LEVEL I APPROVAL MEMORANDUM

Compiled here is the Level I memorandum containing items approved since the March 2024 Board of Regents Meeting. This memorandum from March and April 2024 contains items for which approval authority has been designated by the Board of Regents to the individual institutions or the Commissioner of Higher Education. The items before you have been approved and are now being shared with you for your notification.

- March 2024 Level I Memorandum
- April 2024 Level I Memorandum

LEVEL I MEMORANDUM

DATE: March 8, 2024

TO: Chief Academic Officers, Montana University System

FROM: Joe Thiel, Interim Deputy Commissioner for Academic, Research, and Student Affairs

RE: March, 2024 Level I Academic Items

Contained within this memorandum are Level I proposals submitted by the institutions of the Montana University System in March, 2024. These proposals include items for which approval authority has been designated by the Board of Regents to the individual institutions or the Commissioner of Higher Education. These Level I items are being sent to you for your review. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, raise them at the Level I Chief Academic Officer's conference call on Wednesday, March 13, 2024. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Monday, March 18. You will be notified of approved proposals by March 25, 2024. The Board of Regents will be notified of the approved proposals at the May 2024 meeting of the Board.

1. **Campus Approvals**

Montana State University Billings:

- Notification of intent to place Multiple Programs in Moratorium
  Item #2703-LI0224

Great Falls College Montana State University:

- Notification of the establishment of a Certificate of Technical Studies in EMT/Pre-paramedicine
  Item #2901-LI0224
- Notification of offering the Physical Therapist Assistant AAS program from face-to-face format to a blended offering
  Item #2903-LI0224

Helena College University of Montana:

- Notification of the establishment of a Certificate of Technical Skills in Web Design
  Item #1902-LI0324
- Notification of the establishment of a Certificate of Technical Skills in Service Now
  Item #1901-LI0324

2. **OCHE Approvals**

Montana State University Billings:

- Request for authorization to consolidate the BS in Public Relations, the BA in Communication Arts – Organizational Communication, and the BA in Communication Arts- Media Studies into the Bachelor of Arts in Communication
  Item #2702-LI0224

Great Falls College Montana State University:

- Request for authorization to terminate Computer Information Technology – Network Support & Security Associate of Applied Science
  Item #2902-LI0224

Level II:

Montana State University Billings:

- Request for authorization to create two options in the Master of Science in Clinical Rehabilitation and Mental Health Counseling: (1) Rehabilitation Counseling Option, and (2) Mental Health Counseling Option
  Item # 2701-LII0224

Helena College University of Montana:

- Request for authorization to create a Certificate of Applied Science in IT Help Desk
  Item #1904-LII0324
- Request for authorization to create an Associate of Applied Science in Cloud Dev Ops
  Item # 1903-LII0324

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION: February 2024

ITEM 2703 L1 0224

ITEM TITLE Notification of Intent to Place Multiple Programs in Moratorium:
B.S.: Public Relations
B.A.: Communication Arts – Organizational Communication
B.A.: Communication Arts – Media Studies

Institution: **Montana State University Billings** CIP Code: **090101; 090102; 090902**

Program/Center/Institute Title:

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: X

Options:

Proposal Summary [360 words maximum]

What: Montana State University Billings is notifying the Board of Regents of its intent to place the B.S in Public Relations, the B.A. in Communication Arts—Organizational Communication and the B.A. in Communication Arts—Media Studies in moratorium.

Why: The Department of Communication proposes to merge its three undergraduate major programs into a single program (Bachelor of Arts in Communication). This proposed merger of programs will streamline curricular offerings for students, reduce programmatic redundancies, and will provide students with a clearer path toward program completion. A single program will better clarify student advising protocols, which should boost retention and graduation rates, and will also make it simpler to recruit students to the program.

Resources:

ATTACHMENTS
Termination Form

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

X **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

1b. Withdrawing a postsecondary educational program from moratorium

2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less

3. Establishing a B.A.S./A.A./A.S. area of study

4. Offering an existing postsecondary educational program via distance or online delivery

OCHE Approvals

5. Re-titling an existing postsecondary educational program

6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)

7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)

8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)

9. Revising a postsecondary educational program (Curriculum Proposal Form)

10. Establishing a temporary C.A.S. or A.A.S. degree program *Approval limited to 2 years*

B. Level II:

1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)

2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)

3. Exceeding the 120-credit maximum for baccalaureate degrees *Exception to policy 301.11*

4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. Re-titling an academic, administrative, or research unit

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: B.S. Public Relations

B.A. Communication Arts – Organizational Communication

B.A. Communication Arts – Media Studies

Program is being **X** **Placed into moratorium** ____ **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y: X N: ____**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y: X N: ____**

   b.) **What is the expected graduation date of all students from the program?**

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y: X N: ____**

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y: ____ N: X**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y: X N: ____**

Montana University System
PROGRAM TERMINATION/MORATORIUM FORM

b.) Please describe any layoffs that will occur including the date expected? NA

3. The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):

a.) Internal Curriculum Committees X

b.) Faculty Senate X

c.) Program Public Advisory Committee NA

d.) Articulation Partners NA

4. Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.) **Y:** ____ **N:** X

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

February/2024

ITEM 2901-L10224

Notification of the establishment of a Certificate of Technical Studies in EMT/Pre-paramedicine

Institution: **Great Falls College Montana State University** CIP Code: **51.0904**

Program/Center/Institute Title: **EMT/Pre-paramedicine Certificate of Technical Studies**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: ____

Proposal Summary [360 words maximum]

What: Great Falls College MSU is creating a CTS in EMT/Pre-paramedicine for students currently completing their paramedic prerequisites. This program will be available to students on campus as well as dual credit students.

Why: Upon completion of this 26-27 credits program, students will meet the minimum criteria to seek admission to any paramedic program offered within the Montana University System. Additionally, upon successfully finishing ECP 131 (Emergency Medical Technician with clinical), individuals aged 18 or above are eligible to take the National Registry EMT exam. Attaining certification as an EMT is a prerequisite for most paramedicine programs. Acquiring this certificate will mark a milestone for students pursuing a degree in paramedicine, providing them with momentum in their academic journey. For dual credit students, obtaining this certificate becomes a pivotal moment, fostering their aspirations for a higher degree in the field of paramedicine.

Resources: No additional resources are required. These courses are already taught on our campus to students who plan to apply to a paramedicine program. Great Falls College is staffed and has the resources to offer this certificate, including an existing SIM hospital with simulation mannequins for emergency medicine education.

ATTACHMENTS

A1 – Program Course Requirements

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

X **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ **B. Level II:**

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents

Attachment 1 – Program Course Requirements

EMT/Pre-paramedicine CTS

(Note that a grade of C or above, not C-, is required for graduation.)

Course Prefix and Number		Course Title	Credits
FIRST YEAR – Fall Semester			
M 105 **, + Or any core math		Contemporary Math	3-4
BIOH 104 + BIOH 108 + BIOH 201 **,+	OR OR	Basic Human Biology with Lab Basic Anatomy Human Anatomy Phys I w/lab	4
AHMS 144 +		Medical Terminology	3
FIRST YEAR - Spring Semester			
WRIT 101 **,+		College Writing I	3
ECP 131 +		Emergency Medical Technician with Clinical	7
COMX 115 +		Introduction to Interpersonal Communication	3
CAPP 131 +		Basic MS Office	3
		Total Program Credits	**26-27**

* Indicates prerequisites needed.

** Placement in course(s) is determined by placement assessment.

\+ A grade of C or above is required for graduation.

Montana Board of Regents

CURRICULUM PROPOSAL FORM

1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

Helena College is submitting a request for a Certificate of Applied Science in IT Help Desk. The IT Help Desk CAS recognizes the completion of 30 credits, primarily focused on Computer Science/Programming (CSCI) and Information Technology Systems (ITS) curriculum with the necessary General Education courses required for completion of the certificate. This new CAS option will be offered as part of the established IT & Programming program at Helena College. The current staffing of the program and the stackability of this certificate into the AAS options make this new certificate possible.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

The new certificate aligns with the College's mission to provide the paths and tools necessary to assist learners in achieving their educational and career goals. It also aligns with the Impact goal to evaluate and respond to educational and workforce development needs to cultivate mutually beneficial relationships and to provide seamless career transition. The IT & Programming program has an active advisory council that has requested a 1-year certificate option for students in this area. This certificate will meet the needs of students working to get into the workforce and IT positions within a year and it will meet the needs of our local and state employers. Helena College Strategic Plan.

3. **Process leading to submission.** Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

The new CAS has been under development for the past two years. The Network Administration AAS experienced enrollment decline and through research and feedback from industry partners, the decision was made to terminate the Network Administration AAS and replace it with a more relevant degree option for students that meets Montana's workforce needs. Additionally, the program identified a need for a shorter certificate option directly related to meeting workforce needs and to preparing students to enter the IT career field. It was decided that a CAS in IT Help Desk did both and would benefit both students and employers and that it would be a good addition to the existing program. Program faculty have researched curriculum and course offerings to prepare for the new certificate option beginning fall 2023.

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	22
Credits in required courses offered by other departments	8
Credits in institutional general education curriculum	8
Credits of free electives	0

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CURRICULUM PROPOSAL FORM

Total credits required to complete the program	30

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

1. Students will demonstrate knowledge of programming concepts, logic, design, and problem-solving techniques.

2. Demonstrate basic information technology skills such as file management, web search, work processing, and spreadsheets.

3. Explore career opportunities in the Tech industry and identify pathways to goal attainment.

4. Work as a team member in a business information system environment to accomplish the goals of a global organization.

5. Create safe, reliable, and secure systems free from undefined program behaviors and exploitable vulnerabilities.

6. Provide support and maintenance for information systems.

7. Understand the fundamentals of operating systems and networks.

8. Comprehend and resolve common desktop, mobile, and network issues.

9. Explain the importance of policies, plans and procedures related to organizational security.

10. Use standard processes, tools, and skills to perform computer hardware maintenance and repair.

11. Utilize standard processes, tools, and skills required to secure systems, end-devices, and networks.

12. Utilize standard processes, tools, and skills required to implement and administer Cloud Computing Systems.

13. Apply professional skills including communication, customer service, and teamwork.

5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

IT Help Desk positions are one of the most commonly requested by local employers. The job outlook from the US Bureau of Labor Statistics projects a 9% increase in positions from 2020-2030, with median pay projected at $57,910 annually. The Montana Department of Labor and Industry projects 217 annual openings in Montana for Computer User Support Specialist positions from 2021-2031, with average wage at $47,190 annually.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

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CURRICULUM PROPOSAL FORM

Institution Name	Degree	Program Title
Missoula College	CAS	Computer Support

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

This certificate is designed to support local employers and meet workforce demands. While similar to the Missoula College CAS, we believe it will be primarily used by Helena students seeking IT jobs in Helena and the surrounding areas (Townsend, Boulder, Mt. City, Clancy). Montana State agency offices are located in Helena making the State the largest local employer, so there is a demand for IT Help Desk positions.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

The IT & Programming program collaborated with Missoula and Bitterroot Colleges since the GEERs grants in 202-2021. The program is happy to add Helena College courses to Quottly when able and reaches out to collaborate with other partners when course sharing is necessary. Helena College will be the first college in the state to offer this degree option if approved.

7. **Implementation of the program.** When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

The new degree option will be available to students beginning Fall 2023. All new courses required by this degree have been created and approved and will be offered beginning AY 23-24.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment					Graduates				
AY 23-24	AY24-25	AY25-26	AY26-27	AY27-28	AY23-24	AY24-25	AY25-26	AY26-27	AY27-28
5	10	10	10	10	0	3	6	6	6

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

Students can enter the program in fall or spring semesters, however the program is designed for a fall start. The degree can be completed in two semesters and will support both full-time and part-time

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CURRICULUM PROPOSAL FORM

enrollment. This program has historically had a significant percentage of part-time students enrolled that directly affect overall enrollment and completion numbers.

c. What is the initial capacity for the program?

Initial capacity for the program is 25

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

Success will be determined by enrollment, on-time completion, and job placement within the IT field. If enrollment is not meeting targets, efforts will be made to increase recruitment efforts. If students are not progressing towards on-time completion or if they aren't placed into jobs within the IT field after completion, the curriculum will be reviewed and revised, and the program advisory council will be consulted to ensure there are no barriers to student learning and success.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

Course assessment is documented and tracked in the Helena College assessment database. Instructors enter assessment information and data demonstrating student learning for each course learning outcome for each course taught. They also track any changes made to course assessments based on data or necessary changes. Course learning outcomes and assessments are all mapped to program outcomes to ensure that students are meeting both course and program outcomes as they progress.

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

Direct measures include project-based assignments that evaluate actual application of skills, knowledge, and problem-solving. Indirect measures that will be used include course evaluations, surveys, and program evaluations.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words]*

Program instructors will use the assessment data compiled in the assessment database, other course assessments, student grades, and student progression within the program to regularly evaluate the quality and success of the program. Job placement upon completion of the program will also be a key indicator for quality of the program.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

Specialized accreditation is not needed for this degree.

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact

Montana Board of Regents
CURRICULUM PROPOSAL FORM

on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

The new CAS option will use existing classrooms and equipment. The College invested in Smart Classroom technology for most classrooms on both campuses which makes it possible to offer all courses in the program in a remote format when necessary. The only impact will be the course schedule which will be updated to include courses on the correct rotation for degree progression and completion.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

Nothing is needed.

10. Personnel resources.

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

The program is currently fully staffed with two full-time faculty. There will be no major impact to their schedules. The second faculty was hired in AY 22-23 to prepare for this new degree option.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

No new personnel are needed to support this program.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

Yes, all library, information, and academic support resources are adequate for this new certificate option.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

Yes, existing student services have the capacity to accommodate the proposed program. No new services will be necessary.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3

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CURRICULUM PROPOSAL FORM

Revenues	$9,823.85	$19,647.70	$19,647.70
Expenses	$0	$0	$0
Net Income/Deficit (revenues-expenses)	$9,823.85	$19.647.70	$19.647.70

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

No new expenses for this degree option. This is a new degree option within an existing program with no changes to personnel or facilities needed.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

New student fees are not needed for this program. Existing course fees within the program were updated to better align with the current course needs to enhance student learning.

14. Complete the fiscal analysis form.

Montana Board of Regents

CURRICULUM PROPOSAL FORM

Signature/Date

College or School Dean:

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

Flagship President*:

*Not applicable to the Community Colleges.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

IT Help Desk (CAS) 2023-24

AAS

IT and Programming

Start Here

SEMESTER 1		CREDITS	MILESTONE	COMPLETED
CSCI100	INTRODUCTION TO PROGRAMMING	3	*	
CSCI194	CT SEMINAR	2		
ITS164	NETWORKING FUNDAMENTALS	3		
M115	PROBABILITY AND LINEAR MATHEMATICS	3		
WRIT121T	INTRODUCTION TO TECHNICAL WRITING	3		

TOTAL CREDITS 14

SEMESTER 2		CREDITS	MILESTONE	COMPLETED
ITS280	COMPUTER REPAIR AND MAINTANANCE	3	*	
ITS222	ENTERPRISE SECURITY	3		
ITS279	CLOUD SYSTEMS	3		
ITS224	INTRODUCTION TO LINUX	3		
COMX106	COMMUNICATING IN A DYNAMIC WORKPLACE	3		
ITS289	PROF. CERTIFICATION	1		

TOTAL CREDITS 16

Primary courses for Cloud DevOps AAS at Helena College. See curriculum map for course sequence.
Please provide any feedback to Bryon Steinwand (bryon.steinwand@helenacollege.edu)

CSCI100 Introduction to Programming 3 CR

This course is an introduction to elementary programming techniques using modern programming languages. A wide range of programs will be written by the student and run on a computer. Students learn the techniques of looping, functions and sub/routines, arrays, variables and data types, user input/output, file input/ output and appropriate programming practices.

1. Identify the programming concepts and methods common to all computer languages;
2. Implement fundamental programming skills in two or more programming languages;
3. Design simple applications;
4. Employ control structures, functions/procedures, arrays, classes and objects to solve problems of moderate complexity;
5. Create a program to solve a given problem of moderate complexity.

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CURRICULUM PROPOSAL FORM

CSCI194 CT Seminar 2 CR

This course introduces students to the information technology industry and covers basic technology literacy skills and concepts. Students will set educational goals and begin creating their portfolio.

1. Demonstrate the basic operation of a computer, basic applications, and the Internet.
2. Identify possible majors and associated career options.
3. Find, evaluate, and use information effectively and ethically.
4. Identify security precautions for protecting personal information.
5. Identify personal learning goals and processes leading to attainment of those goals.
6. Schedule and describe interactions with the industry.
7. Describe the requirements and evaluation process of Computer Technology portfolio.

ITS164 Networking Fundamentals 3 CR

This course is an introduction to networking fundamentals with both lecture and hands-on activities. Topics include the OSI model and industry standards, network topologies, IP addressing (including subnet masks), and basic network design. Concepts are reinforced with lab activities using equipment in live and simulated environments.

1. Define and distinguish network terminology.
2. Identify functions of the OSI and TCP/IP reference models and related protocols.
3. Define, name, and identify networking media and explain how it is integrated into local area networks (LAN) and wide area networks (WAN).
4. Define and describe network hardware including layer 1, 2, and 3 devices.
5. Define and describe physical and logical network topologies.
6. Define, describe, and apply IP addressing, subnetting and developing subnet addresses.
7. Define and describe network operating systems.
8. Define and describe cloud networking.
9. Explain the security relationship between ports, protocols, and firewall configurations.
10. Perform LAN setup and connectivity testing using ping and traceroute functions.
11. Perform small WAN setup and testing using static and dynamic routing protocols.

CSCI111 Programming with Java I 3 CR

This course offers a thorough introduction to the concepts behind object-oriented software development, including the terminology and methodologies utilizing the Java Programming Language. This course provides the student with the fundamentals of object-oriented techniques. These skills are needed to work effectively in the area of information technology. The ability to understand the relationship between data and the algorithmic manipulation of data is crucial in IT related fields.

1. Design and implement programs that are up to a few hundred lines long using Java.
2. Explain and be able to use data types, variables and constants, and use assignment, arithmetic and Boolean expressions in writing programs.
3. Explain and be able to use fundamental programming constructs such as sequencing, decisions and iteration.
4. Explain and be able to use fundamental object oriented principles such as classes, objects, methods, encapsulation, data hiding, inheritance and polymorphism.
5. Explain and be able to use arrays, collections, and maps.
6. Explain and be able to use exception handling.
7. Identify primitive, wrapper and object data types in the Java language.
8. Create application documentation with Javadoc comments.
9. Create and effectively use packages.
10. Create and implement interfaces.
11. Construct code that sorts a collection of objects using the Java Collections API.
12. Use the Java Streams API to process a collection of objects.

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CURRICULUM PROPOSAL FORM

CSCI240 Databases and SQL 3 CR

This course focuses on the concepts of relational databases and includes tables, records and typed fields, primary and foreign keys, and database normalization, and a thorough coverage of Structured Query Language "SQL". Through a variety of exercises, the student will learn how to model a business enterprise using the entity-relationship approach to relational database design. The Oracle database is used for all exercises.

1. Design and create tables based on rules of normalization.
2. Create Entity Relationship Diagrams.
3. Utilize SQL effectively to create, query, and change a relational database.
4. Explain primary, secondary, and foreign keys.
5. Utilize the SQL join statement.

ITS279 Cloud Systems 3 CR

This course will introduce the student to the creation, use, and administration of cloud-based resources. The course will survey cloud terminology and concepts, examine use-cases and models, examine oversight and security concerns, and consider financial implications and governance. The student will engage in creation, use, and administration of cloud services as well as exploration of virtualization resources.

1. Explain cloud concepts including architectures, networking and storage technologies, cloud services, and use cases.
2. Explain cloud business and financial models, their benefits and challenges.
3. Create and provision cloud resources including data storage, server resources, user and resource access, and monitor access and use.
4. Explain cloud security including weaknesses and tools to evaluate security.
5. Utilize security tools to evaluate cloud security

ITS224 Introduction to Linux 3 CR

Students are introduced to accessing a multi-user system. They also learn to manage files and directories in a shared environment. Topics include simple user administration, scripts and network access.

1. Explain the history of Linux and Open Source software.
2. Define and explain the Linux installation process.
3. Install and configure the Linux operating system.
4. Students will utilize text editors to examine, monitor, and configure the operating system.
5. Demonstrate proficiency with Linux utilities, commands, applications, file system navigation, and file editing.
6. Students will utilize text editors to examine, monitor, and configure the operating system.
7. Develop shell scripts to automate system tasks, backups, and configurations.
8. Students will utilize Linux utilities to perform system backup and restore.
9. Students will install, update, and remove software packages.
10. Create and manage user and group accounts.
11. Discover and modify file system permissions.
12. Configure remote access using SSH.
13. Access manual pages for commands at terminal.
14. Install, manage, and update system services and daemons.

ITS165 Introduction to Operating Systems and the Command Line 3 CR

Introduction to operating system concepts through the use of contemporary software. Emphasizes interaction with the operating system through the command interpreter and shell-type scripts. Will explore multiple operating systems through a variety of modalities including virtual operating systems.

1. Demonstrate proficient use of the command line interface for multiple Operating Systems.
2. Describe the functions of an Operating System.
3. Summarize the basic mechanisms that enable an Operating System to function.

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4. Elaborate on how processes work, are scheduled, and how they communicate.
5. Characterize the purpose and function of threads.
6. Explain how the Operating System manages and allocates Memory.
7. Summarize the process of moving data to and from the CPU.
8. Explain the structure and function of a file system and files.
9. Utilize virtualization to install and run an Operating System.
10. Investigate security issues involved with Operating Systems.

ITS 219 Directory Services and Identity Federation 3 CR

This course is designed to prepare the student to implement Directory Services in a cloud environment. Microsoft's Active Directory as well as Open LDAP and Cloud provider offerings will be configured. The course will primarily focus on user, group, and permission configurations and not the more advanced features of Directory Services. This course will also prepare students to configure Identity Federation and application authentication to an identify provider.

1. Identify features of common Directory Services providers and the protocols they depend upon.
2. Configure the following DNS records: A, AAAA, CNAME, NS, MX, SOA, SRV, and CERT.
3. Configure Linux and Windows clients to use a directory service.
4. Install and configure Microsoft Active Directory, Open LDAP, and at least two Cloud based Directory Services.
5. Manage users, groups, and permissions in at least two directory services.
6. Compare Identity Federation components and identity providers.
7. Configure Identity Federation between two organizations.
8. Configure an application for authentication and authorization to an identify provider.
9. Create and manage a centralized authentication network.
10. Design and implement proper authentication and trust relationships with central identity management systems.

CSCI121 Programming with Java II 3 CR

This course covers some intermediate and advanced topics of the Java programming language as well as in introduction to Data Structures and Algorithms. The course explores the implementation of lists, stacks, and queues in addition to several standard sorting and searching algorithms. Students will also build a web application that interacts with a database.

1. Write Java and know basic error handling, testing, and debugging techniques.
2. Explain and be able to use recursion.
3. Create programs containing multiple files and libraries.
4. Explain and be able to use/implement the following simple ADTs: lists, stacks, and queues.
5. Create an application that uses multiple threads and compare the standard threading model to two alternative frameworks such as Fork Join and Green Threads.
6. Create an application that can perform input and output with external files.
7. Write an application that interacts with a Database.
8. Compare and implement several standard sorting algorithms.
9. Compare and implement linear and binary search.
10. Perform time complexity analysis on simple algorithms.
11. Create a functional web application using a modern Java web framework.

ITS233 Introduction to DevOps 3 CR

DevOps is the art of automation and Infrastructure as Code (IaC) used to build powerful, dynamic, systems. This

course will explore DevOps using scripting, Application to Programmer Interface (API) libraries, and a variety of tools to automate and administer local, remote, and virtual systems.

1. Apply scripting to Automate OS commands.
2. Apply scripting to configure and administer remote systems.
3. Control and manage containers with scripts.
4. Describe and explore the concept of Infrastructure as Code (IaC).
5. Build and administer virtual infrastructure using scripts and IaC.
6. Define the set of practices and principles that are the basis of DevOps.

CSCI276 Application Security 3 CR

The course studies the best practices in the development of secure software applications. Through code reviews, students will analyze and test application code for security vulnerabilities such as SQL injection, XML injection, cross site scripting, buffer overflow, and improper error handling. Students will analyze different types of security attacks and discuss countermeasures to safeguard applications and data. Security issues of particular programming languages, platforms, and application types will also be discussed.

1. Describe the characteristics of secure programming.
2. Identify the Principles of Secure Programming.
3. Identify the vulnerabilities inherent in different programming languages.
4. Perform manual and automated code reviews for security vulnerabilities.
5. Describe potential system attacks and the actors that might perform them.
6. Create an application that performs input data validation.
7. Identify example utilization of Application Security Principles.
8. Produce software components that satisfy their functional requirements without introducing vulnerabilities.
9. Examine vulnerabilities introduced through libraries and how to mitigate those vulnerabilities.
10. Describe appropriate measures to be taken should a system compromise occur.
11. Describe the differences between symmetric and asymmetric algorithms.
12. Identify how application security attacks vary by the type of application such as desktop, web, and distributed.
13. Identify common platform specific vulnerabilities and their countermeasures.
14. Explain how cryptographic techniques can be applied to protect against data loss.
15. Describe different types of Attacks on Cryptographic techniques and countermeasures.
16. Describe the role that Public Key Infrastructure and Certificates play in Enterprise Security.
17. Identify software development best practices for user authentication.

CSCI245 Modern Database Systems 3 CR

This course is a survey of modern relational and non-relational databases and their design and implementation. Hands on experience will be gained by working several different database management systems. Database selection and tradeoffs based on problem requirements will be a major focus.

1. Evaluate a relational database design to include analysis of the following: normal form compliance, primary key selection, index selection, foreign key relationship suitability and query performance evaluation.
2. Identify the inherent strengths and weaknesses of relational and non-relational databases.
3. Create database tables, views, triggers, stored procedures, functions, constraints, JSON fields and indexes on two different relational database management systems.
4. Report on the operation, functionality and programming API of one non-relational distributed database and how this database functionality relates to ACID and the CAP theorem.
5. Design, implement and test a non-trivial relational database on two modern database management systems.

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6. Design, implement and test a non-trivial non-relational database on two modern database management systems.
7. Implement Object Relational Mapping using a modern framework.
8. Compare and contrast the different classes of databases offered by Cloud providers. (new)
9. Gain experience with at least two databases offered by Cloud providers. (new)

ITS213 Cloud Networks and Storage 3 CR

Cloud platforms offer extensive networking and storage options. This course is a survey of the common networking and storage features common to Cloud platforms. This course also explores Software Defined Networking technologies. The following Cloud computing types will be explored: private clouds, public clouds, hybrid clouds, and multiclouds.

1. Review networking concepts from previous Networking course to include: OSI network model, TCP/IP, IP V4, IP V6, LAN, WAN, VLAN, NAT, Ethernet, Router, Switch, Routing Protocol, VPN.
2. Compare and contrast the different Cloud computing types and identify scenarios where their use would be appropriate.
3. Describe the following cloud networking components and concepts: Availability zone, Virtual Private Cloud, Public Subnet, Private Subnet, Internet Gateway, NAT Gateway, API Gateway, Service Gateway, Dynamic Routing Gateway.
4. Explain the importance of network optimization.
5. Create network subnets to isolate computing resources in a Cloud environment.
6. Given a scenario, implement appropriate Cloud network configurations.
7. Given a scenario, troubleshoot basic network connectivity issues.
8. Define Software-defined networking and identify DevOps tools and platforms that incorporate Software-defined networking features.
9. Compare and contrast object storage, file storage, and block storage as used in a Cloud environment.
10. Provision object storage, file storage, and block storage in a Cloud environment.
11. Identify strategies to protect data-at-rest, and data-in-transit within a cloud environment.

ITS222 Enterprise Security 3 CR

Examination of general information technology security concepts. Topics include access control, authentication, attack methods, remote access, web security, wireless networks, cryptography, internal infrastructure security, and external attacks. Security procedures, organizational policies, risk management and disaster recovery addressed.

1. Identify potential risks to your network, such as access and denial of service attacks; modification and repudiation attacks; malicious software attacks; and social engineering.
2. Understand common remote access options and components, including virtual private networks; and tunneling and point to point protocols.
3. Describe network and host-based intrusion detection mechanisms and vulnerabilities.
4. Explain the concept of hardening in relation to the OS, hardware, and applications.
5. Define the core components of physical network security and the importance of corporate security policies.
6. Understand the basic premise of cryptography and public key infrastructure.
7. Develop a comprehensive disaster recovery plan for a small business.
8. Develop a comprehensive network security plan for a small business.

ITS276 Development of DevOps: Plan, Develop, Build, Test, and Secure 3 CR

This course covers the Development half of the DevOps pipeline: Plan, Develop, Build, Test and Secure. Modern DevOps tooling will be used to implement all phases. Multiple cloud platforms will be the target of eventual deployments. Best practices and principles of DevOps and DevSecOps will be followed.

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1. Describe the components of the DevOps pipeline and how the components would integrate with an Agile development methodology.
2. Describe the cultural challenges when adopting DevOps and explain ways to overcome them.
3. Compare and contrast popular application architectures used in cloud computing.
4. Describe the microservice architecture and compare it to serverless microservices.
5. Explain key practices of continuous integration (CI) and show how CI is crucial to a DevOps implementation.
6. Demonstrate the scope of version control and show how having a single source of truth supports DevOps implementation.
7. Summarize the build phase of DevOps from the following steps: pull request, code review, build process, and automated testing.
8. Develop test automation for unit testing, smoke testing, integration testing, acceptance testing, black box testing, and security testing.
9. Summarize the differences between DevOps and DevSecOps and how Security is addressed at every phase within DevSecOps.
10. Identify strategies to protect data-in-use within a cloud environment.
11. Implement the five Development phases covered in this course of a non-trivial set of client applications, databases, and services.

ITS286 Operations of DevOps: Release, Deploy, Operate, Monitor, and Secure 3 CR

This course covers the Operations half of the DevOps pipeline: Release, Deploy, Operate, Monitor, and Secure. Modern DevOps tooling will be used to implement all phases. Multiple cloud platforms will be the target of deployments. Best practices and principles of DevOps and DevSecOps will be followed.

1. Describe need for effective configuration management, and the techniques that support effective configuration management.
2. Illustrate how different infrastructure choices can impact the ability to implement and scale DevOps effectively.
3. Compare and contrast the following cloud service types, Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).
4. Use various document and data interchange formats used in DevOps tooling.
5. Demonstrate the ability to design and deploy a cloud computing environment using modern infrastructure as code, software provisioning, and container orchestration tooling.
6. Use various cloud vendor APIs to administer and monitor vendor cloud services.
7. Describe and differentiate both continuous delivery and continuous deployment and explain how they relate to a general DevOps culture.
8. Describe an end-to-end deployment pipeline and explain the choices made for each step in the pipeline.
9. Describe test automation for A/B testing, Canary Release, Blue Green Deployment.
10. Deploy continuous monitoring and feedback control systems to ensure enterprise availability, efficiency, and security.
11. Define and design a secure cloud computing environment.
12. Appraise security controls with shared responsibility models between the cloud providers and the cloud consumers.
13. Implement the five Operations phases covered in this course of a non-trivial set of client applications, databases, and services utilizing infrastructure, platform and software 'As A Service' solutions in the cloud.

CSCI299 Senior Capstone 2 CR

This course is an applied learning opportunity that integrates the coursework, knowledge, and skills gained in

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Computer Technology coursework. Students will be matched with an organization that needs assistance on an Information Technology project. Students will work with the organization and assigned Computer Technology Faculty to complete project. Project demonstration and required documentation will be presented at project completion.

1. Demonstrate a comprehensive knowledge of topics and concepts covered in the area of emphasis within Computer Technology by completing a project.
2. Develop a project schedule and a list of needed resources.
3. Create a working resume, cover letter, and career action plan.
4. Use Source/Version Control to manage code.
5. Demonstrate the ability to apply the written word through oral and written presentations to a committee consisting of faculty and pertinent community members.
6. Complete, apprise and present their Computer Technology portfolio to program faculty.

Class used only by IT Help Desk CAS option:

ITS 280 Computer Repair and Maintenance

This course is an in-depth exposure to computer hardware and operating systems. Focus is on the current CompTIA A+ certification exam. Students learn: functionality of hardware, computer maintenance techniques, network and resource sharing and safety. Hardware and software interaction, and upgrading processes. Concepts are reinforced with hands-on lab assignments. Students will gain confidence with the components of personal computer systems, learning proper procedures for installation, maintenance, and upgrade and troubleshooting. Customer service and communication techniques are discussed using various scenarios.

1. Identify basic terms, concepts, functions, and operations of personal computer (PC) system components.
2. Identify and describe functionality of all field replaceable units found in a PC, perform step by step disassembly and reassembly, install a Windows OS and test the system.
3. Identify common peripheral ports, associated cabling and connectors.
4. Identify hardware and software methods of upgrading system performance.
5. Analyze common symptoms and problems associated with PC components and provide solutions to troubleshoot and isolate the problems.
6. Analyze service methodologies for eliciting problem symptoms from customers;
7. Identify the purpose of various types of preventive maintenance products and procedures.
8. Describe, install and configure a wired LAN or Wi-Fi network interface card; upgrade drivers and software settings for proper operation.
9. Analyze issues, procedures, and devices for protection in the PC environment, including people, hardware, and the surrounding workspace.

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10. Complete installations of memory modules, system boards, processors, power supplies, adapter boards, storage devices, and multimedia devices.

11. Discuss and model appropriate customer service toward client troubleshooting problems.

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ACADEMIC PROPOSAL REQUEST FORM

March 2024

ITEM 1902-LI0324

ITEM TITLE

Institution: **Helena College University of Montana** CIP Code: **11.0201**

Program/Center/Institute Title: **Web Design**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: CTS

Proposal Summary [360 words maximum]

What: 6 course, eighteen credit Certificate of Technical Skills created to meet the needs of industry partners to assist in alleviating the demand for IT professionals and programmers, specifically in the area of web design. Upon completion of the program, students will earn a stackable CTS that can lead to employment and to additional educational opportunities in the fields of IT, Media Arts, and Business.

Why: Helena College added a Media Arts lab, media arts and graphic design courses, and new academic pathways in Media arts in 2022. The expansion of equipment and course offerings allows for the creation of new credentials, including a new CTS in Web Design. The Web Design CTS incorporates both Computer Science and Media Arts courses to provide a short-term certificate option for students interested in entering the web developer and digital designer field or for students interested in enhancing their existing education and career. Industry partners, including the Department of Corrections, have shown interest in a short-term certificate option in this field. The US Bureau of Labor Statistics shows the job outlook in 2022-2032 in this field at 16%, much faster than average.

Resources: Resources needed for the addition of the new CTS are already available through existing Helena College personnel and resources.

ATTACHMENTS

Attachments; Web Design CTS Academic Map

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

X **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ **B. Level II:**

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

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ACADEMIC PROPOSAL REQUEST FORM

Academic Map

Web Design

Certificate of Technical Skills

Computer Science and Technology

	Start Here				*Milestone Courses
SEMESTER 1	1	CREDITS	MILESTONE	COMPLETED	
MART 101	Introduction to Media Arts	3	*		**Advising Notes** ▪ Students must earn a C- or better to successfully complete a course.
CSCI 100	Introduction to Programming	3	*		
MART 122	Introduction to Adobe	3	*		
SEMESTER 2	2	CREDITS	MILESTONE	COMPLETED	
MART 145	Web Design	3			
CSCI 211	Client Side Programming	3			
MART 232	Interactive Web II	3			

CTS can be completed in 1-3 semesters depending on the needs of the students. This CTS is available to Dual Enrollment students interested in completion of certifications needed to enter the IT workforce.

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

March 2024

ITEM 1901-LI0324

ITEM TITLE

Institution: **Helena College University of Montana** CIP Code: **11.0201**

Program/Center/Institute Title: **ServiceNow Administration and Development**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: CTS

Proposal Summary [360 words maximum]

What: Six course, sixteen credit Certificate of Technical Skills created to meet the needs of industry partners to assist in alleviating the demand for IT professionals and programmers, specifically those with ServiceNow certifications. Upon completion of the program, students will earn a stackable CTS, as well as two ServiceNow certifications that can lead to immediate employment.

Why: ServiceNow is a low code, cloud-based platform that simplifies and automates IT management workflows, without replacing human employees. Montana agencies such as the Department of Administration, Department of Agriculture, and the Department of Commerce began implementation of ServiceNow in 2020, but a March 2022 challenge issued by Governor Greg Gianforte mandated that executive agencies complete their first transition to ServiceNow by the end of 2023. While transitions to ServiceNow are well underway, Montana does not have a training center for ServiceNow, leading to a shortage of qualified employees. Helena College worked with ServiceNow's education department to incorporate ServiceNow credentials and training materials into new and existing computer science courses.

Resources: Resources needed for the addition of the new CTS are already available through existing Helena College personnel and resources or were obtained through grant funding.

ATTACHMENTS

Attachments: ServiceNow Administration and Development CTS Academic Map

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

X **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ **B. Level II:**

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

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ACADEMIC PROPOSAL REQUEST FORM

Academic Map

ServiceNow Administration and Development

Certificate of Technical Skills

Computer Science and Technology

	Start Here				*Milestone Courses
SEMESTER 1	1	CREDITS	MILESTONE	COMPLETED	
CSCI 191	Special Topics – ServiceNow Administration	3	*		**Advising Notes** ▪ Students must earn a C- or better to successfully complete a course.
CSCI 100	Introduction to Programming	3	*		
CSCI 240	Databases and SQL	3	*		
SEMESTER 2	2	CREDITS	MILESTONE	COMPLETED	
CSCI 291	Special Topics – Low Code Development	3			
CSCI 211	Client Side Programming	3			
ITS 289	Professional Certification	1			

CSCI 291 Special Topics are being used for the ServiceNow curriculum until new courses can be created.

CTS can be completed in 1-3 semesters depending on the needs of the students. This CTS is available to Dual Enrollment students interested in completion of certifications needed to enter the IT workforce.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

February 2024

ITEM 2702 L1 0224

ITEM TITLE Request for Authorization to Consolidate the B.S. in Public Relations, the B.A. in Communication Arts—Organizational Communication, and the B.A. in Communication Arts-Media Studies into the Bachelor of Arts in Communication

Institution: **Montana State University Billings** CIP Code: **090101; 090102; 090902**

Program/Center/Institute Title:

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: X

Options:

Proposal Summary [360 words maximum]

What: Montana State University Billings requests authorization to consolidate the B.S. in Public Relations, the B.A. in Communication Arts—Organizational Communication, and the B.A. in Communication Arts-Media Studies into the Bachelor of Arts in Communication

Why: This proposed merger of programs will streamline curricular offering for students, reduce programmatic redundancies, and will provide students with a clearer path toward program completion.

