

ACADEMIC ITEM APPROVAL MEMORANDUM

Compiled here are academic items approved since the March Board of Regents Meeting. This memorandum from January, February, March, and April 2021, 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.

- May 2021 Academic Items
- June 2021 Academic Items
- July 2021 Academic Items

ACADEMIC ITEMS MEMORANDUM

DATE: June 3rd, 2021

TO: Chief Academic Officers, Montana University System

FROM: Brock Tessman, Deputy Commissioner for Academic, Research, and Student Affairs

RE: May 2021 Academic Items

Contained within this memorandum are Level I and Level II proposals submitted by the institutions of the Montana University System in May 2021. 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 Chief Academic Officer's conference call on Tuesday, June 15th. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, June 18th. You will be notified of approved proposals by June 22nd. The Board of Regents will be notified of the approved proposals at the July meeting of the Board.

LEVEL I ITEMS:

1. Campus Approvals

Miles Community College:

- Notification of the establishment of a certificate in Basic Transportation Entrepreneurship
[Item # 401-L10521](#)

Flathead Valley Community College:

- Notification of the establishment of a C.T.S. in Healthcare Core
[Item # 301-LI0521](#)

2. OCHE Approvals

Montana State University Bozeman:

- Request for authorization to revise the curriculum of the Accelerated B.S. in Nursing
[Item #2010-LI0521](#) | [Curriculum Form](#)
- Request for authorization to revise the curriculum of the B.S. in Nursing
[Item #2010-LI0521](#) | [Curriculum Form](#)

The University of Montana Missoula:

- Request for authorization to retitle the Speech-Language Pathology / Audiology Assistant certificate to the Speech Language Pathology Assistant Certificate
[Item #1001-LI0521](#)

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

May 2021

ITEM 401-LI0521

Notification of the establishment of a C. in Basic Transportation Entrepreneurship

Institution: Miles Community College

CIP Code: 49.0205

Program/Center/Institute Title: Basic Transportation Entrepreneurship Certificate

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

Options: _____

Proposal Summary [360 words maximum]

What Miles Community College plans to offer a Certificate in Basic Transportation Entrepreneurship to enhance the revised CDL curriculum.

Why The federal mandates for obtaining a CDL are changing starting February 2022. The new mandates will require that additional topics are covered. In order to meet the requirements, the CDL lecture and lab courses need to be semester long courses with additional credit hours. In addition to expanding the two CDL courses, MCC wishes to provide students a Certificate option for Basic Transportation Entrepreneurship.

Resources Students will utilize the MCC truck driving simulator as well as MCC's truck and trailer to practice pre-trip safety inspections, driving skills, backing skills with mirrors, utilizing a spotter for blind spots while backing up, and other over the road skill requirements such as field trouble shooting and repair of a tractor trailer unit. At the conclusion of the course, students may use the MCC truck to complete the driver's portion of the CDL examination. Co-requisite HEO 123 Commercial Transportation Basics. An additional fee is required. Students will be required to be enrolled in an MCC contracted random drug and alcohol testing pool. Students must possess a current, valid Montana driver's license with an acceptable driving record; be at least 18 years of age; possess a current Medical Examiner's Certificate (DOT physical) prior to entry in to the course; and possess a valid CDL permit prior to being allowed to drive MCC's semi on public roadways. This course will meet the Federal Motor Carrier Safety Administration's (FMCSA) Entry-Level Driver Training (ELDT) requirements.

Relationship to similar MUS programs There are other CDL programs within the MUS, but not in this format.

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

 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

 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

May 2021

ITEM 301-L10521

Notification of the establishment of a C.T.S. in Healthcare CoreInstitution: Flathead Valley Community CollegeCIP Code: 51.0000Program/Center/Institute Title: C.T.S. Healthcare CoreIncludes (please specify below): Face-to-face Offering: X Online Offering: Blended Offering: Options: **Proposal Summary [360 words maximum]**

What: This certificate program teaches the skills needed to begin a healthcare career and provides the foundational knowledge necessary for a wide variety of professional healthcare programs. This certificate prepares students for healthcare education programs and provides an opportunity for working professionals to develop the foundational education requirements for healthcare careers.

Why: FVCC has many students interested in pursuing a career in health care. This certificate will accomplish three key things: (1) help organize the prerequisites students need to apply for health care programs, (2) familiarize students with the variety of health care programs available, and (3) help student attain a marketable skill that can help them pay for future studies when they enter a health care program.

Resources: No additional resources needed.

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

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

 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

May, 2021

ITEM 2010-LI0521

ITEM TITLE : **Request authorization for Montana State University to propose an Accelerated Bachelor of Science in Nursing Curriculum Revision**

Institution: **Montana State University**

CIP Code: **51.3801**

Program/Center/Institute Title: **College of Nursing**

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

Options: _____

Proposal Summary [360 words maximum]

What: The College of Nursing (CON) proposes a revision to the existing Accelerated Bachelor of Science in Nursing (ABSN) curriculum. The existing curriculum was developed in 2011. National and accreditation requirements recently have significantly changed including the Commission on Collegiate Nursing Education (CCNE) accreditation standards in 2018 and the American Association of Colleges of Nursing (AACN) *Essentials for Baccalaureate Nursing* in 2021. This proposed revised curriculum aligns with these national trends and increases efficiency in curriculum delivery by consolidating MSU accelerated nursing courses into three semesters and improving delivery of clinical learning.

Why: Although individual course modifications have occurred since the ABSN program's inception, a complete curricular revision is necessary to align with significantly changed national standards and to improve overall curricular structure. The proposed revised ABSN program will have a unique course plan from the BSN program, better aligned to the learning needs of the target population: students seeking a second bachelor's degree.

Resources: The ABSN program was started in 2011 with a cohort of 16 students at the MSU CON Bozeman campus site. The program expanded to Great Falls in 2012 with a cohort of 16 students, in 2017 with a cohort of 8 students each on the MSU CON Missoula and Kalispell campuses, and in 2020 to the Billings campus with a cohort of 16 students. The program was not entered into CIM when originally implemented.

In anticipation of this curricular change, MSU CON Dean Sarah Shannon met with MSU Budget Director, Megan Lasso, to carefully review the ABSN program financials. Megan Lasso determined that the revenue and costs of the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The instructional support required for the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The source of funds remains unchanged and the physical facilities and equipment required for the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum.

ATTACHMENTS

Curriculum Proposal form

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)

 X **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
CURRICULUM PROPOSAL FORM

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 College of Nursing [CON] proposes a revision to the existing Accelerated Bachelor of Science in Nursing [ABSN] curriculum. The existing curriculum was developed in 2011. National and accreditation requirements recently have significantly changed including the Commission on Collegiate Nursing Education [CCNE] accreditation standards in 2018 and the American Association of Colleges of Nursing (AACN) Essentials for Baccalaureate Nursing in 2021. This proposed revised curriculum aligns with these national trends and increases efficiency in the MSU curriculum delivery by consolidating nursing courses into three semesters and improving delivery of clinical learning.

- 1. 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 ABSN program directly reflects MSU mission to integrate education, creation of knowledge and art and service to communities and the CON mission is to enhance the health of the people of Montana, our nation, and the global community through excellence in education, research, practice and service. The ABSN program specifically addresses Intentional Focus 1, Goal 1.1. to broaden access for underrepresented populations and increase academic success for all students through excellence in undergraduate education.

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

Between December 2019 and December 2020, a team of nursing faculty met weekly to redesign the Accelerated Bachelor of Science in Nursing [ABSN] curriculum. Several comparable nursing programs which had recently revised the ABSN were consulted, and national trends and student data analyzed. A total curricular redesign was deemed necessary to improve overall curricular structure and meet new professional standards. The revised curriculum was approved by College of Nursing faculty iteratively during development. Pre-requisite requirements also were reviewed, and changes discussed with Colleges of Letters and Science and Agriculture, Gallatin College, and University Studies.

- 3. 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	58
Credits in required courses offered by other departments	42
Credits in institutional general education curriculum	
Credits of free electives	
Total credits required to complete the program	100

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.
1. Students completing our program will synthesize knowledge, skills, and technology from the established and evolving art and science of nursing, as well as the biological, social and behavioral sciences, to apply critical thinking and the nursing process in the delivery of care.
 2. Students completing our program will provide evidence-based, holistic, compassionate and person-centered care respectful of the preferences, values, needs, resources and determinants of health unique to and in partnership with the client, identified support persons and the health-care team.
 3. Students completing our program will promote health equity through advocacy, health promotion, community resource partnerships, and disease prevention strategies at the individual, family, community, and population levels with consideration of social determinants of health.
 4. Students completing our program will demonstrate the ability to synthesize, translate, apply, and disseminate nursing knowledge to improve health outcomes.
 5. Students completing our program will integrate principles of safety and quality improvement into the delivery of high-quality care across complex and evolving healthcare systems to individuals, families, communities, and populations.
 6. Students completing our program will demonstrate collaborative interprofessional communication and practice to optimize the patient experience, safety, improve outcomes and reduce costs.
 7. Students completing our program will function as effective users of information and communication technologies to deliver evidence-based care in accordance with regulatory and institutional policies.
 8. Students completing our program will evaluate leadership concepts, skills, and ethical decision making in the provision and oversight of nursing practice in a variety of settings
 9. Students completing our program will create a personal and professional plan for long-term resilience, self-care, and lifelong learning.

