.33
	FTE of New Admin Staff	0.25	0	0 135	0 135	0.125
	FTE Current Admin Staff	0	0.25	0.125	0.125	0.125
IV	Revenues	¢62.047	#110 2FF	¢102.102	¢251 120	¢210.620
	Tuition	\$62,847	\$119,255	\$182,102	\$251,130	\$310,629
	Additional Tuition					
	Fees (indicate type)					
	Fees (indicate type)					
	Program Revenue (Grants)					
	Program Revenue - Other					
	GPR (re)allocation		****	****	****	+
	Total Revenue	\$62,847	\$119,255	\$182,102	\$251,130	\$310,629
V	Expenses					
	Salaries plus Fringes	¢12.040	¢22.702	£26.040	¢(0,050	¢60.050
	Faculty Salary	\$12,040	\$23,792	\$36,049	\$60,058	\$60,058
	Instuctional Academic Staff	¢40.005	¢40.005	±0.043	\$23,175	\$23,175
	Administrative and Student Support Staff	\$18,025	\$18,025	\$9,012	\$9,012	\$9,012
	Other Staff	45.644	#44.007	¢4.6.700	#20 F7F	¢20 575
	Fringe Faculty and Academic Staff	\$5,611	\$11,087	\$16,799	\$39,575	\$39,575
	Fringe University Staff	¢0.400	¢0.400	# 4 200	# 4 200	# 4200
	Fringe Other Staff	\$8,400	\$8,400	\$4,200	\$4,200	\$4,200
	Facilities and Capital Equipment					
	University buildings and space					
	Capital Equipment	¢2.754	#2.000	#2.250	#4.00F	#4.00F
	Operations	\$2,751	\$2,000	\$2,250	\$1,995	\$1,995
	Other Expenses	#300	£440	#C25	t1 ((2)	#1 (()
	Travel and Professional Development	\$209	\$413	\$625	\$1,663	\$1,663
	Other (please list)	# 47 005	#60 747	#60.00=	¢420.670	#420 6=0
-	Total Expenses	\$47,036	\$63,717	\$68,935	\$139,678	\$139,678
	Net Revenue	\$15,811	\$55,538	\$113,167	\$111,452	\$170,951

Provost's Signature:

Date:

Chief Business Officer's Signature:

Date:

2/9/2024

2/8/2024

COST AND REVENUE PROJECTIONS NARRATIVE UNIVERSITY OF WISCONSIN-STOUT BACHELOR OF FINE ARTS IN ILLUSTRATION

PROGRAM INTRODUCTION

The University of Wisconsin-Stout (UW-Stout) proposes to establish a Bachelor of Fine Arts (BFA) in Illustration. This budget narrative is intended to explain the methods for calculating the figures in the Cost and Revenue projections table included with this proposal. Program costs, chiefly in the form of salary and fringe for existing staff who will have part of their time redirected to supporting this program, and tuition revenue have been estimated to support the forecast of substantial net revenues resulting from the addition of the program.

COST REVENUE NARRATIVE

Section I - Enrollment

UW-Stout has set a goal of achieving an annual cohort of 30 new students—the cohort size allowed for by current facilities and capacity for a new program in UW-Stout's School of Art & Design—by Year 4 of the program. Based on a 2021 survey of four-year degrees conferred by programs in the Illustration CIP code, achieving this goal would mean attaining approximately 13% of the regional market (Minnesota, Wisconsin, and Illinois) share. This is in proportion with the market share achieved by existing BFA programs. While this number of students is not expected in the program's first three years, the interest current students at UW-Stout have expressed in illustration suggests approximately twenty students even in the program's launch year, with an expectation to gradually scale up to the goal of thirty over the next three years.

In determining the number of continuing students each year, UW-Stout first considered the retention rate for first-year students. The campus-wide retention rates for first-year students at UW-Stout has varied between 69.6% and 71.9% over the last five years; however, the retention rate for students in School of Art & Design programs has historically been considerably higher, and a 77% retention rate is assumed for first-year students returning for their second year. This is the same as the rate for most closely related existing program, the BFA in Graphic Design and Interactive Media. This program was also used to generate an estimate for the continuing student persistence rate, assumed to 94.5%. Beginning in the fourth year, it is assumed that 8% of the program's total number of students would exit as graduates. Again, the BFA in Graphic Design and Interactive Media served as the basis for this assumption.

Section II - Credit Hours

In determining how many credits students would take each year, UW-Stout first projected the likely student FTE. Students in BFA programs are generally full-time, defined

as taking 24 credits per year, or very close to this. Based on the anticipated course sequencing for the typical student in this program, it is expected that each student with a full-time load will take 10 general education credits per year, devoting 14 credits to program requirements. Because the instructions for these budget projections stipulate that "only credit hours attributable to major/program requirement, credit hour projection is restricted to the 14 credit hours that full-time program students will take in the major.

While BFA students are generally full-time, there are some who take a part-time load. Before calculating how many credits new and continuing students would generate annually, UW-Stout determined a multiplier to use for student FTE. Drawing on the FTE to student headcount ratio for the Graphic Design and Interactive Media program over the past five years, and used 87% as the average FTE per student. To estimate the number of new student credit hours each year, UW-Stout multiplied the student head count for new students by 14, then multiplied the product by .87. Similarly, the estimated the number of continuing student credit hours each year was calculated by multiplying the head count by 14, then multiplied the result by .87.

Section III - Faculty and Staff Appointments

Since most of the coursework is pre-existing, existing faculty and staff will teach in the program while it gets established. The School of Art and Design already has a strong group of instructors with expertise in the field of Illustration who can easily become affiliated with this program, with minor course reassignment. If the program grows large enough over time, it may eventually be necessary to make a permanent tenure-track hire to provide additional stability for the program; however, in the first five years of the program, courses will be staffed using existing faculty and newly hired IAS.

As with many of the new programs added to complement existing program array, the BFA in Illustration will rely heavily on coursework already offered. While this will help reduce expenses, it also complicates forecasting them. When a student in a new program takes a course that is regularly offered and has capacity, this does not represent a new expense. However, when the number of students in the new program reaches a point where an additional section of an existing course must be added, that section must be considered a new expense attributable to this program. Forecasting the instructional FTE that will be used to support this program requires determining the number of new sections—sections that would not have been offered without the BFA in Illustration, whether the course is new or existing—per academic year over the next five years. Based on the curriculum proposed, UW-Sout expects to offer the following new sections:

- One section of a program course in Year One, taught by existing faculty;
- Two sections of program courses in Year Two, both taught by existing faculty;
- Three sections of program courses in Year Three, all taught by existing faculty;

- Five sections of program courses in Year Four, taught by existing faculty; and three new sections of (four-credit) Fundamentals courses, taught by a new IAS member;
- Five sections of program courses in Year Five, plus three sections of (four-credit) Fundamentals courses, taught by the IAS member hired in Year Four.

All these sections of both program-specific courses and the fundamentals courses required of all BFA students, will be sections of laboratory courses. For the School of Art and Design, a full-time course load for faculty teaching lab courses is 18 credits per year, and a full-time course load for IAS teaching lab courses is 24 credits per year. The program-specific courses will be three-credit courses, so each program section above equates to .167 FTE (annual) for faculty. The fundamentals courses are four-credit courses and will each constitute .167 IAS FTE (annual) in staffing.

In addition to instructional staffing, the program will also add staffing in the form of an academic program director. In accordance with the current metrics for program director reassigned time at UW-Stout, a faculty member will be assigned six credits (.25 annual FTE) to direct the program during its first two years, and three credits (.125 annual FTE) to direct the program in subsequent years, unless the total program enrollment exceeds 149 students.

Section IV - Program Revenues

Tuition revenues have been projected based on the 2023-24 undergraduate tuition rates:

WI Resident: \$244.34/creditNon-Resident: \$529.79/credit

• MN Reciprocity: \$244.34/credit (portion kept by campus)

• Midwest Tuition: \$360.70/credit

Midwest Student Exchange: \$360.70/credit

While UW-Stout anticipates that rates will rise for 2024-25, this is not yet approved and therefore has not been assumed.

Tuition & Additional Tuition

The estimated tuition revenue by year is based on the breakdown by residency type for existing BFA in Graphic Design and Interactive Media.

- 51.23% of students pay the WI resident rate
- 42.75% of students pay the MN Reciprocity rate
- 3.66% of students pay the non-resident rate
- 1.38% of students pay the Midwest rate
- .99% of students pay the Midwest Student Exchange Program (MSEP) rate

To calculate the estimated annual tuition revenue per residency type, the sum of the new and existing credit hours was multiplied by the percentage of students anticipated to fall into that residency type, and then the product was multiplied by the corresponding percredit tuition rate. The sum of these five products constitutes the total annual projected tuition.

<u>Fees</u>

Per the guidance on the instructions, segregated fees have not been included in these projections. Students will pay special course fees for some program coursework but, in keeping with UW-Stout and Universities of Wisconsin policies on these fees, these fees are revisited each year to ensure that they are applied solely to course expenses and remain revenue-neutral. Therefore, no fees are included.

Program Revenues and GPR

At this time, there is no expectation of grant or gift funds that will be applied directly to this program, nor is there any expectation of GPR reallocation.

Section V - Program Expenses

The bulk of program expenses will come in the form of salary and fringe, as this program will not require any new facilities nor any significant upgrade to existing classrooms and laboratories.

Salary and Fringe

Salary estimates for instructional staff have been made based on the average salary for faculty and IAS in the School of Art and Design. For faculty, the average academic-year salary is \$72,098. For IAS, the average academic-year salary is \$46,350. These are the figures used as the total salary expense for one annual FTE of faculty and one annual FTE of instructional academic staff, respectively. The salary estimate for administrative staff is based on the average School of Art and Design faculty salary, since a faculty member is the presumptive academic program director. No other new administrative or support staff is anticipated.

The fringe estimate is based on the average fringe rate for instructional staff in the School of Art and Design during the 2022-23 academic year. This rate was determined to be 46.6% for faculty and 50.0% for IAS. The roundness of the latter figure may give a false impression of being a rough estimate, but it is merely a rounding of 0.49787. On the projections table, the fringe estimated for the program director assignment is accounted as "Fringe Other Staff" (Row 33), with the faculty fringe rate used for the calculation.

Facilities and Capital Equipment

No new construction or renovations are anticipated due to the implementation of the BFA in Illustration, nor are any major equipment costs foreseen. The Applied Arts building that houses the School of Art and Design is in need of an upgrade, and it is anticipated this will be enumerated in a new campus master plan. However, this would be part of the plan with or without the new program, and as such this is not considered a new expense attributable to the program.

Other Expenses

During the program's first year \$2,500 is estimated in marketing costs with \$1,500 expected in each of the program's second and third years. In keeping with supply allocations for other BFA programs, UW-Stout expects that the School of Art and Design will spend roughly \$1,500 in supplies per instructional staff FTE assigned to this program.

Section VI - Net Revenue

Projections suggest significant net revenues even in its first year, with net revenue growth anticipated each year. This expectation squares with the new program's reliance on mainly existing staff and resources, along with an expectation of significant student interest based on the reputational strength of UW-Stout's School of Art and Design. While these projections are encouraging, they may not fully account for the new program picking up students who otherwise might have chosen a different program at Stout, and who therefore would not represent entirely new revenue. Even with this as a caveat, UW-Stout is still confident in a substantial positive net revenue.

Coming after several years of budget shortfalls caused by the institution failing to meet overall tuition targets, the revenue from this new program may be key in preventing future shortfalls. While other programs in the university have shrunk, overall numbers in the School of Art and Design have increased. This new program will leverage an existing strength to help improve UW-Stout's overall financial health.



February 8, 2024

Jay Rothman, President
University of Wisconsin System Administration
1720 Van Hise Hall, 1220 Linden Drive
Madison, WI 53706

Dear President Rothman:

I am writing to provide you with this Letter of Commitment in support of the University of Wisconsin-Stout's proposed B.F.A. in Illustration degree.

As Wisconsin's Polytechnic University, this proposed program will allow UW-Stout to continue providing leadership and innovation to prepare graduates to enter creative practice as illustrators in industries such as advertising, publishing, and entertainment, as well as engage in independent arts practice and consulting.

The proposed program builds on the strong reputation of our School of Art & Design and polytechnic identity through interdisciplinary coursework, creative research, and communication principles, as well as the cutting-edge technology available within the School of Art & Design's computer labs and studio facilities. The program will build on existing courses across the Art and Design curriculum along with new courses in illustration. It will rely upon current faculty and staff expertise in the College of Arts and Human Sciences. A financial review has been conducted to confirm that the necessary financial and human resources are available to launch this proposed program.

The proposed degree has been approved through the campus curriculum approval process. Governance groups confirmed that the design of the proposed program meets the definition and standards of quality at UW-Stout. All programs at UW-Stout participate in the biannual Assessment in the Major and the four-year Planning and Review Committee program review to



support continuous improvement. Assessment of the student learning objectives will be coordinated by the program director in collaboration with the faculty, staff and the program advisory committee.

Thank you for your consideration and support of this new program.

Sincerely,

Glendalí Rodríguez

Provost and Vice Chancellor

attachments

GR/tb Memos 2024 April 4, 2024

IN REGENT POLICY DOCUMENT 7-3, "UW SYSTEM FRESHMAN ADMISSIONS POLICY"

REQUESTED ACTION

Adoption of Resolution D.

Resolution D.

That, upon the recommendation of the President of the University of Wisconsin System, the Board of Regents extends the temporary suspension of the requirement for freshman applicants to provide an ACT or SAT score as part of their application referenced in Regent Policy Document 7-3, Sections I. C. and II. B. This action extends the suspension through the 2026-27 academic year for all of the Universities of Wisconsin.

SUMMARY

Since initially implemented in 1989, the required use of test scores in admission had not been substantively modified until the COVID-19 crisis in early 2020. At that time, the Board of Regents approved suspending the ACT/SAT requirements on a temporary basis initially in response to the inability of applicants to take the ACT or SAT and submit scores during the crisis in May of 2020, for all universities except UW-Madison. In subsequent Board actions, the suspension was expanded to include UW-Madison in July of 2020, further extended to include 2022-23 applicants, and extended again through 2024-25 to allow time to research and understand the impact of the suspension for Universities of Wisconsin and within the national context.

Now, the Universities of Wisconsin, with the benefit of initial research, seek to continue to allow for test optional admissions at all UW universities, including UW-Madison. The Board of Regents is being asked to continue, through Summer 2027 admission application, the suspension of Regent Policy Document 7-3, Sections I. C. and II. B., which requires the submission of ACT/SAT test scores by freshman applicants. Students will continue to be evaluated based on other application materials submitted as required by Regent Policy Document 7-3. The initial approach was to extend the waiver through the Summer of 2028, but, in light of some recent actions by a limited number of schools reinstating required test

scores, the decision was made to recommend only a two-year extension. This will allow the re-evaluation of the position in 2026/2027 at which time the landscape regarding required testing may have materially changed.

The Universities of Wisconsin have gathered data through a collaboration with the <u>Student Success Through Applied Research (SSTAR) Lab</u> at UW-Madison. The research was guided by four core objectives to: 1) determine the degree to which the ACT/SAT score accurately predicts the academic achievement of UW students; 2) evaluate the long-term consequences of permanently suspending the standardized test score requirement (becoming test optional); 3) identify if there are other means of measuring a student's academic readiness for college that could be used in place of a standardized test score; and 4) understand national trends and context among other universities.

The SSTAR Lab has shared preliminary research results based on these objectives. These data indicate that: 1) the first-year student GPA and test scores at UW universities have remained consistent since 2018—both during the period while the test was required and optional; 2) test scores are less reliable predictors of college completion than high school GPA, and do not add meaningful academic information beyond what is already collected in the admissions process; and, 3) in addition to GPA, other academic factors such as high school credits, curriculum, and course rigor, combined with non-academic factors such as leadership, work, time management, and co-curricular engagement are important predictors of academic achievement.

The initial and ongoing suspension of the ACT/SAT requirement has also become an increasingly common practice in higher education. Most states required test scores before COVID-19. Currently, more than 80% (1900+) of institutions are now test optional, including 20 of 53 state systems that have instituted permanent test optional or test blind policies in addition to almost all selective institutions—and most prospective students live in test optional states. All but one Big 10 institution is test optional (in addition to the four that will join in 2024), and neighboring states Illinois and Iowa are already permanently test optional, while Michigan and Minnesota are largely test optional.

Extending the test optional policy through the 2026-27 academic year would provide meaningful advantages to the Universities of Wisconsin and avoid potential risks. It would allow the SSTAR lab to provide a meaningful analysis of a full cohort of UW students who applied under a test optional policy and matriculated through to graduation. It would simplify the admission process and allow UW universities to identify a broader range of students who can succeed at a UW, increasing access without diminishing the academic profile of entering classes. It would also maintain the UW's ability to compete with universities regionally and nationally. A test optional policy would help reduce the risk to UW's reputation overall, and of decreased access and enrollment, especially for

traditionally underserved communities. If approved, the UWs will be able to provide clarity in recruitment communications to those applying in the next two years.

Presenters

- Dr. Julie Amon, Associate Vice President for Enrollment & Student Success, Universities of Wisconsin
- Dr. Ben Passmore, Associate Vice President for Policy Analysis & Research, Universities of Wisconsin

BACKGROUND

The Universities of Wisconsin policy of requiring test scores took effect for applicants in the fall 1989 semester. Initially included as part of "Enrollment Management Phase I," the test requirement policy supported UW's goals under the enrollment management plan of preserving and enhancing educational quality, using limited resources in the most effective manner and, notably, limiting enrollment to "not admit more students than can be served in an orderly fashion." It was not until February 2007 that the test requirement (formerly Regent Policy Document 86-5) was combined with multiple other policies relating to admission to create Regent Policy Document 07-1, subsequently renumbered 7-3, University of Wisconsin Freshman Admissions Policy.

Previous Actions or Discussion

Regent Policy Document 7-3, "UW System Freshman Admissions Policy" was created by the Board on February 9, 2007, with the adoption of Resolution 9290.

Resolution 11430, adopted by the Board on May 7, 2020, temporarily suspended provisions of Regent Policy Document 7-3 related to ACT/SAT testing requirements for all freshman applications to UW campuses, except UW-Madison, for the 2020-21 and 2021-22 academic years.

On July 27, 2020, the UW System President approved a temporary waiver to Regent Policy Document 7-3 suspending provisions related to ACT/SAT testing requirements for all freshman applications to UW-Madison, through December 31, 2020.

¹ BOR meeting minutes June 5, 1987, pp. 21-22 https://search.library.wisc.edu/digital/ARLZNFYQEINFP68L/pages/AYJ2NHPLJCQQ5C83?view=contact

Resolution 11489, adopted by the Board on August 8, 2020, temporarily suspended provisions of Regent Policy Document 7-3 related to the ACT/SAT testing requirements for all freshman applications to UW-Madison for the 2021-22 and 2022-23 academic years.

Resolution 11591, adopted by the Board on February 5, 2021, extended the temporary suspension of ACT/SAT Requirements in Regent Policy Document 7-3, for all institutions, exempting UW-Madison, through the 2022-23 academic year.

Resolution 11754, adopted by the Board on December 10, 2021, extended the temporary suspension of the ACT/SAT Requirements in Regent Policy Document 7-3, for all institutions, including UW-Madison, through the 2024-25 academic year.

In April 2022, the Vice President for Academic & Student Affairs presented preliminary findings from the STARR Lab study to the Education Committee of the Board of Regents.² The presentation of a final report and related policy recommendations was originally targeted for April 2024.

The Universities of Wisconsin are now seeking to extend the SSTAR Lab's study to include analysis of a full cohort of students who applied under the test-optional process and matriculated through to graduation.

Related Regent Policy Documents and Applicable Laws

- Regent Policy Document 7-3, "UW System Freshman Admissions Policy"
- Wis. Stat. § 36.11(3a), Admission of Applicants

² <u>www.wisconsin.edu/regents/download/meeting materials/2022 meeting materials/Meeting-Book -Education-Committee-(April-7,-2022).pdf#page=177</u>

April 4, 2024

HOST CAMPUS PRESENTATION BY UW-PLATTEVILLE: "FOR ALL OUR STUDENTS"

REQUESTED ACTION

For information and discussion.

SUMMARY

This presentation will highlight examples of how UW-Platteville creates access to high-impact practices across the curriculum and a commitment to student success. It will also show how the university's physical campus and strategic efforts pave the way to increase UW-Platteville's hands-on approach to learning. This approach serves students of all backgrounds and disciplines, so they can: 1) reap the benefits of a college education; and 2) successfully contribute to the state of Wisconsin's economic engine upon their graduation. Students will share testimonials about the many benefits of these hands-on learning opportunities.

Presenters

- Wayne Weber, Interim Provost and Vice Chancellor for Academic Affairs
- UW Platteville students:
 - o Katlynn Steffes, Agricultural Education and Dairy Science Major
 - o Carrie LeFeber, Mechanical Engineering major
 - o Liz Winkler, Environmental Science and Conservation major

April, 2024

FIVE-YEAR UPDATE ON THE STUDENT BEHAVIORAL HEALTH INITIATIVE: PROGRESS AND OPPORTUNITY

REQUESTED ACTION

For information and discussion.

SUMMARY

This discussion will provide an overview of the first five years of the Student Behavioral Health Initiative, summarize the status of present efforts, and share what is needed for a sustainable future to support the mental health and well-being of university communities.

The presentation will first summarize what was known about the status of student mental health and the campus services available to address them in 2019, when the Board received its first major presentation about student mental health and well-being. Presenters will review the 3-tiered public health model that was proposed to frame the initiative, and the status of some of the initial recommendations that were approved in early 2020.

Presenters will next focus on the present, and what has changed since 2019, in terms of both student needs and student services. The Regents will learn about the implementation of suicide prevention training, mental health screening for athletes and others, support for behavior intervention teams, and cultural competency training opportunities that help faculty and staff better understand and serve our diverse student body. Panelists will share another brief update on the recent addition of third-party telehealth services, a development that was inconceivable in 2019. Finally, panelists will share some exciting pilot projects that move the conversation upstream, to focus on building a culture of care, promoting connectedness, and teaching proactive skills to foster student resilience and well-being, which can reduce the need for more intensive downstream services.

The presentation will close with a focus on the future. While much has been done, the need to support student mental health and wellbeing will be important far into the future. Primarily, universities need sustainable investment in the foundational campus services that students increasingly rely on for support. And, without alternative funding, the supplemental telehealth services that have provided additional support since Spring 2023

will go away when the American Rescue Plan Act (ARPA) funds are expended at the end of the 2024-25 academic year.

Finally, Regents will have an opportunity to engage in dialogue about the path forward to support the mental health and well-being of campus communities, including potential funding options to support the work.

Presenter(s)

- John Achter, Sr. Director of Student Success & Wellbeing, Universities of Wisconsin
- Randy Barker, Director of Health, Counseling, and Well-Being, UW-Superior
- Deirdre Dalsing, Director of Counseling Services, UW-Platteville
- Sandi Scott, Dean of Students and Senior Student Affairs Officer, UW-Stout

BACKGROUND

The UW has been tracking the mental health needs of students and their utilization of services for over a decade. Consistent with national trends, we have documented a significant increase in mental health symptoms among students during this time—especially prevalence of anxiety and depression—as well as a substantial rise in utilization of campus mental health services that has run counter to declines in enrollment. Also consistent with the national landscape, mental health issues were exacerbated by the COVID-19 pandemic, creating an even more challenging situation for our universities to respond to over the past few years.

To address these issues in a systematic and ongoing manner, the UW embarked on a student behavioral health initiative in 2019 to make recommendations—using a holistic public health framework—to set a foundation for understanding and responding to evolving mental health needs through prevention, early intervention, treatment, and crisis response. To date, several initial recommendations have been implemented and receive ongoing funding support. These include: 1) universally available suicide prevention training for faculty and staff; 2) recurring professional development to equip student-service professionals with knowledge and skills to serve our diverse student body; 3) threat assessment and response resources to manage high risk students and situations, minigrants to support innovative wellbeing programs; and 4) a UW medical withdrawal policy.

To address the shortage of mental health professionals available to meet rising demand for treatment services, former UW System President Tommy Thompson proposed \$10M in base funding during the 2021-23 biennial budget process, tied to achieving recommended counselor-to-student ratios at all UW universities and using telehealth to respond to a psychiatry shortage.

While this portion of the proposal was not funded in the final budget, following the pandemic, the UW received one-time ARPA funds to provide telehealth services (counseling, psychiatry, 24/7 support, and an online wellbeing platform) as a supplement to campus-based services. Although, most care is still provided on campus—and most students express a clear preference for on-campus services—the telehealth contract has provided a temporary relief valve to over-burdened campus services and increased timely access to care. Further, telehealth services have created access for students who previously did not or were unable to use campus services—such as commuter students, working adult students, online students, and others. This unplanned pilot program has resulted in serving more and different students than would otherwise be served through traditional services.