Resources: none

ATTACHMENTS

Curriculum Proposal

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

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3. **Establishing a B.A.S./A.A./A.S. area of study**

4. **Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

5. **Re-titling an existing postsecondary educational program**

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

X 7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

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CURRICULUM PROPOSAL FORM

1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

   The Department of Communication proposes to merge its three undergraduate major programs into a single program. This proposed merger of programs will streamline curricular offerings for students, reduce programmatic redundancies, and will provide students with a clearer path toward program completion. The new Bachelor of Arts in Communication will replace the B.A. Communication Arts – Media Studies option, B.A. Communication Arts – Organizational Communication option, and the B.S. in Public Relations.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

Merging these three undergraduate programs into a single program underscores Core Theme 1: Build Educational Programs to Support Student Needs by creating a streamlined curricular offering for students that will provide a clearer path toward program completion. The new program also supports Core Theme 4: Unify, Invigorate, and Engage MSUB's structure and culture by providing an example of how revisiting and revising curriculum reflects MSU Billings' commitment to deliver a "transformative education."

3. **Process leading to submission.** Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

   Based on feedback received during MSU Billings' Academic Program Review, the Department of Communication opted to streamline and merge its three undergraduate major programs into a single program in order to reduce redundancies and provide clarity for students. The program change has been shared with students and has been reviewed and approved by the Dean of the College of Liberal Arts and Social Sciences (CLASS), the CLASS curriculum council, the University Curriculum Council, the Academic Senate, and the Provost.

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

   a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	45
Credits in required courses offered by other departments	14-15
Credits in institutional general education curriculum	31
Credits of free electives	29-30
Total credits required to complete the program	120

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CURRICULUM PROPOSAL FORM

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

1. Utilize communication to embrace difference.
2. Apply communication theories, perspectives, principles, and concepts.
3. Differentiate meanings embedded in messages.
4. Utilize communication to respond to societal issues.
5. Evaluate the ethical elements of a communication situation.

5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

The Department of Communication's three existing undergraduate major programs already effectively serve the regional workforce and student needs. This proposed merged program addresses regionally-specific economic and workforce needs in a more efficient, student-friendly way by reducing barriers to program completion, and by helping students better make professional connections between the program's curriculum and the professional workforce.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
UM	BA	Communication Studies

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

The proposed Bachelor of Arts in Communication does not substantially duplicate the Communication Studies program at the University of Montana. There is some minor overlap between courses offered in MSUB's Communication program and UM's Organizational and Institutional Communication program.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

The bulk of our existing three undergraduate major programs (particularly public relations and media studies) is unique to the MUS. The proposed merged program maintains the uniqueness of the three original major programs with the noted exception above.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

7. **Implementation of the program.** When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

If approved the program will be offered in Fall Semester 2024. The new program does not require any curricular change; existing students will be able to complete the department's current offerings, if they so choose, while new students will be able to matriculate into the single program.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Enrollment Headcount

AY 23/24	AY 24/25	AY 25/26	AY 26/27	AY 27/28
45	47	50	51	52

Graduates

AY 23/24	AY 24/25	AY 25/26	AY 26/27	AY 27/28
25	26	27	28	29

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

Institutional data reveals the aggregate total major enrollment across the three degrees presently at 45, and the aggregate completion total of 25 from the preceding year. The Department of Communication believes it will be easier to recruit to a merged program compared with three separate, overlapping programs. The net effect should translate into an increase in overall major enrollment.

c. What is the initial capacity for the program?

Given current faculty resources, the headcount capacity of the program is 60-75 students.

8. **Program assessment.** How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

The department will work with Advising Center, Career and Employment Services, and New Student Services to evaluate what impact the program name change will have on initial student knowledge of and interest in the program.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

Montana Board of Regents
CURRICULUM PROPOSAL FORM

In consultation with MSU Billings' Director of Assessment and Accreditation, the Department of Communication annually reviews each of its programs. We will continue this practice upon approval of our merged undergraduate major program.

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

The department assesses student assignments at different levels of curriculum, including the capstone course, which allows a summative assessment of learning. The department has developed a rubric for assessing each of our program learning outcomes.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words]*

The department receives feedback annually from an Assessment committee on our submitted reports. The department incorporates the feedback where appropriate.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

Accreditation is generally not available for our academic discipline.

9. Physical resources.

a. Describe the existing facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

Use of existing facilities will remain exactly the same. There is no increase in courses or personnel.

b. List needed facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

N/A

10. Personnel resources.

a. Describe the existing instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

The department currently has six full-time faculty members and a program coordinator. The proposed program will require no new instructional, support, or administrative resources. It can be offered entirely with existing personnel and resources.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

No new personnel are required to offer the proposed program.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

Library resources are adequate. No new resources are requested.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

Existing student services support is adequate, and will remain so for the new program.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

There are no financial implications stemming from this program change.

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues			
Expenses			
Net Income/Deficit (revenues-expenses)			

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

None.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

None.

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

None.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

Not applicable.

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

Not applicable.

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

No new fees are requested.

14. Complete the fiscal analysis form.

Not applicable.

Signature/Date

College or School Dean:

DocuSigned by:
Tami Haaland 1/31/2024
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Chief Academic Officer:

DocuSigned by:
Dr. Sepehr Eskandari 1/31/2024
151D5B91B28F4B0...

Chief Executive Officer:

DocuSigned by:
1/31/2024
84C8ED970C4E4C7...

Flagship Provost*:

DocuSigned by:
Robert Mokwa 2/14/2024 | 8:15 AM MST
212A28411AC04BD...

Flagship President*:

*Not applicable to the Community Colleges.

DocuSigned by:
President Cruzado 2/14/2024 | 8:15 AM MST
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Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

FEBRUARY/2024

ITEM 2902-L10224

Request for authorization to terminate Computer Information Technology – Network Support & Security Associate of Applied Science

Institution: **Great Falls College Montana State University** CIP Code: **11-0901**

Program/Center/Institute Title: **CIT – Network Support & Security Associate of Applied Science**

Includes (please specify below): Face-to-face Offering: _____ Online Offering: _____ Blended Offering: X

Options: _____

Proposal Summary [360 words maximum]

What: Great Falls College MSU requests authorization to terminate the CIT – Network Support & Security AAS effective Summer 2025.

Why: This decision derived from an in-depth review of information technology career field needs, the resignation of our long-term adjunct faculty, and low-enrollment trends of the program. In addition, cloud-based networking is covered in the two remaining computer information technology degree options at Great Falls College: Computer Programming and Cybersecurity.

Resources: There will be no impact to full-time faculty workloads.

ATTACHMENTS

2902-L10224_Term

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

3. **Establishing a B.A.S./A.A./A.S. area of study**

4. **Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

5. **Re-titling an existing postsecondary educational program**

X 6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: Computer Information Technology – Network Support & Security A.A.S.

Program is being ____ **Placed into moratorium** **X** **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y: X N: ____**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y: X N: ____**

   b.) **What is the expected graduation date of all students from the program? May 2025**

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y: X N: ____**

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y: ____ N: X**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y: ____ N: ____**

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System
PROGRAM TERMINATION/MORATORIUM FORM

3. The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):

a.) Internal Curriculum Committees X

b.) Faculty Senate X

c.) Program Public Advisory Committee X

d.) Articulation Partners N/A

4. Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.) Y: ____ N: X

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION February 2024

ITEM 20701-L2-0224

Request for authorization to create two options in the Master of Science in Clinical Rehabilitation and Mental Health Counselling: (1) Rehabilitation Counseling Option, and (2) Mental Health Counseling Option

Institution: **MSU Billings** CIP Code: **512399**

Program/Center/Institute Title: **Master of Science in Clinical Rehabilitation and Mental Health Counseling**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: X Blended Offering: X

Options: (1) Rehabilitation Counseling Option, and (2) Mental Health Counseling Option

Proposal Summary [360 words maximum]

What: MSU Billings requests authorization to create two options in the Master of Science in Clinical Rehabilitation and Mental Health Counselling: (1) Rehabilitation Counseling Option, and (2) Mental Health Counseling Option

Why: The program's accrediting body, CACREP, has developed new regulations that will be officially released in 2024. They will no longer allow students to gain dual certifications as a Licensed Clinical Professional Counselor and a Certified Rehabilitation Counselor. Instead, CACREP now requires separate academic options for each certification, instead of the unified degree that MSU Billings currently offers. In order to maintain accreditation, MSU Billings must provide options for students to choose either a vocational rehabilitation counseling career or a mental health counseling career.

Resources: MSU Billings will add four new classes to meet the accreditation requirements: "COU 516 - Drugs, Brain, and Behavior", "COU 543 - Marriage and Family Therapy", a separate practicum (COU 594 - Counseling Practicum), and a separate internship class (COU 596 - Internship). While there may be some need for additional adjunct faculty to teach undergraduate classes to free up faculty for graduate level classes, this will not present a significant staffing challenge as the program has access to community specialists with whom we have strong working relationships. New faculty are not required for these options.

ATTACHMENTS

Curriculum Proposal
Fiscal Analysis

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

X **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	Montana State University Billings
AWARD LEVEL:	Graduate
PROGRAM NAME:	
PROGRAM CODE:	

	FY24 Year 0	FY25 Year 1	FY26 Year 2	FY27 Year 3	FY28 Year 4	FY29 Year 5
ENROLLMENT PROJECTIONS						
Headcount						
annual unduplicated headcount of students with declared major or minor within the program	0	105	110	113	118	120
Credit Hours						
annual avg. credits hours earned per student in program related curriculum	-	24	24	24	24	24
Student FTE						
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	-	105	110	113	118	120
Completions						
Annual number of program completers	-	18	18	19	19	20
REVENUE						
Tuition Revenue (net of waivers)		$870,936	$912,409	$937,293	$978,766	$995,355
Institutional Support		$0	$0	$0	$0	$0
Other Outside Funds (grants, gifts, etc.)		$0	$0	$0	$0	$0
Program Tuition/Fees		$0	$0	$0	$0	$0
Total Revenue	**$0**	**$870,936**	**$912,409**	**$937,293**	**$978,766**	**$995,355**
Total Revenue per Student FTE	**#VALUE!**	**$8,295**	**$8,295**	**$8,295**	**$8,295**	**$8,295**
EXPENDITURES						
Tenure Track Faculty — FTE		6.00	6.00	6.00	6.00	6.00
Tenure Track Faculty — Salary + Benefits		$563,383	$563,383	$563,383	$563,383	$563,383
Non-tenure Track Faculty *Includes Adjunct Instructors — FTE		0.36	0.36	0.36	0.36	0.36
Non-tenure Track Faculty *Includes Adjunct Instructors — Salary + Benefits		$10,806	$10,806	$10,806	$10,806	$10,806
Graduate Teaching Assistants — FTE		0.00	0.00	0.00	0.00	0.00
Graduate Teaching Assistants — Salary + Benefits		$0	$0	$0	$0	$0
Staff — FTE		0.45	0.45	0.45	0.45	0.45
Staff — Salary + Benefits		$25,880	$25,880	$25,880	$25,880	$25,880
Total Faculty & Staff — FTE		6.81	6.81	6.81	6.81	6.81
Total Faculty & Staff — Salary + Benefits		$600,068	$600,068	$600,068	$600,068	$600,068
Operations (supplies, travel, rent, etc)		$4,000	$4,000	$4,000	$4,000	$4,000
Start-up Expenses (OTO)		$0	$0	$0	$0	$0
Total Expenses	**$0**	**$604,068**	**$604,068**	**$604,068**	**$604,068**	**$604,068**
Student FTE to Faculty (TT + NTT) Ratio	**#VALUE!**	**16.5**	**17.3**	**17.8**	**18.6**	**18.9**
Net Income/Deficit (Revenue - Expenses)	**$0**	**$266,868**	**$308,341**	**$333,225**	**$374,698**	**$391,287**

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

DocuSigned by:
Leslie Weldon
588DFAB5AACC45E...
Campus Chief Financial Officer Signature

11/2/2023

Chief Financial Officer Comments

Montana Board of Regents

CURRICULUM PROPOSAL FORM

1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

MSU Billings will create two options in our existing Master of Science in Clinical Rehabilitation and Mental Health Counseling program. This curricular change is required by our accrediting body the Council for Accreditation of Counseling and Related Educational Programs (CACREP). One option will be in **Rehabilitation Counseling** and the other in **Mental Health Counseling**. Students in both options will be co-enrolled in 13 stacked classes. The department will create two new classes for the Mental Health Counseling Option: 'COU 516: Drugs, Brain, and Behavior' and 'COU 543: Marriage and Family Therapy'. There will also be separate practicum and internship classes designed for each area of specialty, which adds two additional new classes (COU 594 - Counseling Practicum, and COU 596 – Internship). This change needs to be reflected in the student transcripts per the expectations of CACREP.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

This program change directly aligns with Montana State University Billings' core themes: 1) this program responds to both student and public demand, 2) the department aims to progressively grow the program in a way that meets increased mental health counseling needs in the community and to match student demand for the program to expand, and 3) the program has several community partners, who train our students and hire our graduates, and with this adaption we intend to continue to strengthen those relationships.

3. **Process leading to submission.** Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

The program considered student feedback during a scheduled summer alumni event and reviewed the CACREP guidance language that will be relevant when the next accreditation review occurs. The department met to review and consider the new options. A rubric, COU, was identified for the Counselling courses. All changes have been reviewed and approved by the Academic Senate at MSU Billings.

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

   a. List the program requirements using the following table.

   Both programs require 60 credits:

	Credits
Credits in required courses offered by the department offering the program	60
Credits in required courses offered by other departments	0
Credits in institutional general education curriculum	0
Credits of free electives	0
Total credits required to complete the program	60

Montana Board of Regents
CURRICULUM PROPOSAL FORM

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

Mental Health Counseling Option Learning Outcomes

Upon completion of the program, students will be able to:

1. Advocate for persons with disabilities, including those with mental health issues.
2. Explain the philosophical, historical, and legislative aspects of the mental health counseling profession.
3. Describe the approaches to being a counselor practitioner in the mental health counseling delivery systems.
4. Integrate ethics and ethical guidelines into the processes of mental health counseling.
5. Identify the basic counseling treatment modalities in mental health.
6. Identify and contrast the different interventions for rehabilitation and mental health counseling.
7. Students will be able to identify substance abuse addictions and co-occurring mental health conditions and identify needed resources and treatment options.
8. Use current and relevant assessment practices and utilize current research to ensure clients receive positive outcomes.
9. Use family systemic theories and interventions to employ effective clinical skills for individuals, couples, and families.
10. Examine counseling in a changing mental health community.

Rehabilitation Counseling Option Learning Outcomes

Upon completion of the program, students will be able to:

1. Advocate for persons with disabilities, including those with invisible disabilities.
2. Explain the philosophical, historical, and legislative aspects of the rehabilitation counseling profession.
3. Integrate ethics and ethical guidelines into the processes of rehabilitation counseling.
4. Knowledge and practice of ethics and ethical guidelines and process for rehabilitation counseling
5. Identify the basic counseling treatment modalities mental health.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

6. Identify and contrast the different interventions for rehabilitation and mental health counseling.
7. Examine the psychosocial impact of disability.
8. Identify how rehabilitation counselors educate employers about accommodation of people with disabilities.
9. Use current and relevant research and assessment practices to ensure clients receive positive outcomes.
10. Examine counseling in a changing mental health community.

5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

The Montana Department for Health and Human Services identified that, for all age groups, Montana has consistently ranked in the top five in suicide rates in the nation over the past thirty years. According to the 2020 National Vital Statistics Report, Montana has the 3rd highest rate of suicide in the nation. This report identified issues including education around the stigma of depression, isolation, alcoholism, and a lack of behavioral health services all as factors contributing to the high rate of suicide. Programs such as the one offered at MSU Billings, aim to bridge that gap and develop counselors who can work with people from diverse experiences and backgrounds and support and advocate for them. It should be noted that our existing Masters of Clinical Rehabilitation and Mental Health Counseling is simply being "split" into two options (Rehabilitation Counseling and Mental Health Counseling) as per the most recent requirements from CACREP, and this allows our current program to align with national and regional requirements for accreditation and licensing.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
University of Montana	M.A	Clinical Mental Health Counseling
Montana State University	MS	Clinical Mental Health or Marriage, Couples, and Family Counseling
Montana State University Northern	MEd	Counselor Education

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

Montana Board of Regents
CURRICULUM PROPOSAL FORM

MSU Billings currently offers the Master's in Rehabilitation and Mental Health Counseling. This Master's degree will not change. However, the accrediting body, CACREP, now requires that, within that degree, students choose either a rehabilitation counseling option or a mental health counseling option. Thus, this program does not duplicate another MUS program any more than the existing Masters does.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

MSU Billings has not collaborated with other institutions because we already offer this Master's degree program. The only change is that the program is adding options within the existing degree to separate the emphasis students will receive in either Rehabilitation Counseling or Mental Health Counseling (per CACREP requirements).

7. **Implementation of the program.** When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

The first phase of implementation will occur in Fall 2023, when the new classes and rubric will be implemented in the course catalogue. In Fall 2024, a program will be developed to reflect these two separate options. In Summer 2025, the program will pursue re-accreditation for the rehabilitation counseling option and seek accreditation for the new mental health counseling option.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Enrollment Headcount

AY 23/24	AY 24/25	AY 25/26	AY 26/27	AY 27/28
75	75	75	75	75

Graduates

AY 23/24	AY 24/25	AY 25/26	AY 26/27	AY 27/28
25	25	25	25	25

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

The program is limited by the requirements of our accrediting body who require a ratio of 12 students to one professor full time enrollment. Currently, our headcount is 76. We have projected headcount of 75 for future years.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Head Count	Fall 2017 Census	Fall 2018 Census	Fall 2019 Census	Fall 2020 Census	Fall 2021 Census	Fall 2022 Census	Fall 2023 as of 3/27/23
Clncl Rehab & Mntl Hlth Coun, MS	55	57	70	76	75	94	94

Unique Completers by APR Program and Fiscal Year

APR Program	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Clncl Rehab & Mntl Hlth Coun, MS	12	7	15	12	25	24	22

What is the initial capacity for the program?

The program is limited by the requirements of our accrediting body who require a ratio of 12 students to one professor full time enrollment. Currently, our headcount is 76. We have projected headcount of 75 for future years.

8. **Program assessment.** How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

The program learning outcomes articulate the knowledge and skills that will be measured to determine student success. The curriculum for both programs informed the creation of the program learning outcomes. MSU Billings requires each program to develop a program assessment plan, based on the program learning outcomes and required curriculum. This plan will be implemented and reported on annually. The report will identify the data that was collected and analyzed for the included program learning outcomes. The faculty will evaluate 3 program learning outcomes per year. Should trends arise in the data that reveal curricular and/or pedagogical gaps, the faculty will discuss appropriate actions to fill those gaps to increase student success. These actions will be included in the annual assessment report.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

The program utilizes Tevera as an assessment tool since it meets the requirements of CACREP, and students are evaluated on an annual basis. Tevera measures necessary qualities in a counsellor, including ethics, counseling strategies, and demeanor. These data elements will be used to inform student learning achievement of the program learning outcomes. The program reaches out to practicum and internship supervisors as well as employers on an annual basis to solicit feedback on student knowledge in the core areas identified as priorities by CACREP. We survey alumni from the program each year to determine job placement success, and their knowledge of the core areas identified. These forms of indirect data offer rich contextual information that inform student success in the program. We have initiated an annual alumni event, to create an opportunity to network and connect with graduates. These measures are all included in the program's annual CACREP report. The program faculty will implement student learning evaluation every year, rotating through the program learning outcomes (evaluating 3 per year).

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

The program is required to provide an annual assessment report to our accrediting body CACREP. This report evaluates data from a) key performance indicators (b) faculty evaluations, (c) student progress, activities, and achievements, (d) stakeholder surveys, (e) student surveys, and (f) qualitative data collected through advising, informal course feedback, conversations with students and faculty and faculty meetings. The program faculty employ a mixed methods approach to evaluating student learning by collecting and analyzing both direct and indirect data to inform student success of the program learning outcomes.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words] (again, the Assessment plan has a question about this directly.*

The program uses a combination of the CACREP annual report information and the data analysis for each program learning outcome to assess the health of the program and evaluate student learning. If there are curricular or placement adaptations that need to be made as well as considering class content and pedagogy, the program faculty will discuss and take appropriate action. These discussions will be guided by the results of the data and the trends observed.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

The intent of the program change is to ensure that we can continue to meet the accrediting requirements of CACREP. CACREP Accreditation provides recognition that the content and quality of the program has been evaluated and meets standards set by the profession. The student, as a consumer, can be assured that appropriate knowledge and skill areas are included. The program is stable, professional, and financially sound. This ensures our continued program enrollment and quality.

9. Physical resources.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

a. Describe the existing facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

Because the program is largely online and provided in a Hyflex/Hybrid format there are no substantial physical resources identified. Additionally, this program change does not require additional faculty offices or resources.

b. List needed facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

MSU Billings recently opened a new building (Yellowstone Science and Health Building) which houses the College of Health Professions and Science which includes updated technology. The program largely has the technology needed to make these classes accessible.

10. Personnel resources.

a. Describe the existing instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

There will not be substantive changes given that adding the second option requires only minor course adjustments. If necessary, the program has community partnerships with experienced instructors who can assume the role of teaching some of undergraduate classes, which will enable full time faculty to focus on the newly identified graduate options.

b. Identify new personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

There is not currently a need for new faculty resources because, at a functional level, the existing Master's degree will not change. However, as previously noted, CACREP limits enrollment in their accredited programs to 12 students per faculty member. If demand for this degree increases, MSU Billings will have to either limit enrollment to current levels or increase faculty.

11. Other resources.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

Existing resources are adequate.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

Existing resources are adequate.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

We do not anticipate that this change will alter our existing budget in any way.

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	$870,936	$912,409	$937,293
Expenses	$604,068	$604,068	$604,068
Net Income/Deficit (revenues-expenses)	$266,868	$308,341	$333,225

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

N/A

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

N/A

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

N/A

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

Montana Board of Regents
CURRICULUM PROPOSAL FORM

N/A

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

N/A

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

N/A

14. Complete the fiscal analysis form.

The completed fiscal analysis form is attached.

Signature/Date

College or School Dean:

DocuSigned by:
Kurt Dewes 1/30/2024
611DDC7DCEAC478...

Chief Academic Officer:

DocuSigned by:
Dr. Sepehr Eskandari 1/31/2024
151D5B91B28F4B0...

Chief Executive Officer:

DocuSigned by:
1/31/2024
84C8ED970C4E4C7...

Flagship Provost*:

DocuSigned by:
2/14/2024 | 8:15 AM MST
Robert Mokwa
212A28411AC04BD...

Flagship President*:

*Not applicable to the Community Colleges.

DocuSigned by:
Waded Cruzado 2/14/2024 | 8:15 AM MST
7D6A4CE96C3F415...

Montana Board of Regents

CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

The curriculum of the two options are:

MASTERS OF SCIENCE CLINICAL REHABILITATION AND MENTAL HEALTH COUNSELING PLAN OF STUDY Mental Health Counseling Option	**MASTERS OF SCIENCE CLINICAL REHABILITATION AND MENTAL HEALTH COUNSELING PLAN OF STUDY Rehabilitation Counseling Option**
Required Courses	**Required Courses**
COU 501 Principals of Rehabilitation and Mental Health Counseling (3 credits)	**REHA 501 Principals of Rehabilitation and Mental Health Counseling (3 credits)**
COU 503 Psychiatric Rehabilitation (3 credits)	**REHA 502 Individual and Family Response to Disability (3 credits)**
COU 505 Theories of Counseling (3 credits)	**REHA 503 Psychiatric Rehabilitation (3 credits)**
COU 507 Professional Orientation and Ethic Practice (3 credits)	**REHA 505 Theories of Counseling (3 credits)**
COU 508 Multicultural/Gender Issues in Counseling (3 credits)	**REHA 507 Professional Orientation and Ethic Practice (3 credits)**
COU 516 Drugs, Brain and Behavior (3 credits)	**REHA 508 Multicultural/Gender Issues in Counseling (3 credits)**
COU 517 Research and Program Evaluation (3 credits)	**REHA 515 Medical and Psychological Aspects of Disability (3 credits)**
COU 519 Human Growth and Development (3 credits)	**REHA 517 Research and Program Evaluation (3 credits)**
COU 520 Group and Individual Evaluation (3 credits)	**REHA 519 Human Growth and Development (3 credits)**
COU 521 Advanced Individual Counseling (3 credits)	**REHA 520 Group and Individual Evaluation (3 credits)**
COU 523 Advanced Group Counseling (3 credits)	**REHA 521 Advanced Individual Counseling (3 credits)**
COU 525 Career Development, Placement, and Support (3 credits)	**REHA 523 Advanced Group Counseling (3 credits)**
COU 543 Marriage and Family Therapy (3 credits)	**REHA 525 Career Development, Placement, and Support (3 credits)**
COU 560 DSM-5 for Rehabilitation and Mental Health Counseling (3 credits)	**REHA 560 DSM-5 for Rehabilitation and Mental Health Counseling (3 credits)**
Required Clinical Work	**Required Clinical Work**
COU 590 Prepracticum for Rehabilitation and Mental Health Counseling (3 credits)	**REHA 590 Prepracticum for Rehabilitation and Mental Health Counseling (3 credits)**
COU 594 Counseling Practicum (3 credits)	**REHA 594 Counseling Practicum (3 credits)**
COU 596 Cooperative Education/Internship (12 credits)	**REHA 596 Cooperative Education/Internship (12 credits)**
Total Minimum Semester Credits 60 for each option	

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION February 2024

ITEM 20701-L2-0224

Request for authorization to create two options in the Master of Science in Clinical Rehabilitation and Mental Health Counselling: (1) Rehabilitation Counseling Option, and (2) Mental Health Counseling Option

Institution: **MSU Billings** CIP Code: **512399**

Program/Center/Institute Title: **Master of Science in Clinical Rehabilitation and Mental Health Counseling**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: X Blended Offering: X

Options: (1) Rehabilitation Counseling Option, and (2) Mental Health Counseling Option

Proposal Summary [360 words maximum]

What: MSU Billings requests authorization to create two options in the Master of Science in Clinical Rehabilitation and Mental Health Counselling: (1) Rehabilitation Counseling Option, and (2) Mental Health Counseling Option

Why: The program's accrediting body, CACREP, has developed new regulations that will be officially released in 2024. They will no longer allow students to gain dual certifications as a Licensed Clinical Professional Counselor and a Certified Rehabilitation Counselor. Instead, CACREP now requires separate academic options for each certification, instead of the unified degree that MSU Billings currently offers. In order to maintain accreditation, MSU Billings must provide options for students to choose either a vocational rehabilitation counseling career or a mental health counseling career.

Resources: MSU Billings will add four new classes to meet the accreditation requirements: "COU 516 - Drugs, Brain, and Behavior", "COU 543 - Marriage and Family Therapy", a separate practicum (COU 594 - Counseling Practicum), and a separate internship class (COU 596 - Internship). While there may be some need for additional adjunct faculty to teach undergraduate classes to free up faculty for graduate level classes, this will not present a significant staffing challenge as the program has access to community specialists with whom we have strong working relationships. New faculty are not required for these options.

ATTACHMENTS

Curriculum Proposal
Fiscal Analysis

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

X **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

March 2024

ITEM 1904-LII0324

ITEM TITLE

Institution: **Helena College, UM** CIP Code: **11.1006**

Program/Center/Institute Title: **IT Help Desk CAS**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: ____

Proposal Summary [360 words maximum]

What: Helena College is submitting a request for a Certificate of Applied Science in IT Help Desk. The IT Help Desk CAS recognizes the completion of 30 credits, primarily focused on Computer Science/Programming (CSCI) and Information Technology Systems (ITS) curriculum with the necessary General Education courses required for completion of the certificate.

Why: This new CAS option will prepare students for jobs in computer support specialist roles, commonly referred to as IT Helpdesk positions. Computer support specialist help maintain computer networks and provide technical help to computer users, most often in IT Help Desk positions. IT Help Desk positions are one of the most commonly requested by local employers. The job outlook from the US Bureau of Labor Statistics projects a 9% increase in positions from 2020-2030, with median pay projected at $57,910 annually. The Montana Department of Labor and Industry projects 217 annual openings in Montana for Computer User Support Specialist positions from 2021-2031, with average wage at $47,190 annually.

Resources: The new CAS option will utilize existing courses and new courses created within the last year. Current faculty staffing will be used to offer the new CAS option. No new resources will be needed for this new CAS option.

ATTACHMENTS

Attachments

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

1b. Withdrawing a postsecondary educational program from moratorium

2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less

3. Establishing a B.A.S./A.A./A.S. area of study

4. Offering an existing postsecondary educational program via distance or online delivery

OCHE Approvals

5. Re-titling an existing postsecondary educational program

6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)

7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)

8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)

9. Revising a postsecondary educational program (Curriculum Proposal Form)

10. Establishing a temporary C.A.S. or A.A.S. degree program *Approval limited to 2 years*

B. Level II:

X **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)

3. Exceeding the 120-credit maximum for baccalaureate degrees *Exception to policy 301.11*

4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. Re-titling an academic, administrative, or research unit

Montana Board of Regents

CURRICULUM PROPOSAL FORM

1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

Helena College is submitting a request for a Certificate of Applied Science in IT Help Desk. The IT Help Desk CAS recognizes the completion of 30 credits, primarily focused on Computer Science/Programming (CSCI) and Information Technology Systems (ITS) curriculum with the necessary General Education courses required for completion of the certificate. This new CAS option will be offered as part of the established IT & Programming program at Helena College. The current staffing of the program and the stackability of this certificate into the AAS options make this new certificate possible.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

The new certificate aligns with the College's mission to provide the paths and tools necessary to assist learners in achieving their educational and career goals. It also aligns with the Impact goal to evaluate and respond to educational and workforce development needs to cultivate mutually beneficial relationships and to provide seamless career transition. The IT & Programming program has an active advisory council that has requested a 1-year certificate option for students in this area. This certificate will meet the needs of students working to get into the workforce and IT positions within a year and it will meet the needs of our local and state employers. Helena College Strategic Plan.

3. **Process leading to submission.** Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

The new CAS has been under development for the past two years. The Network Administration AAS experienced enrollment decline and through research and feedback from industry partners, the decision was made to terminate the Network Administration AAS and replace it with a more relevant degree option for students that meets Montana's workforce needs. Additionally, the program identified a need for a shorter certificate option directly related to meeting workforce needs and to preparing students to enter the IT career field. It was decided that a CAS in IT Help Desk did both and would benefit both students and employers and that it would be a good addition to the existing program. Program faculty have researched curriculum and course offerings to prepare for the new certificate option beginning fall 2023.

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	22
Credits in required courses offered by other departments	8
Credits in institutional general education curriculum	8
Credits of free electives	0

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Total credits required to complete the program	30

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

1. Students will demonstrate knowledge of programming concepts, logic, design, and problem-solving techniques.

2. Demonstrate basic information technology skills such as file management, web search, work processing, and spreadsheets.

3. Explore career opportunities in the Tech industry and identify pathways to goal attainment.

4. Work as a team member in a business information system environment to accomplish the goals of a global organization.

5. Create safe, reliable, and secure systems free from undefined program behaviors and exploitable vulnerabilities.

6. Provide support and maintenance for information systems.

7. Understand the fundamentals of operating systems and networks.

8. Comprehend and resolve common desktop, mobile, and network issues.

9. Explain the importance of policies, plans and procedures related to organizational security.

10. Use standard processes, tools, and skills to perform computer hardware maintenance and repair.

11. Utilize standard processes, tools, and skills required to secure systems, end-devices, and networks.

12. Utilize standard processes, tools, and skills required to implement and administer Cloud Computing Systems.

13. Apply professional skills including communication, customer service, and teamwork.

5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

IT Help Desk positions are one of the most commonly requested by local employers. The job outlook from the US Bureau of Labor Statistics projects a 9% increase in positions from 2020-2030, with median pay projected at $57,910 annually. The Montana Department of Labor and Industry projects 217 annual openings in Montana for Computer User Support Specialist positions from 2021-2031, with average wage at $47,190 annually.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Institution Name	Degree	Program Title
Missoula College	CAS	Computer Support

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

This certificate is designed to support local employers and meet workforce demands. While similar to the Missoula College CAS, we believe it will be primarily used by Helena students seeking IT jobs in Helena and the surrounding areas (Townsend, Boulder, Mt. City, Clancy). Montana State agency offices are located in Helena making the State the largest local employer, so there is a demand for IT Help Desk positions.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

The IT & Programming program collaborated with Missoula and Bitterroot Colleges since the GEERs grants in 202-2021. The program is happy to add Helena College courses to Quottly when able and reaches out to collaborate with other partners when course sharing is necessary. Helena College will be the first college in the state to offer this degree option if approved.

7. **Implementation of the program.** When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

The new degree option will be available to students beginning Fall 2023. All new courses required by this degree have been created and approved and will be offered beginning AY 23-24.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment					Graduates				
AY 23-24	AY24-25	AY25-26	AY26-27	AY27-28	AY23-24	AY24-25	AY25-26	AY26-27	AY27-28
5	10	10	10	10	0	3	6	6	6

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

Students can enter the program in fall or spring semesters, however the program is designed for a fall start. The degree can be completed in two semesters and will support both full-time and part-time

Montana Board of Regents
CURRICULUM PROPOSAL FORM

enrollment. This program has historically had a significant percentage of part-time students enrolled that directly affect overall enrollment and completion numbers.

c. What is the initial capacity for the program?

Initial capacity for the program is 25

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

Success will be determined by enrollment, on-time completion, and job placement within the IT field. If enrollment is not meeting targets, efforts will be made to increase recruitment efforts. If students are not progressing towards on-time completion or if they aren't placed into jobs within the IT field after completion, the curriculum will be reviewed and revised, and the program advisory council will be consulted to ensure there are no barriers to student learning and success.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

Course assessment is documented and tracked in the Helena College assessment database. Instructors enter assessment information and data demonstrating student learning for each course learning outcome for each course taught. They also track any changes made to course assessments based on data or necessary changes. Course learning outcomes and assessments are all mapped to program outcomes to ensure that students are meeting both course and program outcomes as they progress.

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

Direct measures include project-based assignments that evaluate actual application of skills, knowledge, and problem-solving. Indirect measures that will be used include course evaluations, surveys, and program evaluations.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words]*

Program instructors will use the assessment data compiled in the assessment database, other course assessments, student grades, and student progression within the program to regularly evaluate the quality and success of the program. Job placement upon completion of the program will also be a key indicator for quality of the program.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

Specialized accreditation is not needed for this degree.

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact

Montana Board of Regents
CURRICULUM PROPOSAL FORM

on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

The new CAS option will use existing classrooms and equipment. The College invested in Smart Classroom technology for most classrooms on both campuses which makes it possible to offer all courses in the program in a remote format when necessary. The only impact will be the course schedule which will be updated to include courses on the correct rotation for degree progression and completion.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

Nothing is needed.

10. Personnel resources.

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

The program is currently fully staffed with two full-time faculty. There will be no major impact to their schedules. The second faculty was hired in AY 22-23 to prepare for this new degree option.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

No new personnel are needed to support this program.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

Yes, all library, information, and academic support resources are adequate for this new certificate option.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

Yes, existing student services have the capacity to accommodate the proposed program. No new services will be necessary.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Revenues	$9,823.85	$19,647.70	$19,647.70
Expenses	$0	$0	$0
Net Income/Deficit (revenues-expenses)	$9,823.85	$19.647.70	$19.647.70

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

No new expenses for this degree option. This is a new degree option within an existing program with no changes to personnel or facilities needed.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

New student fees are not needed for this program. Existing course fees within the program were updated to better align with the current course needs to enhance student learning.

14. Complete the fiscal analysis form.

Montana Board of Regents

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Signature/Date

College or School Dean:

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

Flagship President*:

*Not applicable to the Community Colleges.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

IT Help Desk (CAS) 2023-24

AAS

IT and Programming

Start Here

SEMESTER 1		CREDITS	MILESTONE	COMPLETED
CSCI100	INTRODUCTION TO PROGRAMMING	3	*	
CSCI194	CT SEMINAR	2		
ITS164	NETWORKING FUNDAMENTALS	3		
M115	PROBABILITY AND LINEAR MATHEMATICS	3		
WRIT121T	INTRODUCTION TO TECHNICAL WRITING	3		

TOTAL CREDITS 14

SEMESTER 2		CREDITS	MILESTONE	COMPLETED
ITS280	COMPUTER REPAIR AND MAINTANANCE	3	*	
ITS222	ENTERPRISE SECURITY	3		
ITS279	CLOUD SYSTEMS	3		
ITS224	INTRODUCTION TO LINUX	3		
COMX106	COMMUNICATING IN A DYNAMIC WORKPLACE	3		
ITS289	PROF. CERTIFICATION	1		

TOTAL CREDITS 16

Primary courses for Cloud DevOps AAS at Helena College. See curriculum map for course sequence.
Please provide any feedback to Bryon Steinwand (bryon.steinwand@helenacollege.edu)

CSCI100 Introduction to Programming 3 CR

This course is an introduction to elementary programming techniques using modern programming languages. A wide range of programs will be written by the student and run on a computer. Students learn the techniques of looping, functions and sub/routines, arrays, variables and data types, user input/output, file input/ output and appropriate programming practices.

1. Identify the programming concepts and methods common to all computer languages;
2. Implement fundamental programming skills in two or more programming languages;
3. Design simple applications;
4. Employ control structures, functions/procedures, arrays, classes and objects to solve problems of moderate complexity;
5. Create a program to solve a given problem of moderate complexity.

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CSCI194 CT Seminar 2 CR

This course introduces students to the information technology industry and covers basic technology literacy skills and concepts. Students will set educational goals and begin creating their portfolio.

1. Demonstrate the basic operation of a computer, basic applications, and the Internet.
2. Identify possible majors and associated career options.
3. Find, evaluate, and use information effectively and ethically.
4. Identify security precautions for protecting personal information.
5. Identify personal learning goals and processes leading to attainment of those goals.
6. Schedule and describe interactions with the industry.
7. Describe the requirements and evaluation process of Computer Technology portfolio.

ITS164 Networking Fundamentals 3 CR

This course is an introduction to networking fundamentals with both lecture and hands-on activities. Topics include the OSI model and industry standards, network topologies, IP addressing (including subnet masks), and basic network design. Concepts are reinforced with lab activities using equipment in live and simulated environments.

1. Define and distinguish network terminology.
2. Identify functions of the OSI and TCP/IP reference models and related protocols.
3. Define, name, and identify networking media and explain how it is integrated into local area networks (LAN) and wide area networks (WAN).
4. Define and describe network hardware including layer 1, 2, and 3 devices.
5. Define and describe physical and logical network topologies.
6. Define, describe, and apply IP addressing, subnetting and developing subnet addresses.
7. Define and describe network operating systems.
8. Define and describe cloud networking.
9. Explain the security relationship between ports, protocols, and firewall configurations.
10. Perform LAN setup and connectivity testing using ping and traceroute functions.
11. Perform small WAN setup and testing using static and dynamic routing protocols.

CSCI111 Programming with Java I 3 CR

This course offers a thorough introduction to the concepts behind object-oriented software development, including the terminology and methodologies utilizing the Java Programming Language. This course provides the student with the fundamentals of object-oriented techniques. These skills are needed to work effectively in the area of information technology. The ability to understand the relationship between data and the algorithmic manipulation of data is crucial in IT related fields.