- 4. 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]*

Montana has a statewide nursing shortage with a maldistribution of nurses in rural areas of the state. Annually, approximately 445 registered nurse (RN) position openings are predicted by the Montana Department of Labor through 2025 (AHEC, 2017). Factors associated with this statewide and regional need include an aging citizenry with co-morbidities, provider shortages, implementation of healthcare reforms, and an aging nursing workforce. The MSU College of Nursing addresses the need for ABSN-prepared nurses in Montana and beyond by admitting and graduating approximately 64 ABSN students annually. MSU CON is the largest supplier of Registered Nurses in Montana. While 60-65% of applicants to the ABSN program are former MSU students, approximately 35-40% are transfer students from across MUS and from out of state. Nearly all MSU ABSN graduates are employed soon after graduation with approximately 80% employed in Montana. The College of Nursing has a strong history of serving Montana through two key initiatives. The Caring for Our Own Program (CO-OP) supports Native American and Alaska Native students to become nurses with the ultimate goal of improving health outcomes for Native American communities. Second, a focus on educating nurses for rural generalist practice aims to address the shortage of nurses in Montana's rural and frontier communities.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

5. 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
N/A		There are no other Accelerated Bachelor of Nursing (ABSN) programs in the MUS

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 MSU College of Nursing ABSN program began in 2011 and has received continuous full approval by the Montana State Board of Nursing. The program is also nationally accredited by the Commission on Collegiate Nursing Education (CCNE) through 2029. The demand for professional nursing remains strong.

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]

N/A

6. 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 nursing course, *NRS 116 Introduction to Professional Nursing*, is a pre-requisite to the ABSN major. NRS 116 will begin fall 2021 pending final approval. The courses for the revised ABSN degree will be phased in starting fall 2022. The last courses of the existing curriculum will be phased out by summer semester 2022. See attached *Curriculum Transition Plan*. Students enrolled under the 2020 Catalog (or older) who experience an interruption in their nursing coursework will be individually accommodated to ensure efficient completion of the ABSN program. All pre-ABSN students have been noticed on the CON website and through nursing advisors of proposed prerequisite and curricular changes pending anticipated university approval.

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

Fall Headcount Enrollment					Graduates				
AY 22-23	AY 23-24	AY 24-25	AY 25-26	AY 26-27	AY 22-23	AY 23-24	AY 24-25	AY 25-26	AY 26-27
64	64	64	64	64	64	64	64	64	64

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

The College of Nursing accepts applications to the ABSN once a year for summer placements to one of the five nursing campus locations (i.e., Billings – 16, Bozeman – 16, Great Falls – 16, Kalispell – 8 and Missoula – 8 for a total of 64 placements). Beginning Fall 2022 admission for the three-semester course plan will shift to fall start with completion the following summer.

- c. What is the initial capacity for the program?

No changes to the capacity of the ABSN program are anticipated between the existing and proposed revised ABSN program.

- 7. 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 ABSN program is evaluated using a similar process as other academic programs in the College. The College of Nursing has a Master Evaluation Plan [MEP] which is formatted according to the four standards that must be met for ongoing national accreditation by the Commission on Collegiate Nursing Education (CCNE). Standard III refers to the “Program Quality: Curriculum and Teaching-Learning Practices” and Standard IV refers to “Program Effectiveness: Student Performance and Faculty Accomplishments.” The MEP delineates learning assessment strategies, thresholds and metrics and provides the foundational structure for continuous quality program improvement 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]*

Student learning outcomes are mapped to course objectives, program learning outcomes, national AACN competencies, and pass rates on the national licensing exam (NCLEX-RN). Exemplars reflective of student learning outcomes are assessed on a rotating cycle against established thresholds, analyzed for potential revision, and reviewed by an established faculty committee (i.e., Undergraduate Academic Affairs Committee). In addition, data from employer satisfaction surveys; first time pass rates of graduates on the NCLEX-RN exam (the licensing exam for entry into professional practice); job placement data; and alumni satisfaction surveys are considered. Application numbers and adequacy of clinical resources are assessed regularly.

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

Direct:

1. Successful completion of all courses.
2. Direct clinical supervision of student performance by qualified faculty or preceptors.

Indirect:

1. NCLEX – RN annual first time attempt pass rate
2. Graduation and completion rates.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Consistent with the Master Evaluation Plan and the College of Nursing faculty bylaws, program assessment findings are collected, documented, and reviewed by the Undergraduate Academic Affairs Committee annually. Decisions regarding individual course and overall curriculum improvements are proposed and voted upon by faculty using majority rule. Changes are documented and incorporated into the next assessment cycle.

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

The College of Nursing is nationally accredited by the Commission on Collegiate Nursing Education (CCNE) through June 2029. CCNE accreditation requires ongoing data collection, analysis, reflection, and action to ensure program quality. CCNE will be noticed of this major curricular revision within 90 days of program implementation per policy and included in the next mid-cycle accreditation report due in 2023.

8. 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 College of Nursing has existing physical facilities, equipment, access to clinical learning opportunities, and simulation equipment to support the implementation of the proposed revised program at the Billings, Bozeman, Great Falls, Kalispell and Missoula nursing campus locations.

- 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 additional resources are anticipated to be required. The physical facilities, equipment, access to clinical learning opportunities, and simulation equipment required for the proposed revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The source of funds for these resources remain unchanged.

9. 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 instructional support required for the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The source of funds remains unchanged.

- 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]*

Montana Board of Regents
CURRICULUM PROPOSAL FORM

In anticipation of this curricular change, MSU CON Dean Sarah Shannon met with MSU Budget Director, Megan Lasso, to carefully review the ABSN program financials. Megan Lasso determined that the revenue and costs of the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The instructional support required for the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum

10. 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]*

Available library and information resources are sufficient.

- 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 support services have the capacity to accommodate the curriculum revision.

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

In anticipation of this curricular change, Dean Shannon met with Megan Lasso to carefully review the ABSN program financials. Megan Lasso determined that the revenue and costs of the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The instructional support required for the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The physical facilities and equipment required for the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The source for these remains unchanged.

- 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]*

In anticipation of this curricular change, Dean Shannon met with Megan Lasso to carefully review the ABSN program financials. Megan Lasso determined that the revenue and costs of the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The instructional support required for the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum. The source of funds remains unchanged.

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]*

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]*

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

- 12. 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 utilizes existing undergraduate nursing student program fees of \$425 per semester.

- 13.** Complete the fiscal analysis form.

This proposal is for a revision to an existing program. Per Megan Lasso, the revenue and costs of the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum.

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

Course Title	Course Description
NRSG 116 Introduction to Professional Nursing [2 cr lecture]	This course serves to provide knowledge of the origins of the profession of nursing. Content will explain the historical context of the emergence of the professional nurse and its relevance to current healthcare delivery. Content and activities expose students to issues surrounding the profession of nursing, multiple roles of nursing in society and healthcare, and concepts related to the dimensions of nursing practice: nurse, client, health, and environment
NRSG 318: Accelerated Pathophysiology and Pharmacotherapeutics for Nurses [4 cr lecture]	This course focuses on the abnormal functioning of human cells, tissues, and organs of selected body systems, the physiological adaptations that occur, and how pharmacotherapeutics can address these pathological or adaptive changes across the lifespan. Integration of pharmacological and pathophysiologic principles will be addressed. The influences of nutrition, genetics, culture, determinants of health, age related variations, alternative therapies, and environment to selected diseases and on pharmacotherapeutics will be emphasized. Current research in pathophysiology, pharmacotherapeutic and pharmacological management will be considered.
NRSG 323: Professional Development I: Professional and Ethical Nursing [1 cr lecture]	Students will explore the ethical development of professional nursing to initiate and foster professional, culturally competent, inclusive nursing care. Ethical development including morality and obligations to cultural sensitivity and inclusion, evidence-based practice and professional nurse identity will be discussed.
NRSG 324R Professional Development II: Evidence Based Practice [2 cr lecture/1 cr R/D]	The focus of this course is to provide content related to ethical, professional, and evidence-based practice obligations of a BSN prepared RN. Basics in informatics and library search skills will be utilized. Evidence-based practice [EBP] competencies are examined and include discussion of clinical outcomes and rapid critical appraisal of research. Students will develop a scholarly project based on both existing information and student effort while utilizing nursing theory.
NRSG 327 Foundation of Nursing Care [2 cr lecture]	This course introduces the application of nursing principles, concepts and fundamental skills for safe quality nursing care. Learners use assessment data, clinical judgment and therapeutic communication to plan and provide for effective nursing care.
NRSG 328 Foundations of Nursing Care Lab [3 cr clinical lab]	Students apply nursing principles, concepts and fundamental skills for safe quality nursing care. Learners apply assessment data and nursing process to develop the clinical judgment and therapeutic communication for effective collaboration with clients and the healthcare teams.
NRSG 329 (IL) Adult Health Assessment [2 cr lecture/ 1 cr lab]	This course uses a health-oriented approach to acquire the comprehensive skills of history taking and physical assessment needed to conduct an adult nursing assessment and professionally communicate the findings using verbal, written and electronic methods.
NRSG 333 Nursing Concepts in Health Promotion & Psychosocial Nursing [4 cr lecture]	The focus of this course is on evidence-based information to assess and promote the health of racially, ethnically, and culturally diverse individuals, families, and communities in local, state, national and global arenas. Primary, secondary, and tertiary preventive care measures across the lifespan will be presented. Strategies for meeting the needs of vulnerable populations through the lens of social determinants of health will be examined. Interventions such as lifestyle choices,