Student mental health is a key driver of student success and retention. When students are impacted by common mental health symptoms such as fatigue, loss of concentration, low motivation, sleep problems, anxiety, and excessive worry, among others, their ability to fully participate in their education and optimize their potential is compromised. At their most extreme, mental health issues lead students to drop out of college or, in the worst case scenario, consider taking their own lives. Data suggest that UW students are more at risk to strongly consider and attempt suicide than students nationally, which increases the urgency to ensure we are providing adequate services across the care continuum.

Robust and timely prevention, early intervention, treatment, and crisis response services help students along the full mental health continuum to address their needs in a personalized manner, increasing their ability to attend to their studies, stay enrolled, and thrive. Access to these services can mean the difference between thriving and languishing, passing and failing, staying in college or dropping out, and even life and death.

Previous Action or Discussion

Over the past several years, the Education Committee and the full Board of Regents has received several updates from senior student affairs officers, counseling and health professionals about evolving student mental health needs and what is being done to address them. The Student Behavioral Health Initiative was initiated in 2019 and continues to coordinate UW efforts under the leadership of Dr. Achter at UW Administration.

Related Policies

- Regent Policy Document 23-1: "Basic Health Module"
- Regent Policy Document 23-2: "<u>Health, Safety, and Security at UW System</u> Institutions"

ATTACHMENTS

- A) UW Counseling Impact Assessment Project Annual Report (2022-23)
- B) UW Counseling Director's Priority Statement



COUNSELING IMPACT ASSESSMENT REPORT

2022-23



Universities of Wisconsin

2022-23 Counseling Impact Assessment Report

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Counseling Impact Assessment Committee

Deirdre Dalsing, UW-Platteville Director, Counseling Services Committee Chair

Chasidy Faith, UW-Stout Director, Student Counseling Center

Stacey Gerken, UW-Stevens Point Director, Counseling Center

Bjorn Hanson, UW-Madison Coordinator of Data, Quality, and Informatics

Amy Henniges, UW-Green Bay Director, Health & Counseling Services

Riley McGrath, UW-Eau Claire Director, Counseling Services

Veronica Warren, UW-Whitewater Director, Counseling Center

Data Analyst:

Justin Sullivan, UW-Stout Project Manager, Catalyst

System Liaison:

John Achter, UW System Administration Senior Director of Student Success and Wellbeing Office of Enrollment and Student Success

Counseling Center Directors

Riley McGrath, UW-Eau Claire Director, Counseling Services

Amy Henniges, UW-Green Bay Director, Health & Counseling Services

Crystal Champion, UW-La Crosse Director, Counseling & Testing

Sarah Nolan, UW-Madison Director of Mental Health Services

Carrie Fleider, UW-Milwaukee Director, University Counseling Services **Leah Folks**, UW Oshkosh Director, Counseling Center

Renee' Sartin Kirby, UW-Parkside Director, Student Health & Counseling Center

Deirdre Dalsing, UW-Platteville Director, Counseling Services

Debbie Janis, UW-River Falls Director, Student Health & Counseling

Stacey Gerken, UW-Stevens Point Director, Counseling Center

Chasidy Faith, UW-Stout Director, Student Counseling Center

Randy Barker, UW-Superior Director for Health, Counseling & Well-Being

Veronica Warren, UW-Whitewater Counseling Director, University Health & Counseling Services

Acknowledgements

This work would not be possible without the commitment of time and effort from the participating counseling centers and the UW System Counseling Impact Assessment Committee. Special appreciation is extended to UW System Administration for their recognition of this important project and decision to annually fund the work, and to Catalyst at UW-Stout for coordinating data gathering and reporting.

Gratitude is extended to all counseling center staff who work tirelessly to provide effective and lasting services even during times of financial and personnel strain.



Foreword

This annual report summarizes results from the twelfth year of data collection by the Universities of Wisconsin System Counseling Impact Assessment Project, overseen by a systemwide committee of the same name. The project tracks a core set of common data elements across UW university counseling centers, for the purposes of providing benchmark data for each campus and to allow for system-level analyses of counseling utilization and impact. Incremental progress has been made each year in establishing a systematic and sustainable assessment process that both serves day-to-day clinical needs of counseling center professionals and helps them evaluate and improve upon their work. By moving thoughtfully and systematically, we hope to continue to strengthen the ways in which we assess our work for the betterment of the clients we serve.

This year's report includes data based on the utilization of extended behavioral health services available to 12 of the 13 campuses that were implemented this academic year through a UW System contract with Mantra Health. Mantra provided extended services for telecounseling and telepsychiatry and with their partner, Didi Hirsch, coordinated the UW Mental Health Support 24/7, a crisis line that provided students access through phone, text, and chat. The Mantra contract also included onboarding You@College, a web portal dedicated to student health, happiness, and success.

This report emphasizes the value of providing mental health services on a college campus and the impact it has, including timely assessment of needs, improved well-being, and student retention.

As noted in the Acknowledgements, this work would not be possible without the commitment of time and effort from individual campuses and UW System partners. We hope the resulting report proves thought-provoking to readers and provides a useful context for them to understand our evolving needs and consider ways to continue supporting the mental health and well-being of our student body.

Deirdre Dalsing, UW-Platteville

Jende Valuing

Committee Chair

Methods

The current report summarizes data collected across all 13 UW universities. The report uses two primary sources of data collection that are summarized in the table below. In addition to these two primary sources of data, counseling center directors responded to survey questions to inform the *Utilization* and *Personnel/Staffing* sections of this report.

Table 1: Measures

Client Information Form (CIF)				
 A standard intake form created by the Counseling Impact Assessment Committee and 	 Utilizes items from the Center for Collegiate Mental Health (CCMH), which allows for national 			
first implemented in 2012-13	comparisons			
 Gathers information about presenting concerns, mental health background, and academic functioning at counseling intake 	 Consists of varying response scales, depending on type of item 			
Learning Outcomes and Satisfaction (LOS) Surve	у			
 A survey created by the committee for students who utilize counseling services, administered on a semesterly basis 	 Includes an overall measure of satisfaction with services and impact of counseling on academic and other areas of life functioning 			
 Assesses the extent to which clients perceive counseling as helpful in the context of intrapersonal learning (such as stress management) and academic outcomes 	Consists of the response scales Disagree (1) to Strongly Agree (5) and Poor (1) to Excellent (5)			

Campuses collect CIF data as part of routine clinical practice when clients first request services. These data are shared in a deidentified manner with Catalyst at the end of the academic year and aggregated for reporting purposes. LOS surveys are administered at the end of each semester.

Table 2: Participation by UW University

	CIF – Intake	LOS - End of Semester
	n = 6,603	n = 1,297
UW-Eau Claire	16% (1086)	14% (185)
UW-Green Bay	1% (84)	7% (87)
UW-La Crosse	10% (642)	8% (103)
UW-Madison	13% (866)	9% (116)
UW-Milwaukee	11% (751)	11% (145)
UW Oshkosh	10% (620)	4% (53)
UW-Parkside	1% (62)	1% (17)
UW-Platteville	7% (471)	13% (164)
UW-River Falls	6% (408)	7% (83)
UW-Stevens Point	6% (419)	3% (35)
UW-Stout	8% (524)	13% (165)
UW-Superior	2% (126)	2% (24)
UW-Whitewater	8% (544)	9% (120)

^{*}UW-Madison contributed to all data sources this year. CIF and LOS data prior to 2022-23 does not include UW-Madison.

Executive Summary

- Counseling Utilization: Nearly 15,000 students utilized campus counseling services across UW universities in 2022-23, the second highest since tracking began in 2012-13. This represented nearly 10% of the student body for the second consecutive year. Note: all data in this report comes from students attending counseling at UW university counseling centers and should not be considered representative of the general student population.
- Demographics: Female students (65%) remain more likely than male students (29%) to attend counseling, and the gender gap widened this year after narrowing in 2021-22. Students who identify as transgender or other nonbinary gender category (7%) continued to increase in number, suggesting increasing willingness to self-identify and seek services. Similarly, the percentage of LGBQ students (37%) and students with disabilities (13%) have risen significantly since tracking began and are higher than national benchmark comparisons. Students of color (16%) increased as a proportion of students attending counseling this year and is consistent with proportions in the overall student population.
- Presenting Concerns and Academic Impact: Anxiety (75% of counseling clients), stress (69%), and depression (64%) continue to dominate the issues for which students seek counseling. All three increased slightly in prevalence this year. Concerns with procrastination/ motivation (48%), low self-esteem (45%), attention/concentration (43%), and problems with school/grades (43%) round out the most common presenting concerns. Of note, the percentage of students reporting eating concerns (28%) continues to rise and has almost doubled over the past 10 years. At the onset of counseling, fewer students reported having a hard time focusing on academics than last year (51% vs. 57%) and only 9% reported thinking about leaving school, the lowest since tracking began.
- Mental Health History: UW university counseling clients reporting a prior mental health history continue to increase and exceed national averages for past counseling (68% UW vs. 58% nationally) and taking medications (48% vs. 35%) and being hospitalized for mental health reasons (10% vs. 9%). After years of rising safety risk indicators, all three markers leveled off this year and are more consistent with national benchmarks: clients with a history of suicidal thoughts (35%), non-suicidal self-injury (28%), and suicide attempts (11%). These trends continue to suggest that many UW university students seeking counseling experience longstanding, serious and complex mental health needs.
- <u>Drug and Alcohol Use/Misuse History</u>: The prevalence of problematic alcohol use history among students attending counseling has been one of the most stable data points tracked by this report, consistently reported by approximately 25% of counseling clients. However, the two-week prevalence of marijuana use has increased nearly 10 percentage points since tracking began, from 14% to 23% of clients—likely the result of more relaxed attitudes and increasing legalization of recreational marijuana around the country, despite the fact that it remains illegal in Wisconsin.
- Mental Health Outcomes: On post-counseling surveys, over three-fourths of students continue to experience improvements across a variety of self-reported metrics, including overall well-being and the specific issues for which they sought counseling, consistent with psychotherapy research in other settings. Fluctuating patterns in outcome metrics over time (that is, whether they rise or fall slightly in any given year) seem reliably tied to changing patterns in utilization of services and available staffing levels, which continues to point to a link between timely access to counseling and improved client outcomes.

- Academic Outcomes: Compared to the academic years impacted by the COVID-19 pandemic, fewer counseling clients reported struggling with academics (33%) or thinking of leaving school (20%) when they entered counseling. Of those who did report struggling academically, almost two-thirds reported an increase in academic focus as a result of counseling. Of the students who reported thoughts of leaving school, 72% indicated that counseling helped them stay in school. This represents an estimated 2,100 students that counseling centers helped retain in 2022-23, accounting for approximately \$19 million in saved tuition revenue.
- Client Satisfaction: UW students report very high satisfaction with counseling services and a strong desire for access to on-campus services. Client ratings of appointment availability have declined slightly since the pandemic as utilization has rebounded, once again putting more strain on services. On-campus services remain the primary student preference as reflected in both high utilization of counseling centers and student self-report on the counseling follow-up survey. Students also continue to express desire for the flexibility of telehealth options under some circumstances.
- Personnel/Staffing: The student-to-counselor ratio was at its lowest level this year since tracking began, averaging 1,341:1. This ratio has improved slowly and steadily over several years, yet remains higher than the recommended ratio of 1,000:1 in a high utilization environment. The Clinical Load Index (CLI), which reflects standardized caseload levels, showed an average of 112 clients per counselor this year, compared to 110 last year. This is slightly higher than the national average (106). Staff retention has continued to be a concern, with 80% of centers reporting attrition this year and over 50 positions turning over in the past five years—with some centers experiencing more than 100% turnover in that time period. These data underscore the continued need to attend to adequate staffing levels to both provide high-quality mental health treatment services and attend to staff well-being and retention.
- Telehealth Services: Beginning in January 2023, all UW universities except Madison implemented three telemental health and wellbeing services as a supplement to on-campus services: 1) *You at College* online, personalized, self-help and skill-building portal addressing academic and career success, purpose and connection, and physical and mental well-being; 2) *UW Mental Health Support 24/7* Phone, text, and chat services with trained counselors, available 24/7; 3) *Mantra Health* telecounseling and telepsychiatry services, coordinated with campus-based services. One semester of data indicated that students are finding and appreciating the additional services and that the services are showing signs of addressing important service gaps. These services are funded through the American Rescue Plan Act through 2025. The next two years will further inform whether they provide added value to current campus offerings.

Introduction

Counseling services on university campuses play a critical role in the success of today's students as mental health issues have become more normalized and students continue to seek services in record numbers. From the core services of individual and group counseling to the equally important work of crisis intervention, prevention education, skills workshops, and campus consultation, counseling center professionals strive to be responsive to the evolving mental health and well-being needs of their campus communities.

This report shares the latest data from the Counseling Impact Assessment Project (CIAP), initiated by UW university counseling directors in 2010 to provide a systematic way to track trends, assess their work, and engage in ongoing quality improvement. This project continues to support the work done in our counseling centers by providing data and responses from students who continue to find value in the services provided. Data in this report are in alignment with national research that shows when students improve as a result of counseling, they are more likely to persist in their education.

Finally, an important reminder to all readers of this report: all data in this report comes from students attending counseling at UW university counseling centers and should not be considered representative of the general student population.

Client Utilization and Demographics

Confidential and free short-term counseling services are available to all UW students as a part of tuition and fees paid at each university. As shown in Table 3, nearly 15,000 students utilized campus counseling services across UW universities in 2022-23, representing almost 10% of the overall student population. With an average session attendance of five sessions, this translates to almost 75,000 counseling sessions provided across our university counseling centers.

Table 3: Counseling Center Utilization, 2022-23

Total number of clients	Total university enrollment ¹	Percentage of student population attending counseling	Average sessions attended
14,815	150,821	9.8%	5.0

¹Fall 2022, 10th day headcount of students eligible for counseling services (including branch campuses)

Figure 1 illustrates the five-year trend in the number of students receiving counseling services. This remained 4% higher than the previous five-year average, confirming that counseling centers continue to be a highly utilized resource by students seeking help with their mental health. A campus-by-campus breakdown of counseling utilization over the past five years can be found in Appendix 1. In addition to campus counseling services, the 12 UW universities that implemented supplemental telecounseling services through Mantra Health added almost 1% to the proportion of students on their campuses attending counseling this year. Initial data on the full range of telemental health and well-being services implemented can be found in Appendix 5.



Figure 1: Counseling Center Utilization, Five-Year Trend

As can be seen in Table 4, during 2022-23, centers saw an increased percentage of female clients (65%) and decreased percentage of male clients (29%) from the prior year. This is consistent with typical clientele in counseling centers nationally, though a shift from the previous year when the gender gap was the narrowest it has been since tracking began. Also, important to note is the increasing number of students identifying as transgender or other nonbinary gender category, which represented 7% of counseling clients in 2022-23. This percentage is higher than the national average of 5%, according to the latest data from the Center for Collegiate Mental Health (CCMH, 2023). These students report higher levels of mental health symptoms in population surveys (ACHA, 2022) and have been a focus of mental health outreach in recent years. Their increasing numbers suggests greater willingness to self-identify and to seek services.

Some historically underrepresented populations of students who also report higher levels of mental health symptoms have been accessing services in greater numbers in recent years —including Lesbian, Gay, Bisexual and Queer or Questioning (LGBQ) students (37%) and students with disabilities (13%). Students of color (16%) seeking counseling also increased in percentage during 2022-23 and is slightly lower than the percentage of students of color in the overall UW student population (19% in Fall 2022). The comparable CCMH benchmark for students of color is much higher (39%), which reflects greater levels of racial/ethnic diversity in universities around the U.S. Students with documented disabilities appear to be overrepresented in counseling, comprising 13% of counseling clients compared to 11% in the national CCMH dataset and 8.7% of the overall UW student population, according to the most recent Services for Students with Disabilities Annual Report (Universities of Wisconsin System, 2023). LGBQ students are also likely to be overrepresented in counseling, and to a greater degree. While no UW university benchmark exists for LGBQ students, a 2021 Gallup poll of Generation Z (into which most current college students fall) indicated that just over 15% identify as nonheterosexual. It is therefore remarkable that 37% of UW counseling clients identified as LGBQ this year, a proportion that also exceeds the 32% CCMH benchmark of counseling clients at other U.S colleges and universities in 2021-22. See Appendix 2 for a complete summary of client demographics and Appendix 4 for the full data on trends displayed in Table 4.

Table 4: Demographic Trend Data

ltem	10-Year Change	2012/13 to 2022/23	Lowest	Highest	UW System 2022-23	CCMH 2021-22
Demographic Trend Data						
Female	1.7%		63.3%	70.0%	65.0%	63.0%
Male	-5.7%		27.5%	34.7%	29.0%	32.0%
Transgender/Non-Binary	6.4%		0.6%	7.0%	7.0%	1.0%
White	-1.0%		84.0%	86.5%	84.0%	61.0%
Students of Color	3.0%		13.0%	16.2%	16.0%	39.0%
Heterosexual	-22.5%	1	63.0%	85.5%	63.0%	68.0%
LGBQ	27.2%		9.8%	37.0%	37.0%	32.0%
Registered Disability	5.3%		7.0%	13.0%	13.0%	11.0%

NOTE: 10-year change in this and all subsequent tables is represented as percentage point change, subtracting the percentage of students in each category in 2012-13 from the percentage in 2022-23. Appendix 4 contains the multi-year data used for these calculations.

Client Presenting Concerns and Personal Histories

Counseling centers assist students with a wide variety of personal and mental health concerns. Similar to previous years, the top concerns for which students sought counseling in 2022-2023 were anxiety, fears, or worries (75% of students), stress and stress management (69%), and depression, sadness, or mood swings (64%) (see Table 5). Just under half of all clients noted procrastination/ motivation concerns (48%) followed by low self-esteem/self-confidence (45%). Concerns about eating behavior and the possibility of eating disorders continues to increase since the pandemic, with 28% of students presenting this as their reason for seeking counseling. Best-practice models encourage a multidisciplinary team approach because of the complexity of presenting issues which is considered challenging in the college environment due to limited resources including staffing capacity and specialized training. Data supports a downward trend in students considering withdrawal from college (prior to entering counseling), which could be a result of stabilizing factors with return to in-person classes and campus engagement effort. The full list of presenting concerns and academic impacts can be found in Appendix 2. The full data on trends displayed in Tables 5 and 6 can be found in Appendix 4.

<u>Table 5: Presenting Concerns</u>

ltem	10-Year Change	2012/13 to 2022/23	Lowest	Highest	UW System 2022-23
Presenting Concerns					
Anxiety	15.1%		59.9%	76.0%	75.0%
Stress	4.3%		59.0%	69.0%	69.0%
Depression	9.9%		54.1%	67.1%	64.0%
Procrastination	12.0%		36.0%	50.0%	48.0%
Low self-esteem	7.5%		37.5%	47.0%	45.0%
Attention	6.6%		30.0%	44.0%	44.0%
Problems related to school or grades	0.8%		26.0%	45.3%	43.0%
Friends	3.4%		24.6%	32.0%	28.0%
Sleep Difficulties	4.7%		23.3%	31.3%	28.0%
Eating Behavior	12.2%		15.8%	28.0%	28.0%

Table 6: Academic Impact

ltem	10-Year Change	2012/13 to 2022/23	Lowest	Highest	UW System 2022-23
I am having a hard time focusing on my		. ^			
academics (agree/strongly agree)	-0.7%		50.0%	57.0%	51.0%
I am thinking about leaving school					
(agree/strongly agree)	-2.3%		9.0%	15.6%	9.0%

As shown in Table 7, trends in responses to some mental health history items continue to increase, including the proportion of counseling clients reporting a history of previous counseling and use of medication for mental health reasons. The proportion of students reporting prior mental health hospitalization has remained relatively consistent. It should be noted that all of these mental health history markers are reported at a rate higher than national benchmarks, indicating that UW university counseling centers have needed to be more prepared for students with higher levels of need, including chronic conditions. After years of an increasing percentage of students endorsing safety-risk concerns, we are starting to see a small drop on all three items assessed (history of nonsuicidal self-injury, seriously considering suicide, and making one or more suicide attempts), which puts them more in line with national benchmarks.

<u>Table 7: Prior Mental Health and Alcohol/Drug Use History</u>

ltem	10-Year Change	2012/13 to 2022/23	Lowest	Highest	UW System 2022-23	CCMH 2021-22
Prior Treatment						
Counseling	20.8%	——	47.2%	68.0%	68.0%	59.0%
Medication	15.7%		32.3%	48.0%	48.0%	35.0%
Hospitalization	3.8%		6.2%	11.0%	10.0%	9.0%
Threat to Self						
Non-Suicidal Self-Injury	7.9%		20.1%	31.0%	28.0%	28.0%
Serious Suicidal Ideation	11.0%		24.0%	36.0%	35.0%	34.0%
Suicide Attempt(s)	4.4%		6.6%	12.0%	11.0%	10.0%
Drug and Alcohol						
Felt the need to reduce your alcohol or drug						
use	-1.1%		24.0%	26.0%	24.0%	26.0%
Marijuana Use	8.6%		14.4%	23.0%	23.0%	25.0%
Marijuana Use	8.6%		14.4%	23.0%	23.0%	

In terms of drug and alcohol history, it is notable that the prevalence of problematic alcohol use has remained highly stable over time (around 25% of clients), while the two-week prevalence of marijuana use among counseling clients has continued to rise, moving almost 10 percentage points (from 14% to 23% of clients) since we began tracking. This remains slightly below the national average. As more states legalize recreational use of marijuana, more accepting attitudes will likely lead to a continued rise in marijuana use prevalence, despite the fact that it remains illegal in Wisconsin. It is important to note that only a small percentage of clients identify alcohol or drug use as a presenting concern upon intake, and campus counseling centers generally do not provide a full continuum of substance abuse treatment. Rather, their scope is limited to harm-reduction approaches to address mild to moderate levels of alcohol and other drug misuse, with community referrals made for those in need of more specialized treatment.

Client Outcomes

To assess the impact of counseling on student intrapersonal learning and emotional well-being, the Learning Outcome and Satisfaction (LOS) survey looks at several key self-report indicators. Data presented in Table 8 shows that positive outcomes are consistently reported by over three-fourths of students in several areas, including 1) making improvements on their identified issues, 2) feeling better prepared to work through future concerns, and 3) experiencing an improvement in well-being from the beginning to the end of counseling.

The vast majority of counseling clients also continue to rate the effectiveness of services offered as good, very good, and excellent, although fluctuations seen from year-to-year parallel fluctuations in number of students seeking services and staffing levels. As noted in previous reports, research supports that the number and frequency of counseling appointments attended impacts the amount of improvement experienced (CCMH, 2020). It is anticipated that if counseling centers continue to struggle to fill positions or maintain adequate staffing levels to meet student demand, students will experience poorer outcomes.

See Appendix 3 for a complete summary of LOS data and Appendix 4 for the full data on trends displayed in Tables 8-10.

<u>Table 8: Interpersonal and Emotional Well-Being Outcomes</u>

ltem	10-Year Change	2012/13 to 2022/23	Lowest	Highest	UW System 2022-23
Client Outcomes: Interpersonal and Emotiona	l Well Being	,			
I made improvements on the specific issues for					
which I sought counseling.	-0.4%		80.0%	86.0%	83.0%
I am better prepared to work through future					
concerns and achieve my goals.	1.6%		75.0%	80.2%	78.0%
I increased my ability to think clearly and)			
critically about my problems.	0.2%		74.0%	79.0%	78.0%
Percentage of students who self-reported an					
increase in well-being from the beginning of					
services to the end of services.	-4.4%	*	78.0%	82.4%	78.0%
% of students who rated the effectiveness of					
therapy in helping students with their problems					
as good, very good, excellent.	-5.4%		83.0%	93.0%	83.0%

Improvements in well-being often translate into academic improvements. To assess the impact of counseling services on academic outcomes, students who sought counseling were asked if they were struggling with academics and/or thinking about leaving school (see Table 9). The percentage of students who report struggling with academics (33%) has decreased slightly since the pandemic, as has the percentage of students who indicated they were thinking about leaving school (20%). Of the students who indicated they were struggling academically; counseling has continued to assist them in increasing focus on academics (63%). And of the students who indicated they were thinking about leaving school, 72% indicated that counseling helped them stay in school.