1. Design and implement programs that are up to a few hundred lines long using Java.
2. Explain and be able to use data types, variables and constants, and use assignment, arithmetic and Boolean expressions in writing programs.
3. Explain and be able to use fundamental programming constructs such as sequencing, decisions and iteration.
4. Explain and be able to use fundamental object oriented principles such as classes, objects, methods, encapsulation, data hiding, inheritance and polymorphism.
5. Explain and be able to use arrays, collections, and maps.
6. Explain and be able to use exception handling.
7. Identify primitive, wrapper and object data types in the Java language.
8. Create application documentation with Javadoc comments.
9. Create and effectively use packages.
10. Create and implement interfaces.
11. Construct code that sorts a collection of objects using the Java Collections API.
12. Use the Java Streams API to process a collection of objects.

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CSCI240 Databases and SQL 3 CR

This course focuses on the concepts of relational databases and includes tables, records and typed fields, primary and foreign keys, and database normalization, and a thorough coverage of Structured Query Language "SQL". Through a variety of exercises, the student will learn how to model a business enterprise using the entity-relationship approach to relational database design. The Oracle database is used for all exercises.

1. Design and create tables based on rules of normalization.
2. Create Entity Relationship Diagrams.
3. Utilize SQL effectively to create, query, and change a relational database.
4. Explain primary, secondary, and foreign keys.
5. Utilize the SQL join statement.

ITS279 Cloud Systems 3 CR

This course will introduce the student to the creation, use, and administration of cloud-based resources. The course will survey cloud terminology and concepts, examine use-cases and models, examine oversight and security concerns, and consider financial implications and governance. The student will engage in creation, use, and administration of cloud services as well as exploration of virtualization resources.

1. Explain cloud concepts including architectures, networking and storage technologies, cloud services, and use cases.
2. Explain cloud business and financial models, their benefits and challenges.
3. Create and provision cloud resources including data storage, server resources, user and resource access, and monitor access and use.
4. Explain cloud security including weaknesses and tools to evaluate security.
5. Utilize security tools to evaluate cloud security

ITS224 Introduction to Linux 3 CR

Students are introduced to accessing a multi-user system. They also learn to manage files and directories in a shared environment. Topics include simple user administration, scripts and network access.

1. Explain the history of Linux and Open Source software.
2. Define and explain the Linux installation process.
3. Install and configure the Linux operating system.
4. Students will utilize text editors to examine, monitor, and configure the operating system.
5. Demonstrate proficiency with Linux utilities, commands, applications, file system navigation, and file editing.
6. Students will utilize text editors to examine, monitor, and configure the operating system.
7. Develop shell scripts to automate system tasks, backups, and configurations.
8. Students will utilize Linux utilities to perform system backup and restore.
9. Students will install, update, and remove software packages.
10. Create and manage user and group accounts.
11. Discover and modify file system permissions.
12. Configure remote access using SSH.
13. Access manual pages for commands at terminal.
14. Install, manage, and update system services and daemons.

ITS165 Introduction to Operating Systems and the Command Line 3 CR

Introduction to operating system concepts through the use of contemporary software. Emphasizes interaction with the operating system through the command interpreter and shell-type scripts. Will explore multiple operating systems through a variety of modalities including virtual operating systems.

1. Demonstrate proficient use of the command line interface for multiple Operating Systems.
2. Describe the functions of an Operating System.
3. Summarize the basic mechanisms that enable an Operating System to function.

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4. Elaborate on how processes work, are scheduled, and how they communicate.
5. Characterize the purpose and function of threads.
6. Explain how the Operating System manages and allocates Memory.
7. Summarize the process of moving data to and from the CPU.
8. Explain the structure and function of a file system and files.
9. Utilize virtualization to install and run an Operating System.
10. Investigate security issues involved with Operating Systems.

ITS 219 Directory Services and Identity Federation 3 CR

This course is designed to prepare the student to implement Directory Services in a cloud environment. Microsoft's Active Directory as well as Open LDAP and Cloud provider offerings will be configured. The course will primarily focus on user, group, and permission configurations and not the more advanced features of Directory Services. This course will also prepare students to configure Identity Federation and application authentication to an identify provider.

1. Identify features of common Directory Services providers and the protocols they depend upon.
2. Configure the following DNS records: A, AAAA, CNAME, NS, MX, SOA, SRV, and CERT.
3. Configure Linux and Windows clients to use a directory service.
4. Install and configure Microsoft Active Directory, Open LDAP, and at least two Cloud based Directory Services.
5. Manage users, groups, and permissions in at least two directory services.
6. Compare Identity Federation components and identity providers.
7. Configure Identity Federation between two organizations.
8. Configure an application for authentication and authorization to an identify provider.
9. Create and manage a centralized authentication network.
10. Design and implement proper authentication and trust relationships with central identity management systems.

CSCI121 Programming with Java II 3 CR

This course covers some intermediate and advanced topics of the Java programming language as well as in introduction to Data Structures and Algorithms. The course explores the implementation of lists, stacks, and queues in addition to several standard sorting and searching algorithms. Students will also build a web application that interacts with a database.

1. Write Java and know basic error handling, testing, and debugging techniques.
2. Explain and be able to use recursion.
3. Create programs containing multiple files and libraries.
4. Explain and be able to use/implement the following simple ADTs: lists, stacks, and queues.
5. Create an application that uses multiple threads and compare the standard threading model to two alternative frameworks such as Fork Join and Green Threads.
6. Create an application that can perform input and output with external files.
7. Write an application that interacts with a Database.
8. Compare and implement several standard sorting algorithms.
9. Compare and implement linear and binary search.
10. Perform time complexity analysis on simple algorithms.
11. Create a functional web application using a modern Java web framework.

ITS233 Introduction to DevOps 3 CR

DevOps is the art of automation and Infrastructure as Code (IaC) used to build powerful, dynamic, systems. This

course will explore DevOps using scripting, Application to Programmer Interface (API) libraries, and a variety of tools to automate and administer local, remote, and virtual systems.

1. Apply scripting to Automate OS commands.
2. Apply scripting to configure and administer remote systems.
3. Control and manage containers with scripts.
4. Describe and explore the concept of Infrastructure as Code (IaC).
5. Build and administer virtual infrastructure using scripts and IaC.
6. Define the set of practices and principles that are the basis of DevOps.

CSCI276 Application Security 3 CR

The course studies the best practices in the development of secure software applications. Through code reviews, students will analyze and test application code for security vulnerabilities such as SQL injection, XML injection, cross site scripting, buffer overflow, and improper error handling. Students will analyze different types of security attacks and discuss countermeasures to safeguard applications and data. Security issues of particular programming languages, platforms, and application types will also be discussed.

1. Describe the characteristics of secure programming.
2. Identify the Principles of Secure Programming.
3. Identify the vulnerabilities inherent in different programming languages.
4. Perform manual and automated code reviews for security vulnerabilities.
5. Describe potential system attacks and the actors that might perform them.
6. Create an application that performs input data validation.
7. Identify example utilization of Application Security Principles.
8. Produce software components that satisfy their functional requirements without introducing vulnerabilities.
9. Examine vulnerabilities introduced through libraries and how to mitigate those vulnerabilities.
10. Describe appropriate measures to be taken should a system compromise occur.
11. Describe the differences between symmetric and asymmetric algorithms.
12. Identify how application security attacks vary by the type of application such as desktop, web, and distributed.
13. Identify common platform specific vulnerabilities and their countermeasures.
14. Explain how cryptographic techniques can be applied to protect against data loss.
15. Describe different types of Attacks on Cryptographic techniques and countermeasures.
16. Describe the role that Public Key Infrastructure and Certificates play in Enterprise Security.
17. Identify software development best practices for user authentication.

CSCI245 Modern Database Systems 3 CR

This course is a survey of modern relational and non-relational databases and their design and implementation. Hands on experience will be gained by working several different database management systems. Database selection and tradeoffs based on problem requirements will be a major focus.

1. Evaluate a relational database design to include analysis of the following: normal form compliance, primary key selection, index selection, foreign key relationship suitability and query performance evaluation.
2. Identify the inherent strengths and weaknesses of relational and non-relational databases.
3. Create database tables, views, triggers, stored procedures, functions, constraints, JSON fields and indexes on two different relational database management systems.
4. Report on the operation, functionality and programming API of one non-relational distributed database and how this database functionality relates to ACID and the CAP theorem.
5. Design, implement and test a non-trivial relational database on two modern database management systems.

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6. Design, implement and test a non-trivial non-relational database on two modern database management systems.
7. Implement Object Relational Mapping using a modern framework.
8. Compare and contrast the different classes of databases offered by Cloud providers. (new)
9. Gain experience with at least two databases offered by Cloud providers. (new)

ITS213 Cloud Networks and Storage 3 CR

Cloud platforms offer extensive networking and storage options. This course is a survey of the common networking and storage features common to Cloud platforms. This course also explores Software Defined Networking technologies. The following Cloud computing types will be explored: private clouds, public clouds, hybrid clouds, and multiclouds.

1. Review networking concepts from previous Networking course to include: OSI network model, TCP/IP, IP V4, IP V6, LAN, WAN, VLAN, NAT, Ethernet, Router, Switch, Routing Protocol, VPN.
2. Compare and contrast the different Cloud computing types and identify scenarios where their use would be appropriate.
3. Describe the following cloud networking components and concepts: Availability zone, Virtual Private Cloud, Public Subnet, Private Subnet, Internet Gateway, NAT Gateway, API Gateway, Service Gateway, Dynamic Routing Gateway.
4. Explain the importance of network optimization.
5. Create network subnets to isolate computing resources in a Cloud environment.
6. Given a scenario, implement appropriate Cloud network configurations.
7. Given a scenario, troubleshoot basic network connectivity issues.
8. Define Software-defined networking and identify DevOps tools and platforms that incorporate Software-defined networking features.
9. Compare and contrast object storage, file storage, and block storage as used in a Cloud environment.
10. Provision object storage, file storage, and block storage in a Cloud environment.
11. Identify strategies to protect data-at-rest, and data-in-transit within a cloud environment.

ITS222 Enterprise Security 3 CR

Examination of general information technology security concepts. Topics include access control, authentication, attack methods, remote access, web security, wireless networks, cryptography, internal infrastructure security, and external attacks. Security procedures, organizational policies, risk management and disaster recovery addressed.

1. Identify potential risks to your network, such as access and denial of service attacks; modification and repudiation attacks; malicious software attacks; and social engineering.
2. Understand common remote access options and components, including virtual private networks; and tunneling and point to point protocols.
3. Describe network and host-based intrusion detection mechanisms and vulnerabilities.
4. Explain the concept of hardening in relation to the OS, hardware, and applications.
5. Define the core components of physical network security and the importance of corporate security policies.
6. Understand the basic premise of cryptography and public key infrastructure.
7. Develop a comprehensive disaster recovery plan for a small business.
8. Develop a comprehensive network security plan for a small business.

ITS276 Development of DevOps: Plan, Develop, Build, Test, and Secure 3 CR

This course covers the Development half of the DevOps pipeline: Plan, Develop, Build, Test and Secure. Modern DevOps tooling will be used to implement all phases. Multiple cloud platforms will be the target of eventual deployments. Best practices and principles of DevOps and DevSecOps will be followed.

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1. Describe the components of the DevOps pipeline and how the components would integrate with an Agile development methodology.
2. Describe the cultural challenges when adopting DevOps and explain ways to overcome them.
3. Compare and contrast popular application architectures used in cloud computing.
4. Describe the microservice architecture and compare it to serverless microservices.
5. Explain key practices of continuous integration (CI) and show how CI is crucial to a DevOps implementation.
6. Demonstrate the scope of version control and show how having a single source of truth supports DevOps implementation.
7. Summarize the build phase of DevOps from the following steps: pull request, code review, build process, and automated testing.
8. Develop test automation for unit testing, smoke testing, integration testing, acceptance testing, black box testing, and security testing.
9. Summarize the differences between DevOps and DevSecOps and how Security is addressed at every phase within DevSecOps.
10. Identify strategies to protect data-in-use within a cloud environment.
11. Implement the five Development phases covered in this course of a non-trivial set of client applications, databases, and services.

ITS286 Operations of DevOps: Release, Deploy, Operate, Monitor, and Secure 3 CR

This course covers the Operations half of the DevOps pipeline: Release, Deploy, Operate, Monitor, and Secure. Modern DevOps tooling will be used to implement all phases. Multiple cloud platforms will be the target of deployments. Best practices and principles of DevOps and DevSecOps will be followed.

1. Describe need for effective configuration management, and the techniques that support effective configuration management.
2. Illustrate how different infrastructure choices can impact the ability to implement and scale DevOps effectively.
3. Compare and contrast the following cloud service types, Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).
4. Use various document and data interchange formats used in DevOps tooling.
5. Demonstrate the ability to design and deploy a cloud computing environment using modern infrastructure as code, software provisioning, and container orchestration tooling.
6. Use various cloud vendor APIs to administer and monitor vendor cloud services.
7. Describe and differentiate both continuous delivery and continuous deployment and explain how they relate to a general DevOps culture.
8. Describe an end-to-end deployment pipeline and explain the choices made for each step in the pipeline.
9. Describe test automation for A/B testing, Canary Release, Blue Green Deployment.
10. Deploy continuous monitoring and feedback control systems to ensure enterprise availability, efficiency, and security.
11. Define and design a secure cloud computing environment.
12. Appraise security controls with shared responsibility models between the cloud providers and the cloud consumers.
13. Implement the five Operations phases covered in this course of a non-trivial set of client applications, databases, and services utilizing infrastructure, platform and software 'As A Service' solutions in the cloud.

CSCI299 Senior Capstone 2 CR

This course is an applied learning opportunity that integrates the coursework, knowledge, and skills gained in

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Computer Technology coursework. Students will be matched with an organization that needs assistance on an Information Technology project. Students will work with the organization and assigned Computer Technology Faculty to complete project. Project demonstration and required documentation will be presented at project completion.

1. Demonstrate a comprehensive knowledge of topics and concepts covered in the area of emphasis within Computer Technology by completing a project.
2. Develop a project schedule and a list of needed resources.
3. Create a working resume, cover letter, and career action plan.
4. Use Source/Version Control to manage code.
5. Demonstrate the ability to apply the written word through oral and written presentations to a committee consisting of faculty and pertinent community members.
6. Complete, apprise and present their Computer Technology portfolio to program faculty.

Class used only by IT Help Desk CAS option:

ITS 280 Computer Repair and Maintenance

This course is an in-depth exposure to computer hardware and operating systems. Focus is on the current CompTIA A+ certification exam. Students learn: functionality of hardware, computer maintenance techniques, network and resource sharing and safety. Hardware and software interaction, and upgrading processes. Concepts are reinforced with hands-on lab assignments. Students will gain confidence with the components of personal computer systems, learning proper procedures for installation, maintenance, and upgrade and troubleshooting. Customer service and communication techniques are discussed using various scenarios.

1. Identify basic terms, concepts, functions, and operations of personal computer (PC) system components.
2. Identify and describe functionality of all field replaceable units found in a PC, perform step by step disassembly and reassembly, install a Windows OS and test the system.
3. Identify common peripheral ports, associated cabling and connectors.
4. Identify hardware and software methods of upgrading system performance.
5. Analyze common symptoms and problems associated with PC components and provide solutions to troubleshoot and isolate the problems.
6. Analyze service methodologies for eliciting problem symptoms from customers;
7. Identify the purpose of various types of preventive maintenance products and procedures.
8. Describe, install and configure a wired LAN or Wi-Fi network interface card; upgrade drivers and software settings for proper operation.
9. Analyze issues, procedures, and devices for protection in the PC environment, including people, hardware, and the surrounding workspace.

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10. Complete installations of memory modules, system boards, processors, power supplies, adapter boards, storage devices, and multimedia devices.

11. Discuss and model appropriate customer service toward client troubleshooting problems.

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ACADEMIC PROPOSAL REQUEST FORM

March 2024

ITEM 1903-LII0324

ITEM TITLE

Institution: **Helena College, UM** CIP Code: **11.0902**

Program/Center/Institute Title: **Cloud DevOps AAS**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: ____

Proposal Summary [360 words maximum]

What: Helena College is submitting a request for an Associate of Applied Science degree in Cloud DevOps. The Cloud DevOps AAS recognizes the completion of 63 credits, primarily focused on Computer Science/Programming (CSCI) and Information Technology Systems (ITS) curriculum with the necessary General Education courses required for completion of the degree.

Why: The move to the cloud by businesses has caused a reduction in the need for traditional network administrators and an increase in the need for staff that can remotely code, configure, test, and deploy applications on cloud infrastructure. The new AAS option at Helena College will allow students to learn the fundamentals of architecture, deployment, management, and operations on cloud computing platforms. This new AAS option will prepare students for careers in the field, with relevant jobs including cloud support associate, cloud support engineer, cloud developer, cloud engineer, cloud sales executive, technical account manager, cloud systems administrator, DevOps engineer, computer systems analyst, computer programmer, software developer, network and computer systems administrator, software quality assurance engineer and tester, etc. Montana Department of Labor and Industry projects annual wages for employees in computer professions at $47,190 to $100,000+. The Occupational Outlook Handbook through the Bureau of Labor Statistics projects growth in computer and IT occupations of 13% from 2020-2030.

This new Cloud DevOps AAS will replace the Networking Administration AAS previously offered at the College as it better meets workforce demand.

Resources: The new AAS option will utilize existing courses and new courses created within the last year. Current faculty staffing will be used to offer the new AAS option. No new resources will be needed.

ATTACHMENTS

Attachments

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

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ACADEMIC PROPOSAL REQUEST FORM

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ **B. Level II:**

X **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

____ **5. Re-titling an academic, administrative, or research unit**

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ACADEMIC PROPOSAL REQUEST FORM

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1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

   The move to the cloud by businesses has caused a reduction in the need for traditional network administrators and an increase in the need for staff that can remotely code, configure, test, and deploy applications on cloud infrastructure. The new Cloud DevOps AAS degree at Helena College will allow students to learn the fundamentals of architecture, deployment, management, and operations on cloud computing platforms. The new Cloud DevOps AAS degree will replace the Network Administration AAS currently on moratorium (to be terminated fall 2022) within the IT & Programming program at Helena College.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

   The new AAS aligns with the College's mission to provide the paths and tools necessary to assist learners in achieving their educational and career goals. It also aligns with the Impact goal to evaluate and respond to educational and workforce development needs to cultivate mutually beneficial relationships and to provide seamless career transition. The IT & Programming program has an active advisory council that has requested a degree option in this area. This AAS will meet the needs of students working to get into the workforce and IT positions within a year and it will meet the needs of our local and state employers. Helena College Strategic Plan

3. **Process leading to submission.** Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

   The new AAS has been under development for the past two years. The Network Administration AAS experienced enrollment decline and through research and feedback from industry partners, the decision was made to terminate the Network Administration AAS and replace it with a more relevant degree option for students that meets Montana's workforce needs. Program faculty have researched curriculum and course offerings to prepare for the new degree option beginning fall 2023.

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

   a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	55
Credits in required courses offered by other departments	8
Credits in institutional general education curriculum	8
Credits of free electives	0
Total credits required to complete the program	63

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b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

1. Students will demonstrate knowledge of programming concepts, logic, design, and problem-solving techniques.

2. Demonstrate basic information technology skills such as file management, web search, work processing, and spreadsheets.

3. Explore career opportunities in the Tech industry and identify pathways to goal attainment.

4. Write computer programs using Object oriented programming features.

5. Design, develop and implement database solutions to effectively manage and secure data.

6. Use correct data modeling practices to develop databases designed to support business needs.

7. Work as a team member in a business information system environment to accomplish the goals of a global organization.

8. Create safe, reliable, and secure systems free from undefined program behaviors and exploitable vulnerabilities.

9. Understand how to effectively work and collaborate with software development and operations teams.

10. Deploy, configure and support services in a cloud environment.

11. Given a scenario, apply DevOps principles and practices.

12. Develop and deploy software defined IT infrastructure.

13. Architect and implement virtualized computing platforms.

14. Write scripts to automate the deployment and configuration of Virtual, Container, and Cloud Environments.

15. Explain the importance of policies, plans and procedures related to organizational security.

16. Gain first-hand experience by using the key tools behind effective software design and fundamental Cloud Computing and DevOps methodologies.

17. Select appropriate test automation tools based on a fictional company's needs.

18. Deploy continuous monitoring and feedback control systems to ensure enterprise availability, efficiency, and security.

19. Given a scenario, design and implement a DevOps pipeline to Plan, Develop, Build, Test, Release, Deploy, Operate, Monitor, and Secure services and applications on cloud infrastructure.

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5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

There are many relevant job titles that students with this degree can pursue: cloud support associate, cloud support engineer, cloud developer, cloud engineer, cloud sales executive, technical account manager, cloud systems administrator, DevOps engineer, computer systems analyst, computer programmer, software developer, network and computer systems administrator, software quality assurance engineer and tester, etc. Montana Department of Labor and Industry projects annual wages for employees in computer professions at $47,190 to $100,000+. The Occupational Outlook Handbook through the Bureau of Labor Statistics projects growth in computer and IT occupations of 13% from 2020-2030. This program will also be offered in a hybrid format, supporting both face-to-face and remote students in their education. We believe that offering the degree in this way will expand educational opportunities to both rural and working adult students.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

This new AAS degree doesn't duplicate existing programs/degrees/certificates offered in the Montana University System. It has been intentionally designed to complement other existing degrees and certificates offered rather than duplicate efforts.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

The IT & Programming program collaborated with Missoula and Bitterroot Colleges since the GEERs grants in 202-2021. The program is happy to add Helena College courses to Quottly when able and reaches out to collaborate with other partners when course sharing is necessary. Helena College will be the first college in the state to offer this degree option if approved.

7. **Implementation of the program.** When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

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The new degree option will be available to students beginning Fall 2023. All new courses required by this degree have been created and approved and will be offered beginning AY 23-24.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment					Graduates				
AY 23-24	AY 24-25	AY 25-26	AY 26-27	AY 27-28	AY 23-24	AY 24-25	AY 25-26	AY 26-27	AY 27-28
5	10	10	10	10	0	0	3	7	7

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

Students can enter the program in fall or spring semesters, however the program is designed for a fall start. The degree can be completed in four semesters and will support both full-time and part-time enrollment. This program has historically had a significant percentage of part-time students enrolled that directly affect overall enrollment and completion numbers.

c. What is the initial capacity for the program?

Initial capacity for the program is 25.

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

Success will be determined by enrollment, on-time completion, and job placement within the IT field. If enrollment is not meeting targets, efforts will be made to increase recruitment efforts. If students are not progressing towards on-time completion or if they aren't placed into jobs within the IT field after completion, the curriculum will be reviewed and revised, and the program advisory council will be consulted to ensure there are no barriers to student learning and success.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

Course assessment is documented and tracked in the Helena College assessment database. Instructors enter assessment information and data demonstrating student learning for each course learning outcome for each course taught. They also track any changes made to course assessments based on data or necessary changes. Course learning outcomes and assessments are all mapped to program outcomes to ensure that students are meeting both course and program outcomes as they progress.

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

Direct measures include project-based assignments that evaluate actual application of skills, knowledge, and problem-solving. Indirect measures that will be used include course evaluations, surveys, and program evaluations.

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CURRICULUM PROPOSAL FORM

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words]*

Program instructors will use the assessment data compiled in the assessment database, other course assessments, student grades, and student progression within the program to regularly evaluate the quality and success of the program. Job placement upon completion of the program will also be a key indicator for quality of the program.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

Specialized accreditation is not needed for this degree.

9. Physical resources.

a. Describe the existing facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

The new AAS option will use existing classrooms and equipment. The College invested in Smart Classroom technology for most classrooms on both campuses which makes it possible to offer all courses in the program in a remote format when necessary. The only impact will be the course schedule which will be updated to include courses on the correct rotation for degree progression and completion.

b. List needed facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

Nothing is needed.

10. Personnel resources.

a. Describe the existing instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

The program is currently fully staffed with two full-time faculty. There will be no major impact to their schedules. The second faculty was hired in AY 22-23 to prepare for this new degree option.

b. Identify new personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

No new personnel are needed to support this program.

11. Other resources.

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a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

Yes, all library, information, and academic support resources are adequate for this new degree option.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

Yes, existing student services have the capacity to accommodate the proposed program. No new services will be necessary.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	$9,0823.85	$19,647.70	$19.647.70
Expenses	$0	$0	$0
Net Income/Deficit (revenues-expenses)	$9,0823.85	$19,647.70	$19.647.70

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

No new expenses for this degree option. This is a new degree option within an existing program with no changes to personnel or facilities needed.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

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iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

New student fees are not needed for this program. Existing course fees within the program were updated to better align with the current course needs to enhance student learning.

14. Complete the fiscal analysis form.

Signature/Date

College or School Dean:

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

Flagship President*:

*Not applicable to the Community Colleges.

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CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

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CURRICULUM PROPOSAL FORM

Academic Pathways Map
Cloud DevOps (AAS) 2023-24
AAS
IT and Programming

Start Here

SEMESTER 1		CREDITS	MILESTONE	COMPLETED
CSCI100	INTRODUCTION TO PROGRAMMING	3		
CSCI194^	IT SEMINAR	2		
ITS164	NETWORKING FUNDAMENTALS	3		
M115	PROBABILITY AND LINEAR MATHEMATICS	3		
WRIT121T	INTRODUCTION TO TECHNICAL WRITING	3		
	TOTAL CREDITS	14		

SEMESTER 2		CREDITS	MILESTONE	COMPLETED
CSCI111	PROGRAMMING WITH JAVA I	3		
CSCI240	DATABASES AND SQL	3		
ITS279	CLOUD SYSTEMS	3		
ITS224	INTRODUCTION TO LINUX	3		
ITS165	INTRODUCTION TO OPERATING SYSTEMS AND THE COMMAND LINE	3		
	TOTAL CREDITS	15		

SEMESTER 3		CREDITS	MILESTONE	COMPLETED
ITS 219*	DIRECTORY SERVICES AND IDENTITY FEDERATION	3		
CSCI121	PROGRAMMING WITH JAVA II	3		
ITS233~	INTRODUCTION TO DEVOPS	3		
CSCI276	APPLICATION SECURITY	3		
CSCI245^	MODERN DATABASE SYSTEMS	3		
ITS213*	CLOUD NETWORKS AND STORAGE	3		
	TOTAL CREDITS	18		

SEMESTER 4		CREDITS	MILESTONE	COMPLETED
CSCI292 or CSCI298	INDEPENDENT STUDY OR INTERNSHIP	2		
ITS222~	Enterprise Security	3		
ITS276*	DEVELOPMENT OF DEVOPS: PLAN, DEVELOP, BUILD, TEST, AND SECURE	3		

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ITS286*	OPERATIONS OF DEVOPS: RELEASE, DEPLOY, OPERATE, MONITOR, AND SECURE	3		
CSCI299	SENIOR CAPSTONE	2		
ITS298	PROFESSIONAL CERTIFICATION	1		
COMX106	COMMUNICATING IN A DYNAMIC WORKPLACE	2		
	TOTAL CREDITS	16		

Primary courses for Cloud DevOps AAS at Helena College. See curriculum map for course sequence.
Please provide any feedback to Bryon Steinwand (bryon.steinwand@helenacollege.edu)

CSCI100 Introduction to Programming 3 CR

This course is an introduction to elementary programming techniques using modern programming languages. A wide range of programs will be written by the student and run on a computer. Students learn the techniques of looping, functions and sub/routines, arrays, variables and data types, user input/output, file input/ output and appropriate programming practices.

1. Identify the programming concepts and methods common to all computer languages;
2. Implement fundamental programming skills in two or more programming languages;
3. Design simple applications;
4. Employ control structures, functions/procedures, arrays, classes and objects to solve problems of moderate complexity;
5. Create a program to solve a given problem of moderate complexity.

CSCI194 CT Seminar 2 CR

This course introduces students to the information technology industry and covers basic technology literacy skills and concepts. Students will set educational goals and begin creating their portfolio.

1. Demonstrate the basic operation of a computer, basic applications, and the Internet.
2. Identify possible majors and associated career options.
3. Find, evaluate, and use information effectively and ethically.
4. Identify security precautions for protecting personal information.
5. Identify personal learning goals and processes leading to attainment of those goals.
6. Schedule and describe interactions with the industry.
7. Describe the requirements and evaluation process of Computer Technology portfolio.

ITS164 Networking Fundamentals 3 CR

This course is an introduction to networking fundamentals with both lecture and hands-on activities. Topics include the OSI model and industry standards, network topologies, IP addressing (including subnet masks), and basic network design. Concepts are reinforced with lab activities using equipment in live and simulated environments.

1. Define and distinguish network terminology.
2. Identify functions of the OSI and TCP/IP reference models and related protocols.
3. Define, name, and identify networking media and explain how it is integrated into local area networks (LAN) and wide area networks (WAN).
4. Define and describe network hardware including layer 1, 2, and 3 devices.
5. Define and describe physical and logical network topologies.
6. Define, describe, and apply IP addressing, subnetting and developing subnet addresses.
7. Define and describe network operating systems.
8. Define and describe cloud networking.
9. Explain the security relationship between ports, protocols, and firewall configurations.

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10. Perform LAN setup and connectivity testing using ping and traceroute functions.
11. Perform small WAN setup and testing using static and dynamic routing protocols.

CSCI111 Programming with Java I 3 CR

This course offers a thorough introduction to the concepts behind object-oriented software development, including the terminology and methodologies utilizing the Java Programming Language. This course provides the student with the fundamentals of object-oriented techniques. These skills are needed to work effectively in the area of information technology. The ability to understand the relationship between data and the algorithmic manipulation of data is crucial in IT related fields.

1. Design and implement programs that are up to a few hundred lines long using Java.
2. Explain and be able to use data types, variables and constants, and use assignment, arithmetic and Boolean expressions in writing programs.
3. Explain and be able to use fundamental programming constructs such as sequencing, decisions and iteration.
4. Explain and be able to use fundamental object oriented principles such as classes, objects, methods, encapsulation, data hiding, inheritance and polymorphism.
5. Explain and be able to use arrays, collections, and maps.
6. Explain and be able to use exception handling.
7. Identify primitive, wrapper and object data types in the Java language.
8. Create application documentation with Javadoc comments.
9. Create and effectively use packages.
10. Create and implement interfaces.
11. Construct code that sorts a collection of objects using the Java Collections API.
12. Use the Java Streams API to process a collection of objects.

CSCI240 Databases and SQL 3 CR

This course focuses on the concepts of relational databases and includes tables, records and typed fields, primary and foreign keys, and database normalization, and a thorough coverage of Structured Query Language "SQL". Through a variety of exercises, the student will learn how to model a business enterprise using the entity-relationship approach to relational database design. The Oracle database is used for all exercises.

1. Design and create tables based on rules of normalization.
2. Create Entity Relationship Diagrams.
3. Utilize SQL effectively to create, query, and change a relational database.
4. Explain primary, secondary, and foreign keys.
5. Utilize the SQL join statement.

ITS279 Cloud Systems 3 CR

This course will introduce the student to the creation, use, and administration of cloud-based resources. The course will survey cloud terminology and concepts, examine use-cases and models, examine oversight and security concerns, and consider financial implications and governance. The student will engage in creation, use, and administration of cloud services as well as exploration of virtualization resources.

1. Explain cloud concepts including architectures, networking and storage technologies, cloud services, and use cases.
2. Explain cloud business and financial models, their benefits and challenges.
3. Create and provision cloud resources including data storage, server resources, user and resource access, and monitor access and use.
4. Explain cloud security including weaknesses and tools to evaluate security.
5. Utilize security tools to evaluate cloud security

ITS224 Introduction to Linux 3 CR

Students are introduced to accessing a multi-user system. They also learn to manage files and directories in a shared environment. Topics include simple user administration, scripts and network access.

1. Explain the history of Linux and Open Source software.
2. Define and explain the Linux installation process.

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3. Install and configure the Linux operating system.
4. Students will utilize text editors to examine, monitor, and configure the operating system.
5. Demonstrate proficiency with Linux utilities, commands, applications, file system navigation, and file editing.
6. Students will utilize text editors to examine, monitor, and configure the operating system.
7. Develop shell scripts to automate system tasks, backups, and configurations.
8. Students will utilize Linux utilities to perform system backup and restore.
9. Students will install, update, and remove software packages.
10. Create and manage user and group accounts.
11. Discover and modify file system permissions.
12. Configure remote access using SSH.
13. Access manual pages for commands at terminal.
14. Install, manage, and update system services and daemons.

ITS165 Introduction to Operating Systems and the Command Line 3 CR

Introduction to operating system concepts through the use of contemporary software. Emphasizes interaction with the operating system through the command interpreter and shell-type scripts. Will explore multiple operating systems through a variety of modalities including virtual operating systems.

1. Demonstrate proficient use of the command line interface for multiple Operating Systems.
2. Describe the functions of an Operating System.
3. Summarize the basic mechanisms that enable an Operating System to function.
4. Elaborate on how processes work, are scheduled, and how they communicate.
5. Characterize the purpose and function of threads.
6. Explain how the Operating System manages and allocates Memory.
7. Summarize the process of moving data to and from the CPU.
8. Explain the structure and function of a file system and files.
9. Utilize virtualization to install and run an Operating System.
10. Investigate security issues involved with Operating Systems.

ITS 219 Directory Services and Identity Federation 3 CR

This course is designed to prepare the student to implement Directory Services in a cloud environment. Microsoft's Active Directory as well as Open LDAP and Cloud provider offerings will be configured. The course will primarily focus on user, group, and permission configurations and not the more advanced features of Directory Services. This course will also prepare students to configure Identity Federation and application authentication to an identify provider.

1. Identify features of common Directory Services providers and the protocols they depend upon.
2. Configure the following DNS records: A, AAAA, CNAME, NS, MX, SOA, SRV, and CERT.
3. Configure Linux and Windows clients to use a directory service.
4. Install and configure Microsoft Active Directory, Open LDAP, and at least two Cloud based Directory Services.
5. Manage users, groups, and permissions in at least two directory services.
6. Compare Identity Federation components and identity providers.
7. Configure Identity Federation between two organizations.
8. Configure an application for authentication and authorization to an identify provider.
9. Create and manage a centralized authentication network.
10. Design and implement proper authentication and trust relationships with central identity management systems.

CSCI121 Programming with Java II 3 CR

This course covers some intermediate and advanced topics of the Java programming language as well as in introduction to Data Structures and Algorithms. The course explores the implementation of lists, stacks, and queues in

addition to several standard sorting and searching algorithms. Students will also build a web application that interacts with a database.

1. Write Java and know basic error handling, testing, and debugging techniques.
2. Explain and be able to use recursion.
3. Create programs containing multiple files and libraries.
4. Explain and be able to use/implement the following simple ADTs: lists, stacks, and queues.
5. Create an application that uses multiple threads and compare the standard threading model to two alternative frameworks such as Fork Join and Green Threads.
6. Create an application that can perform input and output with external files.
7. Write an application that interacts with a Database.
8. Compare and implement several standard sorting algorithms.
9. Compare and implement linear and binary search.
10. Perform time complexity analysis on simple algorithms.
11. Create a functional web application using a modern Java web framework.

ITS233 Introduction to DevOps 3 CR

DevOps is the art of automation and Infrastructure as Code (IaC) used to build powerful, dynamic, systems. This course will explore DevOps using scripting, Application to Programmer Interface (API) libraries, and a variety of tools to automate and administer local, remote, and virtual systems.

1. Apply scripting to Automate OS commands.
2. Apply scripting to configure and administer remote systems.
3. Control and manage containers with scripts.
4. Describe and explore the concept of Infrastructure as Code (IaC).
5. Build and administer virtual infrastructure using scripts and IaC.
6. Define the set of practices and principles that are the basis of DevOps.

CSCI276 Application Security 3 CR

The course studies the best practices in the development of secure software applications. Through code reviews, students will analyze and test application code for security vulnerabilities such as SQL injection, XML injection, cross site scripting, buffer overflow, and improper error handling. Students will analyze different types of security attacks and discuss countermeasures to safeguard applications and data. Security issues of particular programming languages, platforms, and application types will also be discussed.

1. Describe the characteristics of secure programming.
2. Identify the Principles of Secure Programming.
3. Identify the vulnerabilities inherent in different programming languages.
4. Perform manual and automated code reviews for security vulnerabilities.
5. Describe potential system attacks and the actors that might perform them.
6. Create an application that performs input data validation.
7. Identify example utilization of Application Security Principles.
8. Produce software components that satisfy their functional requirements without introducing vulnerabilities.
9. Examine vulnerabilities introduced through libraries and how to mitigate those vulnerabilities.
10. Describe appropriate measures to be taken should a system compromise occur.
11. Describe the differences between symmetric and asymmetric algorithms.
12. Identify how application security attacks vary by the type of application such as desktop, web, and distributed.
13. Identify common platform specific vulnerabilities and their countermeasures.
14. Explain how cryptographic techniques can be applied to protect against data loss.
15. Describe different types of Attacks on Cryptographic techniques and countermeasures.
16. Describe the role that Public Key Infrastructure and Certificates play in Enterprise Security.
17. Identify software development best practices for user authentication.

CSCI245 Modern Database Systems 3 CR

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This course is a survey of modern relational and non-relational databases and their design and implementation. Hands on experience will be gained by working several different database management systems. Database selection and tradeoffs based on problem requirements will be a major focus.

1. Evaluate a relational database design to include analysis of the following: normal form compliance, primary key selection, index selection, foreign key relationship suitability and query performance evaluation.
2. Identify the inherent strengths and weaknesses of relational and non-relational databases.
3. Create database tables, views, triggers, stored procedures, functions, constraints, JSON fields and indexes on two different relational database management systems.
4. Report on the operation, functionality and programming API of one non-relational distributed database and how this database functionality relates to ACID and the CAP theorem.
5. Design, implement and test a non-trivial relational database on two modern database management systems.
6. Design, implement and test a non-trivial non-relational database on two modern database management systems.
7. Implement Object Relational Mapping using a modern framework.
8. **Compare and contrast the different classes of databases offered by Cloud providers. (new)**
9. **Gain experience with at least two databases offered by Cloud providers. (new)**

ITS213 Cloud Networks and Storage 3 CR

Cloud platforms offer extensive networking and storage options. This course is a survey of the common networking and storage features common to Cloud platforms. This course also explores Software Defined Networking technologies. The following Cloud computing types will be explored: private clouds, public clouds, hybrid clouds, and multiclouds.

1. Review networking concepts from previous Networking course to include: OSI network model, TCP/IP, IP V4, IP V6, LAN, WAN, VLAN, NAT, Ethernet, Router, Switch, Routing Protocol, VPN.
2. Compare and contrast the different Cloud computing types and identify scenarios where their use would be appropriate.
3. Describe the following cloud networking components and concepts: Availability zone, Virtual Private Cloud, Public Subnet, Private Subnet, Internet Gateway, NAT Gateway, API Gateway, Service Gateway, Dynamic Routing Gateway.
4. Explain the importance of network optimization.
5. Create network subnets to isolate computing resources in a Cloud environment.
6. Given a scenario, implement appropriate Cloud network configurations.
7. Given a scenario, troubleshoot basic network connectivity issues.
8. Define Software-defined networking and identify DevOps tools and platforms that incorporate Software-defined networking features.
9. Compare and contrast object storage, file storage, and block storage as used in a Cloud environment.
10. Provision object storage, file storage, and block storage in a Cloud environment.
11. Identify strategies to protect data-at-rest, and data-in-transit within a cloud environment.