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Course Title	Course Description
	nutrition, exercise, stress management, social support, mindfulness, complementary and alternative therapies will be explored. Personal self-care practices for the nurse will be introduced. The course also explores selected psychosocial concepts and theories relevant to nursing practice with clients across the lifespan in a variety of settings.
NRSG 334 Nursing Practice for Health Promotion [1 cr clinical lab]	This course provides the clinical experiential learning associated with Nursing Concepts for Health Promotion (NRSG 332) and includes health assessments and health promotion teaching and planning for individuals, families, and communities to promote health and prevent disease.
NRSG 358 Nursing Concepts in Reproductive Health and Pediatric Care [4 cr lecture]	The focus of this course is health promotion, disease prevention, illness management, and nursing care of children, their families and individuals seeking sexual and reproductive health service. The class will examine a variety of settings among diverse populations in order to gain a foundational knowledge of reproductive care and care of the developing child. This course builds upon and integrates knowledge gained from nursing, sciences, and the humanities.
NRSG 359 Nursing Practice in Reproductive Health and Pediatric Care [3 cr clinical lab]	The focus of this course is application of health promotion, disease prevention, illness management, and nursing care concepts of children, their families and individuals seeking sexual and reproductive health service. Nursing care will take place in a variety of settings and among diverse populations in order to gain a foundational knowledge of reproductive care and care of the developing child. This course builds upon and integrates knowledge gained from nursing, sciences, and the humanities.
NRSG 400 Nursing Simulation [1-2 cr simulation lab]	This course integrates clinical learning and nursing theory in a simulation-based environment. It includes the application of nursing principles, concepts, related skills, and clinical decision making specific to the scheduled patient populations each semester.
NRSG 406: Professional Development V: Care Management & Informatics in Healthcare Systems. [3 cr lecture]	The focus of this course is to provide skill development in critical thinking, quality improvement, transitional planning, and delegation in relation to care management. Students will utilize a holistic approach to understand how a patient utilizes healthcare, the services provided across multiple settings and the nurse's role in understanding and advocating for the patient's specific needs. Legal and ethical considerations will be examined. Information technology will be examined with emphasis given to clinically transformative technologies, telehealth and the nurses' role.
NRSG 412 Professional Development IV: Nursing Leadership and Transition to Practice [2 cr lecture]	This course practices leadership skills with an emphasis on team evaluation, fiscal management, conflict management, staff empowerment, and change theory. It features planning for transition to professional practice and emphasizes mental well-being and self-care.
NRSG 426 Nursing Concepts in Population Health [2 cr lecture]	The focus of this course is the theoretical application of promoting the health of diverse communities and special populations from a public health perspective. It emphasizes a population focused nursing process, epidemiology, and population-based assessment tools for intervention design.
NRSG 427 Nursing Practice in Population Health [2 cr clinical lab]	This course provides the practice application of promoting health of diverse communities and special populations from a public health perspective. It emphasizes a population focused nursing process and uses epidemiology and population-based assessment tools to form interventions.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Course Title	Course Description
NRSG 431 Nursing Concepts in Psychiatric Mental Health [2 cr lecture]	The focus of this course is to attain foundational knowledge of psychopathology and nursing care of clients with acute and chronic psychiatric disorders. Social, cultural, spiritual, and environmental issues influencing mental health are explored.
NRSG 432 Nursing Practice in Psychiatric Mental Health [1 cr clinical lab]	This course is focuses on nursing care of clients with acute and chronic psychiatric disorders, including psychopathology associated with major mental illness. Community-based experiences provide opportunity for continued development of therapeutic skills to explore social, cultural, spiritual, and environmental influences.
NRSG 452 Health Policy and Economics [2 cr lecture]	Focus is on economics, public policy and political factors that affect the delivery of health and nursing care at the local, state, national and international levels. Students are encouraged to participate in efforts to influence health policy.
NRSG 460 Nursing Concepts in Acute/Chronic Care [4 cr lecture]	This course facilitates understanding and building upon previous and concurrent theoretical and empirical knowledge for patient-centered care of adults across the lifespan to include aging, chronic illness and non-curable, life limiting diseases and those experiencing acute/critical and complex health alterations. Values of compassionate, culturally sensitive, holistic care is emphasized. Advancing theoretical knowledge, professional nursing practice and interprofessional collaboration, and delivery of safe, high quality care are key components.
NRSG 461 Nursing Practice for Acute and Chronic Care [3 cr clinical lab]	This clinical course facilitates application of existing and concurrent theoretical and empirical knowledge, professional nursing practice, interprofessional collaboration and referral in the management and delivery of safe, high quality care of the adult patients across the lifespan experiencing both acute, complex illness and injury and chronic illness and life-limiting diseases. Emphasis is also placed on patient-centered health promotion, disease and palliative care, hospice and end-of-life care for patients and their families. Clinical experiences will provide opportunities to apply knowledge and evidenced-based care across the adult lifespan in a variety of healthcare settings.
NRSG 498 Professional Internship [3 cr clinical lab]	Supervised work-integrated learning experience to maximize independence in providing safe, efficient, high-quality patient care. Students integrate professional nursing roles of leadership, advocacy, and communication and works with an approved RN preceptor for an intensive clinical experience.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Accelerated BSN Course Plan

	A-1	CR	A-2	CR
1st 8 wks	NRSG 329 (IL) Health Assessment	3	NRSG 358 Nursing Concepts in Reproductive Health & Pediatric Care	4
	NRSG 327 Foundations of Nursing Concepts	2	NRSG 359 Nursing Practice in Reproductive Health & Pediatrics	3
	NRSG 328 Foundation of Nursing Lab	3	NRSG 460 Nursing Concepts in Acute/Chronic Care	4
	NRSG 323 Professional Development I	1	NRSG 461 Nursing Practice in Acute/Chronic Care	3
NRSG 452 Health Care Policy/Economics			2	
2nd 8 wks	NRSG 333 Concepts in Health Promotion & Psychosocial Nursing	4	NRSG 324R Professional Development II	3
	NRSG 334 Nursing Practice in Health Promotion	1	NRSG 400 Nursing Simulation	2
All wks	NRSG 318 Accelerated Pathophysiology & Pharmacotherapeutics	4		
	NRSG 400 Nursing Simulation	1		
	Total Credits	19	Total Credits	21
	A-3	CR		
1st 8 wks	NRSG 426 Nursing Concepts in Population Health	2		
	NRSG 427 Nursing Practice in Population Health	2		
	NRSG 431 Nursing Concepts in Psychiatric/Mental Health	2		
	NRSG 432 Nursing Practice in Psychiatric/Mental Health	1		
	NRSG 406 Professional Development V (CM & systems)	3		
	NRSG 400 Nursing Simulation	1		
2nd 4 wks	NRSG 412 Professional Development IV	2		
	NRSG 498 Professional Internship	3		
	Total Credits	16		

Prerequisite courses 44
 A-1 19
 A-2 21
 A-3 16
Total ABSN Credits 100

Direct Patient Care Clinical Credits: 14 credits = 630 hours
Simulation Credits: 4 credits = 120 simulation contact hours X 2 = 240 reported simulation hours
Total Clinical Hours: 630 + 240 = 870 clinical learning hours

REQUIRED PRE-REQUISITES	MSU COURSE NUMBER	CREDITS
Human Anatomy & Physiology I	BIOH 201	5
Human Anatomy & Physiology II	BIOH 211	4
Microbiology for Health Sciences: Infectious Diseases [with lab]	BIOM 250/251	4
Introduction to General Chemistry	CHMY 121IN/122IN	4
Introduction to Organic Chemistry and Biochemistry [will accept either organic or biochemistry for transfer students]	CHMY 123/124	4
Basic Human Nutrition	NUTR 221CS	3
Developmental Psychology – OR – Individual and Family Development: Lifespan	PSYX 230 HDFS 101IS	3 3
Introduction to Psychology – OR – Introduction to Sociology	PSYX 100IS SOCI 101IS	4 3
College Algebra	M 121Q	3
Introduction to Statistics	STAT 216Q	3
College Writing II	WRIT 201	3
Introduction to Public Speaking	COMX 111US	3
Nursing as a Profession	NRSG 116	2
Prerequisite Course Total		44-45