Extrapolating the percentage of students who were thinking of leaving school (20%) but decided to stay after their experience in counseling (72%) to the approximately 14,815 students attending counseling in 2022-23, we estimate that counseling centers helped retain approximately 2,133 students this year who otherwise might have left because their mental health was significantly impacting their ability to be successful. Assuming an average undergraduate resident tuition and fee rate across UW universities of \$8,840, this accounts for approximately \$19 million in saved tuition revenue that can be at least partially attributed to having counseling services on campus.

Table 9: Academic Outcomes

ltem	10-Year Change	2012/13 to 2022/23	Lowest	Highest	UW System 2022-23
Client Outcomes: Academics					
% of students who reported they were		, ,			
struggling academically prior to counseling.	-5.0%	*	33.0%	38.0%	33.0%
Of those who reported struggling					
academically, the % of students who					
reported increased focus as a result of					
counseling.	-3.0%	~	62.0%	67.0%	63.0%
% of students who reported they were		_			
thinking of leaving school prior to					
counseling.	-5.0%		20.0%	25.0%	20.0%
Of those who reported they were thinking					
of leaving school, the % of students who					
reported that counseling helped them to					
stay in school.	-6.8%		72.0%	79.0%	72.0%

Client Satisfaction

UW university students utilizing counseling have consistently reported high satisfaction with services received on the Learning Outcome and Satisfaction Survey (LOS). Table 10 shows 10-year satisfaction trends for appointment scheduling, access to services, and willingness to return and refer others, with a range of 83% to 95% of students giving favorable ratings on items assessing these service categories this year. While client satisfaction levels remain high overall, metrics assessing appointment availability have declined slightly since the pandemic as utilization rebounded, putting more strain on appointment availability. Almost all clients (95%) continue to express a value in having access to counseling services on campus. While UW System launched a three-year contract with Mantra Health in 2022-23 to expand mental health treatment access through telecounseling and telepsychiatry across twelve UW universities (excluding Madison; see Appendix 5), on-campus services remain the primary student preference as reflected in both high utilization of counseling centers and student self-report on the counseling follow-up survey (described further in this section).

Table 10: Client Satisfaction

ltem Control of the c	10-Year Change	2012/13 to 2022/23	Lowest	Highest	UW System 2022-23
Client Satisfaction	1				
I was able to get my first appointment in a					
timely manner	-5.9%		81.0%	88.9%	83.0%
I was able to get follow-up appointments in		$\overline{}$			
a timely manner	-2.9%		81.8%	87.0%	83.0%
It is important for me to have counseling					
services located on campus	-1.4%		90.0%	96.4%	95.0%
I would return to the counseling center					
again	-0.9%		91.0%	92.9%	92.0%
I would recommend counseling services to a					
friend	-1.0%		92.0%	94.0%	93.0%

Qualitative data continues to emphasize this desire for increased access to on-campus care. When asked what could be improved about their counseling experience, one student commented: "how difficult it was to get in and see a counselor. In March, I was only able to see my counselor once because of how busy she was. The infrequency of appointments made it hard to feel like we were making any progress on the issues that I am having." Client comments frequently reference a wish that they "could have more sessions" and that "the sessions could be longer, or more frequent," giving voice to the link between level of service and client outcomes.

Students provided qualitative feedback on their counseling experiences via three questions: What was most helpful?; What was least helpful?; and, What are your suggestions for improvement? A representative sample of responses is included below, offering insights into the needs of students and counseling centers.

What was most helpful about attending counseling?

- "I was never able to open up to therapists because it was very hard for me to meet a BIPOC therapist and also build trust. [The counselor] really helped me and saved my life.... I finally believe I met a therapist and psychiatrist I can work with. They really did an excellent job with someone who was suicidal and in the dark to bring me out to hope and light at the end of the tunnel."
- "It's helpful to talk to someone about your issues without bias. They are also trained to deal with topics like suicide and self-harm that I can't really talk to anyone else with."
- "Convenient location on campus, free of charge."
- "Having a safe space on campus to talk about and openly process my struggles without fear of judgment. It took me a couple of sessions to overcome my anxiety about opening up to someone because I feared being a burden. Therapy helped me realize that it's ok for me to open up to others about my struggles and that it' part of self-care, not being a burden. I started being more open with my parents and close friends and that has been very beneficial in my life."

What was least helpful?

- "Nothing" (most frequent response)
- "I would say that the least helpful is that sometimes appointments go a bit between each other but

I know it is because there are so many students that demand the resources that the counseling center provides – so it doesn't really make me too upset, I am glad people are getting access to things that they otherwise may not have access too."

- "Scheduling."
- "Since the services are so popular and needed, it's hard to get an appointment."
- "That are so few counselors compared to the number of students. It can be quite a while before you can have your first meeting because the counselors are so booked."

Suggestions for Improvement.

- "You should hire more counselors for the students. It made a great impact in my life and I wish the same things for other students."
- "Y'all are very understaffed. It took about a month to get my first appointment, and my appointments are 30 minutes each through to the end of the semester because the demand for counseling is so much higher than it was earlier in the semester. This is not okay. People with mental illness should have access to local and in-person care and be able to get it quickly. All of these problems would be less severe with more staff members on your team. PLEASE hire more staff and get clients in more quickly and for full sessions."
- "Maybe a counseling portal of some sort, to see past appointments and future appointments, topics discussed and counselors."
- "Give the counselors a raise."
- "Hire more people I know there's a huge demand, and online help through Mantra just isn't the same."
- "I just wish it was more accessible to every student. My case was deemed urgent because I was having suicidal thoughts, so I was thankfully able to get in. But, I know this is not the case for everyone."

Finally, the LOS continues to ask a few questions related to telecounseling experiences and preferences. While most students (71%) indicated that most or all of their counseling appointments were attended inperson, a sizable minority (29%) indicated that some or all of their appointments were attended via telehealth, indicating that centers continue to provide flexible options for students. In terms of preferences, 84% expressed a preference for in-person care vs. 16% for telehealth. When asked whether telehealth should continue to be offered as an option, 43% indicated a strong desire, 39% were neutral, and 19% indicated no desire. Consistent with the past few years, these results communicate a primary preference for in-person services and appreciation for the availability of telecounseling as an alternative option.

Personnel/Staffing

Mental health professionals working at UW University counseling centers include licensed psychologists, counselors, social workers, and marriage and family therapists. Many centers also hire staff that are in the process of accruing the clinical hours needed for independent practice and require weekly clinical supervision. The number of professional staff relative to campus enrollment is a critical indicator of a counseling center's ability to provide timely and effective services. This annual report has been tracking the ratio of students to counselors over the course of several years. According to the International Accreditation of Counseling Services (IACS) *Standards for University and College Counseling Services* (2020), "Every effort should be made to maintain minimum staffing ratios in the range of one FTE professional staff member (excluding trainees) for every 1,000-1,500 students, depending on services offered and other campus mental

health agencies." Figure 2 displays the average ratio of students to counselors across UW universities over the past six academic years. After a one-year rise in the ratio two years ago, the ratio continued to recover slightly in 2022-23 to an average of 1,341 students to every one counselor—the lowest ratio since this report began tracking and in between the upper lower limits of the minimum recommended ratio. The lower ratio of 1,000:1 has become the preferred minimum standard given the increase in utilization of counseling services over the last several years.

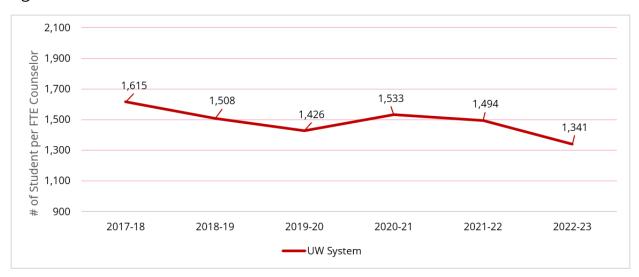


Figure 2: Six-Year Trend: Ratio of Students to Counselors

To illustrate the variability of the student-to-counselor ratio across UW Universities, Table 11 displays the eight-year trend of students to counselors by campus. This year, nine of 13 counseling centers met the 1,500:1 higher minimum ratio; and only three met the 1,000:1 preferred minimum ratio (with four others getting close to meeting this standard). As state funding has dwindled as a proportion of UW institutional budgets in recent decades, most counseling centers turned to segregated fees as a primary source of service funding. While this has helped many campuses improve staffing levels, it has also resulted in unequal funding levels and staffing discrepancies systemwide because segregated fees are subject to individual institutional priorities and approval processes. The UW System behavioral health initiative has recognized these inequities and highlighted them as an important issue to address.

In spring 2020, a systemwide behavioral health workgroup recommended that all UW universities work toward the 1,000:1 ratio considering the significant spike in utilization seen in the last decade. Without this level of staffing, campuses are forced to make decisions that place limits on timeliness of access and amount of services provided, which contribute to lower levels of improvement in both well-being and academic outcomes that are delineated elsewhere in this report. The addition of supplemental telecounseling services through Mantra Health during the spring semester helped to partially address access issues on some of our campuses (see Appendix 5), and the 2023-24 academic year will continue to inform the impact these services might have on improving student access to care.

Table 11: Eight-Year Trend: Ratio of Students to Counselors by University

Campus	2015	2016	2017	2018	2019	2020	2021	2022	Trend
Eau Claire	1599	1526	1312	1544	1100	1205	1084	884	~~
Green Bay	1983	2816	2840	2224	1944	2847	2041	1724	$\overline{}$
La Crosse	1706	1573	1566	1568	1229	1190	984	1689	
Madison	1636	981	951	830	708	867	902	1417	
Milwaukee	2952	2252	2187	2134	1991	2747	2002	1781	\\
Oshkosh	1441	1356	1349	1403	1105	1647	997	812	~~
Parkside	2224	2138	2084	2045	2150	2250	2072	2644	\checkmark
Platteville	2543	2177	1739	1616	1475	1678	1067	1019	~
River Falls	1554	1598	1595	1344	1291	1323	1021	897	~
Stevens Point	1434	1443	1212	1145	1512	1848	1641	1170	~_^
Stout	1558	1697	1364	1270	949	1107	1672	1008	~
Superior	1321	1577	947	918	1339	1011	1044	1033	^
Whitewater	1737	1626	1855	1558	1751	1454	2901	1357	/

An additional metric used to provide perspective on appropriate staffing and service levels for counseling centers is the Clinical Load Index (CLI), developed through a partnership between the Center for Collegiate Mental Health (CCMH), the International Accreditation of Counseling Services (IACS), and the Association for University and College Counseling Center Directors (AUCCCD). The CLI is a standardized metric that is most easily thought of as the average annual caseload for a full-time counselor at a given center. Instead of focusing exclusively on full-time equivalent (FTE) staffing levels, the CLI considers the actual number of students seeking services (counseling center utilization) and the amount of "clinical capacity" (weekly appointment availability) to calculate a score that describes the relationship between the supply and demand for counseling at any given center.

Figure 3 shows the CLI distribution for UW university counseling centers (represented by blue dots) during the 2022-23 academic year, compared to the 2021-22 national reference group of campuses collected by CCMH (represented by gray dots). The average CLI score reported by CCMH in 2021-22 was 106 (which translates to 106 students seen by each full-time counselor, per year). This compares to an average CLI of 112 (range: 82 to 181) across UW University counseling centers in 2022-23, similar to last year. This puts most of our campuses in the mid-range of this metric. It should be noted, however, that the outliers on both ends of the continuum have significantly different capabilities when it comes to serving students. As CCMH (2020) research has documented, higher CLI scores are associated with lower treatment dosages (fewer and less frequent appointments), which are, in turn, associated with less improvement in symptoms of common concerns like depression, anxiety, and general distress. Lower CLI scores are associated with the opposite—higher treatment dosage and greater levels of improvement.

Subsequent CCMH guidance related to the CLI suggest that it should be used to help university leaders engage in honest discussions to seek alignment between staffing levels, scope of service, and the expectations of critical stakeholders including students, faculty, staff, administrators, and parents/family (Locke, 2021). When there is a misalignment between what is expected and what is possible, this has the potential to contribute to stress and discontent among all affected parties.

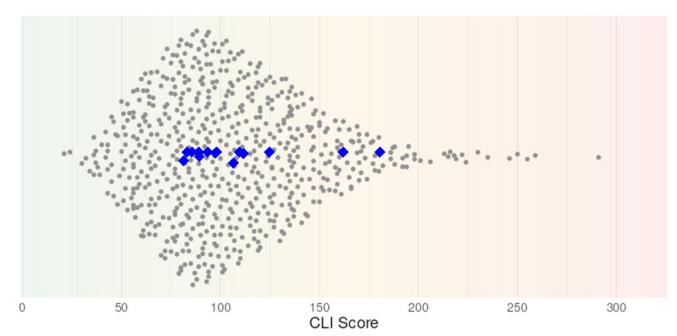


Figure 3: Clinical Load Index (CLI) Distribution (2021-2022 Comparison Data)

Both student-to-counselor ratios and the CLI provide important ways of monitoring our ability to provide quality mental health treatment services on our campuses. These two metrics will continue to inform efforts to reach more favorable and equitable staffing levels to better serve the needs of our students in the future.

Staff Retention

In response to anecdotal reports across UW universities and nationally in the past couple of years, counseling center directors were once again surveyed to explore growing concerns about counselor retention and difficulties filling open positions. Ten of 13 directors completed the survey, which did not include UW-Madison or UW-Milwaukee, the UW universities with the largest number of counseling staff. Among the 10 responding centers, eight of them (80%) reported the loss of at least one counselor in 2022-23—three reported losing three or more, and only two centers reported that all clinical staff were retained. This is very similar to the data from the previous year when four centers reported losing three or more clinical staff and two retained all of their clinical staff. These numbers suggest slightly higher attrition than reported in the most recent national survey of counseling center directors (AUCCCD, 2022), which showed that 69% of centers experienced turnover in 2021-22, accounting for one in five clinical positions.

Expanding the exploration of turnover beyond a single year, nine centers responded to a survey question related to turnover in the past five years. Those universities reported losing a total of 52 counseling staff in the past five years (see Figure 4), which is 1 more than the total staff FTE (51) employed at these centers in 2022-23—representing an aggregate turnover rate of 100%. Three centers reported losing 10 or more counselors each during this time period, and no center retained all of their clinical staff. When looking at the percentage of staff turnover by university, three universities turned over 100% or more of their positions during this time period, one university turned over 71%, three universities were in the 40-50% range, and one university reported 33% turnover. It should also be noted that turnover has impacted the director ranks. Eight of 13 counseling director positions have turned over in the last six years, with only three due to retirement. These survey results appear to confirm the anecdotal reports of concern about professional staff turnover in UW university counseling centers, consistent with national trends.

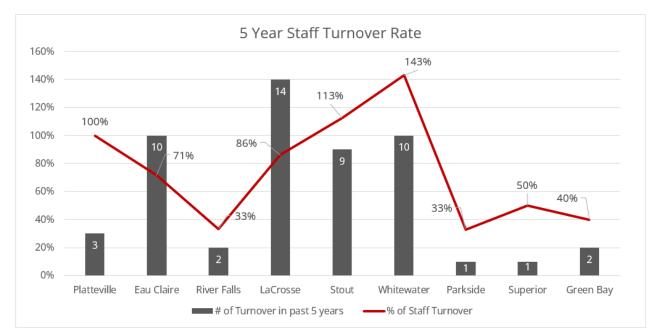


Figure 4: Five-Year Staff Turnover

When asked about the impact losing staff has on centers, there was a clear consensus that the impact has been significant. Below are a few of the impacts identified by directors:

- Loss of institutional knowledge and clinical experience
- Negative impact on clients (gaps in appointment availability; loss of continuity of care)
- Increased workload for remaining staff, contributing to lower morale and burnout
- Search processes that are slow, produce low numbers of applicants, and are not always successful
- Onboarding of new, unlicensed staff, requires clinical supervision, taking time away from clinical services
- Challenge to replace staff with specialized training (for example, eating disorders, trans health, sexual trauma)

Directors noted that recruiting and hiring has remained challenging, with eight of the nine directors identifying having a hard time recruiting for clinical vacancies. When asked about the reasons counseling staff are leaving, the top three answers given were:

- 1) Low salary
- 2) Work conditions (such as hectic schedules, heavy client load, severity of cases, lack of support)
- 3) Lack of flexibility

The top two reasons are identical to those given in the most recent national director survey (AUCCCD, 2022). The third most frequent reason in that report was "departure from the counseling field."

Since salary was identified as the primary barrier to hiring new clinicians, we include a comparison of average starting salaries at UW university counseling centers compared to national data published by AUCCCD (2022). As can be seen in Table 12, the average starting salaries for counselors and psychologists at UW universities lag behind both national and Midwest averages.

Table 12: Average Starting Salaries for University Counselors and Psychologists

Position	UW Starting Salary	Midwest Starting Salary	National Starting Salary
Counselor	\$52,431	\$61,993	\$65,877
Psychologist	\$72,444	\$77,600	\$79,278

According to our survey, the average starting salary for masters-level counselors at UW University counseling centers in the last year was over \$9,000 lower than the average for universities in the Midwest, and over\$13,000 lower than the national average. It is also notable that the average salary for all counselors at UW universities was \$53,947, only \$1,500 greater than the average starting salary, suggesting either that most counselors are relatively new in their positions and/or that there are issues with salary compression. The discrepancy between psychologist pay at UW counseling centers compared to averages in the Midwest (approx. \$5,000 lower) and nationally (approx. \$7,000 lower) is slightly less than for counselors, but still significant. These data show that, on average, UW university counseling centers are not currently offering competitive salaries when compared to peer universities.

Directors have implemented several strategies to help improve staff retention, including offering work-from-home days, prioritizing wellness, building a positive and affirming workplace environment, and advocating for salary increases. These efforts will continue, but until workload and compensation levels can be improved, turnover will continue to be a challenge that poses direct adverse impacts on our students.

Conclusion

This report documents both the successes and challenges of providing mental health counseling services at UW universities. The data presented over multiple years—both quantitative and qualitive—strongly supports the contributions of counseling services to student success and well-being. The report also makes clear that the challenges to providing adequate service levels continue due to high demand, greater complexity of student needs, and, most recently, issues with recruitment, retention, and pay levels for staff.

As UW universities enter the 2023-24 academic year, budget challenges loom even larger across the state due to persistent challenges with enrollment, structural deficits at many of our universities, and reduced state funding, all adding to already difficult circumstances. As recognition of the role of student mental health and well-being as a critical factor in student success has grown over the past several years, we hope that funding for these services will be prioritized when difficult programmatic and staffing decisions need to be made at our universities. The data in this report can inform critical conversations among stakeholders about the role that counseling centers play in student success and the scope of services they can reasonably provide. This is a critically important aspect of a holistic, campuswide approach to promoting student mental health and well-being. Counseling center staff, working together with other staff, faculty, and administrators, will continue to be leaders in these important discussions.

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Appendices

Appendix 1: Number and Percentage of Students Attending Counseling, by Campus

		Total Co	ounseling	Clients			•
Campus	2018-19	2019-20	2020-21	2021-22	2022-23	% of Total Enrollment 2022-23	5-year Change in Utilization
Eau Claire	1,140	1,206	910	1,162	1,079	11.2%	-5.3%
Green Bay	440	509	391	528	657	9.4%	49.3%
La Crosse	1,018	996	742	1,091	826	8.0%	-18.9%
Madison	5,658	4,600	5,523	6,689	6,358	12.7%	12.4%
Milwaukee	1,401	1,564	1,150	1,546	1,405	6.1%	0.3%
Oshkosh	1,280	1,348	1,401	1,401	888	10.9%	-30.6%
Parkside	169	277	139	144	119	3.0%	-29.6%
Platteville	522	596	390	531	651	11.6%	24.7%
River Falls	529	558	387	524	620	11.9%	17.2%
Stevens Point	652	495	483	534	520	7.1%	-20.2%
Stout	758	781	537	694	743	11.4%	-2.0%
Superior	165	185	160	150	215	6.9%	30.3%
Whitewater	906	948	791	723	734	6.6%	-19.0%
TOTAL	14,638	14,063	13,004	15,717	14,815	9.8%	1.2%

Appendix 2: Client Information Form (CIF)

Designed to measure client characteristics and history, the CIF consists of a presenting concerns checklist, four items assessing intake academic functioning, and the standard demographic and personal history items established by the Center for Collegiate Mental Health (CCMH). The 2022-23 results of the CIF are presented below, with benchmark comparisons to national counseling center data collected by CCMH during the 2021-22 academic year (the most recent available).

CIF Client Demographics

	Counseling	UW System	CCMII
	Clients (n = 6,603)	Population (n=160,782)	CCMH (n =190,907)
Academic Status (%) (n = 5,647)	(11 – 0,003)	(11-100,782)	(11 – 130,307)
Freshman/ First year	27%	19%	21%
Sophomore	22%	17%	19%
Junior	20%	17%	22%
Senior	21%	23%	20%
Graduate/Professional Degree	8%	16%	17%
Other	2%	-%	1%
Gender Identity (%) (n = 5,647)		1	•
Woman	65%	45%	63%
Man	29%	55%	32%
Transgender	2%	-%	1%
Other Non-Binary/Self-Identify	5%	-%	4%
Race/Ethnicity (%) (n = 5,589)			
White	84%	73%	61%
Asian American/ Asian	4%	2%	11%
Multi-racial	3%	3%	5%
Hispanic/ Latino(a)	5%	7%	11%
African American/Black	3%	3%	10%
American Indian or Alaskan Native	-%	<1%	1%
Self-identify	<1%	2%	2%
Native Hawaiian or Pacific Islander	<1%	<1%	<1%
Sexual Orientation (%) (n = 5,545)			
Heterosexual	63%	-%	68%
Bisexual	19%	-%	14%
Self-identify	9%	-%	1%
Questioning	4%	-%	4%
Lesbian	3%	-%	2%
Gay	3%	-%	3%
GPA [Mean (SD)]	3.29 (.59)	-	-
International Student (% Yes)	2%	6%	8%
First Generation Student (% Yes)	25%	30%	30%
Age [Mean (SD)]	21 (3.54)	21-24 AVG	22 (4.02)
US Military Service (% Yes)	2%	2%	1%
Traumatic/Stressful Military Experience [% Yes (n)]	1% (29)	-% (-)	34% (121,718)

	Counseling Clients (n = 6,603)	UW System Population (n=160,782)	CCMH (n =190,907)
Student Athlete (% Yes)	12%	-%	14%
Transfer Student (% Yes)	18%	4%	00%

	Counseling	ССМН
	Clients	(n = 190,907)
	(n = 6,603)	
Current Housing (%) (n = 5,742)	<u> </u>	
On-campus residence hall/ apartment	48%	36%
Off-campus apartment/house	49%	61%
On/off-campus co-operative housing	1%	1%
On/off-campus fraternity/sorority house	1%	2%
Other	1%	1%
Who do you Live With (%) (n = 6,602)	·	•
Roommate(s)	66%	66%
Alone	17%	14%
Spouse, partner, or significant other	8%	10%
Parent(s) or guardian(s)	8%	10%
Family other	4%	6%
Children	1%	2%
Other	1%	1%
Relationship Status (%) (n = 4,481)		
Single	58%	61%
Serious dating or committed relationship	39%	34%
Married	2%	4%
Divorced	<1%	<1%
Civil union, domestic partnership, or equivalent	<1%	<1%
Widowed	0%	<1%
Separated	<1%	<1%
Current Financial Situation (n = 6,317)		
Always stressful	13%	11%
Often stressful	23%	15%
Sometimes stressful	38%	24%
Rarely stressful	20%	28%
Never stressful	6%	21%
Registered Disability (% Yes)	13%	11%
If yes, which category- check all that apply (%)	1370	1 1 70
Attention Deficit/Hyperactivity Disorder	51%	47%
Difficulty Hearing	4%	3%
Specific Learning Disability	16%	13%
Mobility Impairments	3%	4%
Health Impairment/Condition	10%	11%
Psychological Disorder/Condition	31%	31%

Visual Impairments/Difficulty Seeing	2%	2%
Traumatic Brain Injury	3%	2%
Cognitive Difficulties/Intellectual Disability	5%	4%
Difficulty Speaking/Language Impairment	1%	1%
Autism Spectrum Disorder	6%	7%
Other	17%	16%
Religious/Spiritual Preference (%) (n = 4,813)		
Christian	25%	30%
Catholic	12%	13%
Agnostic	19%	17%
Atheist	13%	10%
Self-identify	4%	4%
Buddhist	<1%	1%
Jewish	1%	2%
Muslim	1%	2%
Hindu	<1%	2%
No preference	25%	21%
Hours of Work Per Week (%) (n = 3,638)		
0	35%	41%
1-5	8%	6%
6-10	18%	11%
11-15	12%	10%
16-20	12%	13%
21-25	6%	7%
26-30	5%	4%
31-35	1%	2%
36-40	2%	3%
40+	2%	3%

Client Reported Presenting Concerns - % Reporting Yes

Items	Counseling Clients (n = 6,603)
Anxiety/fears/worries (other than academic)	75%
Stress/stress management	69%
Depression/sadness/mood swings	64%
Procrastination/motivation	48%
Low self-esteem/confidence	45%
Attention/concentration	44%
Problems related to school or grades	43%
Friends/roommates/dating concerns	28%
Eating behavior/weight problems/eating disorders/body image	28%
Sleep difficulties	28%
Shyness/social discomfort	25%

Anger/irritability	23%
Choice of major/career	18%
Grief/loss	14%
Other	14%
Childhood abuse (physical, emotional, sexual)	13%
Marital/couple/family concerns	12%
Physical symptoms/health (headaches, stomachaches, pain)	9%
Alcohol/drug use	9%
Sexual assault/dating violence/stalking/harassment	6%
Self-injury (cutting, hitting, burning)	6%
Sexual orientation	5%
Gender identity	4%
Cultural adjustment	3%
Seeing/hearing things others don't	2%
Bullying/harassment	2%
Prejudice/discrimination	2%
Urge to injure/harm someone else	1%

Students were asked to report the degree to which their academics were being negatively impacted by their mental health. Students responded to each item on a scale from 1 (Strongly Disagree - SD) to 5 (Strongly Agree - SA).