ITS222 Enterprise Security 3 CR

Examination of general information technology security concepts. Topics include access control, authentication, attack methods, remote access, web security, wireless networks, cryptography, internal infrastructure security, and external attacks. Security procedures, organizational policies, risk management and disaster recovery addressed.

1. Identify potential risks to your network, such as access and denial of service attacks; modification and repudiation attacks; malicious software attacks; and social engineering.
2. Understand common remote access options and components, including virtual private networks; and tunneling and point to point protocols.
3. Describe network and host-based intrusion detection mechanisms and vulnerabilities.
4. Explain the concept of hardening in relation to the OS, hardware, and applications.
5. Define the core components of physical network security and the importance of corporate security policies.

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6. Understand the basic premise of cryptography and public key infrastructure.
7. Develop a comprehensive disaster recovery plan for a small business.
8. Develop a comprehensive network security plan for a small business.

ITS276 Development of DevOps: Plan, Develop, Build, Test, and Secure 3 CR

This course covers the Development half of the DevOps pipeline: Plan, Develop, Build, Test and Secure. Modern DevOps tooling will be used to implement all phases. Multiple cloud platforms will be the target of eventual deployments. Best practices and principles of DevOps and DevSecOps will be followed.

1. Describe the components of the DevOps pipeline and how the components would integrate with an Agile development methodology.
2. Describe the cultural challenges when adopting DevOps and explain ways to overcome them.
3. Compare and contrast popular application architectures used in cloud computing.
4. Describe the microservice architecture and compare it to serverless microservices.
5. Explain key practices of continuous integration (CI) and show how CI is crucial to a DevOps implementation.
6. Demonstrate the scope of version control and show how having a single source of truth supports DevOps implementation.
7. Summarize the build phase of DevOps from the following steps: pull request, code review, build process, and automated testing.
8. Develop test automation for unit testing, smoke testing, integration testing, acceptance testing, black box testing, and security testing.
9. Summarize the differences between DevOps and DevSecOps and how Security is addressed at every phase within DevSecOps.
10. Identify strategies to protect data-in-use within a cloud environment.
11. Implement the five Development phases covered in this course of a non-trivial set of client applications, databases, and services.

ITS286 Operations of DevOps: Release, Deploy, Operate, Monitor, and Secure 3 CR

This course covers the Operations half of the DevOps pipeline: Release, Deploy, Operate, Monitor, and Secure. Modern DevOps tooling will be used to implement all phases. Multiple cloud platforms will be the target of deployments. Best practices and principles of DevOps and DevSecOps will be followed.

1. Describe need for effective configuration management, and the techniques that support effective configuration management.
2. Illustrate how different infrastructure choices can impact the ability to implement and scale DevOps effectively.
3. Compare and contrast the following cloud service types, Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).
4. Use various document and data interchange formats used in DevOps tooling.
5. Demonstrate the ability to design and deploy a cloud computing environment using modern infrastructure as code, software provisioning, and container orchestration tooling.
6. Use various cloud vendor APIs to administer and monitor vendor cloud services.
7. Describe and differentiate both continuous delivery and continuous deployment and explain how they relate to a general DevOps culture.
8. Describe an end-to-end deployment pipeline and explain the choices made for each step in the pipeline.
9. Describe test automation for A/B testing, Canary Release, Blue Green Deployment.
10. Deploy continuous monitoring and feedback control systems to ensure enterprise availability, efficiency, and security.

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11. Define and design a secure cloud computing environment.
12. Appraise security controls with shared responsibility models between the cloud providers and the cloud consumers.
13. Implement the five Operations phases covered in this course of a non-trivial set of client applications, databases, and services utilizing infrastructure, platform and software 'As A Service' solutions in the cloud.

CSCI299 Senior Capstone 2 CR

This course is an applied learning opportunity that integrates the coursework, knowledge, and skills gained in Computer Technology coursework. Students will be matched with an organization that needs assistance on an Information Technology project. Students will work with the organization and assigned Computer Technology Faculty to complete project. Project demonstration and required documentation will be presented at project completion.

1. Demonstrate a comprehensive knowledge of topics and concepts covered in the area of emphasis within Computer Technology by completing a project.
2. Develop a project schedule and a list of needed resources.
3. Create a working resume, cover letter, and career action plan.
4. Use Source/Version Control to manage code.
5. Demonstrate the ability to apply the written word through oral and written presentations to a committee consisting of faculty and pertinent community members.
6. Complete, apprise and present their Computer Technology portfolio to program faculty.

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ACADEMIC PROPOSAL REQUEST FORM

FEBRUARY/2024

ITEM 2903-L10224

Notification of offering the Physical Therapist Assistant AAS program from face-to-face format to a blended offering

Institution: **Great Falls College Montana State University** CIP Code: **51.0806**

Program/Center/Institute Title: **Physical Therapist Assistant Associate of Applied Science**

Includes (please specify below): Face-to-face Offering: _____ Online Offering: _____ Blended Offering: X

Options: _____

Proposal Summary [360 words maximum]

What: Starting Fall 2024, the Great Falls College Physical Therapist Assistant program will be a Blended Offering with the program changing the modality of their courses to Hyflex. This change will offer students the option of distance learning for lectures, yet all labs will occur on-site at the Great Falls College campus.

Why: Offering the PTA program in the Blended format expands the program reach to students who don't reside in the immediate Great Falls area and sets the groundwork to offer labs at partner locations in the future.

Resources: No additional faculty or resources will be required.

ATTACHMENTS

Attachments

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

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3. **Establishing a B.A.S./A.A./A.S. area of study**

X 4. **Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

5. **Re-titling an existing postsecondary educational program**

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

LEVEL I MEMORANDUM

DATE: April 18, 2024

TO: Chief Academic Officers, Montana University System

FROM: Joe Thiel, Deputy Commissioner for Academic, Research, and Student Affairs

RE: April, 2024 Level I Academic Items

Contained within this memorandum are Level I proposals submitted by the institutions of the Montana University System in April, 2024. These proposals include items for which approval authority has been designated by the Board of Regents to the individual institutions or the Commissioner of Higher Education. These Level I items are being sent to you for your review. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, raise them at the Level I Chief Academic Officer's conference call on Wednesday, April 24th. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, April 26th. You will be notified of approved proposals by Monday, April 29, 2024. The Board of Regents will be notified of the approved proposals at the May 2024 meeting of the Board.

1. **Campus Approvals**

Flathead Valley Community College:

- Notification of offering Surveying AAS via online and distance delivery
  Item #301-LI0424
- Notification of placing Healthcare Office Management AAS into moratorium
  Item #303-LI0424
- Notification of offering a CTS in Medical Coding
  Item #304-LI0424
- Notification of placing Medical Coding AAS into moratorium
  Item #302-LI0424

Montana State University Northern:

- Notification of placing IHS: community Health Option into moratorium
  Item #2803-LI0424
- Notification of offering an Education Preparation Program Online
  Item #2802-LI0324

The University of Montana Missoula:

- Notification of offering the existing Business Management BS in Business Administration via online delivery
  Item #1003-LI0424
- Notification to terminate the Manufacturing Certificate of Technical Studies
  Item #1004-LI0424
- Notification to offer the existing MA in Counselor Education with concentration in School Counseling via online delivery
  Item #1005-LI0424
- Notification to establish a Secondary K12 Teaching Certificate
  Item #1006-LI0424
- Notification to offer a certificate in Specialized Interventionists for Montana Schools (SIMS)
  Item #1007-LI0424

- Notification to place the PhD in Public Health with a concentration in Social Work into moratorium
  Item #1008-LI0424

The University of Montana-Western:

- Notification of establishing Visual Art -2D AA
  Item #1605-LI0424
- Notification of establishing an AA in Art History
  Item #1606-LI0424
- Notification of establishing a certificate in Technical Studies: Digital Marketing
  Item #1601-LI0424
- Notification of establishing a Certificate of Technical Studies: Bookkeeping and Quickbooks
  Item #1602-LI0424
- Notification of establishing a Certificate of Technical Studies: Project Management
  Item #1603-LI0424

2. OCHE Approvals

Montana State University Billings:

- Request for authorization to establish a 60-credit option for the Med in School Counseling
  Item #2702-LI0324
- Request for authorization to retitle the minor in Native American Studies to American Indian and Indigenous Studies
  Item # 2701-LI0324

Montana State University Bozeman:

- Request for authorization to terminate Computer Science Teaching Minor
  Item #2012-LI0324

Great Falls College Montana State University:

- Request for authorization to terminate Computer Assistant Certificate of Applied Science
  Item #2901-LI0324
- Request for authorization to terminate Computer Server Administration Certificate of Applied Science
  Item # 2902-LI0324
- Request for authorization to terminate Computer Network Infrastructure Certificate of Applied Science
  Item # 2903-LI0324
- Request for authorization to terminate CIT-Information Systems Support Associate of Applied Science
  Item #2904-LI0324

Montana State University Northern:

- Request for authorization to change BAS Business Technology to BAS Business Management
  Item # 2801-LI0324
- Request for authorization to re-title Community Leadership to Community Psychology
  Item #2801-LI0524
- Request for authorization to terminate Water Quality Technology
  Item #2802-LI0524

The University of Montana Missoula:

- Request for authorization for authorization to terminate multiple programs
  Item #1001-LI0424
- Request for authorization to retitle the BS in Public Health with a concentration in General Public Health to BS in Public Health
  Item #1002-LI0424

The University of Montana Western:

- Request for authorization to retitle Drama Related Area to Drama Minor
  Item # 1607-LI0424

Level II:

Montana State University Billings:

- Request for authorization to consolidate the Department of Health Care Services and the Department of Health and Human Performances into the new Department of Health Sciences and Human Performance
  Item #2701-LII0524

Montana State University:

- Request for authorization to establish a Bachelor of Science in Environmental Economics and Policy
  Item #2011-LII0524
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Montana State University Northern:

- Request for authorization to establish a MS in Teaching (Content Area)
  Item #2801-LII0524

Montana Technological University:

- Request for authorization to establish a Center for Education and Ecosystem Studies
  Item #1501-LII0524

University of Montana Western:

- Request for authorization to establish a Strength and Conditioning Minor
  Item #1608-LII0424
- Request for authorization to establish a BS in Farm and Ranch Management
  Item #1609-LII0424

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 301-L1-0424

Notification of offering Surveying AAS via online and distance delivery.

Institution: **Flathead Valley Community College** CIP Code: **15.1102**

Program/Center/Institute Title: **Surveying AAS**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: ____

Proposal Summary [360 words maximum]

What: FVCC notifies the Board of Regents of its intent to transition the Surveying AAS to an online and remote delivery model.

Why: Employer demand for graduates of this program is high across the state. In addition, FVCC is the only college that offers and AAS-level surveying program. To meet the demand, FVCC is transitioning the didactic coursework to online and working with Surveying professionals to develop field sites across the state to accommodate distance students.

Resources: No additional resources are needed to make this transition.

ATTACHMENTS

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

X **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

5. Re-titling an existing postsecondary educational program

6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)

7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)

8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)

9. Revising a postsecondary educational program (Curriculum Proposal Form)

10. Establishing a temporary C.A.S. or A.A.S. degree program *Approval limited to 2 years*

B. Level II:

1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)

2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)

3. Exceeding the 120-credit maximum for baccalaureate degrees *Exception to policy 301.11*

4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. Re-titling an academic, administrative, or research unit

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM: 303-L10424

ITEM TITLE: Notification of Healthcare Office Management AAS being placed into moratorium.

Institution: **Flathead Valley Community College** CIP Code: **51.0710**

Program/Center/Institute Title: **Healthcare Office Management AAS**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: ____

Proposal Summary [360 words maximum]

What: FVCC's Curriculum Committee and Board of Trustees has approved placing this program into moratorium.

Why: Persistent low enrollment and lack of industry need informed the decision to place this program into moratorium.

ATTACHMENTS

303-L10424 Program Termination and Moratorium Form

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X A. Level I:

Campus Approvals

X **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating, or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: **Healthcare Office Management AAS**

Program is being **x** **Placed into moratorium** ____ **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y: x N: ____**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y: x N: ____**

   b.) **What is the expected graduation date of all students from the program?**

   May 2025

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y: x N: ____**

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y: ____ N: x**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y: ____ N: ____**

   NA

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System
PROGRAM TERMINATION/MORATORIUM FORM

NA

3. **The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):**

   a.) **Internal Curriculum Committees** x

   b.) **Faculty Senate** x

   c.) **Program Public Advisory Committee** x

   d.) **Articulation Partners** x

4. **Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.)** **Y:** ____ **N:** x

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM: 304-L10424

ITEM TITLE: Notification of a new CTS in Medical Coding.

Institution: **Flathead Valley Community College** CIP Code: **51.0713**

Program/Center/Institute Title: **Medical Coding CTS**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: X Blended Offering: ____

Options: ____

Proposal Summary [360 words maximum]

What: FVCC's Curriculum Committee and Board of Trustees has approved this new certificate of technical studies.

Why: The program advisory board recommended this CTS as a more efficient way than the existing AAS to get students into the workforce and comprehensive enough to prepare students to successfully pass the certification exam.

ATTACHMENTS

Click or tap here to enter text.

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

X **2. Establishing, re-titling, terminating, or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM: 302-L10424

ITEM TITLE: Notification of Medical Coding AAS being placed into moratorium.

Institution: **Flathead Valley Community College** CIP Code: **51.0713**

Program/Center/Institute Title: **Medical Coding AAS**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: ____

Proposal Summary [360 words maximum]

What: FVCC's Curriculum Committee and Board of Trustees have approved placing this program into moratorium.

Why: Students do not need an AAS to become a certified Medical Coder. The program advisory board recommended the change to a CTS as a more efficient way to get students into the workforce and comprehensive enough to prepare students to pass the certification exam.

ATTACHMENTS

302-L10224 Program Termination and Moratorium Form

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X **A. Level I:**

Campus Approvals

X **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: **Medical Coding AAS**

Program is being **x** **Placed into moratorium** ____ **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y: x N: ____**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y: x N: ____**

   b.) **What is the expected graduation date of all students from the program?**

   May 2025

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y: x N: ____**

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y: ____ N: x**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y: ____ N: ____**

   NA

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System
PROGRAM TERMINATION/MORATORIUM FORM

NA

3. **The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):**

   a.) Internal Curriculum Committees x

   b.) Faculty Senate x

   c.) Program Public Advisory Committee x

   d.) Articulation Partners x

4. **Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.)** **Y:** ____ **N:** x

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April/2024

ITEM 2803-LI0424

ITEM TITLE Notification of placing into moratorium IHS: Community Health Option

Institution: **MSU Northern** CIP Code: **51.2208**

Program/Center/Institute Title: **COHS--Integrated Health Sciences: Community Heal Option**

Includes (please specify below): Face-to-face Offering: _____ Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: MSU Northern's College of Health Sciences is placing into moratorium the Community Health Option.

Why: In response to changes in student demand, Northern's Integrated Health Sciences major is placing increased emphasis on its Pre-Allied Health and Exercise Science programs. This requires sustained investment in these areas, limiting the resources available to support the Community Health Option. Given that enrollment in the Community Health Option is currently zero, this is the optimal time to place the program on hold in order to focus resources more fully on strengthening the other tracks. Once additional resources become available and student/industry demand for the Community Health option increases, the university will revisit reintroducing the program into the catalog.

Resources: No resources are affected with this change and there are currently no students in the program.

ATTACHMENTS

Attachments Program Termination/Moratorium Form

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X **A. Level I:**

Campus Approvals

X **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

3. Establishing a B.A.S./A.A./A.S. area of study

4. Offering an existing postsecondary educational program via distance or online delivery

OCHE Approvals

5. Re-titling an existing postsecondary educational program

6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)

7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)

8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)

9. Revising a postsecondary educational program (Curriculum Proposal Form)

10. Establishing a temporary C.A.S. or A.A.S. degree program *Approval limited to 2 years*

B. Level II:

1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)

2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)

3. Exceeding the 120-credit maximum for baccalaureate degrees *Exception to policy 301.11*

4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. Re-titling an academic, administrative, or research unit

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: **Integrated Health Sciences: Community Health Option**

Program is being **x** **Placed into moratorium** ____ **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y:** ____ **N:** **x**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y:** ____ **N:** ____

   b.) **What is the expected graduation date of all students from the program?**

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y:** ____ **N:** ____

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y:** ____ **N:** **x**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y:** ____ **N:** ____

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

b.) Please describe any layoffs that will occur including the date expected?

3. The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):

a.) Internal Curriculum Committees N/A

b.) Faculty Senate N/A

c.) Program Public Advisory Committee X

d.) Articulation Partners N/A

4. Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.) **Y:** ____ **N:** x

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

MARCH/2024

ITEM 2802-LI0324

ITEM TITLE: Notification of offering Education Preparation Program Online

Institution: **Montana State University - Northern** CIP Code: **13.1202**

Program/Center/Institute Title: **College of Arts, Sciences, and Education/Education Department**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: X Blended Offering: ____

Options: ____

Proposal Summary [360 words maximum]

What: The Montana State University – Northern Initial Education Preparation Program (EPP) plans to offer its existing program via an online mode of delivery, effective Fall 2024. The benefits of transition for students include a view toward digital equity, inclusivity, and diversity; increased delivery flexibility; and increased resources for surrounding schools and communities. The program actively seeks to fill a void – meeting the specific educational needs of students along the northern frontier reaches of the state. An online modality allows the program to more effectively provide access and flexibility for teachers-in-training, paraprofessionals, and individuals working on their Class 5 or Emergency Licenses across the Hi-Line, as well as educational opportunities for potential students across the state and beyond. This online program model will incorporate a distinctive community building component that offers online students critical opportunities for face-to-face interactions. These interactions will be in the form of faculty/staff/administrator visits to satellite locations along the Hi-Line for up to two times each semester for in-person orientation and advising sessions.

Why: The reasons for the pursuit of an online program are four-fold. First, the EPP is committed to meeting the needs of students in frontier/rural Montana. Second, the EPP seeks to support districts across the state by allowing teachers-in-training to work in school while obtaining their degree. Third, online delivery allows students to easily access MSUNs EPP without location restrictions. Lastly, an online EPP will provide teacher education students across states with wider resource availability.

Resources: There are several resources that the program will pursue to sustain this effort. The first is work on a social media advertising campaign to heighten the awareness of MSUNs Education programs and to promote the program's new online delivery mode. Quality assurance instructor/course and program resources will also be considered in the form of the Associate of College and University Educators (ACUE) teaching certification endorsements (https://acue.org/) and Quality Matters certifications (https://www.qualitymatters.org/), respectively. The cultivation of additional resources through Education Department stakeholders that include, but are not limited to the Hi-Line MASS Superintendents organization and the college's Initial Education Advisory Council, will assist the program to continuously generate innovative and creative engagement opportunities.

ATTACHMENTS

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

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X A. Level I:

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

X **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 1003-LI0424

ITEM TITLE – Notification to offer the existing Business Management B.S. in Business Administration via online delivery

Institution: **University of Montana - Missoula** CIP Code: **52.0201**

Program/Center/Institute Title: **Department of Management and Marketing**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: ____

Options: 100% face-to-face / 100% online

Proposal Summary [360 words maximum]

What: The Management and Marketing Department proposes a fully asynchronous online pathway to its Business Management Major. The online Business Management pathway will offer an asynchronous online option for all College of Business lower core, upper core, and major required and elective classes to be marketed to non-traditional students in Montana. No degree requirements will change. The online pathway will exist alongside the in-person pathway for the Business Management major**.**

Why: This proposal is for an additional modality option for the BSBA degree with a major in Business Management – asynchronous (online). No degree requirements will change. The online pathway will exist alongside the in-person pathway for the management major. The online major will specifically target older students, veterans, and members of Montana's tribal nations who have completed some college but have not yet completed a bachelor's degree. Thus, we anticipate this change will have a positive impact on UM's ability to attract interested students to our university.

Resources: We will offer the full College of Business Lower and Upper core, and the full list of required Business Management courses to our online students. We propose to offer a limited selection of Business Management elective courses, to simplify the choices for our online students and limit resource expenditures.

ATTACHMENTS

None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X A. Level I:

Campus Approvals

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

__X__ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 1004-LI0424

ITEM TITLE – Notification to terminate the Manufacturing Certificate of Technical Studies

Institution: **University of Montana – Missoula College** CIP Code: **15.0613**

Program/Center/Institute Title: **Industrial Technology Department**

Includes (please specify below): Face-to-face Offering: _____ Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: Missoula College's department of Industrial Technology is requesting authorization to terminate the Manufacturing Certificate of Technical Studies.

Why: There has been no new enrollments into the program.

Resources: None

ATTACHMENTS

None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X A. Level I:

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

X **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

OCHE Approvals

5. **Re-titling an existing postsecondary educational program**

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 1005-LI0424

ITEM TITLE – Notification to offer the existing MA in Counselor Education with concentration in School Counseling via online delivery

Institution: **University of Montana - Missoula** CIP Code: **13.1101**

Program/Center/Institute Title: **College of Education – Department of Counseling**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: X Blended Offering: ____

Options: ____

Proposal Summary [360 words maximum]

What: The Department of Counseling proposes adapting the current 60-credit MA degree in Counselor Education: School Counseling (SC), from a face-to-face delivery format to an online delivery format.

Why: Applications to and enrollment in the SC program have progressively declined over the past decade, and there are significant numbers of unfilled SC positions throughout Montana. We continue to receive inquiries about online SC program options from educators across the state, seeking a program that they could complete while remaining in their remote locations and serving in their current positions. This shift is designed to respond to the need for more SCs in Montana, and to the multiple requests we receive to provide an online option, especially for educators in rural Montana schools.

Resources: We need to add a 1.0 clinical faculty line to coordinate the program, and enroll 24 students biannually. We are working with UM Online on budgeting models to support the position, and we have Dean approval to make this change. Adapting our SC program to an online program requires us to separate our SC students from our current face-to-face courses that enroll both SC students and Clinical Mental Health Counseling (CMHC) students. This shift also provides us opportunity to further specialize our SC program by adding courses and consolidating content in other courses to better prepare SCs.

ATTACHMENTS

None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

x A. Level I:

Campus Approvals

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

__X__ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 1006-LI0424

ITEM TITLE – Notification of establishing a Secondary K – 12 Teaching Certificate

Institution: **University of Montana – Missoula** CIP Code: **13.1205**

Program/Center/Institute Title: **Department of Teaching and Learning**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: 75% Online 25% Face – to – Face

Proposal Summary [360 words maximum]

What: We seek to offer a shortened pathway to secondary licensure at the graduate level to help mediate the well-documented and alarming secondary teacher shortages across the state. A graduate-level certificate that supports Class 5 provisional teaching licenses can help address these shortages. This program would start with math, social studies, and science with an eye toward moving other content areas to this model.

Why: Current student enrollment trends in educator preparation programs indicate the increasing popularity of alternative licensure programs. We are fielding more requests for alternative licensure programs than for traditional graduate offerings, and we do not currently offer an alternative licensure pathway. We seek to offer a shortened pathway to secondary licensure at the graduate level to help mediate the well-documented and alarming secondary teacher shortages across the state. A graduate-level certificate that supports Class 5 provisional teaching licenses can help address these shortages.

Resources: The vast majority of courses for this proposal are already taught in our Master's offerings. There is only 1 new 500 level course in Classroom Management for Secondary teachers. The program will require hiring clinical faculty to cover mentorship, but these costs will be minimal and we already have a pool of clinical faculty in the schools to work with.

ATTACHMENTS

None

None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

X **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ **B. Level II:**

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 1007-LI0424

ITEM TITLE – Notification to offer a certificate in Specialized Interventionists for Montana Schools (SIMS)

Institution: **University of Montana - Missoula** CIP Code: **13.1014**

Program/Center/Institute Title: **Department of Teaching and Learning and Department of Speech, Language, Hearing, and Occupational Sciences**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: ____

Options: 100% face-to-face / 100% online

Proposal Summary [360 words maximum]

What: Establishing a Specialized Interventionists for Montana Schools (SIMS) Certificate. While University of Montana hosts the only speech-language pathology program in the MUS system, several other universities in the MUS system have curriculum and instruction (aka teaching and learning) programs. None of these programs are advertising a certificate to demonstrate enhanced skills in the area of rural disparity and specialized intervention to meet the needs of children with high intensity needs.

Why: Montana schools host many children with specialized needs. Some of the children require time intensive and highly specialized interventions. This certificate is designed to prepare educators and interventionists to meet the learning and developmental needs of children with significant physical and cognitive barriers in the least restrictive educational settings.

Montana's hosts many tribal communities, immigrants, and refugees and acknowledges all forms of diversity. Learning cultural competence is critical in providing equitable and non-biased interventions for learners and family support.

Resources: All coursework will be offered through the University of Montana.

ATTACHMENTS

None

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X A. Level I:

Campus Approvals

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

X **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ **B. Level II:**

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 1008-LI0424

ITEM TITLE – Notification to place the Ph.D. in Public Health with concentration in Social Work into moratorium

Institution: **University on Montana - Missoula** CIP Code: **51.2201**

Program/Center/Institute Title: **Ph.D. Public Health – Social Work/Department of Community and Health Sciences/College of Health**

Includes (please specify below): Face-to-face Offering: _____ Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: The department of Public and Community Health Sciences would like to place the Ph.D. in Public Health with concentration in Social Work into moratorium.

Why: No students are currently enrolling into the program.

Resources: None

ATTACHMENTS

None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X A. Level I:

Campus Approvals

X **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

4. Offering an existing postsecondary educational program via distance or online delivery

OCHE Approvals

5. Re-titling an existing postsecondary educational program

6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)

7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)

8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)

9. Revising a postsecondary educational program (Curriculum Proposal Form)

10. Establishing a temporary C.A.S. or A.A.S. degree program *Approval limited to 2 years*

B. Level II:

1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)

2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)

3. Exceeding the 120-credit maximum for baccalaureate degrees *Exception to policy 301.11*

4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. Re-titling an academic, administrative, or research unit

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title:

Program is being **X** **Placed into moratorium** ____ **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y:** ____ **N:** **X**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y:** ____ **N:** ____

   b.) **What is the expected graduation date of all students from the program?**

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y:** ____ **N:** ____

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y:** ____ **N:** **X**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y:** ____ **N:** ____

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System
PROGRAM TERMINATION/MORATORIUM FORM

3. The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):

a.) Internal Curriculum Committees X

b.) Faculty Senate X

c.) Program Public Advisory Committee X

d.) Articulation Partners X

4. Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.) **Y:** ____ **N:** X

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

APRIL/2024

ITEM 1605-LI0424

ITEM TITLE: Notification of Visual Art – 2D A.A.

Institution: **The University of Montana Western** CIP Code: **500101**

Program/Center/Institute Title: **Fine Arts Department/The University of Montana Western**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: ____

Options: ____

Proposal Summary [360 words maximum]

What: Establishment of Visual Art – 2D A.A.

Why: In order to strengthen the two-year mission, the University of Montana Western decided to create optional concentration areas in the existing A.A., A.S. program. These areas of study provide students an opportunity to pursue a selection of courses while pursuing their two-year degree that will:

1) Allow UMW to more immediately connect them with a faculty advisor in their area of interest.
2) A majority if not all courses in the concentration can be applied to a Bachelor degree at the University (or through an articulation agreement with another institution) optional areas of study help make sure that as a student earns a two-year degree they will not lose traction towards their four-year degree by accidently taking courses that do not apply to their desired four-year program.
3) For students that opt not to complete a four-year degree, an optional concentration allows for more focused curriculum and course work for transferring or jobs.

Additionally, by encouraging students to focus on optional areas of study the University is hoping to see an increase in retention as resources such as advising will be more geared towards a student known area of interest.

Art History A.A. requirements (28 credits):

- ARTZ 105 - Visual Language—Drawing 4cr
- ARTZ 106 - Visual Language—2-D Foundations 4cr
- ARTH 202 - Cross Cultural Approaches to Art History 4cr
- ARTZ 211 - Drawing I 4cr
- ARTZ 221 - Painting I 4cr
- ARTZ 224 - Watercolor I 4cr
- ARTZ 271 - Printmaking I 4cr

Resources: N/A

ATTACHMENTS

Attachments

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

__X__ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

APRIL/2024

ITEM 1606-LI0424

ITEM TITLE: Notification of Art History A.A.

Institution: **The University of Montana Western** CIP Code: **500101**

Program/Center/Institute Title: **Fine Arts Department/The University of Montana Western**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: ____

Options: ____

Proposal Summary [360 words maximum]

What: Establishment of Visual Arts - Crafts A.A.

Why: In order to strengthen the two-year mission, the University of Montana Western decided to create optional concentration areas in the existing A.A., A.S. program. These areas of study provide students an opportunity to pursue a selection of courses while pursuing their two-year degree that will:

1) Allow UMW to more immediately connect them with a faculty advisor in their area of interest.
2) A majority if not all courses in the concentration can be applied to a Bachelor degree at the University (or through an articulation agreement with another institution) optional areas of study help make sure that as a student earns a two-year degree they will not lose traction towards their four-year degree by accidently taking courses that do not apply to their desired four-year program.
3) For students that opt not to complete a four-year degree, an optional concentration allows for more focused curriculum and course work for transferring or jobs.

Additionally, by encouraging students to focus on optional areas of study the University is hoping to see an increase in retention as resources such as advising will be more geared towards a student known area of interest.

Visual Arts - Crafts A.A. requirements (28 credits):

- ARTZ 105 - Visual Language - 2-D Foundations 4cr
- ARTZ 108 - Visual Language - 3-D Foundations 4cr
- ARTZ 145 - Introduction to Glassblowing and Sculpting 4cr
- ARTZ 118 - Calligraphy 4cr
- ARTZ 231 - Ceramics I 4cr
- ARTZ 251 - Sculpture I 4cr
- ARTZ 267 - Fibers Art I 4cr

Resources: N/A

ATTACHMENTS

Attachments

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

__X__ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

APRIL/2024

ITEM 1601-LI0424

ITEM TITLE: Notification of Establishing a Certificate of Technical Studies: Digital Marketing

Institution: **The University of Montana Western** CIP Code: **520101**

Program/Center/Institute Title: **Business & Technology Department/The University of Montana Western**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: Establishing a Digital Marketing Certificate

Why: The purpose of this program of study is to provide theoretical and technical training for persons seeking to work in digital marketing. Digital marketing is the application of knowledge, purpose, and practice to communicate the brand position or value proposition of a business to potential customers via digital means. In this program of study, students will learn about the theory of marketing, learn the technical and design fundamentals of creating websites, and learn/practice how to reach customers via digital communication channels. The student will understand SEO, how search rankings are determined, how paid search works, and how to target specific segments with a particular brand positioning message. This prepares the student for employment with a small business or in the marketing department of a larger business and assures employers that the student has the relevant skills in order to fulfill the requirements of a digital marketing specialist. According to the BLS Occupational Outlook, digital marketing jobs are projected to increase by 16% annually.

Creating certificates supports key BOR goals. Goal 1: Increase postsecondary enrollment of traditional and non-traditional students through expanded outreach programs, evening/weekend programs, and 2-year programs; and Goal 2: Increase degrees and certificates awarded in high-demand occupational fields.

Digital Marketing Certificate requirements (12 credits):

- BMKT 222 Customer Service & Digital Marketing
- BMKT 325 Principles of Marketing
- GDSN 145 Web Design

Resources: Required classes are all previously taught and are part of a current faculty member's load.

ATTACHMENTS

Attachments:

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

__X__ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

APRIL/2024

ITEM 1602-LI0424

ITEM TITLE: Notification of Establishing a Certificate of Technical Studies: Bookkeeping and Quickbooks

Institution: **The University of Montana Western** CIP Code: **520101**

Program/Center/Institute Title: **Business & Technology Department/The University of Montana Western**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: ____

Options: ____

Proposal Summary [360 words maximum]

What: Establishing a Certificate of Bookkeeping and Quickbooks

Why: The purpose of this program is to provide theoretical and technical career training for bookkeepers in basic bookkeeping and QuickBooks Online (QBO). QBO is the most widely used accounting software for small businesses and offers an external certification exam that certifies an individual as a "Certified Quickbooks Online ProAdvisor". The university technical certificate will provide assurance to employers that the potential employee has the required proficiency to perform bookkeeping and that the potential employee has been trained in how to use QuickBooks to perform bookkeeping. Entry level bookkeeping jobs are an excellent entry point for workers to start their career in accounting.

Creating certificates supports key BOR goals. Goal 1: Increase postsecondary enrollment of traditional and non-traditional students through expanded outreach programs, evening/weekend programs, and 2-year programs; and Goal 2: Increase degrees and certificates awarded in high-demand occupational fields.

Bookkeeping Certificate requirements (12 credits):

- ACTG 201 Financial Accounting
- ACTG 202 Managerial Accounting
- CAPP 315 Business Software

Resources: Required classes are all previously taught and are part of a current faculty member's load.

ATTACHMENTS

Attachments:

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

A. Level I:

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

X **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

APRIL/2024

ITEM 1603-LI0424

ITEM TITLE: Notification of Establishing a Certificate of Technical Studies: Project Management

Institution: **The University of Montana Western** CIP Code: **520101**

Program/Center/Institute Title: **Business & Technology Department/The University of Montana Western**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: ____

Options: ____

Proposal Summary [360 words maximum]

What: Establishing a Project Management Certificate

Why: Project Management is a specific career path that typically requires a Bachelor's degree. The tools and techniques are now sufficiently established such that an external certification process and progression are available. The course series will prepare students to take the initial certification exam (CAPM), and establish sufficient credentials and knowledge to begin a career in Project Management.

The two-course (422, 476) PM series will be taught by Speridian certified project managers. Speridian is a local I/T company that has an existing recruiting program for UMW business major graduates. Students that take this series increase their chances of being directly recruited by Speridian as a project manager once they are awarded their degree and Certificate.

By creating a UMW Certificate, we can open up the Speridian recruiting program to non-business majors, and of course we open up the PM credentialed job pathway (non-Speridian) to all as well. We want to award a certificate from UMW so that the student is credentialed from UMW as well as has the option to pursue a credential from the Project Management Institute (PMI).

Project Management offers fast-growing demand and well above average compensation. They are needed in a wide variety of organizations and institutions, from I/T workflow, to construction management, and even complicated scientific projects. PMI expects global demand for 88 million project managers by 2027, and the median pay is ~$90,000.

Project Management Certificate requirements (12 credits):

- BMGT 322 Operations Management
- BMGT 422 Project Management
- BMGT 476 Project Management Practicum

Resources: Expected instructor cost is zero to UMW due to Speridian donating instructor time. BusTech currently has sufficient unused classroom capacity for the block class, and Speridian will use their offices for the stringer. The admin associated with adding a new catalog number and administering the schedule will be absorbed by existing personal

ATTACHMENTS

Attachments

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

_____

_____

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____

5. **Re-titling an academic, administrative, or research unit**

_____

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April, 2024

Request authorization to terminate Computer Science Teaching Minor

Institution: **Montana State University - Bozeman** CIP Code: **11.07**

Program/Center/Institute Title: **Computer Science Teaching Minor**

Includes (please specify below): Face-to-face Offering: X Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: Terminate the computer science teaching minor – a minor designed to serve Education majors.

Why: Since its inception more than five years ago, not a single student has enrolled.

Resources: Not applicable.

ATTACHMENTS

Term2323

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X **A. Level I:**

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

5. **Re-titling an existing postsecondary educational program**

X 6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: **Computer Science Teaching Minor**

Program is being ____ **Placed into moratorium** **X** **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y:** ____ **N:** **X**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y:** **X** **N:** ____

   b.) **What is the expected graduation date of all students from the program?**

   No students are enrolled in the program

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y:** **X** **N:** ____

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y:** ____ **N:** **X**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y:** **X** **N:** ____

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System
PROGRAM TERMINATION/MORATORIUM FORM

No layoffs will result.

3. The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):

a.) Internal Curriculum Committees X

b.) Faculty Senate X

c.) Program Public Advisory Committee X

d.) Articulation Partners na

4. Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.) **Y:** ____ **N:** X

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

MARCH/2024

ITEM 2901-L10324

Request for authorization to terminate Computer Assistant Certificate of Applied Science

Institution: **Great Falls College Montana State University** CIP Code: **11.0103**

Program/Center/Institute Title: **Computer Assistant Certificate of Applied Science**

Includes (please specify below): Face-to-face Offering: X Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: Great Falls College MSU requests authorization to terminate the Computer Assistant CAS effective immediately.

Why: This program was placed into moratorium 2017 and GFC is officially terminating it.

Resources: None

ATTACHMENTS

2901-L10324_Term

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

X **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ **B. Level II:**

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: Computer Assistant Certificate of Applied Science

Program is being ____ **Placed into moratorium** **X** **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y:** ____ **N:** **X**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y:** ____ **N:** ____

   b.) **What is the expected graduation date of all students from the program?**

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y:** ____ **N:** ____

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y:** ____ **N:** **X**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y:** ____ **N:** ____

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System
PROGRAM TERMINATION/MORATORIUM FORM

3. **The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):**

   a.) **Internal Curriculum Committees** X

   b.) **Faculty Senate** X

   c.) **Program Public Advisory Committee** X

   d.) **Articulation Partners** NA

4. **Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.)** Y: ____ N: X

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

MARCH/2024

ITEM 2902-L10324

Request for authorization to terminate Computer Server Administration Certificate of Applied Science

Institution: **Great Falls College Montana State University** CIP Code: **11.1001**

Program/Center/Institute Title: **Computer Server Administration Certificate of Applied Science**

Includes (please specify below): Face-to-face Offering: X Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: Great Falls College MSU requests authorization to terminate Computer Server Administration CAS effective immediately.

Why: This program was placed into moratorium 2017 and GFC is officially terminating it.

Resources: None

ATTACHMENTS

2902-L10324_Term

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

X **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: Computer Server Administration Certificate of Applied Science

Program is being ____ **Placed into moratorium** **X** **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y:** ____ **N:** **X**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y:** ____ **N:** ____

   b.) **What is the expected graduation date of all students from the program?**

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y:** ____ **N:** ____

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y:** ____ **N:** **X**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y:** ____ **N:** ____

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

3. **The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):**

   a.) **Internal Curriculum Committees** X

   b.) **Faculty Senate** X

   c.) **Program Public Advisory Committee** X

   d.) **Articulation Partners** NA

4. **Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.)** Y: ____ N: X

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

MARCH/2024

ITEM 2903-L10324

Request for authorization to terminate Computer Network Infrastructure Certificate of Applied Science

Institution: **Great Falls College Montana State University** CIP Code: **11.0901**

Program/Center/Institute Title: **Computer Network Infrastructure Certificate of Applied Science**

Includes (please specify below): Face-to-face Offering: X Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: Great Falls College MSU requests authorization to terminate Computer Network Infrastructure CAS effective immediately.

Why: This program was placed into moratorium 2017 and GFC is officially terminating it.