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

May, 2021

ITEM 2011-LI0521

ITEM TITLE : Request authorization for Montana State University to propose a curriculum revision to the Bachelor of Science in Nursing

Institution: Montana State University

CIP Code: 51.3801

Program/Center/Institute Title: College of Nursing

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

Options: _____

Proposal Summary [360 words maximum]

What: The College of Nursing (CON) proposes a revision to the existing Bachelor of Science in Nursing (BSN) curriculum. The existing curriculum was developed over 20 years ago. National and accreditation requirements recently have significantly changed including the Commission on Collegiate Nursing Education (CCNE) accreditation standards in 2018 and the American Association of Colleges of Nursing (AACN) *Essentials for Baccalaureate Nursing* in 2021. This proposed revised curriculum aligns with these national trends and increases efficiency in curriculum delivery by consolidating MSU nursing courses into four semesters and improving delivery of clinical learning.

Why: Although individual course modifications have occurred over the past 20 years, a complete curricular revision is necessary to align with significantly changed national standards and to improve overall curricular structure.

Resources: In anticipation of this curricular change, MSU CON Dean Sarah Shannon met with MSU Budget Director, Megan Lasso, to carefully review the BSN program financials. Megan Lasso determined that the revenue and costs of the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum. The instructional support required for the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum. The source of funds remains unchanged and the physical facilities and equipment required for the revised ABSN curriculum will be essentially unchanged from the existing ABSN curriculum.

ATTACHMENTS

Curriculum 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>.

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**

_____ **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)

X _____ **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
CURRICULUM PROPOSAL FORM

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 College of Nursing [CON] proposes a revision to the existing Bachelor of Science in Nursing [BSN] curriculum. The existing curriculum was developed over 20 years ago. National and accreditation requirements recently have significantly changed including the Commission on Collegiate Nursing Education [CCNE] accreditation standards in 2018 and the American Association of Colleges of Nursing (AACN) Essentials for Baccalaureate Nursing in 2021. This proposed revised curriculum aligns with these national trends and increases efficiency in the MSU curriculum delivery by consolidating nursing courses into four semesters and improving delivery of clinical learning.

1. 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 BSN program directly reflects MSU mission to integrate education, creation of knowledge and art and service to communities and the CON mission is to enhance the health of the people of Montana, our nation, and the global community through excellence in education, research, practice and service. The BSN program specifically addresses Intentional Focus 1, Goal 1.1. to broaden access for underrepresented populations and increase academic success for all students through excellence in undergraduate education.

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

Between December 2019 and December 2020, a team of nursing faculty met weekly to redesign the Bachelor of Science in Nursing [BSN] curriculum. Several comparable nursing programs which had recently revised the BSN were consulted, and national trends and student data analyzed. A total curricular redesign was deemed necessary to improve overall curricular structure and meet new professional standards. The revised curriculum was approved by College of Nursing faculty iteratively during development. Pre-requisite requirements also were reviewed and changes discussed with Colleges of Letters and Science and Agriculture, Gallatin College, and University Studies.

3. 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	62
Credits in required courses offered by other departments	45
Credits in institutional general education curriculum	9
Credits of free electives	4

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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 completing our program will synthesize knowledge, skills, and technology from the established and evolving art and science of nursing, as well as the biological, social and behavioral sciences, to apply critical thinking and the nursing process in the delivery of care.
 2. Students completing our program will provide evidence-based, holistic, compassionate and person-centered care respectful of the preferences, values, needs, resources and determinants of health unique to and in partnership with the client, identified support persons and the health-care team.
 3. Students completing our program will promote health equity through advocacy, health promotion, community resource partnerships, and disease prevention strategies at the individual, family, community, and population levels with consideration of social determinants of health.
 4. Students completing our program will demonstrate the ability to synthesize, translate, apply, and disseminate nursing knowledge to improve health outcomes.
 5. Students completing our program will integrate principles of safety and quality improvement into the delivery of high-quality care across complex and evolving healthcare systems to individuals, families, communities, and populations.
 6. Students completing our program will demonstrate collaborative interprofessional communication and practice to optimize the patient experience, safety, improve outcomes and reduce costs.
 7. Students completing our program will function as effective users of information and communication technologies to deliver evidence-based care in accordance with regulatory and institutional policies.
 8. Students completing our program will evaluate leadership concepts, skills, and ethical decision making in the provision and oversight of nursing practice in a variety of settings
 9. Students completing our program will create a personal and professional plan for long-term resilience, self-care, and lifelong learning.

- 4. 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]*

Montana has a statewide nursing shortage with a maldistribution of nurses in rural areas of the state. Annually, approximately 445 registered nurse (RN) position openings are predicted by the Montana Department of Labor through 2025 (AHEC, 2017). Factors associated with this statewide and regional need include an aging citizenry with co-morbidities, provider shortages, implementation of healthcare reforms, and an aging nursing workforce. The MSU College of Nursing addresses the need for BSN-prepared nurses in Montana and beyond by admitting and graduating approximately 224 BSN students annually. MSU CON is the largest supplier of Registered Nurses in Montana. While 60-65% of applicants to the nursing major are MSU pre-nursing students, approximately 35-40% are transfer students from across MUS and from out of state. Nearly all MSU BSN graduates are employed soon after graduation with approximately 80% employed in Montana. The College of Nursing has a strong history of serving Montana through two key initiatives. The Caring for Our Own Program (CO-OP) supports Native American and Alaska Native students to become nurses with the ultimate goal of improving health outcomes for Native American communities. Second, a focus on educating nurses for rural generalist practice aims to address the shortage of nurses in Montana's rural and frontier communities.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

5. 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
Montana Tech of the University of Montana	BSN	Bachelor of Science in Nursing

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 MSU College of Nursing BSN program began in 1937 and has received continuous full approval by the Montana State Board of Nursing. The program is also nationally accredited by the Commission on Collegiate Nursing Education (CCNE) through 2029. The MSU College of Nursing graduates approximately 224 BSN students annually. The Montana Tech of the University of Montana BSN program was approved in 2016 and graduates approximately 40 BSN students annually. The demand for professional nursing and the support of both BSN nursing programs remains strong.

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]

Nursing curricula are designed to reflect the communities they serve, particularly the clinical learning opportunities that are available. Hence, nursing programs typically have few if any courses in common as curricula are designed around the cornerstone of clinical coursework. Pre-requisite coursework for the nursing major is closely aligned between nursing programs, both in-state and out-of-state, allowing pre-nursing students to apply to multiple programs as desired. Currently, Montana Tech of the University of Montana’s BSN program serves the Butte area with in-person didactic and clinical education in Silver Bow County and surrounding areas. The MSU College of Nursing has had a distributed campus model since its inception in 1937 and serves the Bozeman, Billings, Great Falls, Kalispell, and Missoula areas.

6. 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 nursing course, *NRS 116 Introduction to Professional Nursing*, is a pre-requisite to the nursing major. NRS 116 is scheduled to begin fall 2021 pending final approval. The courses for the revised BSN degree will be phased in starting fall 2022. The last courses of the existing curriculum will be phased out by Spring semester 2024. See attached *Curriculum Transition Plan*. Students who enrolled under the 2020 Catalog (or older) who experience an interruption in their nursing coursework will be individually accommodated to ensure efficient completion of the BSN program.

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

Fall Headcount Enrollment	Graduates

Montana Board of Regents
CURRICULUM PROPOSAL FORM

AY 22-23	AY 23-24	AY 24-25	AY 25-26	AY 26-27	AY 22-23	AY 23-24	AY 24-25	AY 25-26	AY 26-27
560	560	448	448	448	224	336	224	224	224

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

The CON accepts BSN program applications twice a year. Based on 5 year data, qualified applicants exceed available capacity by 15-30%. Admitted students start the nursing program either spring or fall semester and are placed at one of five MSU CON campus locations based on student preference and availability (i.e., Billings – 40, Bozeman – 24, Great Falls – 16, Kalispell – 8 and Missoula – 24 = total of 112 placements). Based on 10 year data, 95-98% of admitted nursing students graduate successfully. Students who fail to complete the nursing program typically experience personal or family issues interrupting their education with a few experiencing academic failure. We do not anticipate a reduction in applications over the next five years nor a decrease in graduates. With the transition to the revised BSN curriculum, we project a one-time increase in graduates due to the shift from a five semester program of nursing coursework to a four-semester program. Hence, one semester in AY23-24 we will have “double” graduates. Thereafter, we will graduate approximately the same number of students annually that we admit (i.e., 224 students). All pre-nursing students have been noticed on the CON website and through pre-nursing advisors of proposed prerequisite and curricular changes pending anticipated university approval.