Academic Outcomes

Subscale Item	SD/Disagree	Neutral	Agree/SA	System Mean (n)
I am struggling with my academics	46%	21%	33%	3.69 (1246)
I am thinking of leaving school	78%	13%	9%	2.19 (1253)
My academic motivation and/or attendance are suffering	40%	19%	41%	4.00 (1246)
I am having a hard time focusing on my academics	29%	20%	51%	4.52 (1253)

For the items below, students were asked to report the frequency with which they have had various experiences in their lifetime. The System and CCMH columns represent the percentages of students who reported having the experiences at least one time.

Mental Health History Items

					More		
		_			than		
Items	Never	1 Time	2-3 Times	4-5 Times	5 Times	System % (<i>n</i>)	CCMH
	ivever	Time	Times	Times	Times	10%	% (n) 9%
Been hospitalized for mental health concerns	90%	7%	3%	1%	<1%	(6405)	9% (124,748)
Felt the need to reduce your						24%	26%
alcohol or drug use	76%	9%	9%	2%	6%	(6385)	(110,109)
Others expressed concern about			401	4.07		11%	13%
your alcohol or drug use	89%	5%	4%	1%	2%	(6422)	(110,117)
Received treatment for alcohol or	000/	10/	-10/	-10/	-10/	2%	2%
drug use	98%	1%	<1%	<1%	<1%	(6459)	(115,797)
Purposely injured yourself w/o						28%	28%
suicidal intent (such as cutting,	72%	7%	7%	3%	11%	(5717)	(112,025)
hitting, burning, etc.)						(5/1/)	(112,025)
Seriously considered attempting	65%	13%	13%	3%	7%	35%	34%
suicide	0370	1370	1370	370	7 90	(5659)	(119,484)
Made a suicide attempt	89%	7%	4%	1%	1%	11%	10%
	0.770	7 70	470	1 70	1 70	(5726)	(119,603)
Considered causing serious	96%	2%	2%	<1%	1%	4%	6%
physical injury to another person	3070	2.70	2,0	170	170	(5752)	(118,802)
Intentionally caused serious	99%	1%	<1%	<1%	<1%	1%	1%
physical injury to another	3370	170	1170	170	170	(5732)	(118,802)
Someone had sexual contact with	71%	14%	9%	2%	5%	29%	27%
you w/o your consent	7 1 70	1 170	370	270	370	(6360)	(117,754)
Experienced harassing, controlling,							
and/or abusive behavior from						39%	40%
another person (such as friend,	61%	7%	8%	2%	22%	(5940)	(119,644)
family member, partner, or						(33 10)	(113,011)
authority figure)							
Experienced a traumatic event that						44%	45%
caused you to feel intense fear,	56%	17%	13%	5%	10%	(2383)	(116,477)
helplessness, or horror						(====)	(1.0,1.7)

Extended Mental Health History Items

Items	Never	Prior to College	After Starting College	Both	System % (n)	CCMH % (n)
Attended counseling for mental health concerns	32%	28%	20%	20%	68% (6369)	59% (120,639)
Taken a prescribed medication for mental health concerns	52%	12%	15%	21%	48% (6308)	35% (120,656)

Reported Marijuana Use

Items	None	Once	Twice	2 to 3 Times	4 to 5 Times	5 or More Times	System % (n)	CCMH % (n)
Think back over the last two weeks. How many times have you used marijuana?	77%	6%	4%	6%	4%	4%	23% (6297)	25% (103,164)

Appendix 3: Learning Outcomes and Satisfaction Survey (LOS)

The Learning Outcomes and Satisfaction (LOS) Survey is the standard outcome measure created by the Counseling Impact Assessment Committee in 2011. Administered to clients at the end of the semester, the LOS is designed to measure the extent to which clients believe that counseling helped them to make improvements on intrapersonal skills, academic functioning, and well-being, as well as their satisfaction with services. The LOS contains three subscales: the Intrapersonal Learning Outcomes Subscale, the Client Satisfaction Subscale, and the Academic Outcomes Subscale. Additional items that do not factor onto the three subscales are presented separately. The 2020-21 results of the LOS are presented below with all client LOS entries included.

LOS Demographic Data

	System Survey (n = 1,297)
Academic Status (%)	n = 1,198)
Freshman/First year	287 (24.0%)
Sophomore	277 (23.1%)
Junior	241 (20.1%)
Senior	247 (20.6%)
Graduate/Professional degree student	131 (10.9%)
Other	15 (1.3%)
Gender Identity (%)	n = 1,197)
Woman	834 (69.7%)
Man	248 (20.7%)
Transgender	43 (3.6%)
Self-identify	72 (6.0%)
Race/Ethnicity (%) (n	= 1,193)
African American/Black	21 (1.8%)
American Indian/Alaskan Native	7 (.6%)
Asian American/Asian	62 (5.2%)
Hispanic/Latino(a)	56 (4.7%)
Native Hawaiian/Pacific Islander	- (0%)
Multiracial	36 (3.0%)
White	998 (83.7%)
Self-identify	13 (1.1%)
Age [Mean (SD)]	21.57 (5.35)
Number of Sessions [Mode]	5

For the tables below, students were asked to report their level of agreement with statements on a scale from 1 (Strongly Disagree - SD) to 5 (Strongly Agree - SA).

Lifestyle and Self-Efficacy

				System
Subscale Items	SD/Disagree	Neutral	Agree/SA	Mean (n)
I made improvements on the specific issues for which I sought counseling.	7%	11%	83%	4.13 (1271)
I have started to live a healthier lifestyle in at least				
one area (e.g., sleep, diet, exercise, alcohol/drug use).	9%	21%	70%	3.85 (1225)
I have improved my ability to manage stress.	10%	23%	67%	3.80 (1257)
I am better prepared to work through future concerns and achieve my goals.	7%	15%	78%	4.02 (1266)
I increased my self-confidence and/or self-esteem.	11%	26%	63%	3.75 (1244)
The counseling process helped me understand cultural, family, ethnic, and/or community differences.	13%	31%	56%	3.63 (1088)
I have gained a greater understanding of myself or a clearer sense of identity.	8%	16%	76%	4.01 (1239)
I increased my ability to think clearly and critically about my problems.	7%	15%	78%	4.02 (1255)
I improved my communication skills.	9%	21%	71%	3.89 (1255)
Total Subscale	9.0%	19.8%	71.2%	3.90 (1233)

Counseling Satisfaction

				System
Items	SD/Disagree	Neutral	Agree/SA	Mean (<i>n</i>)
The office staff were helpful in providing information and direction.	3%	7%	90%	4.33 (1199)
This counselor displayed sensitivity/acceptance to individual differences (such as culture, gender, ethnicity, etc.).	2%	4%	95%	4.61 (1208)
This counselor helped me clarify my concerns and provide guidance.	4%	6%	90%	4.45 (1232)
This counselor supported me in making my own decisions and reaching my personal goals.	3%	6%	91%	4.48 (1226)
The counseling environment was warm and inviting.	3%	5%	93%	4.56 (1228)
It is important for me to have counseling services located on campus.	2%	4%	94%	4.69 (1213)
I would return to the counseling center again.	5%	3%	92%	4.58 (1214)
I would recommend counseling services to a friend.	4%	4%	93%	4.60 (1227)
Total Subscale	3%	5%	92%	4.53 (1218)

Academic Outcomes

Items	SD/Disagree	Neutral	Agree/SA	System Mean (<i>n</i>)
Counseling has increased my academic motivation and/or class attendance.	19%	39%	43%	3.29 (1145)
Counseling has helped me to focus better on my academics.	16%	32%	53%	3.46 (1177)
Counseling has helped with my academic performance.	17%	37%	46%	3.38 (1160)
Counseling has helped me stay at school.	18%	33%	49%	3.43 (1099)
Total Subscale	18%	35%	48%	3.39 (1145)

Retrospective Academic Functioning Items

Items	SD/Disagree	Neutral	Agree/SA	System Mean (n)
Prior to counseling, I was struggling with my academics.	50%	16%	34%	2.80 (1246)
Prior to counseling, I was thinking of leaving school.	70%	10%	20%	2.19 (1253)

Appointment Availability

Item	SD/Disagree	Neutral	Agree/SA	System Mean (<i>n</i>)
I was able to get my first appointment in a timely manner.	10%	7%	83%	4.20 (1235)
I was able to get follow-up appointments in a timely manner.	10%	7%	83%	4.20 (1212)

For the tables below, students were asked to respond to each item on a scale from 1 (Poor) to 5 (Excellent).

Overall Satisfaction

Item	Poor	Fair	Good	Very Good	Excellent	System Mean (<i>n</i>)
Overall effectiveness of counseling in helping with my problems.	6%	12%	34%	34%	15%	3.40 (1241)
Overall quality of the services I received.	4%	6%	22%	35%	33%	3.88 (1241)

Retrospective Ratings of Well-Being

Item	Poor	Fair	Good	Very Good	Excellent	System Mean (<i>n</i>)
My level of well-being when I started counseling.	38%	44%	16%	2%	1%	1.84 (1241)
My level of well-being now.	5%	21%	47%	24%	4%	3.00 (1241)

Perceived Change in Well-Being from Start of Counseling

	Decline	No change	Improvement
System Survey	2% (20)	20% (252)	78% (969)

For the table below, students were separated by those who reported that they were or were not struggling with their academics prior to counseling to compare how counseling affected academic performance for each group. Students responded to each item on a scale from 1 (Strongly Disagree - SD) to 5 (Strongly Agree - SA).

Effectiveness of Counseling Support

Scale Items		SD/Disagree	Neutral	Agree/SA	Overall System Mean (<i>n</i>)			
Counseling has	Struggling	56 (14%)	107 (26%)	247 (60%)	3.62 (410)			
increased my academic motivation and/or class	Not Struggling	157 (22%)	331 (46%)	232 (32%)	3.11 (720)			
attendance.	Total (averag	Total (average)						
	Struggling	55 (13%)	277 (23%)	498 (63%)	3.66 (415)			
Counseling has helped me to focus better on my academics.	Not Struggling	129 (17%)	274 (36%)	346 (46%)	3.34 (749)			
	Total (averag	se)			3.46 (1164)			
	Struggling	55 (13%)	107 (26%)	250 (61%)	3.63 (412)			
Counseling has helped with my academic performance.	Not Struggling	138 (19%)	317 (43%)	281 (38%)	3.23 (736)			
	Total (averag	re)	3.38 (1148)					

	Struggling	52 (13%)	93 (22%)	246 (63%)	3.72 (391)
Counseling has helped me stay at school.	Not Struggling	148 (21%)	265 (38%)	794 (40%)	3.26 (693)
	Total (averag	e)			3.43 (1048)

For the table below, students were separated by those who reported that they were or were not thinking of leaving school at the beginning of counseling to compare whether counseling services impacted retention. Students responded to each item on a scale from 1 (Strongly Disagree - SD) to 5 (Strongly Agree - SA).

Effect of Counseling on Academic Retention

Counseling has helped me stay at school.	SD/Disagree	Neutral	Agree/SA	System Mean (<i>n</i>)
Thinking of Leaving	38 (16%)	31 (13%)	173 (72%)	3.80 (242)
Not Thinking of Leaving	164 (19%)	329 (39%)	355 (42%)	3.32 (848)
TOTAL (Average)	18.4%	32.8%	48.7%	3.43 (1090)

Appendix 4: CIF and LOS Survey Trend Data Tables

Demographics

Item	2012-13	2014-15	2016-17	2018-19	2020-21	2022-23
Female	63.3%	65.6%	66.9%	64.0%	70.0%	65.0%
Male	34.7%	32.7%	30.9%	33.0%	27.5%	29.0%
Transgender/Self-identify	0.6%	1.7%	2.2%	3.0%	2.5%	7.0%
White	85.0%	86.0%	86.5%	84.0%	85.0%	84.0%
Students of Color	13.0%	14.1%	13.5%	16.2%	15.0%	16.0%
Heterosexual	85.5%	84.6%	82.6%	78.0%	70.0%	63.0%
LGBQ	9.8%	15.4%	15.4%	22.0%	30.0%	37.0%
Registered Disability	7.7%	8.8%	8.5%	7.0%	10.9%	13.0%

Presenting Concerns

Item	2012-13	2014-15	2016-17	2018-19	2020-21	2022-23
Anxiety/fears/worries (other than						
academic)	59.9%	65.4%	73.3%	61.0%	76.0%	75.0%
Stress/stress management	64.7%	66.7%	68.3%	59.0%	69.0%	69.0%
Depression/sadness/mood swings	54.1%	64.1%	67.1%	58.0%	66.0%	64.0%
Procrastination/motivation	36.0%	42.1%	45.9%	38.0%	50.0%	48.0%
Low self-esteem/confidence	37.5%	42.3%	46.3%	39.0%	47.0%	45.0%
Attention/concentration	37.4%	38.2%	38.9%	30.0%	41.0%	44.0%
Problems related to school or grades	42.2%	45.3%	44.7%	26.0%	40.0%	43.0%
Friends/roommates/dating concerns	24.6%	29.9%	29.7%	26.0%	32.0%	28.0%
Sleep difficulties	23.3%	29.4%	31.3%	26.0%	30.0%	28.0%
Eating behavior	15.8%	20.3%	21.0%	20.0%	26.0%	28.0%
I am having a hard time focusing on my academics (agree/strongly agree)	51.7%	52.2%	53.6%	50.0%	57.0%	51.0%
I am thinking about leaving school (agree/strongly agree)	11.3%	15.6%	13.5%	11.0%	10.0%	9.0%

Mental Health History

Item	2012-13	2014-15	2016-17	2018-19	2020-21	2022-23
Prior Treatment						
Counseling	47.2%	52.5%	55.7%	57.0%	65.0%	68.00%
Medication	32.3%	39.9%	42.2%	40.0%	47.0%	48.00%
Hospitalization	6.2%	9.9%	10.0%	10.0%	11.0%	10.00%
Threat to Self						
Nonsuicidal Self-Injury	20.1%	27.6%	30.2%	31.0%	30.0%	28.00%
Serious Suicidal Ideation	24.0%	34.0%	35.7%	34.0%	36.0%	35.00%
Suicide Attempt(s)	6.6%	10.7%	11.4%	12.0%	12.0%	11.00%
Drug and Alcohol						
Felt the Need to Reduce Your Alcohol						
or Drug Use	25.1%	25.9%	25.6%	26.0%	26.0%	24.00%
Marijuana Use	14.4%	17.3%	18.5%	20.0%	21.0%	23.00%

Client Outcomes: Interpersonal and Emotional Well-Being

2012-13	2014-15	2016-17	2018-19	2020-21	2022-23
83.4%	86.0%	82.0%	80.0%	83.0%	83.0%
76.4%	80.2%	76.8%	75.0%	78.0%	78.0%
77.00/	70.70	76.004	74.00/	70.00/	70.00/
//.8%	/8./%	/6.3%	/4.0%	/9.0%	78.0%
82.4%	82.0%	81.0%	80.0%	82.0%	78.0%
00 404	00.004	92.004	0E 00/	02.0%	83.0%
	76.4% 77.8%	83.4% 86.0% 76.4% 80.2% 77.8% 78.7% 82.4% 82.0%	83.4% 86.0% 82.0% 76.4% 80.2% 76.8% 77.8% 78.7% 76.3% 82.4% 82.0% 81.0%	83.4% 86.0% 82.0% 80.0% 76.4% 80.2% 76.8% 75.0% 77.8% 78.7% 76.3% 74.0% 82.4% 82.0% 81.0% 80.0%	83.4% 86.0% 82.0% 80.0% 83.0% 76.4% 80.2% 76.8% 75.0% 78.0% 77.8% 78.7% 76.3% 74.0% 79.0% 82.4% 82.0% 81.0% 80.0% 82.0%

Client Outcomes: Academics

Item	2012-13	2014-15	2016-17	2018-19	2020-21	2022-23
% of students who reported they were						
struggling academically prior to counseling	38.0%	36.0%	38.0%	36.0%	37.0%	33.0%
% of students who reported increased						
focus as a result of counseling	66.0%	63.0%	62.0%	64.0%	67.0%	63.0%
% of students who reported they were						
thinking of leaving school prior to						
counseling	25.0%	22.0%	21.0%	21.0%	21.0%	20.0%
% of students who reported that						
counseling helped them to stay in school	78.8%	77.0%	79.0%	76.0%	77.0%	72.0%

Client Satisfaction

Item	2012-13	2014-15	2016-17	2018-19	2020-21	2022-23
l was able to get my first appointment in a timely manner	88.9%	87.5%	83.1%	81.0%	88.0%	83.0%
I was able to get follow-up appointments in a timely manner	85.9%	85.8%	81.8%	82.0%	87.0%	83.0%
It is important for me to have counseling services located on campus	96.4%	95.5%	96.0%	95.0%	90.0%	95.0%
I would return to the counseling center again	92.9%	91.6%	92.6%	91.0%	92.0%	92.0%
I would recommend counseling services to a friend	94.0%	93.6%	93.3%	92.0%	94.0%	93.0%

<u>Appendix 5: UW System Telemental Health and Wellbeing Services Pilot</u>

Background

In spring 2022, as part of Governor Evers' "Get Kids Ahead" initiative, \$5 million in American Rescue Plan Act (ARPA) funds were allocated to the UW System to help address student mental health needs that were exacerbated by the pandemic. With this allocation of funds, UW System Administration and UW university stakeholders led a competitive bid process to procure telemental health and well-being services intended to fill critical gaps in currently available on-campus services. Mantra Health, Inc. was awarded the contract in October, 2023. Mantra Health works with two subcontractors to integrate the three requested services described below.

Through this contract, telemental health and well-being services were expanded for 12 UW universities (excluding UW-Madison, where another telehealth vendor is in use) near the mid-point of the 2022-23 academic year. Three services are now available to students at each participating campus:

- YOU at College A personalized well-being platform that directs students toward campus-based and online resources to promote academic and career success (Succeed), purpose and connection (Matter), and physical and mental well-being (Thrive). This platform serves as a "digital front door" to on-campus and online services available to students and can assist the entire student population.
- *UW Mental Health Support 24/7* Phone, text, and chat services with trained counselors, available 24/7. This service can be used for general support as well as crisis.
- Mantra Health Telecounseling and telepsychiatry services that serve as a supplement to, and
 coordinate with, campus-based counseling and psychiatry services. Mantra Health expands access
 by offering evening and weekend scheduling, out-of-state services, and a more diverse pool of
 providers.

<u>Implementation</u>

Each university created their own protocols in cooperation with the vendors, considering the specific needs and resources on their own campuses. Universities implemented the extended resources in four cohorts during the winter of 2022-23 (see Table 13). Because universities onboarded on different dates, and marketed and utilized services differently, comparisons among universities in utilization are difficult to make. The intention of a systemwide implementation is that each university will be able to benefit from the services in the ways that best serve their students in their local university context.

Table 13: Telehealth Implementation Cohorts

Group	Universities	Implementation Period
1	Green Bay, Parkside, Whitewater	November 2022
2	Eau Claire, Stevens Point, Stout	November 2022
3	Oshkosh, Milwaukee, River Falls	December 2022
4	La Crosse, Platteville, Superior	January 2023

Utilization and Impact

YOU at College - In total, 1,034 accounts were created within the individualized YOU at College portals across all 12 universities. As an upstream resource and the "digital front door" to both on-campus and online services available to students, this tool has the broadest applicability to the student population and should

eventually see utilization by the highest number of students. Vendor experience at other institutions suggest an aspirational metric of 20% of the student population using this tool annually. Table 14 summarizes a few additional metrics from the first semester of implementation.

Table 14: YOU at College Utilization: November 2022-May 2023

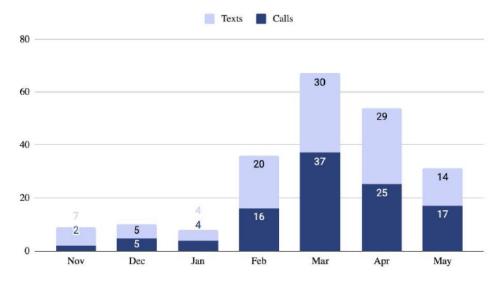
Total	Campus Resources	Self-Check Assessments		
Accounts	Viewed	Completed		
1034	550	412	194	112

Because YOU embeds campus resources into its portal, it is important to monitor how often students access these resources. Through May 2023, 550 content views within YOU—accounting for 40% of total content views—have been of campus-specific resources. As a personalized resource, students are also able to complete self-check assessments to monitor their progress on identified areas of concern. In the first few months of implementation, 412 self-check assessments were completed. Finally, links to both Mantra Health (for telecounseling and telepsychiatry; 194 referrals) and Mental Health Support 24/7 services (112 button clicks) are embedded in the YOU platform, with early data indicating that students are finding and connecting to these services in this way. The top priorities students established during their onboarding within the YOU platform, which informs the content that is recommended to them, are the following:

- Destressing
- Healthy eating and exercise
- Academics and grades
- Practicing mindfulness
- Getting better sleep

UW Mental Health Support 24/7 – Between implementation and May 2023, there were a total of 215 contacts (phone calls, texts, or chats) to UW Mental Health Support 24/7. The most common concerns identified by students were very similar to those presented by students attending counseling in on-campus counseling centers: Anxiety/Stress, Relationships, Depression, School, and Loneliness/Isolation. Figure 6 shows the volume of contacts by month.

Figure 6: UW Mental Health Support 24/7: Volume of Contacts, by Month



Note that contacts are fairly evenly divided between phone calls and chats/texts, indicating that offering multiple ways to reach out is appealing to our students.

Mantra Health – Telecounseling and telepsychiatry services through Mantra Health were available to students as a supplement to on-campus services for the full spring semester. Students can access counseling services directly through a link in the YOU portal or campus website, or they can be referred by a campus health or counseling provider. Psychiatric appointments require referral from a campus provider. Across the 12 UW universities implementing the service, 710 students attended counseling through Mantra, for a total of 2,361 sessions through May 2023. Additionally, 93 students attended telepsychiatry appointments. Telepsychiatry utilization was slightly lower than anticipated and will be monitored in Fall 2023 to determine the appropriate level of service needed.

Since a major goal in contracting with a telehealth provider was to address issues with access to counseling that have been identified over several years, it is important to monitor 1) the extent to which these services are utilized, 2) which demographics of students use the services, and 2) at what times the services are accessed.

In one full semester of operation, the 710 students using Mantra Health represented 7.9% of the total number of students attending counseling at these 12 universities during the 2022-23 academic year. To further answer the utilization question, the bar graph below shows the proportion of students served by both on-campus and Mantra Health through May 2023. A total of 8,313 students attended counseling on campus at these 12 universities, accounting for 8.2% of their respective student populations. With the addition of Mantra services, that percentage increased to 8.9% in its first semester of operation. The total proportion of students attending counseling at these universities in 2021-22 was 8%, suggesting that the addition of telehealth options did increase access to a greater number of students.

As can be seen in the graph, there is significant variability across universities in the proportions of students receiving both campus services and telehealth services. This can be attributed to varying levels of staffing for on-campus counseling, help-seeking behaviors of students, and other characteristics of the universities and student populations themselves. One benefit of a systemwide contract is that students at each university have equal access to the services, regardless of the nature of local resources available to them.