Resources: None

ATTACHMENTS

2903-LI0324_Term

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

X **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: Computer Network Infrastructure Certificate of Applied Science

Program is being ____ **Placed into moratorium** **X** **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y:** ____ **N:** **X**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y:** ____ **N:** ____

   b.) **What is the expected graduation date of all students from the program?**

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y:** ____ **N:** ____

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y:** ____ **N:** **X**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y:** ____ **N:** ____

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

3. The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):

a.) Internal Curriculum Committees X

b.) Faculty Senate X

c.) Program Public Advisory Committee X

d.) Articulation Partners NA

4. Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.) Y: ____ N: X

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

MARCH/2024

ITEM 2904-L10324

Request for authorization to terminate CIT-Information Systems Support Associate of Applied Science

Institution: **Great Falls College Montana State University** CIP Code: **11.0103**

Program/Center/Institute Title: **Computer Information Technology - Information Systems Support AAS**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options: ____

Proposal Summary [360 words maximum]

What: Great Falls College MSU requests authorization to terminate the CIT – Information Systems Support AAS effective Summer 2024.

Why: The CIT-Information Systems Support AAS has been in moratorium for over a year with no student interest. This termination request is being made due to low enrollment in the program and a shift in department direction focusing on Great Falls College's Cybersecurity and Computer Programming degrees.

Resources: There will be no impact to full-time faculty workloads.

ATTACHMENTS

Attachments

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

4. Offering an existing postsecondary educational program via distance or online delivery

OCHE Approvals

5. Re-titling an existing postsecondary educational program

X **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)

8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)

9. Revising a postsecondary educational program (Curriculum Proposal Form)

10. Establishing a temporary C.A.S. or A.A.S. degree program *Approval limited to 2 years*

B. Level II:

1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)

2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)

3. Exceeding the 120-credit maximum for baccalaureate degrees *Exception to policy 301.11*

4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. Re-titling an academic, administrative, or research unit

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: CIT – Information Systems Support Associate of Applied Science

Program is being ____ **Placed into moratorium** **X** **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y:** ____ **N:** **X**

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y:** ____ **N:** ____

   b.) **What is the expected graduation date of all students from the program?**

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y:** ____ **N:** ____

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y:** ____ **N:** **X**

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y:** ____ **N:** ____

   b.) **Please describe any layoffs that will occur including the date expected?**

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

3. **The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):**

   a.) **Internal Curriculum Committees** X

   b.) **Faculty Senate** X

   c.) **Program Public Advisory Committee** X

   d.) **Articulation Partners** NA

4. **Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.)** Y: ____ N: X

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

MARCH / 2024

ITEM 2801-LI0324

ITEM TITLE: Request authorization to change BAS Business Technology to BAS Business Management

Institution: **MSU-NORTHERN** CIP Code: **52.0201**

Program/Center/Institute Title: **BACHLOR OF APPLIED SCIENCE: BUSINESS MANAGEMENT**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: ____

Options: N/A

Proposal Summary [360 words 2323maximum]

What: Change the program title from Bachelor of Applied Science in Business Technology to Bachelor of Applied Science in Business Management.

Why:

The current title "Business Technology" does not describe the program outcomes or required courses. The Business program has a management focus.

The courses proposed for the program focus on business management.

Resources: N/A

ATTACHMENTS

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

3. **Establishing a B.A.S./A.A./A.S. area of study**

4. **Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

X 5. **Re-titling an existing postsecondary educational program**

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

April/2024

ITEM XXX-LI0424

ITEM TITLE Request authorization to re-title Community Leadership to Community Psychology

Institution: **MSU Northern** CIP Code: **33.0104**

Program/Center/Institute Title:

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options:

Proposal Summary [360 words maximum]

What: MSU-Northern is proposing to re-title its Community Leadership program to Community Psychology.

Why: The title of Community Psychology more fully and accurately reflects the content, mission, and learning outcomes of the program offered at MSU-Northern. The current Community Leadership program is very closely aligned with the 18 core competencies published by the American Psychological Association's Division 27, Community Psychology. This new title will communicate to prospective students the comprehensive nature of the program, making it more marketable to students and potential employers.

Resources: No resources are required for this change

ATTACHMENTS

Attachments None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

3. **Establishing a B.A.S./A.A./A.S. area of study**

4. **Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

X 5. **Re-titling an existing postsecondary educational program**

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

April/2024

ITEM XXX-LI0424

ITEM TITLE Request authorization to terminate Water Quality Technology

Institution: **MSU Northern** CIP Code: **15.0506**

Program/Center/Institute Title:

Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: X

Options:

Proposal Summary [360 words maximum]

What: MSU-Northern is terminating its Water Quality Technology Certificate of Applied Science.

Why: The Montana Department of Environmental Quality now offers its own certification program in this field.

Resources:

ATTACHMENTS

Attachments None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

X **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 1001-LI0424

ITEM TITLE – Request for authorization to terminate multiple programs:

B.S. in Public Health with concentration in Community Health

B.S. Public Health with concentration in Global Health

Institution: **University of Montana - Missoula** CIP Code: _____

Program/Center/Institute Title: _____

Includes (please specify below): Face-to-face Offering: _____ Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: The University of Montana requests authorization to terminate the following programs:

B.S. in Public Health with concentration in Community Health
B.S. in Public Health with concentration Global Health

Why: We will be terminating the concentrations associated with the BS in Public Health (General Public Health, Community Health, and Global Health) to create a single, streamlined degree path. The retitling and curriculum change reflects the combination of the concentrations and change to one degree option.

Resources: None

ATTACHMENTS
Attachments – Program Termination Form

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X A. Level I:

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

1b. Withdrawing a postsecondary educational program from moratorium

2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less

3. Establishing a B.A.S./A.A./A.S. area of study

4. Offering an existing postsecondary educational program via distance or online delivery

OCHE Approvals

5. Re-titling an existing postsecondary educational program

X **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)

8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)

9. Revising a postsecondary educational program (Curriculum Proposal Form)

10. Establishing a temporary C.A.S. or A.A.S. degree program *Approval limited to 2 years*

B. Level II:

1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)

2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)

3. Exceeding the 120-credit maximum for baccalaureate degrees *Exception to policy 301.11*

4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. Re-titling an academic, administrative, or research unit

Montana University System

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Program Title: B.S. Public Health with concentration in Community Health; B.S. Public Health with concentration in Global Health

Program is being ____ **Placed into moratorium** **X** **Terminated**

1. **Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)** **Y:** X **N:** ____

   a.) **Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?** **Y:** ____ **N:** X

   b.) **What is the expected graduation date of all students from the program?** Spring 2026

   c.) **Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?** **Y:** X **N:** ____

2. **Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)** **Y:** ____ **N:** X

   a.) **Have the faculty affected by the program termination/moratorium been notified?** **Y:** ____ **N:** ____

Montana University System
PROGRAM TERMINATION/MORATORIUM FORM

b.) Please describe any layoffs that will occur including the date expected?

3. The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):

a.) Internal Curriculum Committees X

b.) Faculty Senate X

c.) Program Public Advisory Committee X

d.) Articulation Partners NA

4. Has there been any negative feedback received from students, faculty, or other constituents regarding the impending termination/moratorium? (If yes, please explain below.) **Y:** ____ **N:** X

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

April 2024

ITEM 1002-LI0424

ITEM TITLE – Request for authorization to retitle the B.S. in Public Health with concentration in General Public Health to B.S. in Public Health

Institution: **University of Montana - Missoula** CIP Code: **51.2208**

Program/Center/Institute Title: **College of Health**

Includes (please specify below): Face-to-face Offering: X Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: The Department of Public Health within the College of Health wishes to retitle the B.S. in Public Health with concentration in General Public Health to B.S. in Public Health.

Why: We will be terminating the concentrations associated with the BS in Public Health (General Public Health, Community Health, and Global Health) to create a single, streamlined degree path. The retitling and curriculum change reflects the combination of the concentrations and change to one degree option.

Resources: No resources are needed to implement this proposal.

ATTACHMENTS

None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

X **A. Level I:**

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

3. **Establishing a B.A.S./A.A./A.S. area of study**

4. **Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

X 5. **Re-titling an existing postsecondary educational program**

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

APRIL/2024

ITEM 1607-LI0424

ITEM TITLE: Request for authorization to retitle Drama Related Area to Drama Minor

Institution: **The University of Montana Western** CIP Code: **500599**

Program/Center/Institute Title: **Fine Arts Department/The University of Montana Western**

Includes (please specify below): Face-to-face Offering: X Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: Retitle Drama Related Area to Drama Minor

Why: The Drama Related Area sounds awkward and implies there is a greater area to major in. The Drama Minor is more succinct.

Resources:

ATTACHMENTS

Attachments:

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____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

4. **Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

X 5. **Re-titling an existing postsecondary educational program**

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

MARCH/2024

ITEM 2802-LI0324

ITEM TITLE: Notification of offering Education Preparation Program Online

Institution: **Montana State University - Northern** CIP Code: **13.1202**

Program/Center/Institute Title: **College of Arts, Sciences, and Education/Education Department**

Includes (please specify below): Face-to-face Offering: ____ Online Offering: X Blended Offering: ____

Options: ____

Proposal Summary [360 words maximum]

What: The Montana State University – Northern Initial Education Preparation Program (EPP) plans to offer its existing program via an online mode of delivery, effective Fall 2024. The benefits of transition for students include a view toward digital equity, inclusivity, and diversity; increased delivery flexibility; and increased resources for surrounding schools and communities. The program actively seeks to fill a void – meeting the specific educational needs of students along the northern frontier reaches of the state. An online modality allows the program to more effectively provide access and flexibility for teachers-in-training, paraprofessionals, and individuals working on their Class 5 or Emergency Licenses across the Hi-Line, as well as educational opportunities for potential students across the state and beyond. This online program model will incorporate a distinctive community building component that offers online students critical opportunities for face-to-face interactions. These interactions will be in the form of faculty/staff/administrator visits to satellite locations along the Hi-Line for up to two times each semester for in-person orientation and advising sessions.

Why: The reasons for the pursuit of an online program are four-fold. First, the EPP is committed to meeting the needs of students in frontier/rural Montana. Second, the EPP seeks to support districts across the state by allowing teachers-in-training to work in school while obtaining their degree. Third, online delivery allows students to easily access MSUNs EPP without location restrictions. Lastly, an online EPP will provide teacher education students across states with wider resource availability.

Resources: There are several resources that the program will pursue to sustain this effort. The first is work on a social media advertising campaign to heighten the awareness of MSUNs Education programs and to promote the program's new online delivery mode. Quality assurance instructor/course and program resources will also be considered in the form of the Associate of College and University Educators (ACUE) teaching certification endorsements (https://acue.org/) and Quality Matters certifications (https://www.qualitymatters.org/), respectively. The cultivation of additional resources through Education Department stakeholders that include, but are not limited to the Hi-Line MASS Superintendents organization and the college's Initial Education Advisory Council, will assist the program to continuously generate innovative and creative engagement opportunities.

ATTACHMENTS

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

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X A. Level I:

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

X **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION April 2024

ITEM 2701 L2 0424

ITEM TITLE Request for authorization to consolidate the Department of Health Care Services and the Department of Health and Human Performances into the new Department of Health Sciences and Human Performance

Institution: **MSU Billings** CIP Code: _____

Program/Center/Institute Title: **Department of Health Sciences and Human Performance**

Includes (please specify below): Face-to-face Offering: _____ Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: MSU Billings requests authorization to consolidate the Department of Health Care Services and the Department of Health and Human Performances into the new Department of Health Sciences and Human Performance.

Why: The department merger creates opportunities for collaboration and facilitates the development of pathways to better serve students interested in Health Sciences and Human Performance as well as in leadership. The mission of the new department will be "*We educate future professionals and leaders who are dedicated to promoting healthy lifestyles and providing quality care"* and its values will include "leadership, lifelong learning, service, promotion of healthy lifestyles, innovation, research/scholarship, integrity, competency". The two departments are already engaged in significant curricular and research collaborations. This merger will strengthen the programs underneath its purview by providing additional opportunities to mentor junior faculty, grow health sciences programs, and create additional opportunities for students. It is important to note that the degree programs offered by the existing two departments will continue and the students in those degree programs will continue to be served by the consolidated department.

Resources: The merger will allow for operational efficiencies and will also lead to small cost savings (e.g., only one department chair will be needed for the new consolidated Department of Health Sciences and Human Performance).

ATTACHMENTS

None

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ B. Level II:

_____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

X **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

May, 2024

ITEM 2011-R0524

ITEM TITLE: Request authorization to establish a Bachelor of Science in Environmental Economics and Policy

Institution: **Montana State University** CIP Code: **45.0601**

Program/Center/Institute Title: **B.S. Environmental Economics and Policy**

Includes (please specify below): Face-to-face Offering: X Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: The Environmental Economics and Policy major teaches students to analyze environmental issues and policies using economic principles. The program includes a rigorous grounding in economics and mathematics. The centerpiece of the program is a set of three upper-division courses in Natural Resource, Environmental, and Energy Economics. These courses, along with a capstone course, focus heavily on policy analysis. To give students a fundamental grounding in the science of environmental problems, the program includes directed electives in environmental science. And to provide a broader perspective on policy analysis, it includes directed electives in environmental policy, law, natural science, and social science.

Why: Given national, state, and local priorities of environmental sustainability, a rapid ongoing transition of our energy system, and increased regulatory attention paid to environmental issues including climate change, we expect job opportunities for graduates from the proposed option will be strong and will grow both nationally and within Montana. Employers need people who have the analytical skills necessary to evaluate the social and economic consequences of different actions as well as the natural science skills necessary to understand the biological, physical and ecological linkages involved. Providing this option to students at MSU is a proactive step in training the future industry leaders, policymakers, and community representatives who will lead MSU, the state of Montana, and the nation in innovative practices that are more sustainable, both environmentally and economically.

Resources: The proposed major option would require three more course offerings per academic year. First, ECNS 132, Economics and the Environment, is listed in the university catalog but has not been offered in recent years. This course would be of interest to students in a wide range of majors and could serve as an attractor to the major. Second, an upper-level class in energy economics (ECNS 335: Energy Economics) needs to be added to complement the currently offered courses. Finally, an additional class in environmental economics (ECNS 433: Economics of the Environment) would be required. These additional courses are a standard part of the Environmental Economics and Policy curriculum at universities that offer the major. The department currently assesses that no new resources will be needed to offer these courses.

ATTACHMENTS

Curriculum Proposal Form
Fiscal Analysis Form
Request to Plan

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Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

X **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

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4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

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1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

   The Department of Agricultural Economics and Economics (DAEE) proposes to create a new option under Bachelor of Science (B.S.) in Economics with major and a stand-alone minor titled "Environmental Economics and Policy". This major will give students a solid foundation in economics and train them to apply economic theory and principles to the analysis of environmental and natural resource policy issues. The curriculum will include directed electives from several other MSU departments including Land Resources and Environmental Sciences, Earth Sciences, and Political Science. The program will include two new DAEE course offerings in Environmental Economics and Energy Economics.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

   As Montana's land-grant university, MSU is dedicated to education, creation of knowledge and art and service to share with Montana communities. Montana is endowed with rich environmental resources, but careful and sustainable management is required to continue enjoying these rich benefits in future years and generations. The proposed environmental economics and policy major will help equip students with models, tools, and knowledge to help address some of most pressing environmental questions and needs in Montana, the nation, and the globe.

   The proposed major and minor would align with several values within MSU's strategic plan. Specifically, it upholds integrity and ethical behavior, collaboration, curiosity, and stewardship. As human beings live in and interact with their environment, we must evaluate our role in the natural environment, how our actions today impact future generations, and how to best manage consumption of natural resources.

   Specifically, the program aligns with Goal 3.2 of Montana State's strategic plan *"grow mutually beneficial partnerships across Montana"*, which includes the action *"new workforce and academic degree programs will be tailored to demonstrated state and regional needs with attention to national trends."*

   The program also addresses Goal 3.3: *"foster a culture of collaboration, continuous improvement, and individual growth"*, which includes the action *"Montana State University will improve and increase collaborations between curricular and co-curricular units to support student success."* The program encourages collaboration through its interdisciplinary approach with directed electives in numerous interrelated fields.

   Finally, the program also aligns with the vision and values of the Green Cats Program, which was created to cultivate a culture of sustainability among students, faculty, and staff, and it would advance goals to expand course offerings and involve students in sustainability issues and solutions

3. **Process leading to submission.** Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

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A five-member steering committee to propose the new program was formed in October 2021. The committee performed an analysis of demand and gathered information on similar programs at peer universities. A Request to Plan was submitted in May 2022 and approved the following in December. The committee constructed a curriculum for the new major and minor and presented it to DAEE faculty in March 2022. Based on faculty feedback, the curriculum was revised, sent back to faculty, and approved by a faculty vote in June 2022.

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

Appendix A lists the full proposed curriculum for both the proposed major and minor in Environmental Economics and Policy. The major includes a rigorous grounding in economics and mathematics, including intermediate microeconomics with calculus. The centerpiece of the program is a set of three upper-level courses in Natural Resource, Environmental, and Energy Economics (ECNS 332, 333, and 334), the latter two of which will be new courses. These courses, along with a capstone course, focus heavily on policy analysis. To give students a fundamental grounding in the science of environmental problems, the program includes directed electives in environmental science. And to provide a broader perspective on policy analysis, it includes directed electives in environmental policy, law, natural science, and social science. The minor is a scaled-down program that still includes the most essential components of the major.

a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	27
Credits in required courses offered by other departments	25
Credits in institutional general education curriculum	18
Credits of free electives	50
Total credits required to complete the program	120

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

Upon successful completion of the program, students will be able to:

- Apply the theoretical frameworks of economics to analyze environmental issues and problems.
- Analyze and evaluate environmental policies, assessing their effectiveness, efficiency, and equity implications.
- Identify appropriate policy instruments and design strategies to tackle emerging environmental challenges while balancing economic, social, and ecological considerations.

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- Integrate economic analysis with concepts from environmental sciences and other fields to assess environmental challenges and propose sustainable solutions.
- Recognize empirical research methods used in environmental economics and policy evaluation, outline potential approaches to answer a novel empirical question, and to apply basic statistical techniques to analyze economic or environmental data.

5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

Given national, state, and local priorities of environmental sustainability, a rapid ongoing transition of our energy system, and increased regulatory attention paid to environmental issues including climate change, we expect job opportunities for graduates from the proposed option will be strong and will grow both nationally and within Montana.

We have contacted program coordinators for Environmental Economics programs at several peer institutions and asked about job placements. Those coordinators report that job placement has been strong, with the most common placements being:

- Graduate school (most commonly graduate programs in Economics and Law School)
- Consulting firms
- Energy firms, both extractive and renewable
- Environmental non-governmental organizations (NGOs)
- State regulatory agencies
- Local government, for example land use planning departments

Employers need people who have the analytical skills necessary to evaluate the social and economic consequences of different actions as well as the natural science skills necessary to understand the biological, physical and ecological linkages involved.

National employment in environmental quality programs grew rapidly from 2015 to 2018, from approximately 315,000 to 340,000 jobs (see figure 1).

Figure 1. National Employment Growth in Environmental Quality Programs

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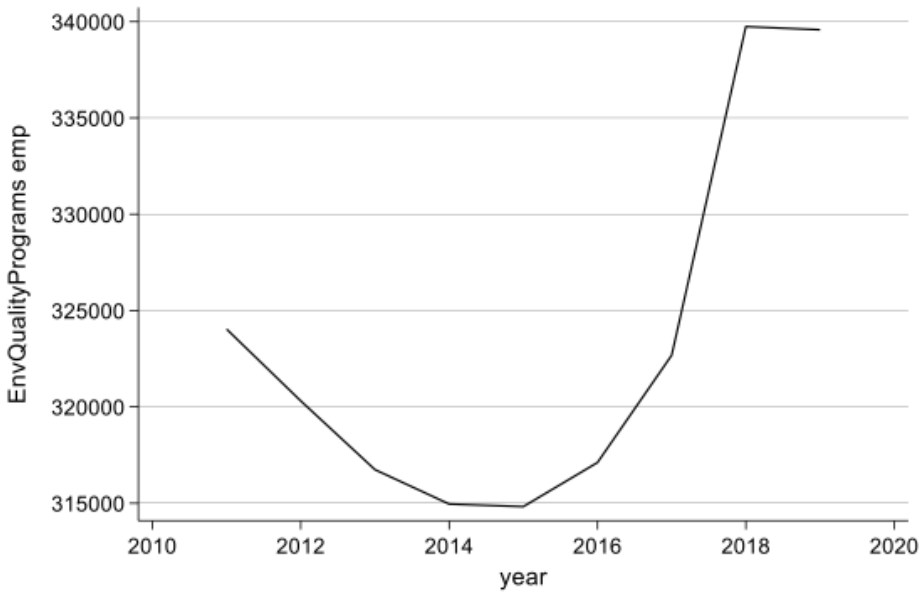

Data Source: Analysis of the Bureau of Labor Statistics, Quarterly Census of Employment and Wages

And job growth for students trained in Environmental Management is expected to continue. The U.S. Department of Labor projects that annual jobs in the field of Environmental Scientists and Specialists will grow 8% over the period 2020-2030 (source: https://www.bls.gov/ooh/life-physical-and-social-science/environmental-scientists-and-specialists.htm).

Many of the projected jobs will be related to the transition that is occurring in the energy sector. Energy and mining account for 20% of Montana's economy (source: http://www.bber.umt.edu/energy/default.asp). According to the *2020 U.S. Energy and Employment Report* by the National Association of State Energy Officials and the Energy Futures Initiative, energy sectors added 120,300 new jobs in 2019, which was 7% of all new jobs nationwide, with the fastest growing sectors being advanced (low emissions) natural gas, wind energy and solar energy. These employment figures are representative of a national shift from a more extractive resource management philosophy to a prioritization of sustainable environmental practices and resource management. Recent findings show that green jobs (defined as solar or wind jobs) more than tripled from 2010-2022, are associated with occupations with 21% higher pay than average, and are more likely located in counties with historically high shares of employment in fossil fuel extraction.[1] Graduates from the proposed degree will be well-suited for existing and growing energy occupations. With their combination of analytical and natural science skills, graduates of the EEP program will be attractive hires for both extractive and renewable energy firms.

[1] Curtis, Mark E. and Ioana Marinescu. 2022. "Green Energy Jobs in the US: What Are They, and Where Are They?" NBER Working Paper No. 30332

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The program will also ensure that MSU is competitive with other universities that offer degrees in environmental economics and policy. For example, some form of Environmental Economics degree is available from the following western universities:

- Colorado State University (standalone major)
- Utah State University (standalone major)
- Washington State University (option within Economics)
- Oregon State University (standalone major)
- University of California – Berkeley (standalone major)
- University of California – Davis (option within Economics)
- University of Arizona (standalone major)

Providing this option to students at MSU is a proactive step in training the future industry leaders, policymakers, and community representatives who will lead MSU, the state of Montana, and the nation in innovative practices that are more sustainable, both environmentally and economically.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

There is no existing program within the Montana University System that is highly similar to the proposed program in Environmental Economics and Policy. The table below lists programs within the system that share some similarities.

Institution Name	Degree	Program Title
MSU Bozeman	B.S.	Economics
MSU Bozeman	Minor	Economics
UM Missoula	B.A.	Economics
MSU Bozeman	B.S.	Environmental Sciences
MSU Bozeman	B.S.	Sustainable Foods & Bioenergy Systems
MSU Bozeman	B.S.	Natural Resources and Rangeland Ecology
UM Western	B.S.	Environmental Science
UM Missoula	B.A.	Environmental Studies
MSU Bozeman	B.A.	Liberal Studies, Environmental Studies option
MSU Billings	B.A.	Environmental Studies

These programs fall into three categories. First are economics programs. The proposed program in Environmental Economics and Policy (EEP) builds on the existing program in Economics at MSU and accordingly shares a core set of courses and mode of analysis. However, they differ in focus. The Economics program is broad in topics, applying an economic lens to topics as disparate as monetary policy and healthcare. The new program will provide more depth in topics relating to the

environment, while providing breadth through multidisciplinary perspectives on the same topics. We also expect the new program to attract students with different sets of interests and goals.

The second category is environmental science programs. While these programs often address similar environmental issues, the proposed program in EEP will provide a distinct disciplinary perspective. The Environmental Science, Sustainable Foods & Bioenergy Systems, and Natural Resources and Rangeland Ecology programs all focus primarily on the scientific side of environmental challenges. In contrast, the new program will focus primarily on the economic side of these issues, studying individual decision-making, policy design, and methods for evaluating tradeoffs in society. These perspectives are highly complementary and we expect many students to pursue a major and minor, or a double major, in both EEP and one of these programs.

The last category is environmental studies programs. These, too, are distinct in perspective as well as structure. The Environmental Studies programs are all highly flexible and interdisciplinary, allowing students to chart their own path and choose from a wide range of courses in the sciences, arts and humanities, and social sciences. While the proposed EEP program will also give students exposure to multiple disciplines, it will be rooted in a disciplinary core of economics.

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

As described above, the only MUS program that has substantial overlap with the proposed program in EEP is the existing program in Economics at MSU Bozeman. The two programs share some course requirements and a mode of analysis. We considered the alternative approaches of offering an environmental concentration or option within the Economics major, or simply advising Economics students interested in environmental topics to take the relevant courses. However, we concluded that offering a program in EEP that is fully distinct from Economics would provide significant benefits to the state of Montana while incurring essentially no additional costs.

We see four main benefits from offering EEP as a full academic program:

1. *Employment value.* Giving EEP a distinct identity will allow students to signal to future employers and graduate schools that they have the unique combination of both a rigorous quantitative training in economics and a broader domain background in environmental issues. These benefits will only grow as the program builds name recognition within Montana.
2. *Recruitment by correcting misperceptions.* Having a distinct name will bring in new students to study the economics and policy of environmental issues who might not have otherwise considered economics. While economics studies a wide range of policy-relevant topics, many potential students without prior exposure to the field assume it is only about business, money, and banking. Informal conversations and exit interviews with Economics majors suggest that most begin with an interest in economics; those who also develop an interest in environmental issues do so only later by chance. By offering a distinct program in EEP, we will be able to attract students who start with a strong interest in environmental issues and would not have otherwise realized that economics offers a valuable perspective on these issues.

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3. *Regional competitiveness.* Offering a program in EEP allows MSU to better compete for students, both from Montana and out of state, who want to study this topic. Many other Western land-grant universities already offer a major in EEP (or an equivalent program with a similar name). MSU is well-positioned to compete for these students given the rich outdoor amenities of the Gallatin Valley.
4. *Enhancing Montana's skills base.* As Montana's population grows, its economy shifts, and its natural resources face increasing pressure, the skills provided by the proposed EEP program will only grow more valuable. Increasing the number of graduates in Montana's workforce who have strong analytical skills and can apply them to environmental issues will bring immense benefits to the state and its citizens.

At the same time, very few additional resources are required to offer the proposed program. EEP will leverage existing teaching and advising capacity and faculty expertise within the Department of Agricultural Economics and Economics (DAEE).

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

The most similar programs within the Montana University System are those at MSU, and in particular the Economics program in the DAEE. We have designed the proposed program in close collaboration with the rest of the faculty in DAEE. We have also consulted with faculty in other departments, such as the Department of Land Resources and Environmental Sciences (LRES), which offers the Environmental Sciences program listed above. They have expressed enthusiasm for EEP due to the complementary nature of its curriculum with their own, and we expect to see growing interactions and collaborations between the two departments.

7. Implementation of the program. When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

The program will first be offered in AY 2024-25. Beyond the catalog entry, the main tasks required to get the program up and running are to prepare and obtain approval for the new courses (ECNS 333, Environmental Economics, and ECNS 334, Energy Economics). A faculty committee of the DAEE will do this during AY 2023-24, along with the remaining tasks, such as advertising the program, evaluating and improving the program, establishing a process for assigning student advisors, and establishing a process for degree certification.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment					Graduates				
AY24-25	AY25-26	AY26-27	AY27-28	AY28-29	AY24-25	AY25-26	AY26-27	AY27-28	AY28-29
10	25	35	50	60	0	0	2	9	15

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b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

These projections are based on an analysis of enrollment within MSU and a survey of degree officers of similar programs at other land-grant institutions. There is considerable room for long-term optimism for enrollment in an EEP program; similar programs at other Western land-grant universities graduate as many as hundreds of students per year. We are also encouraged by the rapid growth trajectory of the Environmental Science major, which was begun only recently by LRES and is now stretching that department's capacity. At the same time, we do not expect to attain extreme levels of enrollment immediately. We started by assuming that enrollment at the end of 5 years will be similar to the median institution whose officers we surveyed, and adjusted upward slightly to account for MSU's unique advantages in this area and the experience of the Environmental Science major.

c. What is the initial capacity for the program?

The initial capacity for the program is constrained only by enrollment caps in the required upper-level courses. ECNS 332 (Natural Resource Economics) currently has a course cap of 50 students, and we expect that the new courses, ENCS 333 and 334, will have the same cap. So the initial capacity is 50 students per cohort, or around 150 students in total headcount enrollment. We do not expect to exceed this capacity in the first few years of the program, though in the event that we do, we can temporarily accommodate additional students by raising the course caps for these courses.

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

The program is meant to provide an option for students with specific interests that is currently missing from MSU, to promote synergies within the university, and to help meet MSU's strategic goals. Because the program does not require additional resources, we do not require especially high enrollment in the major to view it as successful, though it will provide scope for potential department growth.

Because the two new 300-level courses will be the most significant additions of the program, the primary evaluation metric will be enrollment in these courses. If they do not attract sufficient interest, we may choose to offer them every other year on an alternating basis. If they still do not attract sufficient demand, (which would imply low enrollment in the major itself), the courses and the major may be shut down.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

The following actions will be taken to assess program performance:

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- An annual program review, similar to the reviews for our existing Economics and Agribusiness Management Majors
- Exit interviews with graduating students
- Peer faculty in-class teaching observations and evaluations
- The DAEE Resident Instruction Committee will perform annual course assessments. This includes reviewing syllabi and learning outcomes for all relevant courses.
- A job placement survey will be implemented beginning in year four.
- The program will be holistically evaluated in the 7-year department review.

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

The annual program evaluation will include reviewing exam performance in the Environmental Economics, Natural Resource Economics, and Energy Economics courses, and reviewing capstone projects for students majoring in the program. Acceptable thresholds of student performance (based on exam scores or capstone grades) will be set and evaluated each year.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words]*

Findings from the annual program review and other assessments outlined in 8(a) will be disseminated to the relevant faculty. If student performance is found to be inadequate for one or more of the learning outcomes, the department will work with faculty to devise a plan for improvement.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

This program does not require specialized accreditation.

9. Physical resources.

a. Describe the existing facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

EEP majors will not require extensive facilities or equipment. We primarily need to ensure that students have access to necessary software programs (e.g. MS Office, Stata). To this end, the DAEE has a computer lab for undergraduate students containing about 10 computers, and a student study lab. Access to software is further aided by the fact that students may access software via remote desktop connections to campus computers.

b. List needed facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

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We do not anticipate any need for additional facilities or equipment in the near future. If the program substantially increases the DAEE's overall enrollment, we may need additional computers available for undergraduates.

10. Personnel resources.

a. Describe the existing instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

As of Fall 2023 the DAEE will have 20 tenure-track professors, three non-tenure track instructors, and five administrative staff. Given increases in the teaching percentage of effort for some DAEE faculty starting in AY2023, the two new courses will not put additional strain on existing personnel resources, and the quality and productivity of existing programs will not be impacted.

b. Identify new personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

The program does not require any new personnel.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

The existing library and information resources are adequate for the proposed program.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

Existing student services have the capacity to accommodate the program, and we do not anticipate any impact on services for the rest of the student body.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

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	Year 1	Year 2	Year 3
Revenues	$82,360	$205,900	$288,260
Expenses	$0	$0	$0
Net Income/Deficit (revenues-expenses)	$82,360	$205,900	$288,260

Note that these projections assume 55% of unduplicated students are out of state and that students 85% of full tuition costs on average.

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

The proposed program does not include any new expenses.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

The program will not impose new fees.

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14. Complete the fiscal analysis form.

Signature/Date

College or School Dean:	DocuSigned by: Sreekala Bajwa 1682E439FD7E4F1...	4/1/2024 | 8:02 AM MDT
Chief Academic Officer:	DocuSigned by: Robert Mokwa 212A28411AC04BD...	4/1/2024 | 8:02 AM MDT
Chief Executive Officer:	DocuSigned by: Waded Cruzado 7D6A4CE96C3F415...	4/1/2024 | 8:02 AM MDT
Flagship Provost*:	DocuSigned by: Robert Mokwa 212A28411AC04BD...	4/1/2024 | 8:02 AM MDT
Flagship President*:	DocuSigned by: Waded Cruzado 7D6A4CE96C3F415...	4/1/2024 | 8:02 AM MDT

*Not applicable to the Community Colleges.

Appendix A – Proposed New Curriculum

Environmental Economics and Policy Major

Freshman Year	**Credits**	
	FALL	**SPRING**
ECNS 132 - Econ & the Environment or ECNS 101IS - Economic Way of Thinking[1]	3	
Choose one of the following: [2] BIOE 103CS - Environmental Science and Society ENSC 110 - Land Resources and Environmental Sciences GEO 103CS - Intro to Envrmntl Geology NRSM 101 - Natural Resource Conservation SFBS 146 - Introduction to Sustainable Food and Bioenergy Systems	3	
University Core and General Electives	9	
ECNS 202 - Principles of Macroeconomics[1]		3

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University Core and General Electives		12
Year Total:	15	15
Sophomore Year	**Credits**	
ECNS 204IS - Microeconomics[1]	3	
STAT 216Q - Introduction to Statistics	3	
Directed Elective in Environmental Science and GIS[2]	3	
University Core and General Electives	6	
M 161Q - Survey of Calculus or M 171Q - Calculus I		4
Directed Electives in Environmental Policy and Social Science[3]		3
University Core and General Electives		8
Year Total:	15	15
Junior Year	**Credits**	
ECNS 301 - Intermediate Micro with Calc	3	
STAT 217 - Intermediate Statistical Concepts or STAT 337 - Intermediate Statistics with Introduction to Statistical Computing	3	
ECNS 333 - Environmental Economics*	3	
University Core and General Electives	6	
ECNS 332 - Natural Resource Economics		3
Directed Electives in Environmental Policy and Social Science[3]		3
University Core and General Electives		9
Year Total:	15	15
Senior Year	Credits	
ECNS 432R - Economic Policy Evaluation or ECNS 403R - Intro to Econometrics	3	
ECNS 334 - Energy Economics*	3	
University Core and General Electives	9	
Choose one of the following: AGBE 337 Agricultural Law BGEN 361 Principles of Business Law EENV 387 Environmental Laws and Regulations NRSM 430 Natural Resource Law	3	
Directed Major 400-level Elective[4]		3
University Core and General Electives		9
Year Total:	15	15
Total Program Credits:		120

* New Course

[1] ECNS 251IS (4 credits) may be substituted for the three-course sequence ECNS 101IS, ECNS 202, and ECNS 204IS. However, students must still complete at least 27 credits of AGBE/ECNS/EFIN courses to fulfill the major requirement.

[2] Any course from the below list of Directed Electives in Environmental Science and GIS may be substituted for this requirement (but not double-counted).

[3] Directed Electives in Environmental Science and GIS:

GPHY 284 - Intro to GIS Science & Cartog
GPHY 384 - Adv GIS and Spatial Analysis
GPHY 426 - Remote Sensing
AGTE 330 - Alternative Power & Energy Technology
BIOE 370 - General Ecology
ECHM 205CS - Energy and Sustainability

Montana Board of Regents
CURRICULUM PROPOSAL FORM

ENSC 210 - Role of Plants in the Environment
ENSC 245IN - Soils
ENSC 272CS - Water Resources
ENSC 353 - Environmental Biogeochemistry
ENSC 391 - Fundamentals of Environmental Data Analysis
ENSC 407 - Environmental Risk Assessment
NRSM 240 - Natural Resource Ecology

[4] Directed Electives in Environmental Policy and Social Science:
PSCI 240 - Introduction to Public Administration
PSCI 362 - Natural Resource Policy
PSCI 415 - The Political Economy of Energy
SOCI 470 - Environmental Sociology
GPHY 326 - Geography of Energy Resources
GPHY 329 - Environment and Society
GPHY 365 - Geographical Planning
GPHY 402 - Water and Society
AGBE 315 - Ag in a Global Context
ECNS 317 - Economic Development
ECNS 320 - Public Finance

[6] 400-Level Directed Major Electives: ECNS 403R - Intro to Econometrics, ECNS 432R - Economic Policy Evaluation, ECNS 451 – Behavioral & Experimental Economics, ECNS 460 - Advanced Data Analytics for Economics, ECNS 461 - Financial Econometrics, AGBE 421 - Advanced Ag Marketing, AGBE 445 - Agribusiness Management, AGBE 451RS - Economics of Ag Policy, EFIN 401 - Engineering & Economic Financial Management II, and EFIN 499R - Financial Engineering Design Capstone. Cannot double-count R-designated ECNS capstone course and 400-Level Directed Major Electives.

Graduation Requirements

Economics, Agricultural Business, and Financial Engineering students seeking a second major in Environmental Economics and Policy must complete 5 upper division directed elective courses beyond the requirements for their primary major.

Economics students must receive a grade of C or better in ECNS 101IS or ECNS 132, ECNS 202, ECNS 204IS, ECNS 301, and M 161Q or M 171Q (or their equivalents) to meet departmental graduation requirements. All other courses counting toward departmental requirements must be graded C- or better.

Twenty-seven (27) credits in ECNS, AGBE, or EFIN are needed to graduate. A minimum of 120 credits is required for graduation; 42 credits must be in courses numbered 300 and above.

Environmental Economics and Policy Minor

Departmental Requirements		**Credits**
ECNS 132 or ECNS 101IS	Econ & the Environment Economic Way of Thinking [1]	3
ECNS 204IS	Microeconomics [1]	3
Choose two of the following:		6
ECNS 332	Natural Resource Economics	
ECNS 333	Environmental Economics*	
ECNS 334	Energy Economics*	
Supporting Requirements		
STAT 216Q	Introduction to Statistics	3
Directed Elective in Environmental Science and GIS [2]		3

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Directed Elective in Environmental Policy, Law, and Social Science [3]	3
Total Credits	**21**

* New Course

[1] ECNS 251IS Honors Economics (4 credits) may be substituted for both ECNS 101IS and ECNS 204IS. However, students must still complete at least a total of 21 credits for the minor. The additional 2 credits may be filled with an approved substitution.