- c. What is the initial capacity for the program?

No changes to the capacity of the BSN program are anticipated between the existing and proposed revised program.

- 7. 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 BSN program is evaluated using a similar process as other academic programs in the College. The College of Nursing has a Master Evaluation Plan [MEP] which is formatted according to the four standards that must be met for ongoing national accreditation by the Commission on Collegiate Nursing Education (CCNE). Standard III refers to the “Program Quality: Curriculum and Teaching-Learning Practices” and Standard IV refers to “Program Effectiveness: Student Performance and Faculty Accomplishments.” The MEP delineates learning assessment strategies, thresholds and metrics and provides the foundational structure for continuous quality program improvement 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]*

Student learning outcomes are mapped to course objectives, program learning outcomes, national AACN competencies, and pass rates on the national licensing exam (NCLEX-RN). Exemplars reflective of student learning outcomes are assessed on a rotating cycle against established thresholds, analyzed for potential revision, and reviewed by an established faculty committee (i.e., Undergraduate Academic Affairs Committee). In addition, data from employer satisfaction surveys; first time pass rates of graduates on the NCLEX-RN exam (the licensing exam for entry into professional practice); job placement

Montana Board of Regents
CURRICULUM PROPOSAL FORM

data; and alumni satisfaction surveys are considered. Application numbers and adequacy of clinical resources are assessed regularly.

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

Direct:

1. Successful completion of all courses
2. Direct clinical supervision of student performance by qualified faculty or preceptors

Indirect:

1. NCLEX – RN annual first time attempt pass rate
2. Graduation and completion rates

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

Consistent with the Master Evaluation Plan and the College of Nursing faculty bylaws, program assessment findings are collected, documented, and reviewed by the Undergraduate Academic Affairs Committee annually. Decisions regarding individual course and overall curriculum improvements are proposed and voted upon by faculty using majority rule. Changes are documented and incorporated into the next assessment cycle.

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

The College of Nursing is nationally accredited by the Commission on Collegiate Nursing Education (CCNE) through June 2029. CCNE accreditation requires ongoing data collection, analysis, reflection, and action to ensure program quality. CCNE will be notified of this major curricular revision within 90 days of program implementation per policy and included in the next mid-cycle accreditation report due in 2023.

8. 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 College of Nursing has existing physical facilities, equipment, access to clinical learning opportunities, and simulation equipment to support the implementation of the proposed revised program at the Billings, Bozeman, Great Falls, Kalispell and Missoula nursing campus locations.

- 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 additional resources are anticipated to be required. The physical facilities, equipment, access to clinical learning opportunities, and simulation equipment required for the proposed revised BSN curriculum will be essentially unchanged from the existing BSN curriculum. The source of funds for these resources remain unchanged.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

9. 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 instructional support required for the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum. The source of funds remains unchanged.

- 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]*

In anticipation of this curricular change, MSU CON Dean Sarah Shannon met with MSU Budget Director, Megan Lasso, to carefully review the BSN program financials. Megan Lasso determined that the revenue and costs of the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum. The instructional support required for the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum.

10. 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]*

Available library and information resources are sufficient.

- 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 support services have the capacity to accommodate the curriculum revision.

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

In anticipation of this curricular change, MSU CON Dean Sarah Shannon met with MSU Budget Director, Megan Lasso, to carefully review the BSN program financials. Megan Lasso determined that the revenue and costs of the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum. The physical facilities and equipment required for the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum. The source for these remains unchanged.

- 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.

N/A: This is a revised rather than new program.

	Year 1	Year 2	Year 3
Revenues			

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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]*

In anticipation of this curricular change, MSU CON Dean Sarah Shannon met with MSU Budget Director, Megan Lasso, to carefully review the BSN program financials. Megan Lasso determined that the revenue and costs of the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum. The source of funds remains unchanged.

- 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]*

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

- 12. 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 utilizes existing undergraduate nursing student program fees of \$425 per semester.

- 13.** Complete the fiscal analysis form.

This proposal is for a revision to an existing program. Per Megan Lasso, the revenue and costs of the revised BSN curriculum will be essentially unchanged from the existing BSN curriculum.

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

Course Title	Course Description
NRSG 116 Introduction to Professional Nursing [2 cr lecture]	This course serves to provide knowledge of the origins of the profession of nursing. Content will explain the historical context of the emergence of the professional nurse and its relevance to current healthcare delivery. Content and activities expose students to issues surrounding the profession of nursing, multiple roles of nursing in society and healthcare, and concepts related to the dimensions of nursing practice: nurse, client, health, and environment
NRSG 314 Concepts in Psychosocial Nursing [2 cr lecture]	This course explores selected psychosocial concepts and theories relevant to nursing practice with clients across the lifespan in a variety of settings. Topics include the developmental impact of trauma, family theories, crisis theory, anxiety, loss, grief and other human responses; and related psychosocial nursing strategies.
NRSG 316: Pathophysiology and Pharmacotherapeutics for Nurses I [3 cr lecture]	This course introduces the abnormal functioning of human cells, tissues, and organ systems, and the physiological adaptations that occur and how pharmacotherapeutics can address some common pathological or adaptive changes across the lifespan. Integration of pharmacological and pathophysiologic principles will be addressed. The influences of nutrition, genetics, environment, culture, health determinants, age-related variations, and alternative therapies on selected diseases and pharmacotherapeutics will be emphasized. Current research in pathophysiology, pharmacotherapeutic and pharmacological management will be considered.
NRSG 317: Pathophysiology and Pharmacotherapeutics for Nurses II [3 cr lecture]	This course builds on the concepts and content of Pathophysiology and Pharmacotherapeutics for Nurses I and advances the understanding of the abnormal functioning of human cells, tissues, and organs of selected body systems, and the physiological adaptations that occur and how pharmacotherapeutics can address these pathological or adaptive changes across the lifespan. Integration of pharmacological and pathophysiologic principles will be addressed. The influences of nutrition, genetics, culture, determinants of health, age related variations, alternative therapies, and environment to selected diseases and on pharmacotherapeutics will be emphasized. Current research in pathophysiology, pharmacotherapeutic and pharmacological management will be considered.
NRSG 323: Professional Development I: Professional and Ethical Nursing [1 cr lecture]	Students will explore the ethical development of professional nursing to initiate and foster professional, culturally competent, inclusive nursing care. Ethical development including morality and obligations to cultural sensitivity and inclusion, evidence-based practice and professional nurse identity will be discussed.
NRSG 324R Professional Development II: Evidence Based Practice [2 cr lecture/1 cr R/D]	The focus of this course is to provide content related to ethical, professional, and evidence-based practice obligations of a BSN prepared RN. Basics in informatics and library search skills will be utilized. Evidence-based practice [EBP] competencies are examined and include discussion of clinical outcomes and rapid critical appraisal of research. Students will develop a scholarly project based on both existing information and student effort while utilizing nursing theory.
NRSG 327 Foundation of Nursing Care [2 cr lecture]	This course introduces the application of nursing principles, concepts and fundamental skills for safe quality nursing care. Learners use assessment data, clinical judgment and therapeutic communication to plan and provide for effective nursing care.
NRSG 328 Foundations of Nursing Care Lab	Students apply nursing principles, concepts and fundamental skills for safe quality nursing care. Learners apply assessment data and nursing process to develop the clinical