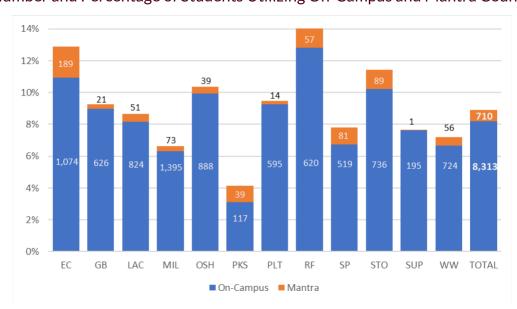


Figure 7: Number and Percentage of Students Utilizing On-Campus and Mantra Counseling

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To speak to the second question about the demographics of students using the services, a goal is that an increased diversity of providers available through Mantra will diversify the range of students seeking services. Nearly 48% of Mantra's counselors and psychiatric providers are non-white and 45% identify as LGBQ. As can be seen in Table 15, early signs are that percentages of both LGBQ and students of color accessing Mantra services are slightly greater than the percentages accessing on-campus services.

Table 15: Client Demographics - Mantra Services

Category	Campus %	Mantra %
White	86%	84%
Students of Color	14%	16%
Heterosexual	67%	60%
LGBQ	31%	38%
Disability Status	12%	3%

Finally, speaking to the question about when students attend appointments (daytime, evenings, or weekends), a goal was to expand the availability of services after hours. In the first full semester of services, one-third of Mantra appointments occurred on weekends or after 5 p.m. on weekdays.

While early experiences vary across our universities, the data above suggests that this telemental health and well-being services contract is having a positive impact on addressing service gaps as intended. Student satisfaction with services thus far is high, with 94% of students attending counseling through Mantra indicating that they felt well-matched with their provider and individual session ratings averaging 4.9 on a five-point scale. As the contract enters year two, the metrics above—as well as additional satisfaction and outcome metrics—will be monitored to further evaluate the value of these services in the overall scope of responding to student mental health and well-being needs.

UW-Madison *Uwill* Utilization Summary

UW-Madison implemented its own supplemental telecounseling services during the 2022-23 academic year through the Uwill platform to bolster the options available for students seeking mental health services at UW-Madison's Mental Health Services (MHS). Students utilizing Uwill were referred by MHS staff primarily from an initial screening appointment where presenting concerns, resources, and appropriate service options were discussed. Examples of common reasons for referrals to brief teletherapy through Uwill included: (1) Student out of state or out of country; (2) Flexibility with schedule (that is, sooner available appointments; availability outside MHS business hours; online booking with provider of choice); (3) Timing of year (such as student graduating at end of term). Students were initially offered 10 sessions, with an ability to request additional sessions.

From October 2022 to June 2023, 461 UW-Madison students were referred to Uwill, with 333 completing initial registration, and 280 completing at least one counseling session. A total of 955 sessions were provided, for an average of 2.87 sessions per registered student and 3.41 sessions per treatment-engaged student. Sessions are based on a 30-minute session length. The Uwill contract has been adjusted for 2023-24, such that students will have the ability to sign up directly for services, in addition to the option of being referred by a UHS provider. This makes it more similar to Mantra services available at the other twelve universities.



UW COUNSELING CENTER DIRECTORS PRIORITY STATEMENT

JANUARY 2024

PREPARED BY:

CARRIE FLEIDER, STACEY GERKEN, DEIRDRE DALSING, AND SARAH NOLAN

ABOUT THIS REPORT:

On October 5, 2023, the directors of counseling centers at all Universities of Wisconsin (UWs) met in Milwaukee, WI for a strategic planning meeting to address mental and behavioral health issues across the UWs. This meeting was also attended by John Achter, Senior Director of Student Success and Wellbeing at the Universities of Wisconsin Administration.

This document includes the following: 1) An outline of priorities identified by UW counseling center directors; 2) A recommendation for the surplus ARPA funds that exist and that need to be expended by the end of FY 2025; 3) Recommendations for measures to be taken by the Universities of Wisconsin to promote the mental health and wellbeing of Wisconsin's college students.





There is a mental health crisis in our nation and a well-documented increase in students reporting and seeking help for mental health symptoms before, during, and after the Covid-19 pandemic. During the 2019-20 academic year, the Universities of Wisconsin president included \$10 million in base funding in his 2020-22 budget proposal to increase access to counseling and psychiatry services, both critical components of a comprehensive public health approach to addressing student mental health and wellbeing.

This funding, however, was not included in the final budget approved by the legislature. With student mental health needs becoming even more pronounced since the pandemic, the need to fund adequate resources continues to be a top priority. With the rising numbers of students who have been negatively impacted in the post-Covid environment, mental health continues to be a top need not only on our campuses, but in our communities.





STRATEGIES

The group of Universities of Wisconsin directors meet on a bi-monthly basis to share challenges experienced across our campuses. Through these ongoing dialogues and the recent retreat, directors have identified the following priorities to build upon what we are currently doing to address UW student mental health.

As directors, we considered the following questions in shaping our priorities and recommendations: As a state system, what is the baseline of mental health treatment services that all UWs should strive to provide? How do we meet the rising mental health needs of our students? How will we know when we have achieved our goals? To help answer these questions, the directors identified the following principles.



PRINCIPLE 1

BUILD OUT
INFRASTRUCTURE OF
CAMPUS MENTAL HEALTH
SERVICES TO INCREASE
ACCESS FOR ALL
STUDENTS

- An increase in funding or additional FTE positions,
- Develop an embedded therapist model for better access for marginalized students
- Increase training and professional development for professional staff, and
- Increase salary scale to recruit and retain professional staff and stabilize our staffing.

Staffing levels are a critical factor in a counseling center's ability to provide timely and effective services. As mental health issues surge, counseling center staff are expected to provide crisis management, case management, and therapy to a growing number of students seeking help—a rate of growth that has far exceeded enrollment changes. In light of the Universities of Wisconsin Counseling Impact Assessment 2022-2023 report, data supports that caseload size is directly related to symptom improvement for students who seek help for mental health concerns. Our data is affirmed by national data showing how accessible and timely service models retain students who might otherwise leave college early.

Of great concern is the workplace conditions for counseling center staff. National studies report counselors are leaving higher education environments due to low salaries, lack of flexibility, and increased acuity of student needs coupled with growing utilization trends. According to the Universities of Wisconsin Counseling Impact Assessment 2022-2023 report, counseling center staff salaries lag behind nationally and in the Midwest. Staff retention is a critical issue that affects all areas of counseling centers at a time when pools of applicants are not only limited in number, but also limited in experience and being able to work independently.



PRINCIPLE 2

UTILIZE BEST PRACTICE
STANDARDS OF COLLEGE
STUDENT MENTAL HEALTH
ESTABLISHED BY NATIONAL
ACCREDITATION AND
RESEARCH BODIES

- Work toward IACS (International Accreditation of Counseling Services) accreditation for all Universities of Wisconsin institutions to ensure high quality mental health services for students throughout the state. It is important to note IACS recommends one FTE professional staff member for every 1000 students. Most UW schools fall short of this threshold and funding to increase staffing levels needs to be a priority.
- Utilize the Clinical Load Index (CLI) established by the Center for Collegiate Mental Health (CCMH) to identify clinical capacity and utilization of services. The Universities of Wisconsin should adopt the goal of all schools to have a benchmark of a CLI of 90 or below. A Counseling Center's CLI score can be thought of as a standardized average annual caseload for a full-time FTE. It has implications for quality and effectiveness of clinical services. Counseling Centers with low CLIs are more likely to be able to provide full-length assessments and ongoing weekly counseling. Data consistently shows that appropriate assessment and access to ongoing clinical services is connected to improvement in symptoms and decreasing distress. As the CLI increases it is likely Counseling Centers will struggle with demand for services exceeding capacity. As a result, student access to services becomes more restricted and effectiveness of services can decrease. Counseling Centers with the highest CLI tend to have more of a case management/referral model that limits access to ongoing clinical services producing less improvement in symptoms. A CLI of 90 allows for a balance of quantity and quality, meeting the needs of more students with effective quality treatment. Obtaining a CLI of 90 requires an increase in permanent clinical FTEs at the campus level.



PRINCIPLE 3

ENGAGE IN UP-STREAM APPROACHES
THAT PROMOTE PROACTIVE SKILLBUILDING AND RESILIENCE
STRATEGIES, HELP TO DESTIGMATIZE
MENTAL HEALTH, CREATE MORE
ACCESS FOR STUDENTS, AND AID IN
STUDENT RETENTION

- Peer-to-peer interventions programs Peer-to-peer interventions are shown to be a helpful supplement to provide support for subclinical levels of student distress. There is a range of peer support approaches; some in person and some on-line. All peer approaches, however, need to be well-supervised and can be labor intensive with attention to safety risk. That is why the UW directors support a program such as TogetherAll, which is a virtually monitored chat that is supervised by licensed clinicians capable of handling risk when indicated.
- The adoption of campus-wide initiatives that center mental health and wellbeing at every level of campus life. These strategies focus on embedding wellness resources/information across all Universities of Wisconsin institutions at every level, so that wellness and mental health resources become ubiquitous. Creating a culture of care takes a whole-campus approach such as is outlined in the Okanagan Charter, an international charter that sets a vision and framework for health-promoting universities.
- Mental health awareness training for all Universities of
 Wisconsin students, faculty and staff on a variety of mental
 health and wellbeing related topics such a) how to identify,
 respond, refer students in distress; b) suicide prevention
 programming, as suicide continues to be the second-leading
 cause of death among the college-age population. As examples, all
 campuses have access to an online training titled Recognize,
 Respond, & Refer that provides an excellent baseline. For those
 wanting more in-depth information and training, Mental Health
 First Aid is a well-regarded program with a version adapted to the
 university setting.



SURPLUS FUNDING RECOMMENDATIONS:

In Spring 2022, as part of Governor Evers' "Get Kids Ahead" initiative, \$5 million in American Rescue Plan Act (ARPA) funds were allocated to the Universities of Wisconsin to help address student mental health needs that were exacerbated by the pandemic. With this allocation of funds, Universities of Wisconsin Administration engaged in a contract with Mantra Health and two subcontractors in Fall 2022 to integrate tele mental health services (counseling and psychiatry), educational well-being resources and crisis services across twelve UW universities (except UW Madison). That contract consists of one-time funding that will end in August 2025. UW universities have had varying utilization of these newly implemented services. The Universities of Wisconsin anticipates that there will remain approximately \$500,000 surplus that will not be spent on this contract.

The following are recommendations made by the UW Counseling Center directors for ways to best use these surplus funds. Guiding these recommendations are the previous principles of the need to build out infrastructure for long term and sustainable counseling center work, to utilize nationally recognized benchmarks for mental health treatment services on campus, and to engage in up-stream activities aimed at campus-wide community change.



SURPLUS FUNDING RECOMMENDATIONS:

- Addressing Staffing Shortages Some UW schools are currently in dire need of FTE positions. Some of these surplus funds could be used to fill staffing holes through short-term or temporary positions. (This one-time funding will not address this issue for the long term; however, staffing continues to be the first priority for counseling center directors for long term sustainability).
- Explore TogetherAll TogetherAll is a national vendor that focuses on peer-topeer intervention regarding mental health support. The Universities of Wisconsin would explore possible acquisition for all UW schools.
- <u>System-wide KORU Training</u> UW-Superior currently has staff certified to provide KORU, a mindfulness training program specifically created for university students. This approach has been very successful and well-received, and with some funding, staff on each campus could become certified so the program could be adopted and implemented throughout the Universities of Wisconsin.
- Create a Shared Projects Resource Coordinator for System-Wide Support This position would be tasked with working across the System with directors on coordination of development, marketing, and distribution of various projects and programs. We have a number of exciting existing initiatives across the Universities of Wisconsin and this position would enable us to leverage creativity and ingenuity across the system to share it more broadly with all students. An example of a project would be to create and disseminate a system-wide podcast or social media posts on mental health topics to be made available across the System.



LONG RANGE STRATEGIES



The Mantra/ARPA contract is scheduled to sunset in 2025. This leaves the Universities of Wisconsin another opportunity to think about long-range goals and planning as it pertains to the growing mental health needs of UW students. With the unfavorable climate regarding higher education funding in Wisconsin in mind, the counseling center directors also engaged in some long-term strategic planning that identified additional possible action steps.

LONG RANGE STRATEGIES:

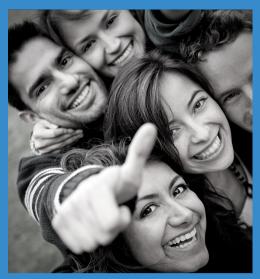
- Increase Segregated Fees and/or Mental Health Tuition Carve-Out Most of the UW counseling centers are funded by segregated health fees. These fees have supported increased positions on some campuses, but still not at a rate that keeps up with growth in utilization. To properly fund campus mental health, either these segregated fees need to be increased significantly or there should be attention directed at ascertaining the feasibility of carving-out tuition dollars or through increasing GPR funding toward mental health. Without adequate funding, few of the recommendations in this report are possible.
- Establish Donor Relations/Funds for System-Wide Projects Related to Mental Health Pursuing increased funding from the legislature should not be abandoned, but given the unpredictability of this approach, other avenues should also be considered. Directors recommend engaging with development personnel to help identify donors who want to make a difference across the state for Universities of Wisconsin students. A development office that looks at identifying donors and foundation monies is needed as we believe that there are donors out there who are committed to changing the lives of college students across the state. Donor relations would include the creation of marketing material that outlines system-wide projects, as well as campus specific needs for mental health.
- Assess/continue telehealth services through Mantra –
 While telehealth services (counseling and psychiatry) have been effective and
 helpful to expand treatment access, data on operational and utilization
 concerns with the 24/hour crisis service and the You@ College wellness
 platforms should be reviewed to consider the benefit of continuing these two
 services.



LONG RANGE STRATEGIES:

- <u>Procure ProtoCall for all UW Schools</u> The current contract with Mantra utilizes Didi Hirsch, which is a 988 crisis call center. Directors suggest dropping Didi and procuring a system-wide contract with ProtoCall, a highly utilized crisis platform used nationally in counseling centers for after-hours coverage.
- Add Required Mental Health Training and Education for students –
 This could be gatekeeper training such as the Mental Health First Aid (MHFA) training, or through a first-year experience course where all entering UW 1st year students would receive training on mental health and would be part of an infusion of mental health resources across campus. These programs would target students so that all UW students receive basic training in resilience and how to recognize and respond to distress in themselves and their peers.
- Explore Required Mental Health Training for Faculty and Staff—In order to create a public health shift in mental health awareness and understanding, chancellors and their designated leadership should move toward requiring mental health awareness training and suicide prevention across campuses. Health promotion opportunities vary across the Universities of Wisconsin. Without a clear mandate these efforts typically only reach those who are already interested. To truly make a culture shift, we need buy-in from top university officials to incorporate training in all levels, whether that be for new employees, recurring faculty training, or ongoing compliance in these trainings.
- Adopt Okanagan Charter for a Healthy Campus –
 This is a broad-based public health strategy that is being adopted across the country by institutions. The Universities of Wisconsin could be a national leader in adopting this charter at all UW institutions.









UW DIRECTORSMEET THE TEAM!

Deirdre Dalsing, UW-Platteville
Sarah Nolan, UW-Madison
Carrie Fleider, UW-Milwaukee
Chasidy Faith, UW-Stout
Stacey Gerken, UW-Stevens Point
Riley McGrath, UW-Eau Claire
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Randy Barker, UW-Superior
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April 4, 2024

UNIVERSITIES OF WISCONSIN DUAL ENROLLMENT TASKFORCE UPDATE: TASKFORCE REPORT AND RECOMMENDATIONS OVERVIEW

REQUESTED ACTION

For information and discussion.

SUMMARY

Following an initial discussion of the potential benefits of dual enrollment, the Office of Academic and Student Affairs convened a task force to provide recommendations as to how best to advance the dual enrollment enterprise across the Universities of Wisconsin. The co-chair of the task force will present a brief overview of the task force's final report, which will be shared as part of a discussion with the full Board of Regents at a future meeting.

Presenters

• Tracy Davidson, UW Administration Associate Vice President for Academic Affairs and Co-chair of the UW Dual Enrollment Taskforce.

BACKGROUND

The Universities of Wisconsin have been considering expanding the scope of dual enrollment opportunities as part of an enrollment focus based on the UW strategic plan. Early in 2023, the Office of Academic and Student affairs formed the UWs Dual Enrollment Taskforce. The taskforce was charged with working both internally with campuses and with external partners to consider the role and structure of UW's dual enrollment practices with the goals of: 1) expanding access to higher education; 2) increasing participation rates among Wisconsin students, especially underrepresented groups; and 3) increasing the number of students who take a UW dual enrollment course and subsequently matriculate at a UW university. In the fall of 2023, the taskforce issued a report with recommendations as to how best to advance the dual enrollment enterprise across the UW.

ATTACHMENTS

A) UW System Dual Enrollment Task Force Recommendations – Draft Report

TLD 2023Dec03 5:30PM



Dual Enrollment at the Universities of Wisconsin: Findings & Recommendations Fall 2023

Prepared by

Alex Perry, College in High School Alliance & Universities of Wisconsin Dual Enrollment Task Force

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Executive Summary

Dual enrollment programs are partnerships between school districts and accredited institutions of higher education that provide high school students with a postsecondary experience leading to transferable college credit. Nationwide, substantial variation exists in dual enrollment program modality, design, and implementation models.

A significant body of research demonstrates that participation in dual enrollment programs is associated with a number of positive outcomes, including an increase in a student's likelihood of enrolling in and completing a postsecondary education. Dual enrollment comprises a significant proportion of total undergraduate enrollment and continues to grow across the nation. In October 2023, the National Student Clearinghouse Research Center reported a significant increase of dual enrollment students. Undergraduates grew at both ends of the age spectrum, with students 18-20 and 30 or older each adding about 3 percent this fall. Those under 18 (dual enrolled high school students) continued to outpace all undergraduates with an 8.8 percent jump. Despite clear benefits and increasing enrollments, dual enrollment in Wisconsin and nationwide is not accessible to all qualifying students. In addition to addressing participation gaps, significant work needs to be done to ensure that students are having meaningful and valuable college course experiences while they are in high school. Specifically, many high school students would benefit from college experiences that will help them create and execute a post–high school plan, and many states would benefit from having better articulated roles for dual enrollment in their educational systems.

Wisconsin has a complicated policy environment for dual enrollment, which involves separate statutory programs and funding models for the Wisconsin Technical College System and the Universities of Wisconsin. Furthermore, in addition to statutorily funded dual enrollment programs, institutions of higher education throughout the state participate in institutionally negotiated concurrent enrollment programs, in which high school instructors are approved to teach college courses in the high schools. Within this context, the Universities of Wisconsin established a Dual Enrollment Task Force of representative stakeholders from across UW universities and select K-12 partners. The task force was charged with mapping the state's dual enrollment landscape and making recommendations to Universities of Wisconsin leadership. The task force met between the spring and fall of 2023, with its work facilitated and informed by engagement with a national consultant from the College in High School Alliance (CHSA). This report summarizes the task force's high-level findings and specific recommendations.

Task force members desired to provide context for the complex landscape of dual enrollment programming in the state and make data-driven recommendations, where possible. The task force also agreed that program quality must be foundational in delivering Universities of

Wisconsin dual enrollment programming and concurrent enrollment courses should show parity in rigor with similar courses taught at UW universities.

Among their observations, the task force noted the following:

- The Universities of Wisconsin lack a systemwide vision for guiding delivery and expansion of dual enrollment programs.
- A challenging trust deficit exists among the UW universities regarding their dual enrollment programs.
- The Universities of Wisconsin dual enrollment programs lack interinstitutional alignment and addressing the lack of alignment is likely fundamental to addressing the competitive disadvantage that Universities of Wisconsin dual enrollment programs face in the current complex landscape.

The 24 recommendations provided in this report, anchored by these central observations, are designed to help set priorities for further work to realize the central objectives outlined in the task force charter: 1) expanding access to higher education, 2) increasing participation rates among historically underrepresented groups, and 3) increasing the number of students who take a UW dual enrollment course and subsequently matriculate to a UW university. The recommendations are organized into the categories of Vision, Alignment, Funding, and Instructor Capacity. A condensed summary of these recommendations is outlined below. A detailed summary of these recommendations begins on page 21 of this report.

Vision

Universities of Wisconsin Recommendations

- Create an aligned Universities of Wisconsin vision for dual enrollment
- Expand data collection to understand how the Universities of Wisconsin are meeting their vision

State-Level Recommendations

• Set a statewide vision for dual enrollment

Alignment

Universities of Wisconsin Recommendations

- Create a Universities of Wisconsin Dual Enrollment Council
- Task the Universities of Wisconsin Dual Enrollment Council with developing an alignment action plan
 - Develop common names and definitions for UW universities dual enrollment programs
 - o Consider dual enrollment credit transfer challenges

- Explore making National Alliance of Concurrent Enrollment Partnerships (NACEP) accreditation for UW universities a systemwide requirement
- o Explore a common admissions platform for UW dual enrollment programs
- o Promote matriculation of dually enrolled students to UW campuses
- o Create a UW dual enrollment coordinator community of practice
- Develop specific communication strategies for students, families, high school counselors, and UW faculty
- o Create a single Universities of Wisconsin online dual enrollment portal
- o Examine UW universities dual enrollment eligibility criteria

State-Level Recommendations

 Establish a Wisconsin dual enrollment task force inclusive of the Department of Public Instruction (DPI), Universities of Wisconsin (UW), Wisconsin Technical College System (WTCS), and the Wisconsin Association of Independent Colleges and Universities (WAICU)

Funding

Universities of Wisconsin Recommendations

- Map existing UW universities dual enrollment cost structures and consider alignment
- Research UW universities dual enrollment college and career outcomes
- Reduce costs for low-income students

State-Level Recommendations

- Increase statutory limits for Early College Credit Program (ECCP) tuition caps
- Survey high schools on impact of current funding models

Instructor Capacity

Universities of Wisconsin Recommendations

- Begin conversations with educator preparation programs about dual enrollment
- Collect data on teacher credentialing
- Consider the potential impact of pending Higher Learning Commission (HLC) policy revisions related to faculty qualifications

State-Level Recommendations

 Propose additional compensation and professional development for concurrent enrollment instructors

These recommendations chart an important path forward for the Universities of Wisconsin dual enrollment programs, anchored in setting a systemwide vision, establishing a Universities

of Wisconsin Dual Enrollment Council, and formalizing a community of practice for the dual enrollment coordinators at each UW university.



Dual Enrollment: National Landscape

History, Definitions, and Structure

Dual enrollment programs, which can also be known as dual credit, concurrent enrollment, and early college high school, among other terms, are partnerships between school districts and accredited institutions of higher education that provide high school–age students with a postsecondary experience leading to transferable college credit. When implemented well, these programs provide authentic postsecondary experiences that advance students' access to college and likelihood of completing a postsecondary degree or credential.

Because a single entity did not coordinate the proliferation of dual enrollment programs across the United States, the organic growth of programs and models nationwide has led to significant variation in what they are named, how they operate, and who they serve. A 2013 analysis by the Higher Learning Commission (HLC), for example, found 38 different terms used in state policy across the country to describe college in high school programs.

While all dual enrollment programs share the features of a partnership between a high school and a college to provide high school students with access to college courses, significant variations exist in modality and program design. Common structural differences among dual enrollment programs may include:

- Location of instruction (whether the student receives instruction at the high school or on the college campus).
- Type of instructor (whether the student receives instruction from a high school teacher or college faculty).
- Whether the student receives high school credit for the course in addition to college credit.
- Whether the program is a whole-school model or offered as part of a suite of available options for students at that high school.
- The level of support services offered to students.
- Whether the program is tuition free or tuition charging.
- Which entity is funding the costs of the program beyond any tuition charged to students, such as the high school, college, state government, other entity, or some combination.
- Whether the program caters to a specific population of high school students or is universally available to all students.
- Whether the program extends beyond high school graduation to a 13th year.