[2] Directed Electives in Environmental Science and GIS:

AGTE 330 - Alternative Power & Energy Technology
BIOE 103CS - Environmental Science and Society
BIOE 370 - General Ecology
ECHM 205CS - Energy and Sustainability
ENSC 110 - Land Resources and Environmental Sciences
ENSC 210 - Role of Plants in the Environment
ENSC 245IN - Soils
ENSC 272CS - Water Resources
ENSC 353 - Environmental Biogeochemistry
ENSC 391 - Fundamentals of Environmental Data Analysis
ENSC 407 - Environmental Risk Assessment
GEO 103CS - Intro to Envrmntl Geology
GPHY 284 - Intro to GIS Science & Cartog
GPHY 384 - Adv GIS and Spatial Analysis
GPHY 426 - Remote Sensing
NRSM 101 - Natural Resource Conservation
NRSM 240 - Natural Resource Ecology
SFBS 146 - Introduction to Sustainable Food and Bioenergy Systems

[3] Directed Electives in Environmental Policy, Law, and Social Science:

AGBE 337 Agricultural Law
BGEN 361 Principles of Business Law
EENV 387 Environmental Laws and Regulations
NRSM 430 Natural Resource Law
PSCI 240 - Introduction to Public Administration
PSCI 362 - Natural Resource Policy
PSCI 415 - The Political Economy of Energy
SOCI 470 - Environmental Sociology
GPHY 326 - Geography of Energy Resources
GPHY 329 - Environment and Society
GPHY 365 - Geographical Planning
GPHY 402 - Water and Society
AGBE 315 - Ag in a Global Context
ECNS 317 - Economic Development
ECNS 320 - Public Finance

Graduation Requirements

Economics, Agricultural Business, and Financial Engineering students seeking a minor in Environmental Economics and Policy must complete 3 upper division directed elective courses beyond the requirements for their major.

A student must receive a grade of C- or better in all courses required for the minor. "P" grades may be accepted for courses transferred from outside the Montana State University system. The department certifying officer will evaluate written requests.

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	Bozeman
AWARD LEVEL:	UG
PROGRAM NAME:	BS in Economics Option in Environmental Economics & Policy
PROGRAM CODE:	

	FY2025	FY2026	FY2027	FY2028	FY2029
ENROLLMENT PROJECTIONS					
Headcount					
annual unduplicated headcount of students with declared major or minor within the program	10	20	30	40	40
Credit Hours					
annual avg. credits hours earned per student in program related curriculum	30	30	30	30	30
Student FTE					
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	10	20	30	40	40
Completions					
Annual number of program completers				7	9
REVENUE					
Tuition Revenue (net of waivers)	$0	$0	$0	$0	$0
Institutional Support					
Other Outside Funds (grants, gifts, etc.)					
Program Tuition/Fees					
Total Revenue	**$0**	**$0**	**$0**	**$0**	**$0**
Total Revenue per Student FTE	**$0**	**$0**	**$0**	**$0**	**$0**
EXPENDITURES					
Tenure Track Faculty — FTE	0.0	0.0	0.0	0.0	0.0
Tenure Track Faculty — Salary + Benefits	$0	$0	$0	$0	$0
Non-tenure Track Faculty *Includes Adjunct Instructors — FTE	0.00	0.00	0.00	0.00	0.00
Non-tenure Track Faculty *Includes Adjunct Instructors — Salary + Benefits	$0	$0	$0	$0	$0
Graduate Teaching Assistants — FTE	0.00	0.00	0.00	0.00	0.00
Graduate Teaching Assistants — Salary + Benefits	$0	$0	$0	$0	$0
Staff — FTE	0.0	0.0	0.0	0.0	0.0
Staff — Salary + Benefits	$0	$0	$0	$0	$0
Total Faculty & Staff — FTE	0.0	0.0	0.0	0.0	0.0
Total Faculty & Staff — Salary + Benefits	**$0**	**$0**	**$0**	**$0**	**$0**
Operations (supplies, travel, rent, etc)	$0	$0	$0	$0	$0
GTA Waivers		$0	$0	$0	$0
Total Expenses	**$0**	**$0**	**$0**	**$0**	**$0**
Student FTE to Faculty (TT + NTT) Ratio	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
Net Income/Deficit (Revenue - Expenses)	**$0**	**$0**	**$0**	**$0**	**$0**

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

DS

DocuSigned by:

3/29/2024 | 8:28 AM MDT

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Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Completion of the fiscal form does not guarantee funding for described expenses. The request for additional funding should be included in standard campus processes for investments in new programs if internal funding, within unit, cannot be reallocated.

The model, assumes 0 of students enrolled in this option are new to MSU, as options aren't considered drivers for new students to attend the university. This is adjusted in the projected tuition revenue.
No anticipated new sections for established courses - 2 new courses for option (3 credits each). Additional courses will be taught by TTs once course buy-outs are over. This is being managed by offering current econ courses on an every other year basis.
New courses will be available to students in the option as well as other students at MSU.

BRT

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

May/2024

ITEM 212-2801-R0524

ITEM TITLE Request for authorization to establish M.S. in Teaching (Content Area)

Institution: **Montana State University – Northern** CIP Code: **13.1299**

Program/Center/Institute Title: **Master of Science in Teaching [Content Area]**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: X

Options: Students choose content area

Proposal Summary [360 words maximum]

What: A Masters of Science in Teaching is being proposed to appeal to multiple potential students interested in a Masters program that is also firmly grounded in pedagogy. The Master's degree will offer courses in pedagogy and in a content area chosen by the student in conjunction with an advisor.

Why: This program is of interest to the education department as the new graduate degree is a practical solution to a teacher shortage in Havre and across the Hi-Line. Current teachers will be able to pursue graduate level content knowledge in additional areas of interest and need, making it possible for regional schools to keep their schools staffed with difficult to fill positions such as Secondary Math, CTE, Secondary English, and Secondary Science. Additionally, potential graduate students who would like to pursue nonteaching careers or careers in community colleges will be able to develop a Masters program that best meets their needs, preparing them to eventually pursue doctoral work if they choose.

Resources: Makes use of current resources by offering courses cross listed at the 300/400 and 500 levels.

ATTACHMENTS

Attachments: Appendix 1 Proposed Program for Catalog
Appendix 2 2801-LII0524_Fis
Request to Plan

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ **B. Level II:**

XX **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	MSUN
AWARD LEVEL:	GRAD
PROGRAM NAME:	Master of Science in Teaching a Content Area
PROGRAM CODE:	30.9999

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
ENROLLMENT PROJECTIONS						
Headcount						
annual unduplicated headcount of students with declared major or minor within the program	-	5	10	15	20	20
Credit Hours						
annual avg. credits hours earned per student in program related curriculum	-	18	18	18	18	18
Student FTE						
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	-	3.75	7.5	11.25	15	15
Completions						
Annual number of program completers	-	0	5	5	10	10
REVENUE						
Tuition Revenue (net of waivers)		$15,378	$30,756	$46,134	$61,512	$61,512
Institutional Support						
Other Outside Funds (grants, gifts, etc.)						
Program Tuition/Fees						
Total Revenue	$0	$15,378	$30,756	$46,134	$61,512	$61,512
Total Revenue per Student FTE	#VALUE!	$4,101	$4,101	$4,101	$4,101	$4,101
EXPENDITURES						
Tenure Track Faculty — FTE						
Tenure Track Faculty — Salary + Benefits			$15,294	$15,294	$30,588	$30,588
Non tenure Track Faculty *Includes Adjunct Instructors — FTE						
Non tenure Track Faculty *Includes Adjunct Instructors — Salary + Benefits						
Graduate Teaching Assistants — FTE						
Graduate Teaching Assistants — Salary + Benefits						
Staff — FTE						
Staff — Salary + Benefits						
Total Faculty & Staff — FTE	0.0	0.0	0.0	0.0	0.0	0.0
Total Faculty & Staff — Salary + Benefits	$0	$0	$15,294	$15,294	$30,588	$30,588
Operations (supplies, travel, rent, etc)						
Start-up Expenses (OTO)						
Total Expenses	$0	$0	$15,294	$15,294	$30,588	$30,588
Student FTE to Faculty (TT + NTT) Ratio	#VALUE!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Net Income/Deficit (Revenue - Expenses)	$0	$15,378	$15,462	$30,840	$30,924	$30,924

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

1. Tuition is based on resident graduate students (3,075.58 for 18 credits).
2. 33 of the 36 credits will be taught as split (300/500) level classes. These classes already exist so there is no additional cost.
3. 3 of the 36 credits will be taught as overload. Pay is 850/credit. This is the culminating experince class and would occur in the studen't second year.
4. Since each student can take classes in a different area, there could be up to 5 faculty teaching 3 credits of overload in years 1-2 and up to 10 faculty teaching 3 credits of overload in years 4-5. I have calculated expenditures based on the high end. Thes amounts would also apply to Adjuncts.
5. Benefits are calculated at 19.95%
6. No FTE is assigned since these are all current faculty with the only cost being overload. No new FTEs are being added.
7. Enrollment projections were provided by CASE.

Montana Board of Regents

CURRICULUM PROPOSAL FORM

1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

   The English Department, in conjunction with the Education department and other stakeholders is putting forward this proposal to add a Master of Science in Teaching which allows content area choices for the applicant. Housed in Graduate Programs at Montana State University – Northern, this program is considered a value added program where students will get a foundation in pedagogy and then concentrated graduate credits in a chosen field. The majority of enrollment is expected to come from current K-12 educators and those intending to continue to a PhD in their chosen field. There will be no changes to existing programs.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

   As a degree offered in blended with hyflex delivery format, this Masters offers students opportunities to pursue pedagogy plus content in numerous areas that will aid them in their professional careers. Responsive to the place-bound nature of many of our students, this degree will not require relocation. Designed to meet a diverse range of needs and aid students in meeting educational and professional goals, including providing content area graduate courses for established educators to increase their opportunities for advancement. We believe this program will support the student-centered environment MSU-Northern cherishes while offering a path to excellence for students in an inclusive and equitable way. Building the curriculum through cross-listed courses will allow us to offer quality while maintaining efficiency.

3. **Process leading to submission.** Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

   The Master in the Science of Teaching degree has been developed as a student, faculty, and community driven program. By working with individuals on campus and in the community, as well as discussing with students set to graduate, we have been able to assemble a program that offers maximum flexibility while maintaining academic rigor. We sought input from multiple programs across campus regarding potential interest as well. Approval of this program is respectfully submitted to the Graduate Council, Provost, Chancellor, Montana State University Bozeman and the Montana Board of Regents.

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

   The Master's degree will offer courses at the 500 level in pedagogy and in a content area chosen by the student in conjunction with an advisor.

   a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	27
Credits in required courses offered by other departments [Education]	9
Credits in institutional general education curriculum	0
Credits of free electives	0

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Total credits required to complete the program	36

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

By the end of the program, students will be able to:

Demonstrate an ability to integrate knowledge and methodologies from pedagogy and a chosen content area in order to analyze complex problems and develop creative solutions.

Hone critical thinking and problem-solving skills that draw on a broad range of perspectives and methods.

Apply knowledge from their discipline to real-world situations and challenges.

Communicate effectively across disciplinary boundaries, using a variety of media and formats to convey complex ideas and arguments.

Develop a deep understanding of the theoretical frameworks and methodological approaches that underpin research and scholarship in their discipline.

Critically evaluate the strengths and limitations of approaches to research and problem-solving, including the challenges of working across different epistemologies and paradigms.

5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

There is a strong interest among superintendents for MSUN to increase its offerings for graduate programs in a variety of endorsable areas. The model of this programs allows the college to teach these courses, which will be taught on a normal rotation anyway, at the 500 level in order to meet that need.

Additionally, the Hi-Line has a significant place-bound population who are still interested in pursuing higher level degrees but who cannot relocate. This degree would allow us to meet their needs as well, but within a structure that allows for students to be in cohort in their pedagogy courses and then branch out into content areas of interest.

Further, there are very few options for students interested in pursuing advanced degrees that do not require relocation. This degree can be offered in-person, online, or in hyflex format to meet a variety of needs.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
MSU - Billings	Master of Education	Interdisciplinary Studies
UM - Missoula	MA or MS	Interdisciplinary Studies

Montana Board of Regents
CURRICULUM PROPOSAL FORM

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

Both of these programs require students to choose at least two disciplines to build their plan of study. MSU Billings includes required education components, so it is the closest in nature. This is not a substantial duplication as our program is designed for a concentration area rather than an interdisciplinary approach, although students can choose two concentration areas if needed. It is a net benefit for the State of Montana and its citizens because it allows more students to pay in state tuition dollars to achieve their goals, increases the preparedness of K-12 teachers across the hi-line, and potentially prepares instructors for our community colleges.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

While effort was made to collaborate across campus, and with advisory boards, there has been little outreach with the two programs listed at other campuses. Since this program is not interdisciplinary in a traditional sense, there was not enough similarity to make collaboration a useful approach.

7. **Implementation of the program.** When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

The intent is to offer the program beginning September 2023. Since the course is a two year degree, with only 12 credits that are required of everyone in the cohort [9 credits in pedagogy and 3 credits in a culminating experience], the phases will be based on availability of content areas. At this time, English, Criminal Justice, Communications, and Theater are ready to offer graduate level course content. Other programs are working on the implementation of 500 level courses into the catalog so that they can be offered as well.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment					Graduates				
AY23/24	AY24/25	AY25/26	AY26/27	AY27/28	AY25	AY26	AY27	AY28	AY29
5	10	15	20	30	5	5	10	10	

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

Initial headcounts for first year cohorts are based upon student surveys of graduating seniors who have expressed interest as well as information from area superintendents regarding potential K-12 educators. The headcount may fluctuate, but there will not be significant time to advertise widely for that first cohort. The hope is to grow the cohort sizes in subsequent years.

c. What is the initial capacity for the program?

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Given the cross-listing of courses and the content area choices integral to the program's viability, the initial capacity is predicated primarily on the course size for the education courses and the number of undergraduate students also enrolled in upper division education courses. The initial capacity is no more than 20 students. However, as interest in the program grows, we will have to make adjustments in the core course offerings to increase capacity.

8. **Program assessment.** How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

Success of the program will be determined through a rigorous assessment plan, discussions with graduates, and input from several advisory boards. This includes annual assessment reports and plans submitted to the Office of Teaching and Learning Excellence. If success is not being achieved changes to the program will be discussed and proposed as appropriate.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

This program will be evaluated each year in the program assessment and submitted to the Office of the Provost. In this assessment, program-level student outcomes are reviewed, artifacts and data are collected and analyzed, and a summary of findings is provided. Based on the outcome of this assessment, an Assessment Plan is created for the upcoming year. This includes all program learning outcomes, assessment mapping, and assessment methods. Program learning outcomes are assessed on a cycle/schedule and continuous improvement is implemented as needed. Rubrics are used to assess program learning outcomes, as recommended by the Office of Teaching and Learning Excellence. These reports and assessments are completed annually and due to the Office of the Provost on Sept. 30 of every academic year.

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

Direct measures include completion and success of course formative assessments. This may include tests, demonstrations, presentations, and overall completion of course materials. In addition, every student will have a culminating experience with an exit project that will be assessed using the established rubrics.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words]*

As outlined above, the assessment plan includes implementing any changes that need to be made to the program including assessment methods or necessary changes to learner outcomes. Any program changes that need to be made will require a Program/Degree Revision submitted to the faculty senate for review. Changes in assessment methods will be changed at the discretion of the course instructors as deemed appropriate.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

The program does not require nor qualify for specialized accreditation.

9. **Physical resources.**

Montana Board of Regents
CURRICULUM PROPOSAL FORM

a. Describe the existing facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

The existing facilities throughout campus will be sufficient for the lecture and lab components for this field of study. The computer labs, when appropriate, provide adequate computing resources as well. If we see a significant influx of individuals wishing to concentrate in lab sciences, there might be an impact on physical resources that cannot be planned for beyond the lab fees that are already assessed in those courses. While we do not have dedicated classroom space, we do not need it as the courses are already in rotation and the rooms are already being used. We would simply have additional students in those classes.

b. List needed facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

The current facilities, equipment, space, laboratory instruments, computers, and other physical equipment would be sufficient to facilitate the learning necessary for successful completion. If the program outgrows the current facilities and equipment, further accommodation can be discussed at that time.

10. Personnel resources.

a. Describe the existing instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

The current Education faculty members have the skill set to teach the courses coded EDU. Courses in other departments would be taught by regular faculty members in those areas who are also highly qualified. Quality and productivity of all programs is maintained through annual assessment. Increased enrollment in these courses will not impact the quality and productivity of existing programs on campus. In fact, having graduate students in courses cross listed at the 300/400 and 500 level has the potential to increase the level of learning and discussion for undergraduate students in those courses.

b. Identify new personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

The current faculty across departments have the necessary skill set and training to be able to teach courses in the program areas. Should an adjunct need to be hired, to avoid faculty teaching overload, most adjunct courses are taught at $850 per credit for Graduate adjuncts. This is already a budget item, since hiring of faculty occurs at the undergraduate level as well.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

Montana Board of Regents
CURRICULUM PROPOSAL FORM

The campus library and information resources are adequate. If other libraries or information resources are needed, and interlibrary loan of materials is not sufficient to meet that need, the faculty will reach out to community members, the advisory boards, and other professionals to determine what materials are appropriate and how best to obtain them. The Library Director will also be consulted for any database additions we might find necessary.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

The existing student services have the ability to accommodate the proposed program. Graduate programs do not have students that excessively use facilities. The remainder of the student body should not experience any lapse in student services due to the addition of the program of study.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

As the primary instructional responsibility is already an expenditure, the net income is significant if the masters proves of interest. There will be no significant expenditures so net tuition dollars are nearly net income.

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	15,378	30,756	46,134
Expenses	0	15,294	15,294
Net Income/Deficit (revenues-expenses)	15,378	15,462	30,840

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

As previously stated, the anticipation is that these courses are already being offered on rotation and are therefore not incurring additional expenditure. There is only one exception. Beginning with the second year of the program, there will be one course taught for the students that is a culminating experience, such as a thesis or a final capstone. This course may result in overload for an instructor each Spring semester, which would be paid at 850.00 per credit, or 2550.00 per instructor.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

The initial cost of establishing the program is entirely the cost of faculty already considered in the budget. Funds will not need to be reallocated to support faculty members' salaries. The one semester of overload faculty members fees can be paid out of net tuition income from the enrolled students in the program.

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CURRICULUM PROPOSAL FORM

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

There is no anticipation of an increase in base funding due to the establishment of this program.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

There are not currently any donations or other one-time sources associated with the establishment of this program.

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

There are not currently any federal grants, other grants, or contracts associated with the establishment of the program.

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

There are no new course, lab, or program fees anticipated in the establishment of this program.

14. Complete the fiscal analysis form.

See Attached Appendix 1- Proposed Program for Catalog

See Attached: Appendix 2- Fiscal Analysis Form

Request to Plan

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CURRICULUM PROPOSAL FORM

Appendix 1 – Proposed Program for Catalog

Proposed Program for 23-24 Catalog

Course Prefix	#	Course Title	Degree Credits
		EDUCATION CORE	
EDUC	517	Research Methods	**3**
EDU	511	C, D, & E in Global Education	3
EDU	582	Assessment, Curriculum & Instruction	**3**
		CONTENT AREA [No more than	
		two content areas may be chosen]	
		500+ Level Course Work in	24
		Declared Content Area[s] with	
		Advisor Approval	
EDU	5XX	**CULMINATING EXPERIENCE**	
		Directed Research, Thesis, Portfolio, Internship, Or Other	3
		Culminating Experience Determined	
		with Advisor in Content Area	
		Total	**36**

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CURRICULUM PROPOSAL FORM

Signature/Date

College or School Dean:

Beth Burdorf 2-28-24

Chief Academic Officer:

03/05/24

Chief Executive Officer:

Gregory O. Kegel 3.8.2024

Flagship Provost*:

DocuSigned by:
Robert Mokwa
212A28411AC04BD...

3/29/2024 | 8:29 AM MDT

Flagship President*:

*Not applicable to the Community Colleges.

DocuSigned by:
Waded Cruzado
7D6A4CE96C3F415...

3/29/2024 | 8:29 AM MDT

Montana University System
REQUEST TO PLAN FORM

ITEM 211-1503-R0324 **Meeting Date January 2024**

Request for authorization to establish a Center for Education and Ecosystem Studies

Program/Center/Institute Title: **The Center for Education and Ecosystem Studies**

Planned 6-digit CIP code:

Campus, School/Department: **Montana Technological University**

Expected Final Submission Date: **June 2024**

Contact Name/Info: **Rayelynn Brandl, rbrandl@mtech.edu**

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) **Provide a description of the program/center/institute.**

The Clark Fork Watershed Education Program (CFWEP) has been operating at Montana Technological University since 2005. The core focus of the program is watershed science, providing in-class service days and field trips for the communities of the Clark Fork. The call to action for the program when it was started was to educate students and local residents about the damages from historic mining practices and the on-going restoration of the river system. As the program has grown, K-12 teacher professional development in STEM has become a second focus. The program utilizes partnerships from campuses throughout Montana in order to achieve the goal of providing high-quality professional development. The combination of K-12 student and teacher STEM education is aimed at creating pathways into STEM education for K-12 students. The program has partnered with Montana school districts and campus researchers to provide authentic research experiences for students in the classroom, at summer research locations, and in campus laboratories. The program employs in-depth research practices to evaluate program efficacy, leading to publications about effective practices in STEM teaching and learning. CFWEP has presented both empirical research and our developed instructional practices at state, regional, and national education conferences. The program operates within formal K-12 structures and also within informal community settings, providing a necessary connection between schools and communities. This connection is promoted from K-12, communities and regional campuses, providing accessible pathways into STEM for students. The program relies completely on soft dollars from a variety of sources including federal and state grants, private donations, fundraising efforts, contracts, and fee for service offerings.

2) **Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).**

CFWEP is poised for growth, expanding across Montana to focus on ecological education, addressing current and future ecological threats, including climate change, population growth, and development. The designed approach,

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grounded in extensive research (Babenko-Mould et al., 2021; Tschannen-Moran & Woolfolk Hoy, 2001; Ingersoll & Strong, 2011), is distinguished by five key innovations. Firstly, it leverages partnerships to address the unique STEM education challenges in rural and Indigenous communities. The center adopts a community-centric design, fostering deep connections between science and local communities through community-based participatory research (Varner, 2014). Secondly, an integration of authentic, real-time datasets provided by industry and agency partners serves as a mechanism for the integration of math and science, offering local relevance and engaging students in meaningful ways (Varner, 2014). A third innovation integrates cultural histories into education, aligning with principles of science pedagogy success (Chu et al., 2021). By focusing on community strengths, the project promotes inclusion and deconstructs the borders between students' family and peer cultures and the culture of science (Aikenhead, 1996). The fourth innovation involves mentoring teachers for citizen-science projects, exploring local issues in K-12 districts and engaging teachers, researchers, and industry professionals in developing real-time, innovative solutions (Beierle & Cayford, 2002). Lastly, adopting a strength-based approach empowers Montana teachers and school districts to create and scale solutions for challenges in math and science education, ultimately leading to more inclusive STEM pathways.

The center's specific aims encompass creating an EcosySTEM, empowering K-12 STEM teachers, opening multiple STEM pathways for all students, and conducting and publishing empirical research on STEM teaching and learning. Targeting low-income, rural, and Indigenous communities in Montana, the center addresses disparities in the state's education landscape, where 41% of students in districts have incomes below the federal poverty threshold, and high school dropout rates exceed state and national averages (MT OPI, 2023). The center extends its reach beyond traditional STEM education recipients, promoting scientific literacy, active citizen involvement in research, and localized problem-solving within under-represented groups. With dual-value impact, the center contributes to STEM education research and encourages teacher and classroom contributions to scientific research, fostering enduring change in STEM education anchored in place-based learning for sustainability. This comprehensive approach is built on the foundation of CFWEP's extensive 20-year experience within the Clark Fork Watershed.

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

The program is currently well-positioned with sufficient staffing and funding, underpinned by a robust growth and sustainability plan designed to facilitate the attainment of center designation. In light of the proposed changes and expansion, we anticipate the need to hire an additional staff member within a year of securing center designation. This new position will play a pivotal role in supporting the proposed center by spearheading the development of funding sources. The responsibilities will include crafting grant requests and fostering strategic partnerships within communities to ensure sustained growth and success. This strategic allocation of resources aligns with our commitment to securing the necessary support for the continued advancement of the program.

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

CFWEP has a rich history of collaboration within Montana Technological University (Tech) and across the Montana University System (MUS). To further our objectives, we are actively cultivating collaborative partnerships to offer K-12 students authentic research experiences within their communities. Our ongoing efforts involve the recruitment of esteemed STEM faculty members at Montana Technological University to craft stackable learning modules tailored for practicing teachers. In tandem, we have established a strategic partnership with the Research Office to design

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a comprehensive certificate program that integrates these stackable modules, ensuring a cohesive and impactful educational experience. This collaborative approach exemplifies our commitment to fostering innovation and excellence in STEM education.

Currently, we partner with the University of Montana's Biology Department and the University of Montana Bird Ecology Lab. Both areas host our Missoula Program Manager, assisting us with delivering CFWEP programming throughout Missoula County Public schools. We currently offer a CFWEP internship and class for UM students. This class is an accepted elective within the School of Forestry program.

Historically, CFWEP has partnered with Montana State University—Billings to bring forward two Department of Education grants. We have also partnered with University of Montana—Western through our Math Science Partnership award projects. We have worked collaboratively with the Salish-Kootenai College within our PHAGES projects and within our work regarding place names within the Clark Fork Watershed.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

Montana Technological University has prioritized Programs of Distinction as a pathway for student success by ensuring students are connected to authentic research experiences, experiential learning activities, and innovation enterprise. CFWEP provides a pathway to the campus through our innovative watershed science programming, our PHAGE discovery programs, and our student research mentoring opportunities. As a Special Focus Institution, Montana Technological University is committed to providing a transformative student experience and advancing science, engineering, and technology for the benefit of humanity while meeting the changing needs of society. CFWEP contributes significantly to this mission by engaging in ecological education, leveraging extensive research, and fostering innovative STEM education practices. The program directly aligns with the university's commitment to advancing science and technology by driving beneficial connections in STEM education, as indicated by its use of real-time datasets, community-based participatory research, and cultural integration (Babenko-Mould et al., 2021; Tschannen-Moran & Woolfolk Hoy, 2001; Ingersoll & Strong, 2011; Varner, 2014; Chu et al., 2021; Aikenhead, 1996; Beierle & Cayford, 2002). By focusing on ecological education and addressing current and future ecological threats, including climate change, CFWEP embodies the university's dedication to meeting the changing needs of society. Furthermore, the program contributes to the development of leaders by empowering K-12 STEM teachers, creating pathways for all students into STEM, and conducting empirical research on STEM teaching and learning. Because the program is connected to many more communities outside of the campus, we are able to recruit students from underserved and underrepresented communities in Montana. This is especially important for assisting the campus with reaching its goals for DEI. The emphasis on mentorship, community engagement, and the creation of citizen-science projects aligns with the university's commitment to providing a transformative student experience. CFWEP's goal of expanding to rural and Indigenous schools also demonstrates a commitment to benefiting humanity by addressing disparities in education, promoting scientific

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REQUEST TO PLAN FORM

literacy, and fostering enduring change in STEM education anchored in place-based learning for sustainability.

Signature/Date	
Chief Academic Officer:	1/23/24
Chief Research Officer*:	
Chief Executive Officer:	1/23/24 ACTING CEO
Flagship Provost:**	
Flagship President:**	

*Center/Institute Proposal only
**Not applicable to the Community Colleges.

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

March/2024

ITEM 1501-LII0524

Request for authorization to establish a Center for Education and Ecosystem Studies

Institution: **Montana Technological University** CIP Code: _____

Program/Center/Institute Title: **Center for Education and Ecological Studies**

Includes (please specify below): Face-to-face Offering: _____ Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: The Clark Fork Watershed Education Program (CFWEP) is requesting to be designated as a Center within the MUS.

Why: The program has grown extensively over the past 15 years. The partners are preparing to extend services to other watersheds within the state of Montana and deepen connections to other university units. Designation as a center will enable the partners to work collaboratively under the umbrella of the center and formally extend services to school districts outside of the Clark Fork Watershed.

Resources: The program has secured funding through 2026 to support the strategic objectives outlined.

ATTACHMENTS

Request to Plan
Research Center and Institute Proposal form

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

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ACADEMIC PROPOSAL REQUEST FORM

3. **Establishing a B.A.S./A.A./A.S. area of study**

4. **Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

5. **Re-titling an existing postsecondary educational program**

6. **Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

7. **Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

8. **Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

9. **Revising a postsecondary educational program** (Curriculum Proposal Form)

10. **Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

X **B. Level II:**

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

3. **Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

X 4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

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RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

Research Centers and Institutes differ from one another in focus, scope, and staffing, but each contributes in unique ways to the common goals of expanding knowledge, generating new discoveries and/or having a positive impact on society through informing policy and systemic change. Communities of researchers and staff in Research Centers and Institutes provide a stimulating environment that encourages early researchers and challenges experienced researchers. Research Centers and Institutes also contribute to the education and training of the researchers of the future by serving as learning environments for students. Interdisciplinary collaboration is promoted by Research Centers and Institutes both within the Institution and among MUS Institutions. Research Centers and Institutes do not provide didactic coursework, confer academic degrees or academic certificates or require accreditation by external accrediting bodies. Research Centers and Institutes frequently provide a portal for obtaining external funding in response to federal and/or state research priorities. As such, apparent duplication of mission between MUS research centers and institutes is not generally problematic as with academic programs due to the different sources of funding.

1. State the proposed Institute/Center's name and purpose.

The Center for Education and Ecosystem Studies

The purpose of this center is to 1) close achievement gaps in STEM education among demographic groups; 2) open multiple STEM pathways for rural and Indigenous K-12 students, and 3) to elevate rural social systems by connecting science to schools and empowering long-term authentic research. The Center will ensure engaging, locally applicable STEM education for all.

2. A comprehensive statement of the Institute/Center's mission and its relationship to the University mission.

A. State the Institute/Center's mission.

The existing mission of the Clark Fork Watershed Education Program is to expand environmental literacy and stewardship through field-based science and research experiences. The mission of the Center is to expand environmental literacy and stewardship through field-based, authentic research experiences, opening up multiple STEM pathways for all K-12 students, building an educational EcosySTEM connected to communities and the university system.

B. Identify the Institute/Center's goals and objectives.

The center's goals encompass creating an EcosySTEM through the following objectives: 1) empowering K-12 STEM teachers; 2) opening multiple STEM pathways for all students; 3) conducting and publishing empirical research on STEM teaching and learning; and 4) providing opportunities for students and teachers to partner with University scientists to engage in authentic research experiences.

C. What specific need is being responded to in developing the proposed Institute/Center?

By providing in-class science education and authentic research for students from low-income, rural, and Indigenous communities in Montana, the center addresses disparities in the state's education landscape, where 41% of students in districts have incomes below the federal poverty threshold, and high school dropout rates exceed state and national averages (MT OPI, 2023). The center extends its

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RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

reach beyond traditional STEM education recipients, promoting scientific literacy, active citizen involvement in research, and localized problem-solving within under-represented groups. With dual-value impact, the center contributes to STEM education research and encourages teacher and classroom contributions to scientific research through active partnerships with University scientists. The center will foster enduring change in STEM education anchored in place-based learning for sustainability. This comprehensive approach is built on the foundation of CFWEP's extensive 20-year experience within the Clark Fork Watershed.

CFWEP is poised for growth, expanding across Montana to focus on ecological education, addressing current and future ecological threats, including climate change, population growth, and development. The designed approach, grounded in extensive research (Babenko-Mould et al., 2021; Tschannen-Moran & Woolfolk Hoy, 2001; Ingersoll & Strong, 2011), is distinguished by five key innovations. Firstly, it leverages partnerships to address the unique STEM education challenges in rural and Indigenous communities. The center adopts a community-centric design, fostering deep connections between science and local communities through community-based participatory research (Varner, 2014). Secondly, an integration of authentic, real-time datasets provided by industry and agency partners serves as a mechanism for the integration of math and science, offering local relevance and engaging students in data science literacy in meaningful ways (Varner, 2014). A third innovation integrates cultural histories into education, aligning with principles of science pedagogy success (Chu et al., 2021). The created EcosySTEM will connect STEM practitioners with school districts, and will prepare teachers for equitable instruction. The fourth innovation involves mentoring teachers for citizen-science projects, exploring local issues in K-12 districts and engaging teachers, researchers, and industry professionals in developing real-time, innovative solutions (Beierle & Cayford, 2002). By focusing on community strengths, the center promotes inclusion and deconstructs the borders between students' family and peer cultures and the culture of science (Aikenhead, 1996). This center's emphasis on local-scale human innovation fosters a diverse approach to tackling community-based participatory research goals including those encompassing climate change (Guenther et al., 2022). This ground-up strategy in which schools and the community, led by teachers and STEM partners, adapt to local pressures of climate change through sustained monitoring or mitigation focuses on appropriate, effective, equitable, impactful, and sustainable projects within the community (Brush et al., 2020). Lastly, adopting a strength-based approach empowers Montana teachers and school districts to create and scale solutions for challenges in math and science education, ultimately leading to more inclusive STEM pathways and STEM undergraduate recruitment.

D. Describe how the Institute/Center benefits the department, college, or institution.

The center holds tremendous potential for benefiting Montana Technological University on multiple fronts. It serves as a powerful tool for student recruitment, offering a unique opportunity for prospective students to engage in impactful, community-focused STEM initiatives. The project's emphasis on place-based, K-12 education focused on data science deepens community relationships and outreach. By connecting faculty with local schools, the center holds potential for broader impacts to enhance the University's reputation as a STEM institution. The collaborative nature of the center provides faculty with avenues for meaningful engagement with diverse communities, creating a symbiotic relationship wherein faculty expertise contributes to K-12 education, while the university benefits from heightened visibility and positive community connections. In essence, the center will be a flagship initiative, demonstrating the University's dedication to transformative education, community service, and interdisciplinary collaboration.

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E. Describe the Institute/Center's relationship to the University mission.

Montana Technological University has prioritized Programs of Distinction as a pathway for student success by ensuring students are connected to authentic research experiences, experiential learning activities, and innovation enterprise. CFWEP provides a pathway to the campus through our innovative watershed science programming, our PHAGE discovery programs, and our student research mentoring opportunities. As a Special Focus Institution, Montana Technological University is committed to providing a transformative student experience and advancing science, engineering, and technology for the benefit of humanity while meeting the changing needs of society. CFWEP contributes significantly to this mission by engaging in ecological education, leveraging extensive research, and fostering innovative STEM education practices. The program directly aligns with the university's commitment to advancing science and technology by driving beneficial connections in STEM education, as indicated by its use of real-time datasets, community-based participatory research, and cultural integration (Babenko-Mould et al., 2021; Tschannen-Moran & Woolfolk Hoy, 2001; Ingersoll & Strong, 2011; Varner, 2014; Chu et al., 2021; Aikenhead, 1996; Beierle & Cayford, 2002). By focusing on ecological education and addressing current and future ecological threats, including climate change, CFWEP embodies the university's dedication to meeting the changing needs of society. Furthermore, the program contributes to the development of leaders by empowering K-12 STEM teachers, creating pathways for all students into STEM, and conducting empirical research on STEM teaching and learning. Because the program is connected to many more communities outside of the campus, we are able to recruit students from underserved and underrepresented communities in Montana. This is especially important for assisting the campus with reaching its goals for DEI. The emphasis on mentorship, community engagement, and the creation of citizen-science projects aligns with the university's commitment to providing a transformative student experience. CFWEP's goal of expanding to rural and Indigenous schools also demonstrates a commitment to benefiting humanity by addressing disparities in education, promoting scientific literacy, and fostering enduring change in STEM education anchored in place-based learning for sustainability.

3. Briefly describe the Institute/Center's anticipated activities.

Build an EcosySTEM Team: The success of the center revolves around a diverse array of key players. The team is composed of a wide array of expertise connected to STEM. Industry professionals, spanning fields from agriculture to engineering, provide real-world insights. STEM professionals and educators from university departments, scientific agencies non-profit organizations enrich learning with field experiences. The STEM outreach professionals and professional development experts of the current CFWEP staff ensure effective program outreach and collaborate with nationally recognized teacher leaders to ensure the modules are founded upon relevant and practical, research-based pedagogy.

Develop Team Norms, Protocols, and Goals: The center will engage in a stage of developing community partnerships focused on equitable power structures in the four domains of Community-Based Participatory Research (CBPR) (Wallerstein et al., 2019). During this time, the center partners will identify norms, protocols, structure and functions of mentor relationships, and community goals. This approach nurtures a sense of ownership and responsibility among community members, ultimately contributing to more connected, effective, sustainable, and inclusive models for Indigenous and rural communities. Collaborative teams will include teachers, industry professionals, scientific agencies, and experts.

Build Stackable Modules: Stackable modules for teacher professional development will be built for long-term deployments. The modules planned are building blocks, packed with innovative content to enhance STEM education in classrooms (an outline of these modules is available).

Recruit Rural and Tribal School Teachers: The heart of the center will be the teacher learners, composed of at least 30 recruited K-12 public school teachers from rural and tribal Montana school districts collectively working to build a stronger foundation for STEM education relevant to their students.
Deploy a Blended Professional Development Model: Long-term professional development will be hosted through a blended model of face-to-face workshops and online learning. The model will emphasize mentorship relationships, collaborations, and networking regarding both science and data science content and pedagogical objectives.
Establish Mentorship Relationships: Mentorships between STEM professionals and teachers will boost knowledge exchange, support citizen science project design and deployment, and create lasting connections for ongoing support.
Connect Schools to Local Scientific Datasets: Datasets from various STEM disciplines and industries will be accessible to project partners, teachers, and students, connecting places to math and science and creating a pathway for citizen science projects. The center will collaborate with partners to build an accessible data platform.
Support the Integration of Cultural Histories and Values into Classrooms: Equity is a central focus, with strategies aimed at inclusivity of curriculum and community role models. The center recognizes the vital importance of cultural relevance in STEM education. To honor the diverse cultural perspectives of students, our approach incorporates cultural histories and values. By doing so, we acknowledge the richness of cultural knowledge and experiences that students bring to the classroom, making science education more inclusive and accessible via multiple ways of knowing.
Pilot Place-Based Pedagogy: Teachers will apply pedagogical understandings from the center's professional development experiences to connect learning to local environments, making it more engaging and relatable for students. Feedback from piloting strategies will inform ground-up fidelity models aimed at sustainability of place-based content within the social ecology of the school.
Connect STEM Professionals with Students: STEM professionals from industry and agencies will bring place-based content to life and connect students to scientific role models.
Collaborative Design Citizen Science Projects: Community-Based Participatory Research (CBPR) Projects, mentored by STEM professionals, will monitor natural phenomena or human innovations within communities. Teachers and students will create and/or add to existing datasets for authentic research experiences focused on long-term data analysis. Equipped with local resources and expertise, schools may be galvanized to lead environmental justice community actions. For example, through CFWEP's mentoring, Dr. Linda Rost, a center partner, and her students explored the impacts to their local lake from *e.coli*, leading to governmental agencies and MTU scientists mentoring the rural remote Montana community of Baker in the scientific investigation and identification of the pollution source. Projects like Dr. Rost's could be the long-term result of the center.
Disseminate Scalable STEM Education Models: With formative feedback from varied stakeholders, the center will disseminate niche sustainability plans of STEM education models that are scalable and can benefit students, educators, and communities for years to come. Our vision is to create models of STEM education that can be expanded and replicated.