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Course Title	Course Description
[3 cr clinical lab]	judgment and therapeutic communication for effective collaboration with clients and the healthcare teams.
NRSG 329 (IL) Adult Health Assessment [2 cr lecture/ 1 cr lab]	This course uses a health-oriented approach to acquire the comprehensive skills of history taking and physical assessment needed to conduct an adult nursing assessment and professionally communicate the findings using verbal, written and electronic methods.
NRSG 332 Nursing Concepts for Health Promotion [2 cr lecture]	This course explores assessment and promotion of health for racially, ethnically, and culturally diverse individuals, families, and communities in local, state, national and global arenas. Concepts include prevention, vulnerable populations, social determinants of health, and personal self-care practices.
NRSG 334 Nursing Practice for Health Promotion [1 cr clinical lab]	This course provides the clinical experiential learning associated with Nursing Concepts for Health Promotion (NRSG 332) and includes health assessments and health promotion teaching and planning for individuals, families, and communities to promote health and prevent disease.
NRSG 354 Nursing Concepts in Reproductive Health [2 cr lecture]	The focus of this course is health promotion, disease prevention, illness management and nursing care of clients seeking sexual and reproductive services. The course will also focus on nursing concepts surrounding pregnancy, labor, delivery, post-partum, and care of the newborn.
NRSG 357 Nursing Concepts in Pediatric Care [2 cr lecture]	This course examines health promotion, disease prevention, illness management, and nursing care of children within the family context using knowledge gained from nursing, sciences, humanities, and developmental theory.
NRSG 359 Nursing Practice in Reproductive Health and Pediatric Care [3 cr clinical lab]	The focus of this course is application of health promotion, disease prevention, illness management, and nursing care concepts of children, their families and individuals seeking sexual and reproductive health service. Nursing care will take place in a variety of settings and among diverse populations in order to gain a foundational knowledge of reproductive care and care of the developing child. This course builds upon and integrates knowledge gained from nursing, sciences, and the humanities.
NRSG 400 Nursing Simulation [1-2 cr simulation lab]	This course integrates clinical learning and nursing theory in a simulation-based environment. It includes the application of nursing principles, concepts, related skills, and clinical decision making specific to the scheduled patient populations each semester.
NRSG 403 Professional Development III: Care Management [2 c lecture]	This course provides development of critical thinking, transitional planning, and delegation for patient care management. Students will examine healthcare utilization holistically across multiple settings and explore the legal, ethical and advocacy issues for patient's specific needs.
NRSG 408 Nursing Concepts in Chronic Care [2 cr lecture]	This course focuses on care of adult patients with chronic, non-curable diseases. Quality of life, altered mobility, sexuality, body image, stigma, social isolation, compliance, chronic pain, and aging provide foundation for patient-centered health promotion, palliative care, hospice, and end-of-life care.
NRSG 409 Nursing Practice in Chronic Care [2 cr clinical lab]	This course provides the clinical experiential application of care for adult patients care with chronic, non-curable diseases for patients and their families with an emphasis on patient-centered health promotion, disease and palliative care, hospice, and end-of-life care.
NRSG 412 Professional Development IV: Nursing	This course practices leadership skills with an emphasis on team evaluation, fiscal management, conflict management, staff empowerment, and change theory. It

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Course Title	Course Description
Leadership and Transition to Practice [2 cr lecture]	features planning for transition to professional practice and emphasizes mental well-being and self-care.
NRSG 426 Nursing Concepts in Population Health [2 cr lecture]	The focus of this course is the theoretical application of promoting the health of diverse communities and special populations from a public health perspective. It emphasizes a population focused nursing process, epidemiology, and population-based assessment tools for intervention design.
NRSG 427 Nursing Practice in Population Health [2 cr clinical lab]	This course provides the practice application of promoting health of diverse communities and special populations from a public health perspective. It emphasizes a population focused nursing process and uses epidemiology and population-based assessment tools to form interventions.
NRSG 431 Nursing Concepts in Psychiatric Mental Health [2 cr lecture]	The focus of this course is to attain foundational knowledge of psychopathology and nursing care of clients with acute and chronic psychiatric disorders. Social, cultural, spiritual, and environmental issues influencing mental health are explored.
NRSG 432 Nursing Practice in Psychiatric Mental Health [1 cr clinical lab]	This course is focuses on nursing care of clients with acute and chronic psychiatric disorders, including psychopathology associated with major mental illness. Community-based experiences provide opportunity for continued development of therapeutic skills to explore social, cultural, spiritual, and environmental influences.
NRSG 452 Health Policy and Economics [2 cr lecture]	Focus is on economics, public policy and political factors that affect the delivery of health and nursing care at the local, state, national and international levels. Students are encouraged to participate in efforts to influence health policy.
NRSG 470 Nursing Concepts in Acute Care [2 cr lecture]	This course advances theoretical and empirical knowledge for patient-centered care of adults experiencing acute/critical and complex health alterations. This includes an emphasis on compassionate, culturally sensitive, holistic care; professional nursing practice, interprofessional collaboration, and delivery of safe, high quality care.
NRSG 471 Nursing Practice in Acute Care [2 cr clinical lab]	Apply theoretical and empirical knowledge, professional nursing practice, interprofessional collaboration and referral to manage and deliver safe, high quality care of the adult patient experiencing acute / critical and complex health alterations in a variety of healthcare settings.
NRSG 480 Management of Healthcare Systems [2 cr lecture]	Healthcare system structure, functioning and theory is examined with emphasis on evidence-based practice, quality improvement, systems thinking and information technology. Students will focus on clinically transformative technologies, telehealth, and the nurses' role for outcome improvement.
NRSG 498 Professional Internship [3 cr clinical lab]	Supervised work-integrated learning experience to maximize independence in providing safe, efficient, high-quality patient care. Students integrate professional nursing roles of leadership, advocacy, and communication and works with an approved RN preceptor for an intensive clinical experience.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Traditional BSN Plan of Study

T-1	CR	T-2	CR
NRSG 329 (IL) Health Assessment	3	NRSG 332 Nursing Concepts in Health Promotion	2
NRSG 327 Foundations of Nursing Care	2	NRSG 334 Nursing Practice in Health Promotion	1
NRSG 328 Foundation of Nursing Lab	3	NRSG 354 Nursing Concepts in Reproductive Health	2
NRSG 323 Professional Development I	1	NRSG 357 Nursing Concepts in Pediatric Care	2
NRSG 314 Concepts in Psychosocial Nursing	2	NRSG 359 Nursing Practice in Reproductive Health & Pediatrics	3
NRSG 316 Patho/Pharm I	3	NRSG 324R Professional Development II	3
NRSG 400 Nursing Simulation	1	NRSG 317 Patho/Pharm II	3
T-1 Semester Credits	15	NRSG 400 Nursing Simulation	1
		T-1 Semester Credits	17
T-3	CR	T-4	CR
NRSG 408 Nursing Concepts in Chronic Care	2	NRSG 470 Nursing Concepts in Acute Care	2
NRSG 409 Nursing Practice in Chronic Care	2	NRSG 471 Nursing Practice in Acute Care	2
NRSG 426 Nursing Concepts in Population Health	2	NRSG 480 Management of Healthcare Systems	2
NRSG 427 Nursing Practice in Population Health	2	NRSG 452 Health Care Policy/Economics	2
NRSG 431 Nursing Concepts in Psychiatric/Mental Health	2	NRSG 498 Professional Internship	3
NRSG 432 Nursing Practice in Psychiatric/ Mental Health	1	NRSG 412 Professional Development IV	2
NRSG 403 Professional Development III	2	NRSG 400 Nursing Simulation	1
NRSG 400 Nursing Simulation	1		
T-1 Semester Credits	14	T-1 Semester Credits	14
TOTAL CREDITS			60

Direct Patient Care Clinical Credits: 14 credits = 630 hours; Simulation Credits: 4 credits = 120 simulation contact hours X 2 = 240 reported simulation hours; Total Clinical Hours: 630 + 240 = 870 clinical learning hours

REQUIRED PRE-REQUISITES	MSU COURSE NUMBER	CREDITS
Human Anatomy & Physiology I	BIOH 201	5
Human Anatomy & Physiology II	BIOH 211	4
Microbiology for Health Sciences: Infectious Diseases [with lab]	BIOM 250/251	4
Introduction to General Chemistry	CHMY 121IN/122IN	4
Introduction to Organic Chemistry and Biochemistry [will accept either organic or biochemistry for transfer students]	CHMY 123/124	4
Basic Human Nutrition	NUTR 221CS	3
Developmental Psychology – OR – Individual and Family Development: Lifespan	PSYX 230 HDFS 101IS	3 3
Introduction to Psychology – OR – Introduction to Sociology	PSYX 100IS SOCI 101IS	4 3
College Algebra	M 121Q	3
Introduction to Statistics	STAT 216Q	3
College Writing I	WRIT 101W	3
College Writing II	WRIT 201	3
Introduction to Public Speaking	COMX 111US	3
CORE (A, D, or H)	multiple	9
Nursing as a Profession	NRSG 116	2
Elective(s)		3-4
TOTAL		60
Total Traditional BSN Credits		120

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

 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**

ACADEMIC ITEMS MEMORANDUM

DATE: June 29th, 2021

TO: Chief Academic Officers, Montana University System

FROM: Brock Tessman, Deputy Commissioner for Academic, Research, and Student Affairs

RE: June 2021 Academic Items

Contained within this memorandum are Level I and Level II proposals submitted by the institutions of the Montana University System in June 2021. 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 Chief Academic Officer's conference call on July 20th, 2021. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, July 23rd. You will be notified of approved proposals by July 27th. The Board of Regents will be notified of the approved proposals at the September meeting of the Board.