A significant body of research directly examining dual enrollment has found that these programs provide significant benefits to participating students, particularly in increasing their likelihood to access and to complete a postsecondary degree or credential. For example,

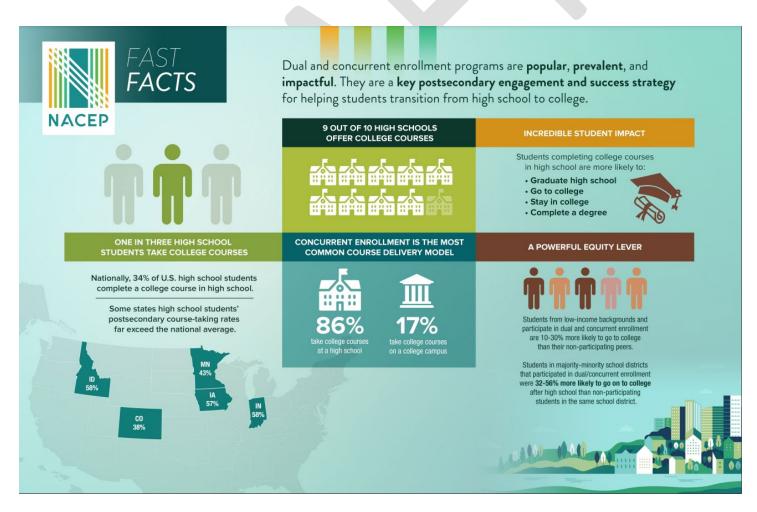
Research Priorities for Advancing Equitable Dual Enrollment Policy and Practice, an article published in 2022, reviewed existing dual enrollment literature and noted five conclusions about these programs:

- Dual Enrollment Is an Evidence-Based Practice that Has Broad Positive Impacts on Student Outcomes – The evidence clearly demonstrates that dual enrollment helps increase high school graduation, college enrollment, and college completion. Although the effects of dual enrollment are not always equitable, the evidence shows that, on average, dual enrollment positively impacts student outcomes. Some recent advancements in policy and practice have the potential to equalize opportunities for dual enrollment access and success.
- Dual Enrollment Expands Learning Opportunities and College Access and Has the
 Potential to Improve Local Communities Arguably the most important impact of dual
 enrollment growth is that it has expanded opportunities for students to access high quality learning and development as well as college-level education. Expanding college
 access has cumulative effects that have the potential to translate into more college educated Americans contributing to their local communities and economies.
- Dual Enrollment Addresses Increasing Demand for College-Level Education Amidst Increasing College Costs Although the pandemic has led to a dip in college enrollment, long-term college enrollment trends show that demand for college has increased over the past couple decades. At the same time, the price of college for students and families has increased exponentially. Dual enrollment is an approach that brings college courses to more students and often does so at a much lower price than the average college course (depending on the state or local finance model).
- Dual Enrollment Has Broad Support from Students, Families, High Schools, Colleges, and Policymakers Put simply, dual enrollment is popular among a broad range of stakeholder groups. Because of its practicality, accessibility, and affordability, dual enrollment enjoys wide support among various groups, including policymakers from both sides of the aisle. Students and families are attracted to dual enrollment because they understand that dual enrollment can save them money. High schools and colleges are interested in strengthening the high school–to–college transition, and dual enrollment supports that goal.
- Dual Enrollment Requires Intentional Alignment and Integration of Secondary and Postsecondary Education Systems, Structures, and Policies Perhaps more than any other policy or program, dual enrollment bridges two educational systems—secondary and postsecondary—at the local, state, and national levels. Designing and delivering dual enrollment requires aligning and integrating two sets of policies and structures. Successfully bridging these two sectors to design high-quality programs requires deliberate and intentional policy and action across sectors and levels.

Dual Enrollment: By the Numbers

Dual enrollment comprises a significant proportion of total undergraduate enrollment in the United States. In October 2023, the National Student Clearinghouse Research Center released its <u>Stay Informed Report</u> for fall 2023 enrollment. The following highlight speaks to the significance of dual enrollment to overall undergraduate enrollment: "Undergraduates grew at both ends of the age spectrum, with students 18-20 and 30 or older each adding about 3 percent this fall. Those under 18 (dual enrolled high school students), however, continued to outpace all undergrads with an 8.8 percent jump." Additionally, the National Alliance of Concurrent Enrollment Partnerships (NACEP) provides a <u>fast fact document</u> that describes how impactful dual enrollment is on both secondary and post-secondary enrollment and design.

Dual Enrollment: State Successes



States that have seen significant increases in their dual enrollment participation and success, such as Indiana, Colorado, and Kentucky, have developed a holistic state strategy supporting access to and success in dual enrollment programs. These states typically have data systems that provide statewide data on dual enrollment access and success, collaboration cross-state to support this work, consistent funding to support the expansion of access to dual enrollment, thoughtful policies supporting student access to courses, support for instructors to get credentialed, and statewide strategies to encourage intentional course taking in dual enrollment by students. While Wisconsin has many components that could contribute towards a successful statewide strategy for dual enrollment, it lacks an overarching state vision for the role that these programs should play in a student's educational journey as well as a policy focus on closing access and success gaps. The state's separate legislative mechanisms to support dual enrollment in two- and four-year institutions also play a significant role in complicating students' ability to participate in these programs.

The Biggest National Challenges Facing Dual Enrollment

While dual enrollment has significant positive benefits for students, challenges exist that impact its ability to realize its full potential as a college access and success tool. This report makes recommendations regarding how to address the specific challenges faced by dual enrollment programs across the Universities of Wisconsin. Many of these challenges are also explored in a national context – a big-picture analysis that may prove useful as UW universities work to address them.

The current national challenges facing dual enrollment include:

- Significant Gaps in Access and Student Success National and state data tell a consistent story; while dual enrollment can be an effective college access and success strategy, particularly for low-income and historically underrepresented students, those students have less access than their peers from other demographic groups. Many factors contribute to these gaps, including cost barriers for low-income students, a lack of credentialed high school instructors to teach the courses in low-resourced school districts, challenging eligibility criteria that only the most privileged students can pass, and a lack of counseling and advising for students.
- A Lack of Availability of Intentionally Structured Programs Many students participate in
 dual enrollment courses haphazardly because programs lack intentionally structured
 academic or career pathways. As a result, these <u>"random acts of dual enrollment"</u>
 minimize students' experience and hinder meaningful accumulation of credit towards a
 degree or credential.

• A Lack of a Clear Vision on the Role These Programs Play in the Education System – Dual enrollment represents a rethinking of how the current education system is structured and when students should participate in college course-taking experiences. But as dual enrollment continues to grow, few programs, systems, or states have developed a comprehensive vision for the role dual enrollment is meant to play in shaping, enhancing, or changing the education system and experiences for students.

Many of these national challenges are playing out in Wisconsin. Despite the existence of state-level policy and funding to support expanding access to college courses for high school students, questions persist regarding student access and success, program quality, and how to operate with an aligned state vision.



Dual Enrollment: Wisconsin Landscape

Wisconsin's dual enrollment programs are structured by both state statutes and nonstatutory guidelines. These programs provide students with a range of options for taking college courses while still in high school and have different cost structures, modalities, and other program requirements. Although the state of Wisconsin has historically tried to address the complexity in these dual enrollment program offerings, the result has only complicated implementation, overall. Two active statutory dual enrollment programs operate in Wisconsin, each under different statutes:

- Early College Credit Program (ECCP) The Early College Credit Program, laid out in state statute 118.55, allows high school students to take up to 18 credits of college courses and provides school districts financial support intended to incentive college enrollments. Specifically, the program provides support for high school students in grades 9-12 to attend UW universities, the state's tribally controlled colleges, and private nonprofit institutions of higher education in Wisconsin. These courses may be taken in person at the college campus, online, or in a blended format. They can be taken for postsecondary credit only or for both postsecondary credit and high school credit, depending on specific criteria outlined in the statute. The tuition costs for these ECCP courses are also set by statute. UW four-year universities can only charge onethird of the amount that would be charged to a resident undergraduate student for each credit, while UW branch campuses can only charge half of the amount that would be charged to a resident undergraduate student for each credit. Tuition costs are split among the student, the school district, and the state, with the state covering 25%–50% of the tuition, depending on whether the student also receives high school credit for the course.
- Start College Now (SCN) Start College Now, delineated in state statute 38.12(14), allows 11th and 12th graders to take courses at Wisconsin Technical College System (WTCS) institutions. In this program, the school district is fully responsible for paying the students' technical college tuition, as well as expenses related to fees and books, if a similar course is not offered by the high school.

In addition to the two statutory programs that differ in eligibility requirements, cost structures, and procedures, the state's landscape includes several nonstatutory dual enrollment programs. Specifically, **concurrent enrollment programs**, in which a college partners directly with a high school to offer courses in the high school taught by credentialed high school

faculty¹, are popular. In fact, these high school–based programs account for 84 percent of dual enrollments within the Universities of Wisconsin and nearly <u>80 percent of WTCS dual enrollments</u>. Concurrent enrollment programs are offered within all sectors of Wisconsin post-secondary institutions:

- Universities of Wisconsin Concurrent enrollment programs within the Universities of Wisconsin have various program names. For example, the concurrent enrollment program at UW Oshkosh is known as the "Cooperative Academic Partnership Program", or CAPP, while at UW-Green Bay, the program is referred to as "College Credit in the High School," or CCHS. Students participating in these concurrent enrollment programs pay a reduced per-credit tuition rate; a rate set by system policy SYS 185:
 Awarding of UW Credit in Wisconsin Schools. The policy imposes both a floor and a ceiling to the tuition rate, with the floor being 50% of the full per credit resident undergraduate tuition rate of the UW University with the lowest tuition rate, and the ceiling being 50% of the full per-credit resident undergraduate tuition rate of the institution offering the course. In some cases, school districts pay all the participating program costs. In other cases, the school district passes on the participating costs to students and families.
- Wisconsin Technical College System Concurrent enrollment programs within Wisconsin Technical College System (WTCS) institutions are uniformly referred to as "Transcripted Credit" programs. Course costs are negotiated between each WTCS institution and the participating high school. Students can participate in transcripted credit courses free of charge based on a formal articulation agreement that outlines a "cost-neutral" arrangement between the school district and the institution of higher education. This is an important distinction between the concurrent enrollment programs offered within the UW universities and those offered by WTCS institutions.
- Wisconsin's Independent Colleges Several independent colleges across the state also
 offer concurrent enrollment opportunities for students. Per-credit costs for these
 courses are negotiated directly between the institution and the high school and vary by
 institution.

In addition to the statutory Early College Credit Program and Start College Now, as well as the concurrent enrollment programs offered by many of the statewide institutions of higher education, other programs exist in which students can earn college credit while still in high school, including the Universities of Wisconsin "high school specials" program and WTCS programs like Youth Apprenticeship, Advanced Standing, and 38.14 Contracts programs. For

¹ Credentialed high school faculty across all Wisconsin dual enrollment programs are those who meet the Higher Learning Commission's <u>requirements for credentialed dual enrollment instructors</u>, although these faculty qualifications policies are about to <u>undergo revision</u>.

more information on Wisconsin's current dual enrollment program options, including these additional program options, see the Wisconsin Legislative Council's <u>2020 Legislative Interim</u> <u>Research Report on Dual Enrollment</u>.



Universities of Wisconsin Dual Enrollment Task Force

Facing many of the same questions that are being grappled with nationally, Universities of Wisconsin Administration created a <u>Dual Enrollment Task Force</u> in early 2023. The task force was given the following charge:

The Universities of Wisconsin have been considering expanding the scope of dual enrollment opportunities as part of an enrollment focus under the System's strategic plan. Universities of Wisconsin President Jay Rothman charged Senior Vice President for Academic and Student Affairs, Dr. Johannes Britz, to work both internally with our universities and with external partners to consider the role and structure of the Universities of Wisconsin dual enrollment practices in the context of 1) expanding access to higher education, 2) increasing participation rates among Wisconsin students, especially underrepresented groups, and 3) increasing the number of students who take a UW university dual enrollment course and subsequently matriculate to a UW university.

The membership of the task force included the following:

Executive Sponsors:

- Andrew Leavitt, Chancellor, UW Oshkosh
- Johannes Britz, Senior Vice President for Academic and Student Affairs, Universities of Wisconsin Administration
- Maria Cuzzo, Provost and Vice Chancellor, UW-Superior
- Rob Ducoffe, Provost and Vice Chancellor for Academic and Student Affairs, UW-Parkside

Co-chairs:

- Tracy Davidson, Associate Vice President, Office of Academic Affairs, Universities of Wisconsin Administration
- John Achter, Senior Director, Student Success and Wellbeing, Office of Enrollment and Student Success, Universities of Wisconsin Administration
- Julie Amon, Associate Vice President for Enrollment and Student Success, Universities of Wisconsin Administration

Members:

- Barbara Bales, Director, PK-20 Strategic Initiatives and Educational Programs, Office of Enrollment and Student Success, Universities of Wisconsin Administration
- Kavita Bhatia, Professor of Mathematics, UW-Stevens Point at Marshfield
- Dave Clark, Vice Provost for Student Success and Co-Lead for Division of Enrollment Management, UW-Milwaukee
- John Dobyns, Operational and Outreach Director, Cooperative Academic Partnership Program, UW Oshkosh

- Nelu Ghenciu, Professor and Chair, Mathematics, Statistics and Computer Science, UW-Stout (UW Faculty Shared Governance Chair)
- Denise Hancock, Administrative Program Manager, Center for Professional Studies, UW-Parkside
- Beth Hein, Executive Director of Educational Pathways, UW-Stout
- Carolyn Keller, Associate Provost in Academic Affairs, Associate Professor of Social Sciences, UW-Platteville
- Sara Knueve, Policy Advisor, Division for Academic Excellence, Department of Public Instruction
- Deej Lundgren, Director for State Relations, Office of Government Relations, Universities of Wisconsin Administration
- Patrick Neuenfeldt, Associate Director for Dual Enrollment Services, UW-Green Bay
- Ben Passmore, Associate Vice President, Office of Policy Analysis and Research, Universities of Wisconsin Administration
- Jamie Schneider, Professor of Chemistry and Assistant Dean, College of Arts and Sciences, UW-River Falls
- Aaron Seligman, Senior Advisor, Office of Academic and Student Affairs, Universities of Wisconsin Administration
- Karin Smith, Consultant for Dual Enrollment, Department of Public Instruction
- Megan Strehlow, Assistant Vice Chancellor, Student Access and Success, UW-Green Bay
- Jen Szydlik, Professor of Mathematics, UW Oshkosh
- Colleen Timm, Agency Administrator, Cooperative Educational Service Agency (CESA) 7
- Scott Owczarek, Associate Vice Provost and University Registrar, UW-Madison

The task force held a charge meeting in March 2023 and five additional working meetings during which members mapped and analyzed the most common barriers to dual enrollment in the state. Discussions among task force members were framed by a desire to provide context for the complex landscape of dual enrollment programming in Wisconsin. The task force also wished to make data driven recommendations, where possible. To this end, the work of the task force included identifying data sets that might help members better understand how to navigate barriers. The task force agreed that program quality is a foundational consideration in the delivery of UW System dual enrollment programming and that concurrent enrollment courses should show parity in rigor with similar courses taught at UW universities. Within this framework, task force workgroups were organized to align with the objectives outlined in the charge.

Following these initial conversations, the Universities of Wisconsin contracted with Alex Perry from the College in High School Alliance (CHSA), in partnership with Amy Williams and Dianne Barker from the National Alliance of Concurrent Enrollment Partnerships (NACEP). The consultants held eight meetings with the task force. These meetings focused on mapping a framework for recommendations and utilizing task force input to articulate the recommendations themselves. With the support of the task force co-chairs, the meetings were

organized using CHSA's framework published in <u>Unlocking Potential</u>: A <u>State Policy Roadmap</u> <u>for Equity and Quality in College in High School Programs</u>.

6 ► NAVIGATIONAL SUPPORTS

States prioritize the student navigational supports and advising needed to ensure student success in college in high school courses, particularly for those students historically underserved by these programs.

5 NSTRUCTOR CAPACITY

States develop strategies to recruit, support, and diversify the pool of instructors with the qualifications to teach college in high school while encouraging collaboration between K-12 and postsecondary partners as college in high school programs are scaled.



States ensure that students are able to access college in high school courses, regardless of geography, with pathways that maximize opportunities for students to earn multiple college credits, and facilitate students exploring academic and career areas of interest while ensuring that those courses count toward high school graduation requirements.

1 ▶ EQUITY GOAL & PUBLIC REPORTING

States set an equitable, statewide public goal for increasing the participation and success of traditionally underserved student groups in college in high school programs, with clear, disaggregated public reporting and accountability for progress toward the goal.

2 PROGRAM INTEGRITY & CREDIT TRANSFER

States support and promote high-quality college in high school programs through effective oversight and cross-sector collaboration between the K-12 and postsecondary sectors, as well as ensuring credit articulation.

3 ▶ FINANCE

States design funding mechanisms that remove financial barriers for low-income and moderate-income students to participate and excel in college level work in high school.

This six-part framework was developed so that states and systems could assess their current programs and policies with an eye towards identifying gaps. The framework includes these components:

- Equity Goal and Public Reporting To what extent does the state have a clear vision for the role of dual enrollment in its education ecosystem, a goal to realize that vision and address equity gaps, and the data system to support measuring progress against that goal?
- Program Integrity and Credit Transfer To what extent does the state have the policies and practices that encourage high-quality dual enrollment; promote collaboration between K-12, higher education, and the workforce; and have the credit transfer policies necessary to ensure students' dual enrollment experiences are correctly applied to their future studies?
- Finance To what extent does the state reduce or eliminate the cost burden for
 participating in these programs on low-income students, inclusive of tuition and
 nontuition course costs, and how does the state ensure that both K-12 and higher
 education are properly incentivized to be strong partners in participating in dual
 enrollment?
- Course Access and Availability To what extent does the state and individual programs make a variety of thoughtfully designed courses available to students, does the state provide students with multiple pathway options including Career & Technical Education (CTE), and to what extent does the state or individual programs have equity-minded eligibility criteria in place?
- Instructor Capacity To what extent does the state support the need for K-12 teachers to secure additional credentials to be able to teach in a dual enrollment course and ensure appropriate professional development and collaboration between K-12 and higher education instructors working in this space?
- Navigational Supports To what extent does the state and individual programs support the advising and support needs of students to ensure their success in thoughtfully selecting dual enrollment experiences aligned to their post–high school goals?

Over the course of the first five consultant-led meetings with the task force, the members collectively worked through each of the framework categories of unlocking potential to consider to what extent the Universities of Wisconsin and State of Wisconsin dual enrollment policies and practices aligned with the needs of students. Where appropriate, the consultants provided insight into the national landscape and current research on specific dual enrollment challenges, which also informed task force discussions. In addition, ongoing meetings with the task force co-chairs provided an opportunity to further analyze and align recommendations with the goals set forth in the task force charge. Ultimately, the consultants, in consultation with task force leadership, distilled and synthesized task force discussions into this final report, which was iteratively reviewed by task force leadership and via subsequent task force meetings. Task force leadership expanded the final report to reflect additional details of the Wisconsin dual enrollment landscape.

Key Findings of the Task Force

The Universities of Wisconsin Dual Enrollment Task Force identified several actionable recommendations to advance Universities of Wisconsin dual enrollment programs and advance state policy. These recommendations respond to a core diagnosis of the following three larger challenges facing Universities of Wisconsin dual enrollment:

- Universities of Wisconsin Lack a Systemwide Vision for Guiding Dual Enrollment Programming Each of the individual UW university dual enrollment leaders have an understanding about why they are doing this work, but that vision is not aligned across UW universities, nor is it aligned with the Universities of Wisconsin Administration. No common banner guides implementation of this work, and differing visions have resulted in different ways to prioritize, operationalize, and resource dual enrollment among UW universities. The lack of a shared vision likely contributes to the lack of systemwide program alignment, cited below.
- A Trust Deficit Exists Among UW Universities Regarding Their Dual Enrollment
 Programs Members of the task force identified a trust deficit among UW universities
 regarding each other's dual enrollment programs. This trust deficit likely has led to
 misperceptions about course quality, efficiency of credit transfer, and other issues
 related to dual enrollment operations.
- Universities of Wisconsin Dual Enrollment Lacks Alignment Each institution makes its own decisions about program structure, funding, and staffing, and a lack of consistency is found in dual enrollment program names and definitions across the state, even when those programs are offered at the same high school. The lack of operational alignment and coordination among UW universities creates significant confusion for parents and students who interact with UW's dual enrollment programs. In fact, the confusion generated by the lack of institutional alignment was consistently cited by the task force as an important obstacle to high school student participation. In addition, each campus must find its own way to solve common challenges as no shared communication infrastructure exists to promote knowledge sharing and problem solving across the institutions. The lack of communication infrastructure likely also contributes to the trust deficit. The task force and external consultants believe that resolving this lack of alignment would unlock significant progress toward achieving Universities of Wisconsin goals and potential enrollment growth. The Universities of Wisconsin, functioning as 13 individual programs without a common vision or operational consistency, are at a competitive disadvantage in the state's dual enrollment ecosystem, where the Wisconsin Technical College System (WTCS) operates as a more coherent system. In addition, the task force believes that alignment creates the foundation for a new dialogue with the Wisconsin legislature and other constituencies involved in

operationalizing the state's dual enrollment programs. These dialogues could lead to important progress in key areas.

The key findings of the task force working in concert with consultants led to the development of recommendations that speak to the task force charge.



Recommendations

The recommendations outlined within this report are designed to present specific ideas regarding how these challenges might be addressed, including both recommendations for the Universities of Wisconsin, as well as those for the state of Wisconsin. These recommendations are organized into the following framework: VISION, ALIGNMENT, FUNDING, and INSTRUCTOR CAPACITY.

The following sections provide several recommendations as to how Universities of Wisconsin might advance and grow its dual enrollment programs. These recommendations are anchored in **three key recommendations** that the task force believes are most essential to making progress. These recommendations are:

Create an Aligned Vision for Dual Enrollment at the Universities of Wisconsin Dual Enrollment Council Establish a Universities of Wisconsin Dual Enrollment Coordinator Community of Practice

Table 1. Key recommendations of the Universities of Wisconsin Dual Enrollment Task Force.

These recommendations are described in more detail using the framework above.

VISION		ALIGNMENT		FUNDING		INTRUCTOR CAPACITY	
UW	STATE	UW	STATE	UW	STATE	UW	STATE
Create Aligned Vision	• Create Statewide Vision	Create Dual Enrollment Council Develop Alignment Action Plan Examine Transfer Credit Challenges	Establish Wisconsin Dual Enrollment Task Force with DPI, WTCS, and WAICU	Map Existing UW Dual Enrollment Cost Structures & Consider Consolidation	Increase Statutory Limits for ECCP Tuition Caps	Engage Teacher Ed Programs About Dual Enrollment	Propose Additional Compensation Professional Development for Concurrent Enrollment
• Expand Data Collection		Explore Required NACEP Accreditation Explore Common Admission Platform Promote UW University Matriculation		Research UW Dual Enrollment Value Proposition Reduce Costs for Low- Income Students	Survey High Schools to Understand Impact of Current Funding Model	Collect Data on Instructor Credentialing Consider Potential Impact & Strategies in Response to HLC Changes	
		Create Dual Enrollment Community of Practice Develop Communication Strategies					
		Create Single UW Dual Enrollment Portal Examine UW					
		Dual Enrollment Eligibility Criteria					

Table 2. Complete recommendations of the UW Dual Enrollment Task Force.

Vision

Universities of Wisconsin Recommendations

Create an Aligned Vision for Dual Enrollment at the Universities of Wisconsin – The UW universities should collaborate with the Universities of Wisconsin Administration to develop a common vision for dual enrollment that can be jointly adopted by all UW universities. Such a vision should seek to answer why the Universities of Wisconsin are investing resources in offering dual enrollment to students; identify the goals UW universities have for expanding dual enrollment, to whom, and why; and develop some underlying principles to govern how the overall dual enrollment ecosystem across the Universities of Wisconsin should evolve to align with this vision. The task force believes that this vision should be centered on using dual

enrollment to expand access and success for underrepresented students in higher education and to expand the overall size of the college-going population of young people in Wisconsin, which will support the state's goals of increasing the number of adults with a postsecondary degree or credential. Any vision developed and adopted by the Universities of Wisconsin should reflect the consensus of the broadest group of stakeholders possible.

- Rationale: Currently, no aligned common perspective exists across the Universities of Wisconsin to the simple question "why dual enrollment?" Lacking a vision means that the different UW universities have developed their own goals and objectives for their individual dual enrollment programs that may not align and sometimes create tension among the universities. A common, shared vision developed and agreed to through consensus among the universities would provide an important starting point for exploring ways to improve communication and alignment across the Universities of Wisconsin dual enrollment program. It would also provide the state with a clear understanding of what the Universities of Wisconsin are looking to accomplish from involvement in dual enrollment and may help set the terms for additional state investments or assistance to contribute towards meeting that vision.
- Example: Kentucky's Dual Credit Policy for its institutions of higher education outlines both a narrative vision for the role of dual enrollment in the state's education system and also a specific goal for Dual Credit Attainment developed to quantify and show what it would take to close access gaps to the programs statewide.