A. Identify faculty expertise available for participation in the Institute/Center's activities.

Robin Bullock, Ph.D., Environmental Engineering and Director of the Center for Environmental Remediation and Assessment
Alysia Cox, Ph.D., Environmental Chemistry
Jim Driver, Ph.D., Microscopist
Robert Pal, Ph.D, Restoration Ecology
Marisa Pedulla, Ph.D., Biological Sciences, Science Education Partnership Award PI
Paul Helfich, M.S., Ph.D. Candidate, Restoration Ecology and Environmental Chemistry
Michelle Hardy, Ph.D., Dean of College of Letters, Science, and Professional Studies

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RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

B. Which departments on campus will be involved and how will the Institute/Center contribute to the academic programs of the institution?

Environmental Engineering: The center presents a substantial opportunity for collaboration and mutual benefit with the Center for Environmental Remediation and Assessment (CERA) at Montana Technological University. By aligning with CERA's mission to develop environmentally acceptable technologies and climate-resilient remediation and restoration processes, the center can contribute valuable data and insights. The center's focus on place-based, environmental education and teacher professional development provides a platform for studying the long-term impacts of land restoration and community engagement. This collaboration could yield innovative solutions to questions posed by CERA, such as the potential use of remediated lands for renewable energy locations, carbon sequestration, and the integration of waste materials into environmental cleanup efforts. The interdisciplinary nature of the collaboratively built EcosySTEM, combined with CERA's expertise in environmental remediation, geochemistry, and energy, creates a powerful synergy. The outcomes of the center can provide CERA with valuable real-world data, enhancing its research and remediation strategies, while simultaneously showcasing the university's commitment to impactful, community-driven initiatives. The collaboration can strengthen both entities' positions as leaders in environmental research, remediation, and education.

Environmental Chemistry: Collaborating with the Center for Advanced Materials Processing (CAMP) offers a wealth of resources and expertise in materials science and engineering. CAMP, as a unit of Montana Technological University's Research Office, plays a crucial role in supporting research and development activities, making it an ideal partner for the center. The Materials Testing Laboratory, under the leadership of a full-time director, presents an opportunity for the center to access state-of-the-art facilities and instrumentation. This collaboration could enhance the hands-on experiences for teachers and students by integrating materials science research into K-12 curriculum. The apprenticeship program at CAMP, involving undergraduate and graduate students, aligns with our emphasis on workforce development, providing students with valuable mentoring and practical experience. The Analytical Testing Laboratory, led by another full-time director, adds a layer of sophistication to the collaboration. Our center could benefit from the analytical capabilities offered by this laboratory, incorporating advanced materials testing and analysis into the educational modules. This integration could elevate the scientific rigor of the program and expose participants to cutting-edge techniques in environmental research. CAMP's role in Research Program Management, including support for visiting researchers, aligns with the collaborative nature of the proposed center. This support structure ensures that the collaborative efforts are streamlined and effective. Moreover, CAMP's ability to assist in developing competitive research and development proposals complements the goal of securing sustainable funding and expanding the center's impact. The shared resources and expertise can enhance the overall research capacity. CAMP's role as a "Gateway to Montana Tech" facilitates efficient collaboration across departments, streamlining efforts for mutual success and adding to the recruitment possibility for the University.

Biological Sciences: CFWEP has a long-standing history of collaboration with the biology department, evidenced by a partnership with Dr. Pedulla, resulting in a successful phage discovery program that has involved over 13,000 students. Continued collaboration with Dr. Pedulla's laboratory and with Dr. Jim Driver (microscopist), offers a rich and diverse range of opportunities for the center. Dr. Pedulla's expertise in mycobacteriophage discovery aligns with the center's mission of fostering STEM education

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through real-world applications. The unique intersection of research areas, such as Rare Earth Elements, Environmental Health, Biotechnology, Nanotechnology, and Biomaterials & Nanomaterials, provides a comprehensive foundation for creating engaging and interdisciplinary educational modules. The emphasis on hands-on learning aligns well with the center's goals of providing authentic research experiences for teachers and students. Collaboration includes incorporating environmental and ecological aspects into the program, enriching students' understanding of the broader impacts of microbiology in natural ecosystems.

Furthermore, the center could explore opportunities for cross-disciplinary collaboration, linking Dr. Pedulla's work with Biomaterials & Nanomaterials to the project's emphasis on sustainable practices and ecological resilience. This connection could offer students a unique perspective on the application of nanotechnology in addressing environmental challenges. Dr. Pedulla's history of successful grant applications, including NIH SEPA grants and an NSF Major Research Instrumentation grant, underscores her commitment to bringing research experiences into the classroom. This aligns seamlessly with the center's vision of connecting teachers and students to authentic scientific practices. The continued collaboration could open avenues for joint grant applications, strengthening the sustainability and impact of the center.

Montana Bureau of Mines and Geology: Center collaboration with the Montana Bureau of Mines and Geology (MBMG) holds immense potential for mutual benefit. The MBMG, with its extensive expertise in geoscience and environmental assessments, aligns with the center's mission of connecting STEM education to local social networks and structures. The collaboration would provide the MBMG with a unique opportunity to contribute to K-12 education by sharing its wealth of knowledge in geologic data management and hazard assessment. The center can leverage MBMG's Abandoned Mine Lands Inventory to enrich place-based environmental education modules, providing students with real-world examples of environmental impact and remediation. The Geologic Mapping expertise of MBMG can enhance the center’s understanding of local geology, supporting the creation of informed, location-specific curriculum content. The MBMG's Earthquake Studies and Landslide Hazards Programs could contribute valuable insights into the center’s focus on community resilience. Collaboration with the Economic Geology program may offer students exposure to the practical applications of geological studies, linking STEM education to potential career paths. Moreover, the center could contribute to the MBMG's goals by providing an educational dimension to its work. The center’s emphasis on Community-Based Participatory Research aligns well with MBMG's commitment to engaging local communities in understanding and addressing environmental issues. This collaboration could also enhance the visibility of MBMG's programs, especially the Groundwater Assessment Program, Environmental Program, and Energy Program, by integrating their findings into educational modules and fostering a better understanding of the importance of responsible resource use and environmental stewardship.

Future partnerships with other departments on the Montana Technological University campus are likely as the Center’s reach expands. For example, when addressing climate change issues, the Center partners will likely need to partner with electrical engineering and/or materials science faculty in order to explore innovation pathways within communities across Montana.

4. Identify the organizational structure of the Institute/Center within the institution.

Rayelynn Brandl, Executive Director
Tammy Gordon, Budget Analyst
Chris Pavlovich, Director of Program Services and Evaluation

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RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

Dalit Guscio, Program Manager
Teal Taylor, Field Coordinator

A. Identify all agencies, organizations and/or institutions that will be involved.

The following organizations/individuals have committed resources to building the EcosySTEM.
Robin Hehn, Confederated Salish and Kootenai Tribes Liaison and NGSS/MT Science Standards Training Provider, MTU-Clark Fork Watershed Education Program
Shane Doyle, Ph.D., enrolled member of the Apsaalooké Nation from Crow Agency
Megan Fylling, **M.S.,** Research Director and Avian Ecologist, University of Montana Bird Ecology Lab, Bird's Eye View Education Program
Danielle Oyler, Bear Education Coordinator for Montana Fish, Wildlife and Parks, Appointed by Sara Meloy
Clint Sestrich, **M.S.,** Fisheries Biologist, US Forest Service, Appointed by Alex Sienkiewicz
John Roseberry, M.S., Geomorphologist and Cartographer, Self Employed
Jeremy Fleege, P.E. Montana Resources, Environmental Engineer
Shane Doyle, Ed.D., Crow Cultural Consultant
Christopher Doyle, B.S., Regional Director Southwest and Eastern Montana, Rocky Mountain Elk Foundation
Michelle Hardy, Ph.D., Dean of College of Letters, Science, and Professional Studies, Montana Technological University
Kayla Lappin, M.S., Director of Marketing and Business Recruitment, Butte Local Development Corporation
Jenny Malloy, M.Ed., Co-Executive Director, Rural Resilience
Michelle McCarthy, M.Ed., Montana Office of Public Instruction Science Instructional Coordinator
Leah Shannon, M.Ed., East Side Intermediate School, Livingston Public Schools
Monte Meyerink, Ph.D., External Evaluator, Northern State University, South Dakota
Bob Fuhrmann, Youth Education & Work Program Manager, National Park Service, Yellowstone National Park
Jim ONeill, Butte School District Superintendent
Alex Sienkiewicz, District Ranger, Yellowstone Ranger District
Sara Meloy, Education Bureau Chief, Montana Fish, Wildlife and Parks
Eldon Johnson, Livingston Public Schools, Superintendent
Wendy Weaver, Executive Director, Montana Freshwater Partners
Max Hjortsberg, Conservation Director, Park Country Environmental Council
Linda Rost, Ph.D., High School Teacher, Baker, Montana
Ashley Lowrey, Watershed Coordinator, Yellowstone Upper Watershed Group
Daniel P. Anderson, Yellowstone Safe Passages

Montana Natural Resource Damage Program: CFWEP is largely funded through the Montana Natural Resource Damage Program (NRDP) Created in 1990 to prepare the state's lawsuit against the Atlantic Richfield Company (ARCO) for injuries to the natural resources in the Upper Clark Fork River Basin (UCFRB), the NRDP is administratively attached to the Montana Department of Justice. Since 1990, NRDP has been responsible for performing necessary natural resource damage assessments and pursuing lawsuits against responsible parties throughout Montana. The core focus of the CFWEP is watershed science, providing in-class service days and field trips for the communities of the Clark Fork.

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RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

The call to action for the program when it was started was to educate students and local residents about the damages from historic mining practices and the on-going restoration of the river system. The center will continue its long-term partnership with NRDP and education regarding historic damages.

B. Identify advisory council information.

Jeremy Fleege, P.E. Montana Resources, Environmental Engineer
Shane Doyle, Ed.D., Crow Cultural Consultant
Christopher Doyle, B.S., Regional Director Southwest and Eastern Montana, Rocky Mountain Elk Foundation
Michelle Hardy, Ph.D., Dean of College of Letters, Science, and Professional Studies, Montana Technological University
Kayla Lappin, M.S., Director of Marketing and Business Recruitment, Butte Local Development Corporation
Jenny Malloy, M.Ed., Co-Executive Director, Rural Resilience
Michelle McCarthy, M.Ed., Montana Office of Public Instruction Science Instructional Coordinator
Leah Shannon, M.Ed., East Side Intermediate School, Livingston Public Schools
Monte Meyerink, Ph.D., External Evaluator, Northern State University, South Dakota
Joe Griffin, Geologist, Retired
Steve Gammon, Ph.D., Retired Provost, Montana Technological University
Brad Archibald, Pioneer Technical Services
Maggie Davis-Welch, Butte Broadcasting
Rick Edwards, Northwestern Energy
Elizabeth Erickson, Water & Environmental Technologies (WET)
Erick Greene, Ph.D., Montana Osprey Project
Sidni Markovich, Markovich Inc.
Matt Vincent, Rampart Solutions
Colleen Elliott, **Ph.D.,** Geologist, Montana Bureau of Mines and Geology
Justin Ringsak, Nature Conservancy

5. Identify first year and continuing finances necessary to support the Center/Institute, including the sources of funding.

2024 ORGANIZATIONAL BUDGET

	AMOUNTS
REVENUE	
For each source of revenue, please indicate C=Committed; R=Received; A=Applied; TBA=To Be Applied For	
Contributions	$ 5,000.00
Events	$ 30,500.00
Foundation Grants:	
Dennis & Phyllis Washington Foundation (R)	$ 20,000.00
Rocky Mountain Elk Foundation (R)	$ 3,000.00

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Missoula Conservation District (A)	$ 5,000.00
Cinnabar (A)	$ 12,000.00
American Prairie (A)	$ 31,798.00
Government Grants:	
NRD (C)	$ 472,946.00
NIH/SEPA (R)	$ 122,952.82
NSF (A)	$ 360,871.00
MT DEQ (A)	$ 30,000.00
Membership Dues	
Other:	
Butte-Silver Bow PitWatch (R)	$ 17,820.26
Butte-Silver Bow Stormwater (R)	$ 62,174.00
Butte Reclamation Evaluation System (C)	$ 16,709.43
Montana Tech Reinvestments	$ 12,113.00
Montana Tech SEED grant	$ 2,504.41
TOTAL REVENUE	**$ 1,205,388.92**

A. Will additional faculty and other resources be required to implement this Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

The program is currently well-positioned with sufficient staffing and funding, underpinned by a robust growth and sustainability plan designed to facilitate the implementation of center designation. In order to fulfill the proposed goals and mission, the center will need to bring aboard at least one more full-time staff position. The partners are currently exploring the possibility of affiliate faculty positions who would be responsible for generating their own funding. CFWEP has renewed contracts with Butte-Silver Bow and the Natural Resource Damage program, which continue through to 2026. The program has applied for significant funding from other resources and will submit no fewer than three additional proposals in 2024. The program has self-funded for the past 20 years.

B. Are other, additional resources required to ensure the success of the proposed Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

In light of the proposed changes and expansion, we anticipate the need to hire an additional staff member within a year of securing center designation. This new position will play a pivotal role in supporting the proposed center by spearheading the development of funding sources. The responsibilities will include crafting grant requests and fostering strategic partnerships within communities to ensure sustained growth and success. This strategic allocation of resources aligns with

our commitment to securing the necessary support for the continued advancement of the program. Continued support from Montana Technological University in the terms of indirects re-investment and continued administrative support are necessary.

6. Describe other similar Centers/Institutes or research capacities in the state and surrounding region.

A. Describe the relationship between the proposed Center/Institute and any similar Centers/Institutes, programs, or research capacities within the Montana University System.

To the best of our knowledge and via extensive research, there is not substantial duplication of the proposed center with other existing centers. The proposed centers from UM and MSU that were submitted at the March, 2024 meeting align with this center's proposed mission and vision that could result in strengthened partnerships and synergies between the flagships and MTU.

B. In cases of substantial duplication, explain the rationale for the proposed Center/Institute.

7. Assessment: How will the success of the center/institute be measured?

In preparation for center attainment, CFWEP has crafted a robust strategic plan with goals in four areas: 1) funding, 2) staff capacity, 3) programming, and 4) visibility. The success of the center will be measured on the attainment of goals in each of these areas.

In addition, a research plan for development of the EcosySTEM has been developed. This research plan will be deployed to ensure the center has met goals for the EcosySTEM and to conduct and publish empirical research on STEM teaching and learning.

1: Create an EcosySTEM Connected to People and Places
Formative Feedback Questions:
FF1.1 How are the EcosySTEM modules perceived and utilized by teachers and districts?
What barriers and bridges are identified throughout the EcosySTEM project by various stakeholders?
Research Questions:
Does a more connected network of STEM educators and STEM professionals correlate with higher or improved outcomes?
In what ways does the EcosySTEM project foster STEM mentorship and collaboration, and how do these networks impact program outcomes?
How do various stakeholders describe sustainable EcosySTEM implementation according to the five dimensions of fidelity (Dane & Schneider, 1998)?
Annual Outcome Instruments:

- Project-Created Formative Feedback Instruments (Teacher Module Selection, Post-Module Surveys, Program Team Feedback Forms, Program Team Focus Groups, Program Team Interviews)
- Team Focus Groups (Ali et al., 2022)
- Undirected (Collaboration) and Directed (Advice/Mentoring) Professional Network Surveys (Freeman, 2004; Korshunov et al., 2018; Lazega & Snijders, 2016; Wasserman & Faust, 1994)
- Undirected (Collaboration) and Directed (Advice/Mentoring) Professional Network Observations (Freeman, 2004; Korshunov et al., 2018; Lazega & Snijders, 2016; Wasserman & Faust, 1994)

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RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

2: Empower and Equip Teachers in the EcosySTEM
Formative Feedback Questions:
FF.2.1 Are teachers satisfied with EcosySTEM participation?
FF.2.2 How do teachers perceive themselves as change agents within the social ecologies of their schools?
Research Questions:
A2.1 How does participation in the EcosySTEM impact teachers' self-efficacy?
A2.2 How does participation in the program impact teachers' STEM identity?
How does participation in the EcosySTEM project impact environmental attitudes, specifically the connectivity between humans and ecosystems?
A2.4 Does participation in the EcosySTEM affect teacher change?
A2.4 Sub Questions:

- A2.5.S1 Does participation in the EcosySTEM increase teacher content knowledge?
- A2.5.S2 Does participation in the EcosySTEM increase math or science instruction time?
- A2.5.S3 Does participation in the EcosySTEM affect science instructional practices including pedagogy regarding authentic research and citizen science?

Annual Outcome Instruments:

- Teachers' Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001)
- Adapted Teacher Job Satisfaction Scale (TJSS) (Barnett et al., 2001)
- Measuring Science Instructional Practice Survey (Hayes et al., 2016)
- Teacher Interviews
- STEM Professional Identity Overlap Tool/Reflection (McDonald et al., 2019)
- New Ecological Paradigm Evaluation Tool (Stern et al., 1995; Dunlap, 2008; Erdoğan, 2009; Manoli et al., 2007)

Bi-Annual Outcome Instruments:

- Self-Reported Instructional Time in Math and Science
- Project-Created Positive Self-Monitoring Application Form According to the Transtheoretical Model Stages of Change (Burke et al., 2006)

Quarterly Outcome Instruments:

- Project-Created Pre and Post Content Assessments (within Stackable Modules)

3: Collect Baseline Student Data
Research Questions:
A3.1 Does teacher participation in the EcosySTEM affect standardized state scores?
Does teacher participation in the EcosySTEM impact achievement gaps among different demographic groups?
A3.3 Does teacher participation affect STEM identity among students over time?
Does teacher participation in the EcosySTEM project impact student environmental attitudes, specifically the connectivity between humans and ecosystems?
Annual Outcome Instruments:

- Math and Science Standardized State Test Scores Paired with Demographic Variables (Gershenson & Papageorge, 2018; Lubienski & Pinheiro, 2017)
- STEM Professional Identity Overlap Tool/Reflection (McDonald et al., 2019)
- New Ecological Paradigm Evaluation Tool (Stern et al., 1995; Dunlap, 2008; Erdoğan, 2009)

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RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

8. State the internal campus review and approval process which has occurred prior to submission to the Commissioner's Office. Indicate, where appropriate, involvement by faculty, students, community members, professional constituencies, etc.

This project started in Fall 2022 with quarterly meetings involving the Provost, Deans, MGMB, and Research. The CFWEP staff team, executive leadership team, university partners, and community partners have collaborated to build the Center's mission, goals, and evaluation plan. Additionally, the program partners have been working to secure additional funding sources outside of contracts and grants, including the launch of a development plan to secure private foundation funds, individual, and corporate sponsorships. CFWEP has working partnerships within school districts and agencies throughout the state. Key stakeholders in Butte, Missoula, and Livingston were consulted in regard to community outreach needs and K-12 teacher professional development needs. These partners were instrumental in assisting CFWEP with creation of the EcosySTEM vision, goals, and activities.

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ACADEMIC PROPOSAL REQUEST FORM

APRIL/2024

ITEM 1608-LII0424

ITEM TITLE: Request to establish a Strength & Conditioning Minor

Institution: **The University of Montana Western** CIP Code: _____

Program/Center/Institute Title: **Strength & Conditioning Minor/Department of Health & Human Performance/The University of Montana Western**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: This proposal establishes an unattached minor program in Strength & Conditioning that consists of currently-offered courses in order to adhere to an external accrediting standard that the Department of Health & Human Performance intends to attain in year 2030.

Why: Students within and beyond the BS: Kinesiology and BS: Physical Education & Health programs have aggressively pursued advance certifications to facilitate career attainment and security. Currently, the core kinesiological curriculum prepares students for these advanced certifications, particularly the National Strength & Conditioning Association's (NSCA) Strength & Condition Specialist Certification (CSCS). This certification is well-respected throughout physical education, athletic performance enhancement, coaching, and applied medicine. The Department of Health & Human Performance (HHP) also currently offers study sessions to community members interested in pursuing this important certification.

The NSCA has moved to restricting access to the certification examination to only those who graduate from a Council on Accreditation of Strength and Conditioning Education (CASCE)-accredited program by the year 2030. HHP has identified that this accreditation is a necessary priority to ensure our graduates are well placed in their respective career markets, a goal that was reinforced during the Kinesiology Program's seven-year review by the external reviewer. In order to accomplish this and follow the accreditation expectations, a Strength & Conditioning Program must be established for accrediting oversight. The Department has identified that a program-independent minor would be most appropriate and potentially facilitate access to out-of-department students.

Resources:

ATTACHMENTS

Attachments:
1608-LII0424_Request to Plan S&C Minor
1608-LII0424_Curr S&C Minor
1608-LII0424_Fisc S&C Minor

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ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ A. Level I:

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

____ B. Level II:

X **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

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ACADEMIC PROPOSAL REQUEST FORM

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

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CURRICULUM PROPOSAL FORM

1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

   This proposal establishes an unattached minor program in Strength & Conditioning that consists of currently-offered courses in order to adhere to an external accrediting standard that the Department of Health & Human Performance (HHP) intends to attain by year 2030. Complementary to the Kinesiology, Physical Education & Health, and Business B.S. degrees currently offered, this proposed program is designed to augment the capability for graduates within and beyond these degree programs to pursue advanced disciplinary certifications to enhance their career trajectories. This proposed program does not replace or modify other programs.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

   Students within and beyond the BS: Kinesiology and BS: Physical Education & Health programs have aggressively pursued advanced certifications to facilitate career attainment and security. Currently, the core kinesiological curriculum prepares students for these advanced certifications, particularly the National Strength & Conditioning Association's (NSCA) Strength & Condition Specialist Certification (CSCS) as part of its mission of experiential education. This certification is well-respected throughout physical education, athletic performance enhancement, coaching, and applied medicine.

   The NSCA has moved to restricting access to the certification examination to only those who graduate from a Council on Accreditation of Strength and Conditioning Education (CASCE)-accredited program by the year 2030. HHP has identified that this accreditation is a necessary priority to ensure our graduates are well placed in their respective career markets, a goal that was reinforced during the Kinesiology program's seven-year review by the external reviewer. In order to accomplish this and follow the accreditation expectations, a Strength & Conditioning program must be established for accrediting oversight. As implied by this program proposal in the University's Academic Priorities and Planning Statement, pursuing a CASCE-accredited program is necessary to support the University's mission to educate students through experiential, immersive practices and strive for continuous improvement.

3. **Process leading to submission.** Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

   A faculty-member within HHP has been involved in the development of the CASCE accreditation development process before its announcement. HHP has consulted with students, disciplinary colleagues, and industry experts (including the NSCA) in program design. Through internal and external program review, that informed the current trajectory of the Department's programs, HHP developed this program to adhere to the CASCE standards and provide students continued access to the CSCS examination process. The university-internal Curriculum Proposal process then proceeded to garner evaluation and majority support from the HHP Department, the Faculty Senate representing all academic departments, and the Office of the Provost.

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

   The Strength & Conditioning Minor prepares students for careers directly in the strength and conditioning discipline, as well as for careers that parallel or complement athletic performance. Through a diverse selection of courses that span deep kinesiological science and practical coaching application, students will explore how underlying biomechanical, neurological, physiological, and psychological factors impact injury prevention and

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CURRICULUM PROPOSAL FORM

performance enhancement for a variety of populations. This program is carefully designed to both augment pre-professional preparation for multiple careers in Kinesiology and comprehensively prepare students to pass the National Strength and Conditioning Association Strength and Conditioning Specialist certifying exam.

a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	26
Credits in required courses offered by other departments	8
Credits in institutional general education curriculum	8*
Credits of free electives	0
Total credits required to complete the program	34

* 4 credits offered within HHP, 4 credits by other departments

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

Upon completion of the Strength & Conditioning Minor, students will be able to:

- Demonstrate proper exercise coaching techniques pertinent to a spectrum of sports, activities, and athlete demographics
- Integrate concepts across a kinesiological curriculum to comprehensively evaluate athletic training needs to minimize injury risk and maximize performance adaptations
- Design scientifically-informed periodized training programs in order to accomplish specific training goals for diverse athletic populations

5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

As reported by the Bureau of Labor Statistics (BLS), the State of Montana employs more Exercise Trainers and Group Fitness Instructors than any other state, with notable concentrations in Southwest Montana. The mean wage for this occupational group exceeds the state's mean per capita income, and the State of Montana expects a 20.4% increase in this labor market over the next decade (exceeding the national average). As the CSCS certification is considered the "gold standard" of credentials for this occupational group, it is necessary for MUS institutions to meet the CASCE program standards to continue to supply employees to the regional and state labor market.

Since offering CSCS preparation resources, materials, and courses at the University of Montana Western, student and community-member interest and participation has grown mathematically exponentially over the past four years. In order for the University to continue providing these opportunities to our students past 2030, it is necessary for an appropriately-named and -designed program to attain CASCE accreditation. As such, the University, community, region, and state have a need for the proposed program to be implemented and would benefit from multiple similar programs across the region.

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6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

   Listed below are programs with similar content that present the potential for future CASCE accreditation. It should be noted, however that no program has indicated to CASCE or the NSCA intent to pursue accreditation at this time, and most of these programs do not currently staff an adequate number of properly-credentialed employees to support the accreditation requirements for their program sizes.

Institution Name	Degree	Program Title
University of Providence	BS	Exercise Science, Strength & Conditioning Concentration
Rocky Mountain College	BS	Health & Human Performance, Human Performance Concentration*
Montana State University Billings	BS	Health & Human Performance, Human Performance Option
Montana State University	BS	Kinesiology, Exercise Science Option*
University of Montana	BS	Integrative Physiology, Sports Medicine Concentration

***If appropriate optional courses are selected**

   a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

   As no other program has indicated intent to the NSCA to pursue CASCE accreditation, and few programs have the requisite naming (explicitly indicating strength and conditioning in the primary program title, as per CASCE requirements), and all other programs that offer the potential to meet CASCE standards are Major programs, the proposed Minor program is entirely unique in its offerings in the state of Montana.

   b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

   Given the aforementioned, there are not significantly similar programs in the state of Montana. Discussions about program design and implementation were held at the NSCA National and Regional Conferences over the past two years, including discussions with strength and conditioning staff at multiple MUS institutions. This process provided feedback utilized in refining the proposed program and reinforced the necessity of offering this program in the region to facilitate the continued development of properly-credentialed strength and conditioning specialists.

7. **Implementation of the program.** When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

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CURRICULUM PROPOSAL FORM

The program will be initially offered in the academic year following the approval of this program proposal, optimistically in 2024/2025. It is expected that a small proportion of students from the already-established Coaching Minor will alter their minor to this program, providing an initial enrollment seed source.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment					Graduates				
AY24	AY25	AY26	AY27	AY28	AY24	AY25	AY26	AY27	AY28
4	8	8	10	13	0	2	7	12	15

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

Students involved in the NSCA CSCS Study group in the community, associated coaching and kinesiology courses, associated programs, and those that indicated career interest in strength and conditioning were polled for interest; correcting for duplicates, enrollment and projected graduation dates were then derived from advising data. These data were tempered with historical review of the number of associated students that attempted the NSCA CSCS exam in the past, and an autoregressive model was then constructed to verify program projections. These expectations were then compared to the NSCA regional expectations and found to be conservative projection estimates. Please note that the NSCA expects a significant increase in enrollment in accredited programs after 2030, given the severe credentialing limitations imposed at that time requiring interested students to pursue enrollment in only these accredited programs.

c. What is the initial capacity for the program?

It is expected that the initial enrollment in the program will be predominantly seeded by students already enrolled in parallel programs (such as the Kinesiology Major), and therefore not posing an increase in course enrollment. As such, based on current course enrollment, **the program will have an *additional* initial capacity of 8-10 students not currently associated with Departmental programs**.

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

Similar to the Kinesiology Program's assessment process, student performance data will be measured against internally-developed rubrics associated with student learning outcomes mapped to graduate outcomes and assessed across lower and upper division courses. Unique to this Minor program, CASCE evaluates the success (and continued accreditation) of a program by the initial-attempt success rate of associated students on the CSCS exam itself. As such, beyond maintaining high-percentage (or increasing percentage) attainment of the aforementioned graduate outcomes, if program graduates can maintain a rolling average CSCS pass rate of 75% or more (to maintain CASCE program expectations), this is a plausible indication of program success. Failure requires immediate reassessment and alterations of teaching strategies to meet CASCE expectations for the next evaluation cycle, as per CASCE requirements.

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a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

Internally-developed rubrics for specific assignments in each departmental course associated with specific student learning outcomes will be utilized to assess the percentage of students in each course meeting expectations, which are then mapped via weighted average to reflect on each graduate outcome. For example, the final teaching demonstration assignment in COA 250: Coaching Powerlifting is graded via the coaching rubric and will be used in conjunction with a similar assignment in KIN 410: Advanced Strength Training & Conditioning to assess the first graduate outcome of the minor program.

Assessment and tracking of these graduate outcomes will occur at the end of each academic year, in parallel to the assessment of the percentage pass rate of associated students in the CSCS exam, as required by CASCE. These assessments will be completed annually.

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

Direct measures of student course assignment performance will be utilized to assess student learning. These will be evaluated through intentionally-designed departmental rubrics, including rubrics associated with coaching, the scientific method, client/patient evaluation, and program design. As mentioned, the direct measure associated with CSCS exam performance (pass rate) will also be utilized.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words]*

As accreditation is dependent on student performance on the national exam, the external and objective assessment of performance is assessed by the NSCA and enforced by CASCE. Student learning and graduate outcomes, combined with item analysis on CSCS exam performance will be utilized to diagnose program strengths and weaknesses in order to enhance student exam performance. Failure to do so will result in loss of accreditation.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

As described throughout this document, this minor program is being proposed in order to seek CASCE accreditation. This accreditation is necessary in order to continue to provide students the same career preparation opportunities

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

The Department of Health & Human Performance currently operates a Human Performance Laboratory and a Strength & Conditioning Laboratory, and maintains access to three shared computer-equipped classrooms and two shared gymnasium spaces. The HHP Laboratory includes biomechanical, neurological, and physiological instrumentation such as computerized infrared kinematic camera systems, biaxial force

Montana Board of Regents
CURRICULUM PROPOSAL FORM

platforms, accelerometers, skinfold assessment tools, surface electromyography, ergometers, metabolic analyzer, etc, intentionally attained to support kinesiological coursework. The Strength & Conditioning Lab includes comprehensive training equipment, including weightlifting racks, barbells, weight plates, cable machines, medicine balls, plyometric boxes, resistance bands, and other accessories intentionally attained to support strength and conditioning coursework.

As this program is only reliant on already-offered courses, and enrollment projections suggest courses have enrollment capacity for all projected student growth for the next five years, there is no expected problematic increased use of these physical resources.

b. List needed facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

Detailed projections beyond the NSCA-suggested enrollment bump in 2030 are difficult at this current time. As enrollment grows, tuition revenue will fund additional instructional needs, as indicated by the Office of the Provost.

10. Personnel resources.

a. Describe the existing instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

The Health & Human Performance Department currently employs six faculty that instruct the program-associated courses, including one CSCS-certified with strength coaching experience and a second pursuing certification, one Doctor of Physical Therapy, and one Certified Athletic Trainer. The faculty are supported by a Division Chair and the Office of the Provost. As the addition of the minor program is not expected to increase enrollment beyond course capacity, it should not increase personnel load.

b. Identify new personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

No new personnel are expected to be needed to support the program within the projected range. As indicated by the Office of the Provost, tuition revenue will fund additional instructional needs.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

As this program is reliant on courses already integrated into other, currently operating programs that are supported by available library and information resources, they will continue to be adequate.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

Similarly, there are no expected increased demands on student services.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	$6001	$12,003	$12,003
Expenses	0	0	0
Net Income/Deficit (revenues-expenses)	$6001	$12,003	$12,003

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

CASCE has recently announced a grant designed to support the costs of accreditation; the Department will pursue this grant upon approval of the program, and the grant is scheduled to account for all accreditation costs until 2030. After that time, Departmental funds will be allocated to these costs.

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

This program will not alter fees.

14. Complete the fiscal analysis form.

Signature/Date

College or School Dean:

Chief Academic Officer:

4/3/2024

Chief Executive Officer:

4/3/2024

Flagship Provost*:

Flagship President*:

*Not applicable to the Community Colleges.

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CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

Required Coursework:

BIOB 160 Principles of Living Systems (4 cr.)
BIOH 221 Human Anatomy with Lab (4 cr.)
COA 180 Coaching Ethics (2 cr.)
COA 250 Coaching Powerlifting (1 cr.)
COA 254 Periodization for Sport Performance (2 cr.)
HEE 410 Organization & Administration for Sport/Fitness (4 cr.)
KIN 410 Advanced Strength Training & Conditioning (4 cr.)
NUTR 221 Basic Human Nutrition (4 cr.)

Select 1 course/1 credit from the following:

COA 251 Coaching Olympic Weight Lifting (1 cr.)
COA 252 Coaching Targeted Resistance Training (1 cr.)

Select 8 credits from any 300-level KIN courses (8 cr.)

KIN 320: Exercise Physiology (4 cr.)
KIN 325: Biomechanics (4 cr.)
KIN 330: Motor Learning and Control (4 cr.)

Program Requirement: FA/CPR/AED

Montana University System

REQUEST TO PLAN FORM

ITEM 1608-LII0424 **Meeting Date: APRIL 2024 (BOR-MARCH 2024)**

Item Name: Request for authorization to plan a Strength & Conditioning Minor

Program/Center/Institute Title: **Strength & Conditioning Minor** Planned 6-digit CIP code:

Campus, School/Department: **The University of Montana Western/Department of Health & Human Performance (HHP)** Expected Final Submission Date: **May 2024**

Contact Name/Info: **Mitchell Stephenson/mitchell.stephenson@umwestern.edu/406-683-7230**

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) **Provide a description of the program/center/institute.**

This proposal establishes an unattached minor program in Strength & Conditioning that consists of currently-offered courses in order to adhere to an external accrediting standard that the Department of Health & Human Performance intends to attain in year 2030.

2) **Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).**

Students within and beyond the BS: Kinesiology and BS: Physical Education & Health programs have aggressively pursued advanced certifications to facilitate career attainment and security. Currently, the core kinesiological curriculum prepares students for these advanced certifications, particularly the National Strength & Conditioning Association's (NSCA) Strength & Condition Specialist Certification (CSCS). This certification is well-respected throughout physical education, athletic performance enhancement, coaching, and applied medicine. The Department of Health & Human Performance (HHP) also currently offers study sessions to community members interested in pursuing this important certification.

The NSCA has moved to restricting access to the certification examination to only those who graduate from a Council on Accreditation of Strength and Conditioning Education (CASCE)-accredited program by the year 2030. HHP has identified that this accreditation is a necessary priority to ensure our graduates are well placed in their respective career markets, a goal that was reinforced during the Kinesiology Program's seven-year review by the external reviewer. In order to accomplish this and follow the accreditation expectations, a Strength & Conditioning Program must be established for accrediting oversight. The Department has identified that a program-independent minor would be most appropriate and potentially facilitate access to out-of-department students.

3) **Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.**

Montana University System

REQUEST TO PLAN FORM

The University of Montana has already established a new Strength & Conditioning Laboratory to be used in this new minor. With current enrollments, no new faculty members are required. As enrollments grow, tuition revenue will fund additional instructional needs.

4) **Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).**

As this is simply a minor, it will largely serve existing UMW students in various other majors, such as our BS in Kinesiology.

5) **Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.**

This program is perfectly aligned with Montana Western's experiential education mission. We focus on hands-on learning, and this minor will allow students to engage in high impact practices supervised by terminally degreed faculty members. The program was also included in our latest Academic Priorities and Planning Statement.

Signature/Date
Chief Academic Officer:  **11/16/2023**
Chief Research Officer*:
Chief Executive Officer:  11/20/2023
Flagship Provost:**
Flagship President:**

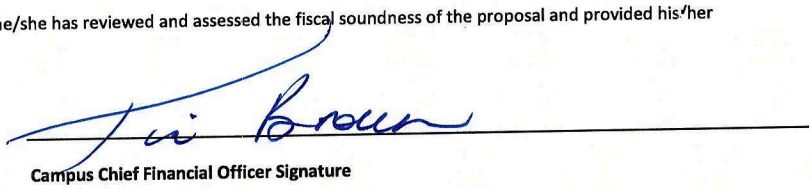
*Center/Institute Proposal only
**Not applicable to the Community Colleges.

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	University of Montana Western
AWARD LEVEL:	Minor
PROGRAM NAME:	Strength and Conditioning
PROGRAM CODE:	

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
ENROLLMENT PROJECTIONS						
Headcount						
annual unduplicated headcount of students with declared major or minor within the program	-	4	8	8	10	13
Credit Hours						
annual avg. credits hours earned per student in program related curriculum	-	7	7	7	7	7
Student FTE						
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	0	0.933333333	1.866666667	1.866666667	2.333333333	3.033333333
Completions						
Annual number of program completers	-	2	4	4	5	7
REVENUE						
Tuition Revenue (net of waivers)		$6,001	$12,003	$12,003	$15,003	$19,504
Institutional Support		$0				
Other Outside Funds (grants, gifts, etc.)		$0				
Program Tuition/Fees		$0				
Total Revenue	$0	$6,001	$12,003	$12,003	$15,003	$19,504
Total Revenue per Student FTE	#DIV/0!	$6,430	$6,430	$6,430	$6,430	$6,430
EXPENDITURES						
Tenure Track Faculty — FTE	0.0	0.0	0.0	0.0	0.0	0.0
Tenure Track Faculty — Salary + Benefits						
Non-tenure Track Faculty *Includes Adjunct Instructors — FTE	0.0	0.0	0.0	0.0	0.0	0.0
Non-tenure Track Faculty — Salary + Benefits						
Graduate Teaching Assistants — FTE						
Graduate Teaching Assistants — Salary + Benefits						
Staff — FTE						
Staff — Salary + Benefits						
Total Faculty & Staff — FTE						
Total Faculty & Staff — Salary + Benefits						
Operations (supplies, travel, rent, etc)						
Start-up Expenses (OTO)						
Total Expenses	$0	$0	$0	$0	$0	$0
Student FTE to Faculty (TT + NTT) Ratio	N/A	N/A	N/A	N/A	N/A	N/A
Net Income/Deficit (Revenue - Expenses)	$0	$6,001	$12,003	$12,003	$15,003	$19,504

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.



Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

APRIL/2024

ITEM 1609-LII0424

ITEM TITLE: Request to establish a B.S. in Farm and Ranch Management

Institution: **The University of Montana Western** CIP Code: **520101**

Program/Center/Institute Title: **B.S. Farm and Ranch Management/Department of Business and Technology/The University of Montana Western**

Includes (please specify below): Face-to-face Offering: X Online Offering: X Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: This proposal establishes a B.S. in Farm and Ranch Management.

Why: With an expanding job market for qualified farm and ranch managers or in the Agricultural Industry in general, students taking the farm and ranch core will learn important agricultural content areas such as plant and crop identification, concepts about soil and water, livestock feeding and nutrition, technology in agriculture, animal science and reproduction. Students are offered a variety of minors from business, equine, outdoor industry or any other minor that they can pair with this major. By adding any of these minors to the degree it gives a value-added benefit. This degree teaches a mix of traditional and new methods related to farming and ranching. Teaching the benefit of traditional and new methods will promote the resource for generations to come.