LEVEL I ITEMS:

1. Campus Approvals

Miles Community College

- Notification of the establishment of a CDL Professional Certificate
[Item #401-LI0721](#)

2. OCHE Approvals

Helena College University of Montana:

- Request for authorization to retitle the C.A.S. in Machine Tool Technology and A.A. S. in Computer Aided Manufacturing
[Item #1905-LI0621](#)

Montana Technological University

- Request for authorization to retitle the "Organismal" option in the Biology B.S. to "Organismal and Ecological Studies"
[Item #1501-LI0621](#)
- Request for authorization to terminate the Drafting Technology / AEC Graphics Technology A.A.S. and the C.A.S. in Drafting Technology
[Item #1502-LI0621](#) | [Termination Form](#)

LEVEL II ITEMS:

Montana State University Bozeman:

- Request for authorization to establish a PhD in Indigenous and Rural Health
[Item #2010-LI0621](#) | [Curriculum Form](#) | [Fiscal Form](#) | [Request to Plan](#)

July 2021

ITEM 000-401-L10721

Notification of the establishment of a C. in CDL Professional Certificate

THAT

Miles Community College notifies the Montana Board of Regents of Higher Education of the establishment of a C. of 17 of CDL Professional Certificate

EXPLANATION

The federal mandates for obtaining a CDL are changing starting February 2022. The new mandates will require that additional topics are covered. In order to meet the requirements, the CDL lecture and lab courses need to be semester-long courses with additional credit hours. Accordingly, MCC is revising its CDL courses to meet the federal requirements. In addition, MCC is creating a campus-approved CDL Professional Certificate¹⁷ in order to give students the a credential upon their successful completion of HEO 123 and HEO 124.

ATTACHMENTS

Spreadsheet of Certificate Scope and Sequence, as approved by the Miles Community College Academic Standards and Curriculum Committee on May 4, 2021.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

06/21

ITEM 1905-LI0621

ITEM TITLE Request for authorization to retitle the C.A.S. in Machine Tool Technology and A.A.S. in Computer Aided Manufacturing

Institution: Helena College University of Montana

CIP Code: 48.0501(CAS) 48.0510 (AAS)

Program/Center/Institute Title: Machine Tool/Computer Aided Manufacturing

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

Options: _____

Proposal Summary [360 words maximum]

What: Helena College is proposing retitling of the existing C.A.S. in Machine Tool Technology to “C.A.S. in Manual Machining” and the A.A.S. in Computer Aided Manufacturing to “A.A.S. in CNC Machining”.

Why: The manufacturing programs have shown unstable enrollment for the past five years; and have had decreased enrollment for the past two years consecutively. This program has excellent retention and completion rates with 100% job placement. We have held multiple activities (Manufacturing nights, Fabrication Fridays etc.) to attract students to the program. The manufacturing industry is a very high demand, high skill, high paying industry with plenty of employment opportunities but we have not been able to consistently attract students to fill these programs. Last year we polled both our students as well as our advisory board members to discuss the possibility of a name change to better reflect the true nature of the program and simplify the title for the general public. It was agreed by both students and our program advisory board that a name change would be favored to potentially increase enrollment into these programs.

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

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

 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

June 2021

ITEM 1501-LI0621

Request to re-title the "Organismal Track" in Biology to the "Organismal and Ecological Studies Track"

Institution: **Montana Technological University**

CIP Code: **26.0101**

Program/Center/Institute Title: **Biology Department**

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

Options: _____

Proposal Summary [360 words maximum]

What: Montana Technological University requests authorization from the Montana Board of Regents to re-title "Organismal Track" in Biology to the "Organismal and Ecological Studies Track".

Why: The Biology degree is divided into two main tracks: (1) Cell and Modular, and (2) Organismal. Traditionally, these two tracks divide areas such as advanced chemistry and cellular/molecular biology classes. We would like to offer a greater level of diversity for the Organismal Track and rename the track to reflect these changes.

- Students in the organismal track often go into Restoration Ecology or a similar field. Many of the advanced Chemistry, Math and Anatomy classes are less relevant to the ecology-based profession and act as a hindrance to student success.
- Curriculum changes would allow for additional ecology-based classes and better academic training.

Resources: This change requires no new resources. Faculty in the department are currently teaching these courses in the curriculum.

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

 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

06-2021
Spring 2021

ITEM 195-1502-LI0621

ITEM TITLE

Institution: Highlands College

CIP Code: 15.1302

Program/Center/Institute Title: Drafting Technology/AEC Graphics Technology (Architecture/Engineering/Construction) AAS and Certificate of Applied Science in Drafting Technology

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

Options: N/A

Proposal Summary [360 words maximum]

What: Request to terminate the Drafting Technology AAS degree and the Certificate of Applied Science in Drafting Technology. Please note the Drafting Technology degree recently had a name change (186-1501-LI0120) and is now referred to as AEC Graphics Technology.

Why: Low enrollment numbers and retirement of instructor.

Resources: N/A

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>.

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

_____ **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: **Drafting Technology (Architecture/Engineering/Construction—AEC Graphics Technology) AAS and Certificate of Applied Science in Drafting Technology**

Program is being Placed into moratorium Terminated

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

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? N/A

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:

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

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

June/2021

ITEM 2010-LI0621

Request authorization for Montana State University to propose a PhD in Indigenous and Rural Health

Institution: Montana State University

CIP Code: 51.2208

Program/Center/Institute

Title: PhD in Indigenous and Rural Health/College of Education, Health and Human Development

Includes (please specify below):

Face-to-face Offering: x

Online Offering:

Blended Offering:

Options: _____

Proposal Summary [360 words maximum]

What:

This is a proposal for a PhD in Indigenous and Rural Health

Why:

The goal of the proposed program is to develop scholars, educators and practitioners who can address the health and wellness of Indigenous and rural communities in Montana and beyond. By leveraging interdisciplinary knowledge across the university, this program will prepare professionals to lead the development, implementation, and evaluation of health systems, programs and policies; direct research programs; and educate and train the next generation of health professionals. This program will be available both at a distance and onsite in Bozeman. There will be no changes to existing programs. Faculty from various colleges will be affiliated with and teaching courses in the program.

Resources:

Beginning in year 1, approximately .1 FTE of an existing faculty member's workload will be allocated by the Department of Health and Human Development to serve as the Program Director and .2 FTE of an existing staff member's time will be allocated for recruiting students, managing applications, and supporting students through the program. By year 2, or depending on enrollment, the allocation of a staff member's time may increase to .3 FTE. As a faculty line becomes available, this will be allocated to the program within the Department of Health and Human Development or another collaborating department to provide program and student support and coordination.

Sources: Existing faculty and staff in the Department of Health and Human Development will assume the roles described above. The faculty member will be one who has been involved in the development of the program with expertise in community and indigenous health. The staff member will be one who is accustomed to working with graduate programs and whose responsibilities will be adjusted to accommodate new tasks. As a faculty line becomes available, and depending on program enrollment, an appropriate national search will be conducted for someone who is a leader in the area of Indigenous and/or rural health. Start-up for the faculty member will come from grant resources. The new faculty member will take responsibility for the new core coursework of the program: CHTH 6xx Introduction to Indigenous and Rural Health and CHTH 6xx Seminar – 1 week on campus each summer (1 credit).

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ATTACHMENTS

Curriculum Proposal form
Fiscal Analysis
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

 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:**

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

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST 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]*

The goal of the proposed program is to develop scholars, educators and practitioners who can address the health and wellness of Indigenous and rural communities in Montana and beyond. By leveraging interdisciplinary knowledge across the university, this program will prepare professionals to lead the development, implementation, and evaluation of health systems, programs and policies; direct research programs; and educate and train the next generation of health professionals. This program will be available both at a distance and onsite in Bozeman. There will be no changes to existing programs. Faculty from various colleges will be affiliated with and teaching courses in the program.

- 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 is in alignment with MSU's mission to integrate education, knowledge creation, and service to communities. This program addresses the three intentional focus areas outlined in MSU's 2019 "Choosing Promise" Strategic plan and aligns with several priorities in the MSU Academic Priority and Planning Statement:

Intentional Focus 1: This program will support MSU's goal to "expand high-quality graduate education" both in terms of balancing our portfolio of degrees offered (goal 1.2.1) and increasing the number of research doctoral degrees awarded annually (goals 1.2.3).

Intentional Focus 2: This program will support MSU to reach its goal of enhancing "the significance and Impact of scholarship." Students affiliated with this program will engage in interdisciplinary scholarship that addresses "access and equity in education and health outcomes" thus "promoting wellness in our Montana communities" (goal 2.1.1; and a "Grand Challenges" topic area). In addition, this PhD program will help enhance the education of "graduate students through increased participation in research" (goal 2.1.3).

Intentional Focus 3: This program will support MSU to "increase mutually beneficial collaborations with tribal nations and partners." This program will "improve and increase tribal partnerships with mutually defined outcomes" (goal 3.1.2) and is "tailored to demonstrated state and region needs with attention to national trends" (goal 3.2.4).

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

A planning group comprised of faculty from five MSU-Bozeman colleges, staff and faculty from four MSU research centers, the WWAMI program, and staff from five health-related agencies across Montana have been meeting over the past two years to co-create this interdisciplinary doctoral program in the social,

Montana Board of Regents
CURRICULUM PROPOSAL FORM

behavioral, health and natural sciences. The Intent to Plan was approved by the BOR in September 2019 and group meetings have been occurring to develop the materials for this form.