Expand Data Collection to Understand How the Universities of Wisconsin Are Meeting Their Vision – Currently, the Universities of Wisconsin Administration collects and reports detailed data on access, matriculation, and success of dual enrollment students in the Universities of Wisconsin, including detailed information on demographics of dual enrollment students. This capability should be built out to include more detailed data on courses UW dual enrollment students are participating in, matriculation rates to institutions outside of the Universities of Wisconsin, information on major programs that dual enrollment students pursue, how many dual enrollment credits are accumulated by high school graduation, and the amount of dual enrollment credit transferred from non–UW dual enrollment programs. Additionally, the impact of dual enrollment on longer-term employment outcomes of students should be studied. Additional data would help the Universities of Wisconsin (through the UW Dual Enrollment Council recommended below) to set specific equity goals for dual enrollment participation and success metrics for the system to work towards achieving.

• Rationale: In addition to setting a clear vision that talks about the "why" behind dual enrollment, it will also be necessary to ensure that the Universities of Wisconsin are collecting and reporting the data that will contribute towards understanding whether that vision is successfully being advanced. In addition, sharing which courses students take will allow Universities of Wisconsin to understand where they are providing the most value in the state's dual enrollment ecosystem as a whole and where challenges may exist related to opportunities and options students have available.

State-Level Recommendations

Create a Statewide Vision for Dual Enrollment – Wisconsin needs an aligned statewide vision for the role that dual enrollment plays in the state's education system, inclusive of the perspectives of all relevant state institutions of higher education. This will help explicitly connect the contribution that dual enrollment can make to the state's postsecondary attainment goal.

• Rationale: The Universities of Wisconsin need a clear vision for dual enrollment. In addition, an aligned statewide vision is needed to maximize the efficacy of all approaches to providing Wisconsin high school students with access to college courses. This would also help senior policymakers understand the role of these programs in meeting the state's larger goals, including its postsecondary attainment goal. Most states lack a clear goal for their dual enrollment programs, and so Wisconsin is not unusual in not having had these state-level conversations. But the advantages of having a vision are significant; they can help guide the state's policy and resource allocation decisions moving forward and maximize the benefits of dual enrollment.

Alignment

Universities of Wisconsin Recommendations

Create a UW Dual Enrollment Council – The Universities of Wisconsin should establish a Dual Enrollment Council comprising representatives from Universities of Wisconsin Administration and all 13 UW universities. Campus representation should include campus leadership as well as those with oversight of dual enrollment programming. This Dual Enrollment Council should help build the vision for the Universities of Wisconsin dual enrollment program and be tasked with developing recommendations as to where alignment on dual enrollment policies and procedures across the 13 UW universities is possible and necessary. As part of its work plan, the council should map the existing landscape of UW dual enrollment, including a complete inventory of the high schools with which UW universities have existing programs and courses.

• Rationale: A coordinated interinstitutional effort, encouraged and endorsed by Universities of Wisconsin leadership, is needed to map a path forward on alignment across UW universities' dual enrollment programs. Such a body needs to reflect the perspectives of both UW universities as well as Universities of Wisconsin Administration, be collaborative and action-oriented, and consider ways, such as the recommendations outlined below, that institutions might increase operational alignment and coordination for the betterment of the whole system. The foundational focus for a UW Dual Enrollment Council is to begin to address the significant trust deficit apparent among the 13 UW universities regarding their dual enrollment programs. A council would create a space for university and program leadership to communicate and collaboratively develop appropriate solutions to align the systemwide

dual enrollment enterprise. This work may involve policy or process change, as well as opening lines of communication and dialogue among UW universities.

Task the UW Dual Enrollment Council with Developing an Alignment Action Plan – The Dual Enrollment Council should begin its work by identifying a clear work plan to address the issues that are most pressing to the Universities of Wisconsin dual enrollment programs and for which the council can make the most progress. The task force suggests the following possible components of an action plan for the council to consider:

- Develop Common Names and Definitions for UW Dual Enrollment The Universities of Wisconsin should develop common definitions and program names that align across all UW universities to create coherence in what institutions call their dual enrollment programs.
 - Rationale: Currently, no shared definitions exist for terms and program names across the Universities of Wisconsin, creating confusion for all constituencies who interact with more than one UW campus. In contrast, the Wisconsin Technical College System (WTCS) has an aligned set of names and definitions for its various dual enrollment programs that are offered through every college and at every high school.
- Examine Dual Enrollment Credit Transfer Challenges UW universities should jointly explore the extent to which dual enrollment credit transfer is an issue, whether the Universal Credit Transfer Agreement (UCTA) is providing seamless transfer of dual enrollment courses, and how the UCTA can be used to address any remaining issues impeding transfer of dual enrollment credits among the universities, including tools such as Transferology. The task force identified anecdotal data about challenges related to credit transfer, and the council should investigate further to understand whether this is a challenge that requires addressing.
 - o <u>Rationale:</u> Students attending UW dual enrollment programs should have the confidence to know that if they attend another UW university upon high school graduation, they will not be asked to take a course substantially like one that they completed in dual enrollment. The Universities of Wisconsin should assess the extent to which that is happening presently, and if issues are identified, work with the universities to address them.
- Explore Making NACEP Accreditation for UW Universities a Systemwide Requirement The council should carefully consider the advantages and disadvantages to requiring accreditation for concurrent enrollment programs offered by the National Alliance of Concurrent Enrollment Partnerships (NACEP) by all UW universities as a way of building trust between each campus over dual enrollment course quality and ensuring high-quality courses. The council would need to consider the trade-offs of such an approach, balancing the resources and staff commitments necessary to obtain and maintain accreditation with the advantages of doing so. The council could consider ways to

address those time and capacity commitments through looking at doing a systemwide accreditation, having the Universities of Wisconsin Administration subsidize the costs of accreditation for the universities, and other approaches, as appropriate.

- o Rationale: Despite every UW university needing to align with Higher Learning Commission accreditation requirements on faculty credentialing, mistrust exists among the universities about the quality of their dual enrollment courses, specifically tied to the qualifications of the high school instructors teaching dual enrollment courses. To engender greater trust among the institutions, a discussion about pursuing NACEP accreditation is likely important. Task force members held strong feelings both in favor of taking this route and against it, but a path forward might be found if resource and capacity constraints related to the process of securing and maintaining accreditation can be addressed.
- <u>Example:</u> At present, <u>10 states require</u> NACEP accreditation for all programs in some form, and state systems of higher education like the Minnesota State Colleges and Universities system and Ivy Tech Community College in Indiana have navigated the accreditation process successfully. In addition, a small number of states, <u>including Oregon</u>, have their own state-level quality assurance mechanism for dual enrollment.
- Explore a Common Admissions Platform for UW Dual Enrollment Programs The UW Dual Enrollment Council should explore implementing a common admissions platform for UW dual enrollment programs. Currently, UW universities are all using different systems, with varying levels of sophistication, to track and manage their dual enrollments. The council should consider the advantages, disadvantages, and feasibility of adopting a common platform, such as the UW Electronic Application for Admission (EApp), a customized UW EApp specific to dual enrollment, or another platform, that can be shared by the universities and improve capacity at the individual programs by reducing administrative burdens faced by each individual program.
 - o Rationale: Each UW campus currently builds its own system for managing enrollments and other program needs. Administrative tasks that are replicable from campus to campus take time and capacity for the staff managing this work. A common admissions system customized to the need of the UW dual enrollment programs could potentially free up capacity for campus dual enrollment coordinators to spend more time on other alignment priorities and serving students. However, several task force members pointed out that such a system could be limiting to an individual university's ability to innovate and that the tradeoffs should be examined carefully before proceeding.
- Promote UW University Matriculation The UW universities should align on shared strategies that can be universally adopted to create a feeling of belonging among all UW dual enrollment students in campus life and to energize and enthuse students to pursue matriculation to a UW university after high school graduation. This should include building off the lessons of existing work happening at the universities, such as

UW-Green Bay and other universities' piloting of direct admissions for dual enrollment students.

- o <u>Rationale:</u> The Universities of Wisconsin benefit most from students who take dual enrollment and then choose to matriculate to a UW institution. The universities should develop common strategies or identify common needs for the system to address to encourage students to consider a UW university posthigh school graduation.
- Create a Universities of Wisconsin Dual Enrollment Coordinator Community of Practice

 Universities of Wisconsin Administration should organize and staff a community of practice for the 13 dual enrollment coordinator positions across the system. The purpose of this community of practice will be to share ongoing challenges and opportunities, share best practices, interface the UW dual enrollment programs at the coordinator level, and raise issues for consideration and discussion by the UW Dual Enrollment Alignment Council.
 - o Rationale: The individual coordinators across the UW universities have no formal collaborative mechanism to allow them to discuss program-level issues, address common challenges, and provide feedback to more senior leadership at the Universities of Wisconsin about shared issues. A permanent ongoing collaborative mechanism is needed at the coordinator level staffed and supported by the Universities of Wisconsin system office. The role that staffs and coordinates the UW dual enrollment community of practice should also be the liaison with the WTCS and its dual enrollment coordinators as well.
- Develop Specific Communication Strategies for Students, Families, High School
 Counselors, and UW Faculty Many constituencies interact with Universities of
 Wisconsin dual enrollment in some fashion and need specifically tailored
 communications. The Universities of Wisconsin should coordinate communications for
 each audience, focusing on the value of dual enrollment, as well as the options
 available to students. These communications should draw on lessons from existing UW
 communications campaigns, such as that for direct admissions, and be informed by the
 system's vision and goals for dual enrollment.
 - o Rationale: The communications that will excite students and parents are different from those most helpful to counselors or college faculty. Each audience needs specific attention to help them understand their role and opportunities in the dual enrollment ecosystem. This includes both outward and inward facing communications, particularly given some of the limited working knowledge about dual enrollment across UW universities and academic departments.
 - <u>Example:</u> The <u>Ohio Department of Higher Education</u> provides specific resources for students and families, secondary schools, and institutions of higher education about the state's dual enrollment programs.

- Create a Single Universities of Wisconsin Dual Enrollment Online Portal Students and parents should have one online web portal they can access to get all their necessary information about the Universities of Wisconsin dual enrollment programs. This should include aligned messaging and appropriate links for students and parents to find the content most relevant for them given their high school. This portal could be connected to the UW EApp.
 - o <u>Rationale:</u> Opportunities to access information about dual enrollment opportunities are inconsistent across the 13 UW universities. A single online portal, even if it then links out to the individual universities to provide customized information, still provides a universal starting point where aligned messaging can be communicated for anyone interested in learning more about UW universities' dual enrollment offerings.
 - <u>Example:</u> The Louisiana Dual Enrollment Task Force launched <u>Louisiana Dual Enrollment</u>, a statewide portal for students, parents, and counselors to access information about dual enrollment opportunities in Louisiana. Like the Universities of Wisconsin, Louisiana's dual enrollment programs have significant variability in design and course offerings, but the portal provides a starting point for each of those three audiences to get information about the programs and how to access them.
- Examine UW Universities Dual Enrollment Eligibility Criteria The Dual Enrollment Council should review the existing eligibility criteria for dual enrollment programs among UW universities and utilize evidence-based practices to align these criteria, where possible. Ideally, eligibility criteria should promote the broadest access possible without impacting academic outcomes. This review should also explore what communications efforts might be necessary with high schools to improve how they are approaching assessing student eligibility. This effort should focus on developing equity-based criteria that preference screening in, rather than screening out, students.
 - Rationale: Currently, eligibility criteria for dual enrollment differ campus to campus within the Universities of Wisconsin, heightening the complexity and confusion related to these programs for students and families. Other states and systems have undertaken thoughtful efforts to examine the impact of different eligibility criteria and developed new universal criteria that align to the standards of promoting the widest access without impacting academic performance. In many cases, these criteria look beyond either placement tests or GPA as the sole measure of eligibility. Such a move to examine eligibility criteria and identify criteria that expand access without impacting academic outcomes would align with work done in other states. In the last 18 months, Ohio, Florida, and Louisiana have adopted new statewide eligibility criteria for dual enrollment. These new criteria are based on data from studies that explored the impact of non-test-based eligibility criteria on student access and performance.

State-Level Recommendations

Establish a Wisconsin Dual Enrollment Task Force Inclusive of DPI, UW, WTCS, Tribal Colleges, and WAICU – The two systems of public higher education (UW and WTCS), the Tribal Colleges, the Wisconsin Association of Independent Colleges and Universities (WAICU), and the Department of Public Instruction (DPI) should form a task force to examine the impact of the current I dual enrollment landscape on Wisconsin high school students. Is the existence of two policy mechanisms and divergent programming and priorities having a negative impact on student ability to access and navigate their way through program offerings? If so, the task force should consider what changes to the current statewide structure might improve the student experience. In addition, the task force might consider how dual enrollment programs across the state might more intentionally articulate with the Department of Public Instruction's formal Academic and Career Planning initiative, which explicitly includes dual enrollment as one of several strategies for building career focused post-secondary pathways.

• Rationale: Many of the discussions about the current situation, where one law governs WTCS dual enrollment and another law governs Universities of Wisconsin dual enrollment, focus on what is best for the respective education systems. It is essential to reset the conversation back to what is best for students and undertake a joint project to examine the impact that Wisconsin's current dual enrollment ecosystem is having on student agency and choice. To the extent that process identifies challenges, those should be rectified in an aligned and joint way to improve the overall student experience with dual enrollment.

Funding

Universities of Wisconsin dual enrollment programs do not produce the revenue that enrollments of non–dual enrollment students do. This is due to several factors, including limited state funding, multiple state statutes, and an inability of high school students to access federal financial aid for dual enrollment. Further, a desire to expand access to underrepresented low-income students into dual enrollment—and therefore into postsecondary education—requires making dual enrollment an affordable experience for students.

The task force strongly believes that every low-income student participating in dual enrollment in the state of Wisconsin should be able to do so at no cost to them. This vision requires additional state investments to become a reality, through supporting concurrent enrollment costs and through increasing the statutory tuition limits for ECCP. The recommendations below are designed to set the Universities of Wisconsin on a course toward having a new conversation with the state about additional funding to support more of the costs of dual enrollment, particularly for low-income students.

The task force believes that the recommendations outlined in this report, particularly the articulation of a clear vision for Universities of Wisconsin dual enrollment, as well as increasing interinstitutional program alignment, will create the foundation for a new dialogue with the Wisconsin legislature about the need for additional funding to support expanding dual enrollment statewide.

Universities of Wisconsin Recommendations

Map Existing UW Dual Enrollment Cost Structures and Consider Alignment – The Universities of Wisconsin should implement a systemwide inventory of all dual enrollment program options and their costs to students. Following this inventory, the UW Dual Enrollment Council should explore coordinated dual enrollment pricing.

• Rationale: Task force members reported that students, families, and school district partners experience significant confusion related to the different program offerings provided by UW universities, particularly the differing costs. Programs often differ in pricing due to structural differences such as modality, whether the school district is contributing any funding to support the student participating in the course, and other factors. A concerted effort systemwide to create more consistency for students and reduce the large number of options for Wisconsin high school students will reduce barriers to entry and make students more likely to consider UW university programs.

Research UW Dual Enrollment Value Proposition – Commission new research into outcomes for UW dual enrollment students, showing their outcomes in college access and success, as well as career outcomes, to demonstrate the successes of UW dual enrollment programs and the value of investment in UW dual enrollment courses.

- Rationale: For the Universities of Wisconsin to make a compelling case about the need for the state to fund more of the overall costs of a dual enrollment course at UW universities, particularly given the ability of students to take lower cost courses through WTCS, the Universities of Wisconsin will need to have clear and comparative outcomes data for its students participating in dual enrollment at UW universities showing the significant value to those students of participating in dual enrollment.
- Example: The Kentucky Commission on Postsecondary Education commissioned two studies into the state's dual enrollment programs that have directly contributed towards the state's recent investments into making a Dual Credit Scholarship available for all students. The state's two research studies examined the educational outcomes of participating in dual enrollment at the state's two-year and four-year institutions.

Reduce Costs for Low-Income Students – Grounded in the vision created above, the Universities of Wisconsin should develop a systemwide strategy for reducing or eliminating costs for low-income students and develop strategies to focus on the recruitment and retention of diverse, low-income, and first-generation students. This will involve identifying where existing resources can be better targeted to facilitate access for these students and what additional funding would need to be provided by the legislature.

<u>Rationale:</u> Students participating in dual enrollment have many costs (tuition, textbooks, etc.), which create a barrier for low-income students to participate. To serve the overall goals of expanding access and creating opportunities for new college students, the Universities of Wisconsin need a specific strategy focused on low-income student recruitment and retention.

State-Level Recommendations

Increase Statutory Limits for Early College Credit Program Tuition Caps – Amend the Early College Credit Program statute to allow a higher statutory limit for the charges for undergraduate tuition, at least to a level comparable with the average tuition levels for Start College Now institutions that are being paid in full by the school districts.

• Rationale: In the Start College Now (SCN) program, school districts fund the full cost of tuition for the students. Under the Early College Credit Program (ECCP), tuition reimbursement costs are capped at one-half of the tuition cost for UW two-year campuses and one-third of costs for the UW four-year universities. While tuition costs at UW universities are higher overall than those costs at WTCS colleges, a preliminary analysis shows that the state is currently paying more dollar-for-dollar for the SCN program than ECCP. If confirmed by further analysis, this disparity should be addressed by aligning statute to ensure school districts are paying at least the same overall amounts of funding for credits students earn through UW dual enrollment programs as they do through WCTS programs.

Survey High Schools on Impact of Current Funding Models – The state should examine whether the requirement that school districts pay the costs of dual enrollment tuition, under both Start College Now and the Early College Credit Program, are creating any disincentives for schools to offer these course experiences widely to as many students who can benefit from participating as possible. As the state looks to expand the availability of these courses to more students, the cost impact of these statutory programs may need to be considered in more detail..

• Rationale: In states like Minnesota that also require high schools to pay for the costs of courses for students, ongoing discussions are occurring about the role that this funding mechanism is playing in depressing participation in dual enrollment because high schools are concerned about the budgetary impact of significantly expanding dual enrollment. A broader statewide discussion about how Wisconsin funds dual enrollment, including Start College Now and the Early College Credit Program, may suggest an alternative funding mechanism that would be more appropriate to expand participation, particularly for low-income students.

The Business Case for Expanding Access to Low-Income Students

According to new research from the <u>Community College Research Center (CCRC)</u>, the return on investment for community colleges engaged in dual enrollment is directly benefited by a focus on equity. CCRC's research into the economics of dual enrollment at community colleges – which likely applies to four-year institutions as well – finds that the programs have a direct ROI for the college when programs focus on the following two strategies relevant to the UW conversation:

- Economies of scale: With increases in the number of students enrolled in dual enrollment, the average cost of implementing and providing it falls.
- Yield surplus: Dual enrollment can motivate more students to attend community college and pursue community college credentials after high school, thus generating revenue for colleges downstream.

A lot of the discussion that takes place at colleges and universities about dual enrollment and the resource allocations connected to it often focus on the revenue generated from students while they are participating in dual enrollment. But, at a time of postsecondary enrollment decline across much of the postsecondary education system, there is a real incentive for colleges to invest in opening doors to college for more students and looking to provide students with access to dual enrollment who are outside the college's typical student population.

The result is that while colleges may need to make an investment in providing low-income students with access to free dual enrollment courses up front, if it results in students successfully matriculating to the college where previously they had not been considering postsecondary as achievable for them, that is a twofold win: it is a win for the student who is now in a position to earn a vital postsecondary degree or credential for the modern economy, and it is also a win for the college that is now generating revenue from a student who was not planning to attend previously.

An expansion of equitable access to dual enrollment, and a careful consideration about how it fits with Universities of Wisconsin's wider higher education goals and strategies, requires a clear vision about what dual enrollment is meant to provide the college. If the goal is to maximize the revenue generated from high school students taking dual enrollment, then equity will necessarily take a back seat. But if the goal is to expand the pool of students attending a UW university generally, the latest research shows there to be a strong incentive to expand low-income student access to dual enrollment

Instructor Capacity

Universities of Wisconsin Recommendations

Engage Teacher Education Preparation Programs about Dual Enrollment – The Universities of Wisconsin should begin talking with their educator preparation programs about ways to

modify current program offerings to include more content-specific courses for teacher candidates to encourage teacher candidates to become certified to teach dual enrollment. This effort should include looking at whether courses currently coded as education courses contain enough content to be coded as discipline-specific courses as well. The conversation should also include ways in which dual enrollment can be used by high school students as an on-ramp into teaching as a career pathway.

- Rationale: Convincing mid-career teachers to pursue more graduate instruction will always be difficult. Embedding relevant experiences while teacher candidates are still receiving instruction could be key long-term to producing more teachers with the credentials needed to teach in a dual enrollment setting. Dual enrollment can also be used to activate high school students' interest and engagement with the teaching profession. Thus, educator preparation programs can help address dual enrollment's needs, which in turn can be used to support the teacher workforce at large.
- Example: Indiana's Ivy Tech Community College, the state's community college system, has partnered with Marian University to allow students to take dual enrollment in high school, complete their associate degrees at Ivy Tech, then pursue bachelor's and master's degrees in teaching at Marian University. By the time students graduate, they have experienced dual enrollment themselves and have completed a teacher preparation program to become a licensed teacher. They graduate with the discipline-specific credentials to teach dual credit themselves.

Collect Data on Instructor Credentialing – The Universities of Wisconsin should collect data from the individual universities on current instructor credentialing gaps and needs to determine how close the universities are to having fully credentialed instructor populations in high schools and where gaps remain. After reviewing the data, the Dual Enrollment Council should then discuss the appropriate strategies to address those gaps, including how the Midwestern Higher Education Compact's <u>Graduate Credit Quest</u> platform can help.

• Rationale: task force members disagreed about how much of an issue dual enrollment teacher credentialing remains. Further data collection will help assess the significance of remaining challenges and how best to address them.

Consider the Potential Impact of Higher Learning Commission (HLC) Revisions – The task force agreed that program quality is of paramount importance in delivering Universities of Wisconsin dual enrollment programming. Concurrent enrollment courses should show parity in rigor with similar courses taught on UW college campuses. HLC is in the process of significantly revising their faculty qualifications policies. These changes will generally put the onus of determining faculty qualifications on institutions. Given the importance of this conversation, the task force co-leads have recommended that a dedicated work group be formed prior to this report's completion. Eventually, the proposed Dual Enrollment Council should be part of this conversation. This conversation could include considering how academic departments will navigate the changes and what the Universities of Wisconsin Office of Academic Affairs might recommend about responding to the additional faculty hiring flexibilities reflected in the revised HLC policies.

• Rationale: HLC is likely to defer more decision-making about instructor qualifications to the institutions themselves and to remove specific recommendations regarding credential requirements for instructors. If that happens, the Universities of Wisconsin would benefit from an aligned approach systemwide to the new standards and what changes to make, if any, to UW university credentialing requirements.

State-Level Recommendations

Propose Additional Compensation and Professional Development for Concurrent Enrollment Instructors – High school teachers with the credentials to teach a dual enrollment course should be additionally compensated to incentivize them to seek the credentials necessary to expand the pool of qualified dual enrollment instructors. In addition, the state should restore statutory incentives to provide professional development to secondary instructors, as these can be used to support teachers' dual enrollment instructor needs, including credentialing and collaboration with postsecondary faculty.

• Rationale: While the state has invested significant resources in improving teacher credentialing for dual enrollment instructors, ongoing investments will be necessary as the teacher workforce changes.

Conclusion

Discussions among the Dual Enrollment Task Force members, as well as those conversations that took place between the task force and its consultants, made it clear that significant, important, and good work is taking place across the Universities of Wisconsin dual enrollment programs. These conversations also made it clear that multiple barriers impede progress toward increasing participation in these programs and increasing the number of students who participate in dual enrollment programs and subsequently matriculate to a UW university. The task force identified three foundational barriers to progress in these areas. These include:

- 1. The lack of a systemwide vision that can guide delivery and expansion of dual enrollment programs,
- 2. The lack of systemwide operational alignment among dual enrollment programs, and
- 3. A significant trust deficit across the UW universities.

The task force felt that these foundational barriers can be significantly addressed via three key recommendations:

- 1. Articulate an aligned vision for dual enrollment programs across the UW universities,
- 2. Establish a UW Dual Enrollment Council to facilitate, among other things, developing a plan to better align the operations of UW dual enrollment programs, and
- 3. Launch a UW dual enrollment coordinator community of practice to facilitate interinstitutional communication.

In addition to more detailed recommendations in these foundational areas, the report lays out recommendations related to communications, funding, instructor capacity, and program quality.

Next Steps

We recommend that immediate next steps include:

Assign Universities of Wisconsin Administration liaisons from the Office of Academic
Affairs and the Office of Enrollment and Student Success to facilitate and routinely
convene a community of practice for dual enrollment program coordinators across UW
universities.