Resources:

ATTACHMENTS

Attachments:
1609-LII0424_Request to Plan B.S. F&R Mgmt
1609-LII0424_Curr B.S. F&R Mgmt
1609-LII0424_Fisc B.S. F&R Mgmt

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Campus Approvals

_____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

_____ **1b. Withdrawing a postsecondary educational program from moratorium**

_____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

_____ **3. Establishing a B.A.S./A.A./A.S. area of study**

_____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

_____ **5. Re-titling an existing postsecondary educational program**

_____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

_____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

_____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

_____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

_____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

_____ **B. Level II:**

X **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

_____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

_____ **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

_____ **5. Re-titling an academic, administrative, or research unit**

Montana University System

REQUEST TO PLAN FORM

ITEM 1609-LII0424 **Meeting Date APRIL 2024 (BOR-MARCH 2024)**

Item Name: Request for authorization to plan a B.S. in Farm and Ranch Management

Program/Center/Institute Title:	**B.S. in Farm and Ranch Management, The University of Montana Western**	Planned 6-digit CIP code:	**520101**
Campus, School/Department:	**The University of Montana Western/Department of Business and Technology**	Expected Final Submission Date:	**May 2024**
Contact Name/Info:	**Denise Holland/denise.holland@umwestern.edu/406-683-7203**		

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) **Provide a description of the program/center/institute.**
The B.S. Farm and Ranch Management degree is designed to teach individuals the business aspect of ranch management along with the knowledge for livestock and forage production. This program will give the students the ability to identify opportunities in management and operations within the agriculture industry. Students will also be introduced to emerging and traditional practices in this industry.

2) **Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).**
With an expanding job market for qualified farm and ranch managers or in the Agricultural Industry in general, students taking the farm and ranch core will learn important agricultural content areas such as plant and crop identification, concepts about soil and water, livestock feeding and nutrition, technology in agriculture, animal science and reproduction. Students are offered a variety of minors from business, equine, outdoor industry or any other minor that they can pair with this major. By adding any of these minors to the degree it gives a value-added benefit. This degree teaches a mix of traditional and new methods related to farming and ranching. Teaching the benefit of traditional and new methods will promote the resource for generations to come.

   The University of Montana Western is situated in Beaverhead County which has over 400 farms with over 1 million acres of farm and ranch land and is one of the largest cattle producing counties in Montana. This will give students unique experiential opportunities through field experiences, practicums, and internships.

3) **Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.**
We are piloting this degree with the use of the current business faculty who are already teaching the courses that are being offered. An adjunct may be needed periodically for a class. We anticipate this degree growing and will eventually be needing a tenure line faculty member. This has been discussed with Provost MacLean and he is in support of the possible hire in the future.

Montana University System
REQUEST TO PLAN FORM

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

Discussion with the Sciences at The University of Montana Western regarding adding a Range Management Minor (official title to be determined) to the major has been discussed and the review of that curriculum has begun. We have been discussing with MSU for a partnership to assist students in starting their career at Montana Western and then transferring to MSU for Agricultural Education.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

This degree aligns with Western's mission statement through experiential education and enhancing degree-seeking student recruitment. Four years ago, the Business & Technology Department added a Farm and Ranch Management minor to the B.S. Business Administration degree. In four years, this minor has become the fastest growing minor with students from different disciplines adding it to their degrees. The Farm and Ranch Management degree is designed for hands-on learning. The students in this degree will spend time in the field with farmers and ranchers fulfilling our mission of being a leader in experiential education.

Signature/Date
Chief Academic Officer:  **1/23/2024**
Chief Research Officer*:
Chief Executive Officer:  **1/23/2024**
Flagship Provost:**
Flagship President:**
*Center/Institute Proposal only **Not applicable to the Community Colleges.

Montana Board of Regents

CURRICULUM PROPOSAL FORM

1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. *[100 words]*

   The University of Montana Western's Business and Technology Department is proposing a Bachelor of Science degree in Farm and Ranch Management. Students may select a minor of their choosing from business, equine management, outdoor industry, or another minor from the course catalog. Since the department added a farm and ranch operations minor four years ago it has quickly grown to be the most popular minor area. With the growth of the minor a bachelor's degree was the next logical step to meet student demand and regional industry needs.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the new program in the context of the institution's mission and core themes. *[200 words]*

   This proposal expands the program's support of the mission statement to "achieve academic excellence by sustaining a culture of concentrated experiential education" and supports core theme one: "Continuously improve undergraduate education and experiential learning." Students taking the core courses learn important agriculture content such as livestock production, agriculture crops, soil & water management, agriculture records and finance while incorporating a "hands-on" approach to farm and ranch management including animal science, animal reproduction and nutrition, soils, technology, and other areas related to farm and ranch management to promote positive sustainable use of resources for generations to come.

   In addition, this proposal supports the University's regional mission as it is responding to a need requested and established by local farms and ranches, and businesses that support agriculture in Beaverhead County and rural Montana in general. Farms and ranches and businesses that support them are looking for a Montana opportunity to support their growth and development. This program will expose students to a wide range of farming and ranching practices through close partnerships with local and regional ranches. Those ranches' practices range from traditional ranching techniques to the latest innovations, such as regenerative agriculture.

3. **Process leading to submission**. Briefly detail the planning, development, and approval process of the program at the institution. *[100 words]*

   During the academic year 22-23 conversations started about creating a 4-year farm and ranch degree due to the minor being so successful. At the beginning of 2023-24 academic year, the department worked on the curriculum proposal. During this time conversations were had with other schools in the state letting them know that Western was putting forth a degree. The curriculum proposal advanced through the campus approval process including: an approval by the department; initial approval by the provost for resource consideration and need of program; a review by the campus curriculum committee, approval by faculty senate; concluding with a final approval from the Provost and the Chancellor. The Request to Plan was vetted by the Chief Academic Officers; the Academic, Research, and Student Affairs Committee of the Board of Regents, and the Board of Regents during the March 2024 meeting.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

4. **Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.

The program is structured around the University of Montana Western's block system which typically requires each course to be four credits each. The program consists of 32 credits general education, 48 credits of agriculture core courses, minor 28-32 credits of the student's choice.

a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	48
Credits in required courses offered by other departments	Variable, depending on which Minor is selected
Credits in institutional general education curriculum	32
Credits of free electives	8
Total credits required to complete the program	120

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

1. Students will be able to identify opportunities and understand decision-making in the management and operations of a farm and ranch operation.
2. Students will be able to analyze and research production practices in the agriculture industry.
3. Students will be able to understand a variety of topics related to agriculture technology.
4. Students will be able to analyze and explore the best practices in farm and ranch operations, both traditional and new production techniques.
5. Students will analyze financial topics related to production agriculture.
6. Students will be able to demonstrate critical thinking and problem-solving skills to issues associated with production agriculture.
7. Students will analyze the current events that are occurring in agriculture and explore ways that these events affect their future careers.

5. **Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

The University of Montana Western has a long history of educating rural Montana students. Students and the community have asked for the addition of agricultural courses to supplement and support the business education Western provides. This addition is intended to serve that request and help those students with the skills needed to successfully run Montana farms, ranches, and related businesses.

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With an expanding job market for qualified farm and ranch managers and managers of business supporting the Ag industry in general, students taking the agriculture core learn important ag related content such as livestock production, agriculture crops, soil & water management, agriculture records and finance while incorporating a "hands-on" approach to farm and ranch management including animal science, animal reproduction and nutrition, soils, technology and other areas related to farm and ranch management to promote positive sustainable use of resources for generations to come.

The University of Montana Western is situated in Beaverhead County which has over 400 farms with over 1 million acres of farm and ranch land and is the largest cattle producing county in Montana. These operations offer a wide range of practices, from traditional ranching to innovative approaches like regenerative agriculture. This creates a unique experiential opportunity for students through field experiences, practicums, and internships.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
MSU	BS	Ranching Systems -Dan Scott Management Program
MSU-Northern	BS	Agricultural Operations Technology

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. *[200 words]*

This program is not intended to duplicate the above programs but will provide a net benefit to the State and its citizens. This degree will predominately target rural Montana students that want to learn more about the agricultural industry so they can return home to rural communities and help the industry in those areas or on their own family's ag business. It is anticipated that graduates may be interested in Ag Management, Ag Finance, Ag production careers and businesses that support the Ag producers. The University of Montana Western's Farm and Ranch Management degree will be a set of classes that provide an overview of specific areas in farm and ranch such as animal science, soils and water, crops and soils, and finance. This program focuses on a service to the surrounding community of Beaverhead County and rural Montana. Beaverhead County and the surrounding area have seen an increased demand in recent years for non-owner farm and ranch managers as well as students wanting to gain knowledge in current ag practices such as regenerative agriculture. This degree will provide knowledge and skills to those students seeking to manage, run a family ag business or establish an agriculture-related businesses.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

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During the fall of 2023 a phone conversation was conducted between the Division Chair of Professional Studies at Montana Western and Associate Dean for Academic Programs. This phone conversation established the communication that Western was putting forth a 4-year degree in farm and ranch management. We also discussed the possibility of an articulation agreement for the agriculture education degree at MSU. In January the Division Chair of Professional studies at Montana Western discussed the new degree with the Provost at MSU-Northern.

7. **Implementation of the program.** When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. *[100 words]*

The program requires an additional faculty member. The institution will begin a search for this faculty member after the program is approved. The hope is to begin allowing students into the program in Fall 2024, but the start may be delayed if hiring is delayed.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment					Graduates				
AY_24-25	AY_25-26	AY_26-27	AY_27-28	AY_28-29	AY_27-28	AY_28-29	AY_29-30	AY_30-31	AY_31-32
10	20	25	30	33	0	0	5	10	13

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

We based the projections on the recent success of our Minor in Farm & Ranch Operations. We assume many students from the same demographic will choose this major, and we anticipate a similar growth rate through time.

c. What is the initial capacity for the program?

Based on the success of the Farm and Ranch Minor we can accommodate 25-50 students a year with the hiring of another faculty member.

8. **Program assessment.** How will success of the program be determined? What action would result if this definition of success is not met? *[150 words]*

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? *[150 words]*

The assessment process to evaluate how well students are achieving the intended learning outcomes will follow the same assessment process that is used to evaluate our current business program. The students are currently evaluated using both direct and indirect measures at various points as the students' progress through their degree. The specific assessment for the farm and ranch management minor will begin during the summer 2024.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

b. What direct and indirect measures will be used to assess student learning? *[100 words]*

Some of the direct measures currently used are oral/written assessment through standard, department-developed rubrics. Some of the indirect measures to be used are an internship supervisor review and an exit survey. The exit survey is conducted at the conclusion of every internship and/or thesis presentation. Some of these same assessments will be used in the farm and ranch management assessment plan.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? *[100 words]*

At a minimum once a year, after all the assessment data is collected, the faculty in the Business Department meet to review the data collected from the direct and indirect measures. Based on that data changes are made to the curriculum to ensure that the student learning outcomes are being met. The Business and Technology Department also hosts a meeting with their advisory board once a year where they receive industry feedback on what is being taught in the curriculum and what changes should be made.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. *[100 words]*

While there is no specialized accreditation for this area, this degree will be reviewed and the learning outcomes will need to be assessed within the parameters set by the university accrediting body Northwest and OCHE.

9. Physical resources.

a. Describe the existing facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? *[200 words]*

Existing facilities, equipment and space that are currently used by the Business Department will be used. It is not anticipated that there will be any adverse impact on the current physical resources nor is it anticipated that new facilities, equipment and space will be needed as there are currently adequate facilities, equipment and space for the increased utilization of physical resources used by this degree area. The Business and Technology Department has the capacity to adequately and successfully implement the degree.

b. List needed facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? *[150 words]*

No new facilities, equipment or space are needed to successfully implement this degree. However, the Business and Technology Department will seek out relationships with area farms and ranches to allow the use of their resources to provide practical experiential learning activities.

10. Personnel resources.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

a. Describe the existing instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? *[200 words]*

The Business and Technology Department will use their existing instructional resources to successfully implement the degree. It is anticipated that through more efficient course scheduling there will be little impact on the current program and the current quality of the other programs will not be affected.

b. Identify new personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? *[150 words]*

Funding is being acquired to hire an additional faculty member specifically for the farm and ranch management degree. A job announcement for the position will be posted soon after the program is approved by the BOR.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? *[100 words]*

Resources from the library are more than adequate to meet the needs of this program. The requests for this program will be submitted as part of the Business & Technology Department regular requests for library and information resources.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? *[150 words]*

There are no implications that the addition of this degree will place any additional strain on existing student services serving the Business & Technology Department.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. *[100 words]*

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	$125,720	$151,440	$164,300
Expenses	$80,000	$80,000	$80,000
Net Income/Deficit (revenues-expenses)	$45,720	$71,440	$84,300

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? *[200 words]*

Montana Board of Regents
CURRICULUM PROPOSAL FORM

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? *[150 words]*

Funding will likely not come from reallocation of existing state appropriated funds.

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

Not applicable.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

We have a commitment for a portion of an endowed position from an industry partner. We are pursuing commitments from additional industry partners.

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

No federal grants, other grant(s), special fee arrangements, or contract(s) will be valid to fund the program

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

In the 24-25 Biennium, course fees will be added to support experiential learning in the classroom. Currently students in the minor take a two-day trip to Idaho which allows them to visit several different types of agriculture areas such as a dairy and meat packing plant. To cover these types of activities some course fees will need to be added.

14. Complete the fiscal analysis form.

Signature/Date

College or School Dean:

Montana Board of Regents

CURRICULUM PROPOSAL FORM

Chief Academic Officer:

4/3/2024

Chief Executive Officer:

4/3/2024

Flagship Provost*:

Flagship President*:

*Not applicable to the Community Colleges.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

BS: Farm and Ranch Management

General Education: 32 Credits

Select the following course for Behavior & Social Sciences:

Any ECNS 101 course and above

Farm and Ranch Management: 48 Credits

- AGBE 305 - Ag Commodity Marketing 4 credit(s)
- AGSC 102 - Agriculture Plant Science 4 credit(s)
- AGSC 310 - Soil and Water Management 4 credit(s)
- AGTE 410 - Agriculture Technology Management 4 credit(s)
- ANSC 100 - Introduction to Animal Science 4 credit(s)
- ANSC 202 - Livestock Feeding and Nutrition 4 credit(s)
- ANSC 240 - Animal Reproduction 4 credit(s)
- BMGT 327 - Risk Management and Insurance 4 credit(s)
- AGTE 215 - Farm and Ranch Construction 4 credit(s)
- AGBE 350 - Farm and Ranch Records and Finance 4 credit(s)
- AGBE 491 - Agriculture Special Topics 4 credit(s)
- AGSC 498 - Cooperative Education/Internship 4 credit(s)

Minor Areas: 28-32 credits

Recommended Minor Areas

- Business (28 Credits)
- Equine Management (32 credits)
- Outdoor Industry (28 credits)
- Other Minor (28 credits minimum)
    - Any minor listed in the catalog may be used as the student's minor. The minor will consist of not less than 28 credits of courses not previously taken.

Electives: 6-8 credits

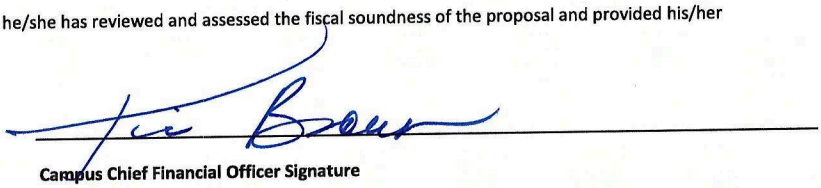
- Credits can be taken from any rubric.

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	University of Montana Western
AWARD LEVEL:	B.S.
PROGRAM NAME:	Farm and Ranch Management
PROGRAM CODE:	

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
ENROLLMENT PROJECTIONS						
Headcount						
annual unduplicated headcount of students with declared major or minor within the program	-	10	20	25	30	33
Credit Hours						
annual avg. credits hours earned per student in program related curriculum	-	12	12	12	12	12
Student FTE						
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	-	4	8	10	12	13.2
Completions						
Annual number of program completers	-	0	0	5	10	13
REVENUE						
Tuition Revenue (net of waivers)		$25,720	$51,440	$64,300	$77,160	$84,876
Institutional Support		$0				
Other Outside Funds (grants, gifts, etc.)		$100,000	$100,000	$100,000	$100,000	$100,000
Program Tuition/Fees		$0				
Total Revenue	$0	$125,720	$151,440	$164,300	$177,160	$184,876
Total Revenue per Student FTE	#VALUE!	$31,430	$18,930	$16,430	$14,763	$14,006
EXPENDITURES						
Tenure Track Faculty — FTE		1.0	1.0	1.0	1.0	1.0
Tenure Track Faculty — Salary + Benefits		$80,000	$80,000	$80,000	$80,000	$80,000
Non-tenure Track Faculty *Includes Adjunct Instructors — FTE						
Non-tenure Track Faculty *Includes Adjunct Instructors — Salary + Benefits						
Graduate Teaching Assistants — FTE						
Graduate Teaching Assistants — Salary + Benefits						
Staff — FTE						
Staff — Salary + Benefits						
Total Faculty & Staff — FTE						
Total Faculty & Staff — Salary + Benefits		$80,000	$80,000	$80,000	$80,000	$80,000
Operations (supplies, travel, rent, etc)						
Start-up Expenses (OTO)						
Total Expenses	$0	$80,000	$80,000	$80,000	$80,000	$80,000
Student FTE to Faculty (TT + NTT) Ratio	#VALUE!	4.0	8.0	10.0	12.0	13.2
Net Income/Deficit (Revenue - Expenses)	$0	$45,720	$71,440	$84,300	$97,160	$104,876

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.



Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

March, 2024

ITEM 211-2010-R0324

ITEM TITLE: Request for permanent authorization of a temporary Healthcare Administrative Professional CAS

Institution: **Gallatin College MSU** CIP Code: **51.0705**

Program/Center/Institute Title: **Certificate of Applied Science in Healthcare Administrative Professional**

Includes (please specify below): Face-to-face Offering: X Online Offering: _____ Blended Offering: _____

Options: _____

Proposal Summary [360 words maximum]

What: Gallatin College requests to permanently establish a Healthcare Administrative Professional Certificate of Applied Science. This accelerated one-year program replaces a Health Information Coding CAS and provides students the ability to work on an administrative team in a variety of healthcare settings: hospitals/clinics, home health agencies, long-term care, insurance companies, consulting firms and software vendors. Upon completion of 36 credits, students will be prepared for positions in healthcare coding, billing, entry level management, and financials. Graduates will also be eligible for certifications in Medical Coding, Medical Billing, and Medical Administrative Specialist from bureaus such as AAPC, AHIMA, and AMT.

Why: The Montana Department of Labor and Industry projected the following annual southwest Montana job openings through 2031: 139 Medical Secretaries, 48 Medical Health Service Managers, 495 General Office Clerks, and 273 Bookkeepers. This program was developed to meet current community need for healthcare business staff who can perform a variety of tasks such as medical coding, billing, insurance verification, accounting, management, human resources, and compliance. It will replace a Gallatin College Health Information Coding CAS program which prepared students for some of these tasks but was too specialized for graduate and industry demand. Student exposure to all areas of healthcare business will create additional career opportunities while those interested in specializing and certification will be prepared to sit for related entry-level exams upon program completion.

Previous Health Information Coding students expressed interest in earning certification to be able to work remotely. This new certificate will allow them to pursue more readily available remote employment opportunities such as billing and patient registration. Additionally, due to the COVID pandemic, many positions in Healthcare have become vacant. With this new CAS, a student's well-rounded understanding of healthcare-specific business tasks will allow them to apply their knowledge to various key areas of healthcare administration. It will also minimize in-house training burdens that under-staffed employers are facing.

Resources: Gallatin College received substantial American Rescue Plan Act grant funding from Gallatin County to strengthen our local economy and workforce. This is funding the creation of this program including curriculum development, faculty wages, and equipment needs through 2024. Classroom and lab instructional spaces already exist at Gallatin College.

ATTACHMENTS

Curriculum Proposal
Fiscal Analysis

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

____ **A. Level I:**

Campus Approvals

____ **1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)

____ **1b. Withdrawing a postsecondary educational program from moratorium**

____ **2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**

____ **3. Establishing a B.A.S./A.A./A.S. area of study**

____ **4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

____ **5. Re-titling an existing postsecondary educational program**

____ **6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)

____ **7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)

____ **8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)

____ **9. Revising a postsecondary educational program** (Curriculum Proposal Form)

____ **10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

X **B. Level II:**

____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Request to Plan Form)

X **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Request to Plan Form)

____ **3. Exceeding the 120-credit maximum for baccalaureate degrees** *Exception to policy 301.11*

Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

4. **Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

5. **Re-titling an academic, administrative, or research unit**

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	Gallatin College Montana State University
AWARD LEVEL:	Certificate of Applied Science
PROGRAM NAME:	Heathcare Administrative Professional
PROGRAM CODE:	HADP-CAS

	FY2023	FY2024	FY2025	FY2026	FY2027
ENROLLMENT PROJECTIONS	**Actual**				
Headcount					
annual unduplicated headcount of students with declared major or minor within the program	5	7	11	18	24
Credit Hours					
annual avg. credits hours earned per student in program related curriculum	33	33	33	33	33
Student FTE					
Undergrad: (Headcount x CH)/30	5.5	7.7	12.1	19.8	26.4
Completions					
Annual number of program completers		4	8	9	15

REVENUE					
Tuition Revenue (net of waivers)	$20,630	$30,182	$48,377	$80,746	$109,815
Institutional Support (Mill Levy, State Funds)					
Other Outside Funds (grants, gifts, etc.) ARPA	$5,000				
Program Tuition/Course Fees	$500	$700	$1,100	$1,800	$2,400
Total Revenue	**$26,130**	**$30,882**	**$49,477**	**$82,546**	**$112,215**
Total Revenue per Student FTE	**$4,751**	**$4,011**	**$4,089**	**$4,169**	**$4,251**

EXPENDITURES						
Tenure Track Faculty	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	$0	$0	$0	$0	$0
Non-tenure Track Faculty *Includes Adjunct Instructors	FTE (30-31cr. = 1.0 FTE)	1.00	1.00	1.25	1.25	1.25
	Salary + Benefits	$69,771	$69,771	$84,052	$84,052	$84,052
Graduate Teaching Assistants	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	$0	$0	$0	$0	$0
Staff & Dept. Head	FTE	0.24	0.24	0.24	0.24	0.24
	Salary + Benefits	$13,416	$13,416	$13,416	$13,416	$13,416
Total Faculty & Staff	FTE	1.24	1.24	1.49	1.49	1.49
	Salary + Benefits	**$83,187**	**$83,187**	**$97,468**	**$97,468**	**$97,468**
Operations (supplies, maintenance, etc)		$2,500	$2,700	$3,100	$3,800	$4,400
Start-up Expenses (OTO)		$5,000				
Total Expenses		**$90,687**	**$85,887**	**$100,568**	**$101,268**	**$101,868**

Student FTE to Faculty (TT + NTT) Ratio	**5.5**	**7.7**	**9.7**	**15.8**	**21.1**
Net Income/Deficit (Revenue - Expenses)	**-$64,557**	**-$55,005**	**-$51,091**	**-$18,722**	**$10,347**

0.092206437

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

DS

1/25/2024 | 4:14 PM MST

DocuSigned by:

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Campus Chief Financial Officer Signature

Chief Financial Officer Comments

NOTE:
Completion of the fiscal form does not guarantee funding for described expenses. The request for additional funding should be included in standard campus processes for investments in new programs if internal funding, within unit, cannot be reallocated.
At full capacity - enrollment would be 24 students
.25 of NTT teaching will be in pre-health, medicial assisting and gen ed.

BRT

Montana Board of Regents

CURRICULUM PROPOSAL FORM – A.A.S. / C.A.S. PERMANENT AUTHORIZATION

1. **Overview of the request and resulting changes.** Provide a one-paragraph description of the program. Is this program related or tied to other programs on campus? *[100 words]*

   Gallatin College would like to permanently establish a certificate of applied science in Healthcare Administrative Professional. This certificate provides students the ability to work with administrative teams in a variety of healthcare settings: hospitals, clinics, home health agencies, long-term care, insurance companies, consulting firms and software vendors. Upon completion of the program, students will be prepared for positions in healthcare coding, billing, entry level management, and financials. Graduates will also be eligible for certifications in Medical Coding, Medical Billing, and Medical Administrative Specialist from certification bureaus such as AAPC, AHIMA, and AMT.

2. **Relation to institutional strategic goals.** Describe the nature and purpose of the program in the context of the institution's mission and core themes. *[200 words]*

   Gallatin College's mission is to "provide a comprehensive, accessible, responsive, student-centered learning environment that supports the achievement of individuals' professional and personal goals and enhances Montana's communities and economy." The one-year Healthcare Administrative Professional program is offered at an affordable $1,891 per semester or $3,782 total for in-state students. Upon starting their career, skilled program graduates from diverse socioeconomic backgrounds will be able to earn the wages necessary to remain in our area. With afternoon and evening classes, this program is also accessible to adult learners who may be working but desire to increase their skill set and earning potential in a highly relevant Montana industry.

   Through coursework, hands-on learning, and regional healthcare industry partnerships, this degree reflects MSU's mission of "integrat[ing] education, creation of knowledge…and service to communities". Gallatin College students typically come from the surrounding area and stay in the region to support the local community and economy. As students complete their certificate, interaction with industry leaders occurs through guest speakers and instruction by professionals who also work within the industry. This mutually beneficial partnership provides students with immediate job opportunities while giving Montana companies the recruitment advantage and ability to serve our state's healthcare administrative needs.

3. **Process leading to submission.** Briefly detail the planning, development, approval and early implementation process of the program at the institution. *[200 words]*

   Gallatin College previously offered a Health Information Coding certificate, however, student and industry feedback indicated that the program was too specialized and limited career opportunities for graduates. The Healthcare Administrative Professional program is designed to expose students to all areas of Healthcare Business, including medical coding, billing, insurance verification, accounting, management, human resources, and compliance. This new program design allows for a more well-rounded graduate, however, students interested in specializing and certification in specific areas will still be prepared to sit for the entry level exams upon program completion. The Gallatin College Allied Health Program Director solicited curriculum input from local healthcare professionals about this program. This includes the Allied Health advisory committee representing local hospitals, clinics, and physician offices.

4. **Program description.** Please include a complete listing of the program's curriculum in Appendix A of this document.

   See Appendix A

   a. List the program requirements using the following table.

Montana Board of Regents

CURRICULUM PROPOSAL FORM – A.A.S. / C.A.S. PERMANENT AUTHORIZATION

	Credits
Credits in required courses offered by the department offering the program	18
Credits in required courses offered by other departments	15
Credits in institutional general education curriculum	3
Credits of free electives	0
Total credits required to complete the program	36

b. List the learning outcomes for the program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

1) Demonstrate basic medical coding; interpret patient information and translate it to universally recognized coding systems to assign and sequence procedure and diagnostic codes (CPT, ICD9, ICD10, HCPCS).
2) Practice basic medical billing and reimbursement procedures.
3) Discuss basic medical terminology and human anatomy.
4) Analyze and generate basic financial transactions through the accounting cycle for sole proprietorships, partnerships, and corporations.
5) Model basic medical office functions using standard and emerging technologies typical in entry-level healthcare administrative positions.
6) Demonstrate written and verbal communication at a professional level necessary for successful employment in a business environment.
7) Express a working knowledge of business fundamentals such as management principles, marketing, product/service development, sales, and basic accountancy.
8) Discuss how to access human, financial, and business resources.
9) Create an actionable business plan.
10) Identify local healthcare market needs and provide examples of how to respond to changes that can impact a business; model traits of effective and prepared leadership.

5. Need for the program. To what specific student, regional, and statewide needs is the institution responding with the program? How does the program meet those needs? Has demand for the program met the institution's expectations? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

The Montana Department of Labor and Industry projected the following annual southwest Montana job openings through 2031: 139 Medical Secretaries, 48 Medical Health Service Managers, 495 General Office Clerks, and 273 Bookkeepers. This program was developed to meet current community need for healthcare business staff who can perform a variety of tasks such as medical coding, billing, insurance verification, accounting, management, human resources, and compliance. It will replace a Gallatin College Health Information Coding CAS program which prepared students for some of these tasks but was too specialized for graduate and industry demand. Student exposure to all areas of healthcare business will create additional career opportunities while those interested in specializing and certification will be prepared to sit for related entry-level exams upon program completion.

Montana Board of Regents

CURRICULUM PROPOSAL FORM – A.A.S. / C.A.S. PERMANENT AUTHORIZATION

Previous Health Information Coding students expressed interest in earning certification to be able to work remotely. This new certificate will allow them to pursue more readily available remote employment opportunities such as billing and patient registration. Additionally, due to the COVID pandemic, many positions in healthcare have become vacant. With this new CAS, a student's well-rounded understanding of healthcare-specific business tasks will allow them to apply their knowledge to various key areas of healthcare administration. It will also minimize in-house training burdens that understaffed employers are now facing.

6. **Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
Flathead Valley Community College	AAS	Health Care Office Management
Missoula College	CAS	Medical Reception

a. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. *[200 words]*

In the initial program development stages, Associate Dean Sarah Maki and Allied Health Program Director DeeDee Dalke connected with Melissa Bergerson and Dr. Kurt Toenjes at MSUB to explore existing offerings. Simultaneously, she worked with regional Southwest Montana healthcare industry leaders to determine the specific needs, best practices, and workplace expectations for our region. Using this information, the program courses and curriculum was established to best meet our local need and environment. Given the necessary content and high industry demand for healthcare program graduates, it was determined that the program would be established as a one-year certificate.

7. **Implementation of the program.** When was the program be first offered? Describe the process of implementation *[100 words]*

The program was first offered in Fall 2022. Implementation included curriculum development utilizing industry expert knowledge and advising. It also included collaboration with our college's Business Administration program director to determine business-oriented course availability for additional students.

a. Complete the following table indicating the actual and projected enrollments in and graduates from the program since the program was first offered.

Fall Headcount Enrollment					Graduates				
AY 2022	AY 2023	AY 2024	AY 2025	AY 2026	AY 2022	AY 2023	AY 2024	AY 2025	AY 2026
3	5	7	11	18	2	4	6	8	9

b. Describe the methodology and sources for determining the enrollment and graduation projections above. *[200 words]*

Montana Board of Regents

CURRICULUM PROPOSAL FORM – A.A.S. / C.A.S. PERMANENT AUTHORIZATION

Enrollment projections are based on historical enrollment numbers, current knowledge of prospective student interest and applications, and existing space restrictions the program is experiencing.

8. **Program assessment.** How is success of the program determined? What action would result if this definition of success is not met? *[150 words]*

Program success will be determined by enrollment numbers, student completion rates, graduate job placement rates, and industry response. Each of these areas will be tracked by Gallatin College staff and the Allied Health Program Director. If success is not met in any of these areas, the college will work with involved parties to determine potential barriers and possible solutions to strengthen the program and success markers.

a. Describe the assessment process used to evaluate how well students are achieving the intended learning outcomes of the program. When do assessment activities occur and at what frequency? *[150 words]*

The Gallatin College Allied Health Program Director will oversee annual student learning program outcomes assessment. Each year the faculty teaching relevant classes will provide artifacts from coursework and externship performance representing 15% of the student enrollment that will be assessed by faculty within Gallatin College. Student assessments are measured in points and then categorized as 'Strongly Present', 'Developing', or 'Not Observed'. We expect that at least 70% of students in each category should have either Strongly Present or Developing skills in each area assessed.

b. What direct and indirect measures are used to assess student learning? *[100 words]*

Direct measures will include tests, quizzes, and lab project participation/completion. Indirect measures will include the level and quality of participation in discussions and lab assignments.

c. How are assessment findings employed to ensure the quality of the program? *[100 words]*

Successful student competition of the coursework and lab activities will be assessed at 70% or above. Negative results of the above-mentioned would indicate gaps or a need to reevaluate the course materials and/or concepts.

d. Where appropriate, describe applicable specialized accreditation and explain why you have or have not sought accreditation. *[100 words]*

Graduates will be eligible for certifications in Medical Coding, Medical Billing, and Medical Administrative Specialist from certification bureaus such as American Academy of Professional Coders (AAPC), American Health Information Management Association (AHIMA), and American Medical Technologists (AMT). Additional specialized accreditation is not required by regional industry companies.

9. **Physical resources.**

a. Describe the existing facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment that support the program. What has been the impact on existing programs of increased use of existing physical resources by the program? How has the increased use been accommodated? *[200 words]*

Montana Board of Regents

CURRICULUM PROPOSAL FORM – A.A.S. / C.A.S. PERMANENT AUTHORIZATION

As this program utilized a significant number of classes offered by the previous Health Information Coding program and the existing Business Administration program, minimal resources were needed for program start-up. ARPA grant funding is also available through 2024 for essential materials and equipment as needed.

Our Industry Partners continue to be supportive of this program as students who graduate with this certificate will be able to provide a versatile skillset to healthcare business settings. Job placements are expected to increase as graduates from this program will meet criteria for several areas of the healthcare business office such as Medical Billing, Medical Coding, Accounting, and general medical office duties rather than one singular specialized area such as Medical Coding.

b. What new facilities, equipment, space, laboratory instruments, etc., have been obtained or will be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How has or will the need for these additional resources be met? *[150 words]*

No additional facilities, equipment or instruments were required to support the program. However, with the current space limitations satellite camera equipment has been confirmed via Perkins grant funding to allow for remote learning options when appropriate.

10. Personnel resources.

a. Describe the existing instructional, support, and administrative resources that support the program. What has been the impact on existing programs of increased use of existing personnel resources by the proposed program? How has the quality and productivity of existing programs been maintained? *[200 words]*

The majority of courses for this program (23 credits) already exist in the Allied Health division or are shared with the Business Administration program, thus the bulk of instructional resources were already established. Initial student enrollment and the program capacity of ten is not expected to strain these programs, when enrollment reaches 24 students, some new sections may need to be added or those courses will need to be expanded.

b. Identify new personnel that have been or will be hired to support the program. (Enter the costs of those personnel resources into the budget sheet.) How have you secured the needed qualified faculty and staff? *[150 words]*

Existing NTT faculty and the program director provided course instruction throughout 2022-2023. However, as enrollment increases occur, new NTT may be hired to teach additional sections of courses, specifically in Accounting and Business Management.

Necessary non tenure track faculty have been secured through industry partner connections and general college instructor recruitment. Should the demand for this program rise, additional resources and funding are available for NTT instructor wages through 2024 through an ARPA grant. The cost of these faculty has been included in the program fiscal worksheet.

11. Other resources.

a. Are the available library and information resources adequate for the program? If not, how will adequate resources be obtained moving forward? *[100 words]*

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Library resources are not currently utilized for the program. Information resources are instead provided by course textbooks and relevant industry content obtained by course instructors.

b. What impacts has the program had on student services? What are the implications of the new program on services for the rest of the student body? *[150 words]*

Gallatin College provides internal student services and administrative support for workforce programs. With all new programs Gallatin College is adding a specific percentage for staffing needs that will impacting the college in the advising, and administrative side. For every 100 new students added to the college there is an additional 1.0 FTE impact, this would include the advising and administrative side. For this program the goal is to enroll 24 students. A .24 FTE was added to the budget on the staff and dept line. The ARPA grant also includes funding for an Administrative Assistant who will be available to assist leadership roles in programmatic administrative tasks and grant reporting, however this grant will be complete December of 2024 therefore the college will need other funds to support these administrative roles.

12. Revenues and expenditures. Describe the implications of the program on the financial situation of the institution. *[100 words]*

Financial implications for the institution have been mitigated by an ARPA grant provided by Gallatin County. Please see included program fiscal worksheet. Additionally, it should be noted that only 10 credits of this Certificate are stand-alone courses. The fiscal sheet is planned in a manner which represents this program as a sole stand-alone program. There will be shared faculty costs for this program however when doing the fiscal planning a conservative approach was taken to plan for worst case scenarios.

a. Describe expenses associated with the implementation of the program. How have these expenses been met? *[200 words]*

Expenses thus far have been met through the County ARPA grant. The funding model that Gallatin College is following utilizes either grant, private sector or Mill Levy funding for the first 3 years of startup. As enrollment and revenue grow the Dean may request general fund support through the MSU strategic investment process. The program will be fully funded with the enrollment of 24 students.

i. If funding came from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact has the reallocation of funds in support of the program had on other programs? *[150 words]*

n/a

ii. If an increase in base funding was required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution included the base funding in the department's budget.

Base funding for this program was requested for AY 24 through the MSU strategic investment process.

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iii. If funding has or will come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? *[150 words]*

A three-year ARPA grant was provided by Gallatin County. Once funding is no longer available, we anticipate that the program will be close to being self-sustainable from continued student enrollment. A base funding increase was requested for AY 24 to support this program.

If the program does not have strong enrollment year to year, then a decision may be to run the program every other year.

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that are or will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? *[150 words]*

In November 2021, Gallatin College received a $1.9 million ARPA grant to fund the creation and expansion of new healthcare programs. Once grant funding is no longer available, we plan to continue offering the program as long as industry and student demand continues as anticipated. 2014 Mill levy funding will be utilized to support this program as needed until it is self-sufficient.

13. Student fees. If the proposed program has or intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

Currently the proposal is to require $100 total in course fees.

14. Complete the fiscal analysis form, starting from the inception of the program and noting which fiscal years show actual program data and which are projected.

Please see attached Fiscal Analysis Form.

Signature/Date

College or School Dean: DocuSigned by: Stephanie Kraus 846EB00FC0D245E... 1/23/2024 | 3:15 PM MST

Chief Academic Officer: DocuSigned by: Robert Mokwa 212A28411AC04BD... 1/23/2024 | 3:15 PM MST

Chief Executive Officer: DocuSigned by: Waded Cruzado 7D6A4CE96C3F415... 1/23/2024 | 3:15 PM MST

Flagship Provost*: DocuSigned by: Robert Mokwa 212A28411AC04BD... 1/23/2024 | 3:15 PM MST

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Flagship President*: DocuSigned by: Waded Cruzado 7D6A4CE96C3F415...

1/23/2024 | 3:15 PM

*Not applicable to the Community Colleges.

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Appendix A – Proposed New Curriculum

Year 1		Credits
	FALL	SPRING
ACTG 101 - Accounting Procedures I (shared course)	4	
BIOH 104IN - Basic Human Biology w/lab (shared course)	4	
COMX 106 - Communicating in a Dynamic Workplace (shared course)	3	
AHMS 144 - Medical Terminology (shared course)	3	
AHMS 210 Basic Medical Coding	4	
ACTG 102 - Accounting Procedures II (shared course)		4
AHMS 108 - Health Data Content and Structure		3
AHMS 156 - Medical Billing Fundamentals		3
AHMS 158 - Legal and Regulatory Aspects of Healthcare (shared course)		2
BMGT 215 - Human Resource Management (shared course)		3
AHMS 220 - Medical Office Procedures (shared course)		3
Year Total:	18	18
Total Program Credits:		**36**