- Assign Universities of Wisconsin Administration liaisons from the Office of Academic
 Affairs and the Office of Enrollment and Student Success to facilitate building and
 routinely convening a UW Dual Enrollment Council. The liaisons should consult with the
 Dual Enrollment Task Force regarding an effective composition for this group. In the
 short term, the council should be charged with the following:
 - Work with UW leadership and campuses to build a shared vision for systemwide dual enrollment operations. This vision should guide implementing recommendations from this report, as well as future system activities related to dual enrollment.
 - Review accreditation standards and how best to assure quality concurrent enrollment programming. This work should include:
 - Align the Universities of Wisconsin workgroup to identify potential impacts of recent changes to HLC policy on faculty qualifications.
 - Review NACEP accreditation standards and make recommendations as to how the Universities of Wisconsin might best assure consistent, high-quality standards across their dual enrollment enterprise.
 - Collect data on the current landscape of instructor credentialing in the state.

In the near term, the Dual Enrollment Council should be charged with prioritizing and, where warranted, providing implementation plans related to aligning dual enrollment operations across UW universities. Implementation plans should include the identification of metrics to measure progress. Recommendations to be considered in this context include the following:

- Exploring a common admissions platform.
- Examining potential statewide dual enrollment eligibility criteria.
- Developing system-level communication strategies.
- Exploring strategies for increasing student matriculation.
- Examining existing transfer credit challenges.
- Developing a single UW dual enrollment online information portal.

In addition, near-term activities of the council should include prioritizing and providing implementation plans for other recommendations related to dual enrollment funding and instructor capacity/quality. These recommendations include:

- Surveying Wisconsin K-12 districts to determine the impacts of the current financial structures of dual enrollment in the state.
- Mapping existing dual enrollment cost structures and considering the benefits and risks to aligning costs systemwide.
- Mapping the costs and benefits of reduced tuition costs for low-income students, as well as the means to implement.

- Considering how dual enrollment activities might be operationalized to serve as an onramp for students who might not otherwise attend college.
- Engaging teacher education programs to better accommodate preparation for dual enrollment.

Longer-term Recommendations

Achieving state-level goals outlined in the report will require conversations with multiple stakeholders and progress in these areas is predicated on the foundational work laid out above. Universities of Wisconsin Administration leadership should monitor progress to determine when best to initiate conversations related to the following:

- Establishing a Wisconsin Dual Enrollment Task Force with DPI, WAICU, WTCS, and the Universities of Wisconsin.
- Developing a shared, statewide vision for dual enrollments.
- Changing the structure, particularly reimbursement levels, of the current ECCP legislation.

Proposing additional compensation for concurrent enrollment instructors, as well as considering the restoration of statutory incentives for instructor professional development

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Appendix A | Early College Credit Program (118.55)

118.55 Early college credit program.

- (1) DEFINITIONS. In this section:
- **(b)** "Governing body of a private school" means a board elected or appointed to govern a private school or, if no board is appointed or elected to govern the school, any other person having direct charge of the private school.
- (bm) "Institution of higher education" means all of the following:
- 1. An institution within the University of Wisconsin System or a tribally controlled college.
- 2. A private, nonprofit institution of higher education located in this state.
- (c) "Participating private school" means a private school attended by a pupil who has applied to take or is taking a course under this section.
- (2) ENROLLMENT IN INSTITUTION OF HIGHER EDUCATION; APPLICATION. Subject to sub. (7t) (c), any public high school pupil who is not attending a technical college under s. 38.12 (14) or 118.15 (1) (b) and any high school pupil attending a private school may enroll in an institution of higher education for the purpose of taking one or more nonsectarian courses at the institution of higher education, including during a summer semester or session. The pupil shall submit an application to the institution of higher education in the previous school semester. The pupil shall indicate on the application whether he or she will be taking the course or courses for high school credit or postsecondary credit or both, if applicable. The pupil shall also specify on the application that, if he or she is admitted, the institution of higher education may disclose the pupil's grades, the courses that he or she is taking, and his or her attendance record to the public or private school in which the pupil is enrolled.
- (3) NOTIFICATION OF INTENT; DETERMINATION OF HIGH SCHOOL CREDIT; NOTIFICATION OF POSTSECONDARY CREDIT.
- (a) A public school pupil who intends to enroll in an institution of higher education under this section shall notify the school board of the school district in which he or she is enrolled or the governing board of the charter school under s. 118.40 (2r) or (2x) that he or she attends and a pupil attending a private school who intends to enroll in an institution of higher education under this section shall notify the governing body of the private school he or she attends of that intention no later than March 1 if the pupil intends to enroll in the fall semester, and no later than October 1 if the pupil intends to enroll in the spring semester. The notice shall include the titles of the courses in which the pupil intends to enroll and the number of credits of each course, and shall specify whether the pupil will be taking the courses for high school or postsecondary credit.
- (b) If the public school pupil specifies in the notice under par. (a) that he or she intends to take a course at an institution of higher education for high school credit, the school board or governing board of the charter school under s. 118.40 (2r) or (2x) shall determine whether the course is comparable to a course offered in the school district or charter school, whether the course satisfies any high school graduation requirements, and the number of high school credits to award the pupil for the course, if any. If the pupil attending a private school specifies in the notice under par. (a) that he or she intends to take a course at an institution of higher education for high school credit, the governing body of the participating private school shall determine whether the course is comparable to a course offered at the private school, whether the course

satisfies any requirements necessary for high school graduation, and the number of high school credits to award the pupil for the course, if any. In cooperation with institutions of higher education, the state superintendent shall develop guidelines to assist school boards, governing boards of charter schools under s. 118.40 (2r) or (2x), and participating private schools in making the determinations. The school board, governing board, or governing body shall notify the pupil of its determinations, in writing, before the beginning of the semester in which the pupil will be enrolled. If the public school pupil disagrees with the decision of a school board or governing board of a charter school under s. 118.40 (2r) or (2x) regarding comparability of courses, satisfaction of high school graduation requirements, or the number of high school credits to be awarded, the pupil may appeal the decision to the state superintendent within 30 days after the decision. The state superintendent's decision shall be final and is not subject to review under subch. III of ch. 227. If the pupil attending a participating private school disagrees with any decision of a governing body under this paragraph, the pupil may appeal the decision to the governing body within 30 days after the decision.

- (c) If the pupil specifies in the notice under par. (a) that he or she intends to take a course for postsecondary credit at an institution of higher education that is within the University of Wisconsin System, the board of regents of the University of Wisconsin System shall notify the pupil whether credits earned for the course are transferable between and within institutions within the system.
- (4) ADMISSION TO INSTITUTION OF HIGHER EDUCATION; NOTIFICATION.
- (a) An institution of higher education shall admit a pupil to attend a course under this section if all of the following apply:
- 1. The pupil meets the requirements and prerequisites of the course.
- **2.** There is space available in the course.
- (am) A pupil may attend an institution of higher education under this section only if the institution of higher education complies with s. 118.13 (1).
- (b) If an institution of higher education admits a pupil, it shall notify the school board of the school district in which the pupil is enrolled, the governing board of the charter school under s. 118.40 (2r) or (2x) the pupil attends, or the governing body of the pupil's participating private school, in writing, within 30 days after the beginning of classes at the institution of higher education. The notification shall include the course or courses in which the pupil is enrolled.
- (c) If a pupil is not admitted to attend the course that he or she specified in the notice under sub. (3) (a) but is admitted to attend a different course, the pupil shall immediately notify the school board of the school district in which he or she is enrolled, the governing board of the charter school under s. 118.40 (2r) or (2x) the pupil attends, or the governing body of the pupil's participating private school and the school board, governing board, or governing body shall inform the pupil of its determinations under sub. (3) (b) regarding the course to which the pupil was admitted as soon as practicable.
- (5) RESPONSIBILITY FOR AND DETERMINATION OF COSTS; PAYMENT AND REIMBURSEMENT FOR CERTAIN COSTS. Subject to sub. (7t), the school board of the school district in which a pupil attending an institution of higher education under this section is enrolled, the governing board of the charter school under s. 118.40 (2r) or (2x) attended by a pupil who is attending an institution of higher education under this section, and the governing body of the participating private school attended by a pupil who is attending an institution of higher education under this section shall be responsible for the following amount:

- (a) If the public high school pupil is taking a course for high school credit, regardless of whether the course is also taken for postsecondary credit, and if the course is not comparable to a course offered in the school district or at the charter school, 75 percent of the actual cost of tuition for the course, as determined under par. (d). If a private high school pupil attending a private school is taking a course for high school credit, regardless of whether the course is also taken for postsecondary credit, and if the course is not comparable to a course offered by the participating private school, 75 percent of the actual cost of tuition for the course, as determined under par. (d). If the pupil takes a course described under this paragraph at a high school in a school district, at a charter school under s. 118.40 (2r) or (2x), or at a participating private school, the school board of the school district, the governing board of the charter school, or the governing body of the participating private school is responsible for the costs of books and other necessary materials for the course.
- **(b)** If the pupil is taking a course for postsecondary credit and if the course is not comparable to a course offered in the school district, at the charter school under s. <u>118.40 (2r)</u> or <u>(2x)</u>, or at the participating private school, 25 percent of the actual cost of tuition for the course, as determined under par. <u>(d)</u>.
- (d) If a school board, the governing board of a charter school under s. <u>118.40 (2r)</u> or <u>(2x)</u>, or the governing body of a participating private school is required to pay tuition on behalf of a pupil under this subsection, the tuition charged for each credit assigned to the course may not exceed the following:
- 1. For an institution of higher education under sub. (1) (bm) 1., other than a University of Wisconsin college campus, as defined in s. 36.05 (6m), one-third of the amount that would be charged for each credit assigned to the course to an individual who is a resident of this state and who is enrolled in the educational institution as an undergraduate student. Subject to sub. (7t), neither the institution of higher education nor the school board, governing board, or governing body may charge any additional costs or fees to a pupil to attend a course under this section.
- 1m. For an institution of higher education under sub. (1) (bm) that is a University of Wisconsin college campus, as defined in s. 36.05 (6m), one-half of the amount that would be charged for each credit assigned to the course to an individual who is a resident of this state and who is enrolled in the college campus as an undergraduate student. Subject to sub. (7t), neither the college campus nor the school board or governing board may charge any additional costs or fees to a pupil to attend a course under this section.
- 2. For an institution of higher education under sub. (1) (bm) 2., one-third of the amount that would be charged for each credit assigned to a similar course offered by the University of Wisconsin-Madison to an individual who is a resident of this state and who is enrolled at the University of Wisconsin-Madison as an undergraduate student. Subject to sub. (7t), neither the institution of higher education nor the school board or governing board may charge any additional costs or fees to a pupil to attend a course under this section.

(e)

1. Subject to sub. (7t), within 30 days after the end of the semester, the school board of the school district in which a pupil who attended an institution of higher education under this section was enrolled, the governing board of the charter school under s. 118.40 (2r) or (2x) attended by a pupil who attended an institution of higher education under this section, and the governing body of a participating private school attended by a pupil who attended the institution of higher education under this section shall pay the institution, on behalf of the pupil, the amount determined under par. (d) and shall submit an itemized report to the department of the amounts paid under this subdivision.

- 2. Subject to subd. 3., from the appropriation under s. 20.445 (1) (d), the secretary of the department of workforce development shall, on behalf of the school board of a school district in which a pupil who attended an institution of higher education under this section was enrolled, on behalf of the governing board of the charter school under s. 118.40 (2r) or (2x) attended by a pupil who attended an institution of higher education under this section, and on behalf of the governing body of a participating private school and a pupil who attended the private school and who attended an institution of higher education under this section, pay to the department of public instruction the following amount:
- a. For a pupil who took a course for high school credit, as described in par. (a), 25 percent of the actual cost of tuition for the course, as determined under par. (d). The department of public instruction shall reimburse the school board of the school district, governing board of the charter school, or the governing body of the private school the amount received from the department of workforce development under this subd. 2. a.
- **b.** For a pupil who took a course for postsecondary credit, as described in par. (b), 50 percent of the actual cost of tuition for the course, as determined under par. (d). The department of public instruction shall reimburse the school board of the school district, governing board of the charter school, or the governing body of the private school the amount received from the department of workforce development under this subd. 2. b.
- 3. If the appropriation under s. 20.445 (1) (d) in any fiscal year is insufficient to reimburse all school districts, governing boards, and governing bodies eligible for the full amount of reimbursable tuition costs under subd. 2., the secretary of the department of workforce development shall notify the state superintendent, who shall prorate the amount of the payments under subd. 2. among eligible school districts, governing boards, and governing bodies.
- (6) RESPONSIBILITY OF PUPIL FOR TUITION AND FEES; INSTITUTION OF HIGHER EDUCATION.
- (a) Subject to sub. (7t), a pupil taking a course at an institution of higher education for high school credit under this section is not responsible for any portion of the tuition and fees for the course if the school board, the governing board of a charter school under s. 118.40 (2r) or (2x), the state superintendent on appeal under sub. (3) (b), the governing body of the participating private school, or the governing body on appeal under sub. (3) (b) has determined that the course is not comparable to a course offered in the school district, at the charter school, or at the participating private school, whichever is applicable.
- (b) A pupil taking a course at an institution of higher education for high school credit under this section is responsible for the tuition and fees for the course if the school board, the governing board of a charter school under s. 118.40 (2r) or (2x), or the governing body of the participating private school has determined that the course is comparable to a course offered in the school district, at the charter school, or at the participating private school, unless the state superintendent or the governing body reverses the decision of the school board, governing board, or governing body, respectively, on appeal under sub. (3) (b).

(c)

1. Except as provided in subd. 2., a pupil taking a course under this section at an institution of higher education only for postsecondary credit is responsible for 25 percent of the actual cost of tuition for the course, as determined under sub. (5) (d). The school board of the school district in which the pupil attending an institution under this section is enrolled, the governing board of the charter school under s. 118.40 (2r) or (2x) attended by a pupil attending an institution of higher education under this section, and the governing body of a participating private school attended by a pupil attending an institution of higher

- education under this section shall establish a written policy governing the timing and method for recovering from the pupil's parent or guardian the pupil's share of tuition as specified in this subdivision.
- 2. The school board, governing board of the charter school under s. 118.40 (2r) or (2x), or the governing body of the participating private school shall waive the pupil's responsibility for costs under subd. 1. if the department determines that the cost of the course would pose an undue financial burden on the pupil's family.
- (7g) TRANSPORTATION. The parent or guardian of a pupil who is attending an institution of higher education or technical college under this section and is taking a course for high school credit may apply to the state superintendent for reimbursement of the cost of transporting the pupil between the high school or participating private school in which the pupil is enrolled and the institution of higher education or technical college that the pupil is attending if the pupil and the pupil's parent or guardian are unable to pay the cost of such transportation. The state superintendent shall determine the reimbursement amount and shall pay the amount from the appropriation under s. 20.255 (2) (cy). The state superintendent shall give preference under this subsection to those pupils who satisfy the income eligibility criteria for a free or reduced-price lunch under 42 USC 1758 (b) (1).
- (7t) LIMITATIONS ON PARTICIPATION AND PAYMENT.
- (a) A school board, governing board of a charter school under s. <u>118.40 (2r)</u> or <u>(2x)</u>, or governing body of a participating private school may establish a written policy limiting the number of credits for which the school board, governing board, or governing body will pay under sub. <u>(5)</u> and s. <u>38.12 (14) (d)</u> to the equivalent of 18 postsecondary semester credits per pupil.
- (c) If a pupil receives a failing grade in a course, or fails to complete a course, at an institution of higher education or technical college for which the school board, governing board of a charter school under s. 118.40 (2r) or (2x), or governing body of a participating private school has made payment, the pupil's parent or guardian, or the pupil if he or she is an adult, shall reimburse the school board, governing board, or governing body the amount paid on the pupil's behalf upon the request of the school board, governing board, or governing body. If a school board, governing board, or governing body that requests reimbursement of a payment made under this section is not reimbursed as requested, the pupil on whose behalf the payment was made is ineligible for any further participation in the program under this section. For the purposes of this paragraph, a grade that constitutes a failing grade for a course offered in the school district, at the charter school under s. 118.40 (2r) or (2x), or at the participating private school constitutes a failing grade for a course taken at an institution of higher education or technical college under this section.
- (8) PROGRAM INFORMATION; AGREEMENT.
- (a) Annually by October 1, each school board shall provide information about the program under this section to all pupils enrolled in the school district in the 8th, 9th, 10th, and 11th grades.
- **(b)** A school board, governing board of a charter school under s. <u>118.40 (2r)</u> or <u>(2x)</u>, or the governing body of a participating private school may enter into an agreement with an institution of higher education to facilitate the early college credit program under this section.
- (9) RULES. The state superintendent shall promulgate rules to implement and administer this section, including rules establishing criteria for determining reimbursement amounts under sub. (7g).

- (10) INAPPLICABILITY.
- (a) In this subsection:
- 1. "Private, nonprofit institution" means a private, nonprofit postsecondary institution that is a member of the Wisconsin Association of Independent Colleges and Universities or any successor organization.
- **2.** "University of Wisconsin System institution" means a four-year university in the University of Wisconsin System.
- **(b)** This section does not apply to a course for which a public high school pupil may earn postsecondary credit if all of the following apply:
- 1. The school board of the school district and one of the following have entered into an agreement before, on, or after July 1, 2018, to provide a college credit in high school program to academically qualified pupils under which participating pupils may take the course for postsecondary credit:
- a. The chancellor of a University of Wisconsin System institution.
- **b.** The president of a private, nonprofit institution.
- **2.** The instruction of pupils in the course takes place in a school building in the school district or a school district facility.
- **3.** The individual who provides instruction in the course is any of the following:
- **a.** For a course taught pursuant to an agreement under subd. <u>1. a.</u>, a high school teacher who is employed by the school district and certified or approved to provide the instruction by the participating University of Wisconsin System institution or a faculty member of the participating University of Wisconsin System institution.
- **b.** For a course taught pursuant to an agreement under subd. <u>1. b.</u>, a high school teacher who is employed by the school district and certified or approved to provide the instruction by the participating private, nonprofit institution or a faculty member of the participating private, nonprofit institution.
- (c) This section does not apply to a course for which a high school pupil attending a private school may earn postsecondary credit if all of the following apply:
- 1. The governing body of the private school and one of the following have entered into an agreement before, on, or after July 1, 2018, to provide a college credit in high school program to academically qualified pupils under which participating pupils may take the course for postsecondary credit:
- a. The chancellor of a University of Wisconsin System institution.
- **b.** The president of a private, nonprofit institution.
- 2. The instruction of pupils in the course takes place in the private school building.
- 3. The individual who provides instruction in the course is any of the following:
- **a.** For a course taught pursuant to an agreement under subd. <u>1. a.</u>, a high school teacher who is employed by the governing body of the private school and certified or approved to provide the instruction by the participating University of Wisconsin System institution or a faculty member of the participating University of Wisconsin System institution.

- **b.** For a course taught pursuant to an agreement under subd. <u>1. b.</u>, a high school teacher who is employed by the governing body of the private school and certified or approved to provide the instruction by the participating private, nonprofit institution or a faculty member of the participating private, nonprofit institution.
- (d) This section does not apply to a course for which a high school pupil attending a charter school under s. 118.40 (2r) or (2x) may earn postsecondary credit if all of the following apply:
- 1. The governing board of the charter school and one of the following have entered into an agreement before, on, or after April 2, 2022, to provide a college credit in high school program to academically qualified pupils under which participating pupils may take the course for postsecondary credit:
- a. The chancellor of a University of Wisconsin System institution.
- **b.** The president of a private, nonprofit institution.
- 2. The instruction of pupils in the course takes place in the charter school building.
- **3.** The individual who provides instruction in the course is any of the following:
- **a.** For a course taught pursuant to an agreement under subd. <u>1. a.</u>, a high school teacher who is employed by the governing board of the charter school and certified or approved to provide the instruction by the participating University of Wisconsin System institution or a faculty member of the participating University of Wisconsin System institution.
- **b.** For a course taught pursuant to an agreement under subd. <u>1. b.</u>, a high school teacher who is employed by the governing board of the charter school and certified or approved to provide the instruction by the participating private, nonprofit institution or a faculty member of the participating private, nonprofit institution.

History: 1991 a. 39, 269, 315; 1993 a. 399; 1995 a. 27 ss. 3979m, 9145 (1); 1997 a.

27 ss. 2816 to 2819, 2821 to 2827m, 2844, 2845; Stats. 1997 s. 118.55; 1997 a. 113, 164, 237; 1999 a. 9; 2003 a. 131; 2015 a. 55; 2017 a. 59, 307; 2017 a. 364 ss. 48, 49; 2021 a. 217; s. 35.17 correction in (5) (b).

Cross-reference: See also chs. PI 38 and 40, Wis. adm. code.

Appendix B | Start College Now (38.12(14))

(14) ATTENDANCE AT TECHNICAL COLLEGE.

- 38.12(14)(a)(a) Upon the pupil's request and with the written approval of the pupil's parent or guardian, any public school pupil who satisfies the following criteria may apply to attend a technical college for the purpose of taking one or more courses:
- 1. The pupil has completed the 10th grade.
- **2.** The pupil is in good academic standing.
- **3.** The pupil notifies the school board of the school district in which the pupil resides of his or her intent to attend a technical college under this subsection by March 1 if the pupil intends to enroll in the fall semester and by October 1 if the pupil intends to enroll in the spring semester.
- **4.** The pupil is not a child at risk, as defined in s. 118.153 (1) (a).
- **5.** The pupil is not ineligible under s. <u>118.55 (7t) (c)</u> to participate in the program under this section.
- (am) A school board may refuse to permit a pupil to attend a technical college under this subsection if the pupil is a child with a disability, as defined in s. 115.76 (5), and the school board determines that the cost to the school district under par. (dm) would impose an undue financial burden on the school district.
- **(b)** The technical college district board shall admit the pupil to the technical college if he or she meets the requirements and prerequisites of the course or courses for which he or she applied, except as follows:
- 1. The district board may admit a pupil to a course under this subsection only if there is space available in the course after admitting to the course all individuals applying for admission to the course who are not attending the technical college under this subsection.
- **2.** The district board may reject an application from a pupil who has a record of disciplinary problems, as determined by the district board.
- (c) If a child attends a technical college under this subsection, the technical college shall ensure that the child's educational program meets the high school graduation requirements under s. 118.33. At least 30 days before the beginning of the technical college semester in which the pupil will be enrolled, the school board of the school district in which the pupil resides shall notify the pupil, in writing, if a course in which the pupil will be enrolled does not meet the high school graduation requirements and whether the course is comparable to a course offered in the school district. If the pupil disagrees with the school board's decision regarding comparability of courses or satisfaction of high school graduation requirements, the pupil may appeal the school board's decision to the state superintendent within 30 days after the decision. The state superintendent's decision is final and is not subject to review under subch. III of ch. 227. The pupil is eligible to receive both high school and technical college credit for courses successfully completed at the technical college.
- (d) Subject to s. 118.55 (7t), for each pupil attending a technical college under this subsection, the school board shall pay to the technical college district board, in 2 installments payable upon initial enrollment and at the end of the semester, for those courses taken for high school credit, an amount equal to the cost of

tuition, course fees, and books that a pupil who is attending the technical college and who is a resident of this state would be charged, except that the school board is not responsible for payment for any courses that are comparable to courses offered in the school district.

- (dm) If a pupil who is attending a technical college under this subsection is a child with a disability, as defined in s. 115.76 (5), the payment under par. (d) shall be adjusted to reflect the cost of any special services required for the pupil.
- **(e)** The school board of the school district in which the pupil resides is not responsible for transporting a pupil attending a technical college under this subsection to or from the technical college that the pupil is attending.
- (f) A pupil taking a course at a technical college for high school credit under this subsection is not responsible for any portion of the tuition and fees for the course if the school board is required to pay the technical college for the course under par. (d).

Cross-reference: See also ch. TCS 9, Wis. adm. code.

History: 1971 c. 154; 1975 c. 198 s. 65; 1977 c. 29; 1979 c. 221; 1981 c. 20, 269; 1981 c. 391 s. 210; 1983 a. 27, 192; 1983 a. 379 ss. 2, 5, 6, 7; 1983 a. 391; 1985 a. 332 s. 251 (1), (3); 1987 a. 399; 1989 a. 56, 121, 177, 359; 1993 a. 227; 1995 a. 27 s. 9145 (1); 1995 a. 448; 1997 a. 27, 237; 1999 a. 150 s. 672; 2001 a. 22; 2003 a. 69; 2005 a. 324, 470; 2013 a. 56; 2017 a. 59 ss. 632f, 632h, 1570b to 1570y; 2019 a. 75, 147.

Cross-reference: See also ch. TCS 7, Wis. adm. code.