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

There are five colleges at MSU who are involved in this proposed new curriculum: Education, Health and Human Development; Agriculture; Nursing; Business; and Letters and Science. Appendix A provides details on the new curriculum.

- a. List the program requirements using the following table.

	Credits
Dissertation credits	18-28
Credits in core doctoral curriculum	5
Credits of electives determined by doctoral committees	27-37
Total credits required to complete the program	60

- 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.

MSU Indigenous and Rural Health PhD Program Core Competencies

- ⇒ Competency A: Incorporate knowledge of Indigenous and rural cultures, epidemiology, sociology, anthropology, psychology, environmental health, healthcare systems, public health, health equity, and traditional epistemologies into Indigenous and rural health efforts.
- ⇒ Competency B: Partner with Indigenous and rural communities using community-based participatory approaches to improve health and wellbeing at the individual, family, organizational, policy and systems levels.
- ⇒ Competency C: Assess and use communication strategies across diverse audiences to inform and influence individual, organization, community, policy, and research actions.
- ⇒ Competency D: Apply systems level thinking and community ways of knowing to synthesize research, theory, and community knowledge in the needs and assets assessment, design, implementation, and evaluation of health policies, practices and programs.
- ⇒ Competency E: Critically assess various research paradigms and methodologies in the design, implementation and evaluation of health policies, practices and programs.
- ⇒ Competency F: Apply management skills that use strategic and operational guidance for both public and private organizations for achieving individual and community health.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

⇒ Competency G: Engage leadership skills for influencing decision-making regarding policies, practices and programs that advance the health of Indigenous and rural communities.

How remote learners will be accommodated in this program:

Students enrolled in the PhD in Indigenous and Rural health program will be in a face-to-face program with accommodations for remote learners. The required classes include “Introduction to Indigenous and Rural Health.” This is a new course to be developed and will be offered as a hybrid course where students can participate in the classroom or online through WebEx or another similar modality used by the professor. The other required core course is the Seminar, which is a 1 credit, 1-week summer course. The purpose of the summer course is to build a community across the cohort which may be especially important for the distance students. Therefore, this 1 credit seminar during the summer will be a required in-person session. The program is designed to be responsive to student interests and needs and therefore the rest of the program courses will be decided by the student and their committee. The proposal provides a list of optional elective courses. There is a mix of distance, in-person, and hybrid across the areas of focus that the student may select. Through these options the student may select all distance courses or all in-person or a mixture to meet degree requirements.

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 Healthcare Workforce Advisory Committee's (MHWAC) statewide strategic plan¹ cites a need to transform the workforce to meet the state's unique health-related challenges through academic degree programs tailored to meet demonstrated state and regional needs. They cite the need for research, policy, and health systems development that will address existing health disparities in the state. These needs can be directly addressed by graduates of this program.

MHWAC's strategic plan also suggests utilizing the best practice of "growing your own" as a method to meet workforce demands and of providing academic programs to those in rural and underserved areas. With the options of distance and onsite learning, tribal and other college and university health programs can advance training for workers who are in tribal, county, and state health departments. This includes those in nursing, as there is a lack of PhD programs for this audience. Professionals in these positions from other states can also take advantage of this program.

PhD-trained health scientists are needed to solve intractable health disparities that our state faces. This includes the 18- year in median age at death difference between whites and American Indians (AIs) in the state, the highest per capita suicide rate in the nation and an average household income that consistently trends \$7,000 or more below the national average with housing, food, and healthcare costs comparable to or higher than the national average. Altering these statistics calls for innovative, multidisciplinary and collaborative solutions generated by the research of emerging health scientists.

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	PhD	Public Health

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] 18 words

The PhD program identified above is the most closely related program, but the proposed program does not duplicate the program at UM. This program will be offered both in-person and on-line, meeting the need for students who wish to remain in their communities. The program at the University of Montana is an on-campus program. We have heard from potential students who would like to continue working full-time and enroll in this degree program. Also, the UM program focuses on public health and this PhD program has a broader lens that includes courses from four colleges. Faculty who are affiliated with this program are in the colleges of Business, Nursing, Agriculture, Education, Health and Human Development and Letters and Science. Therefore, students will be able to have committee members spanning multiple colleges and areas of expertise and will be exposed to interdisciplinary course content in both rural and Indigenous health. A student may have committee members who provide expertise to their dissertation research in areas spanning public health nursing, business, sociology, Native American studies, and community health. For example, a dissertation could be on the stresses experienced by Indian Health Service nurses during COVID-19 and the impact of these stresses on staffing shortages. Students will also be able to take advantage of the Indigenous Research Institute, a new interdisciplinary center at MSU. Team science and interdisciplinary science are burgeoning fields and research shows that work done through these approaches leads to better and more sustainable outcomes. Therefore, the graduates will be prepared to address complex and entrenched health inequities. We believe there's room for multiple programs in Montana that focus on Indigenous and rural health. For example, an Indigenous Health PhD program that began Fall 2020 at the University of North Dakota received over 300 inquiries for their program in the first few weeks after the program was announced. Their program has 14 student slots.

- 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]

We informed UM about the development of this program and sent them a copy of the Intent to Plan document.

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]

Students can matriculate into the program beginning Fall 2021.

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

Fall Headcount Enrollment					Graduates				
AY 21	AY 22	AY 23	AY 24	AY 25	AY 21	AY 22	AY 23	AY 24	AY 25
12	24	34	40	46	0	0	5	10	10

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

An email and survey were sent to the deans of the participating colleges and to all faculty involved with the development of this curricula with information about this program and for the deans, a request to send the email to faculty in their college. Faculty interested in affiliating with this program were asked to complete an affiliate faculty survey that included a description of their research interests and activities and how those relate to Indigenous and/or Rural Health, their mentoring philosophy, potential funding for students, and a projection of how many students they would be interested in matriculating each year from 2021-2025. Enrollment and graduation projections came from the responses to the survey. A total of 21 faculty responded that they were interested in affiliating with this program. Data for this section came from the survey. Regarding student demand, as stated above, an Indigenous Health PhD program that began Fall 2020 at the University of North Dakota received over 300 inquiries for their program in the first few weeks after the program was announced. Their program has 14 student slots.

c. What is the initial capacity for the program?

Fall headcount enrollment projections for the table above came from the 21 faculty members who are interested in serving as Chair for students in the program.

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 assessed by monitoring the successful matriculation of students through coursework, comprehensive examinations, and dissertation completion in 3-4 years for full-time students. An additional measure of success will be placement of our graduates in academic, research, government, and industry positions upon completion of the degree. Success of the program will also include that students feel supported by the program and faculty and that their well-being is an important component of their success. Students will participate in an annual meeting (see a below) and an exit interview to provide additional data on program success and challenges. Exit interviews will also be held with students who step out of the program before completion.

If success is not achieved according to the definition above, faculty who are affiliated with the program will meet to review the results and develop a plan for course correction.

- 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]*
 - Upon matriculation into the program and with review and update each year, students will complete an Individualized Professional Development Plan with their Chair to set goals and provide a formative evaluation of their progress.
 - Annual meetings of the student and their committee will be held to evaluate how well students are achieving learning outcomes and to evaluate students' perspective of their success and support. These meetings will be convened by the students' committee chair.
 - Data will be collected regarding time course of milestone completion. Details of course completion, assessment from comprehensive exams and dissertation defenses will be recorded and monitored so that problems can be detected and acted upon in a proactive and timely fashion and success of the program can be evaluated.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- Student presentations and publications will be documented.
- Independent teaching and evaluations of teaching for the students will be monitored and recorded.
- Post-graduation placements will be tracked.

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

The primary direct measures used to assess student learning will be course grades, comprehensive examination performance and the PhD dissertation defense. The PhD program comprehensive exam will be conducted by the students' committee, typically in the beginning of the third year of the program. Students will prepare a grant proposal based on one or more elements of his/her proposed dissertation prior to an oral exam. Results of the annual meeting of the student and their committee and Individualized Professional Development Plan will also be used to assess student learning.

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

A committee of faculty members across the four colleges will be developed. The committee will review outcome metrics on an annual basis and work collectively to elevate program quality over time. Student feedback and perspectives will be included in this assessment. Individuals representing agencies involved in planning this PhD program may also participate in this committee. Feedback will be given to all affiliate faculty with opportunity for feedback and input.

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

Accreditation will occur through the NWCCU for Montana State University as a whole. No other accreditations are applicable to this program.

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]*

Biomedical and health research represents a prominent area of MSU's research expenditures from sources such as the National Institutes of Health, Departments of Energy, Defense and Agriculture, and private sources. Faculty who will be affiliated with this program have laboratories that are well-equipped with state-of-the-art technology for cutting edge research. Additional work is conducted in community and field settings.

MSU hosts several programs that directly engage in or support biomedical research and provide faculty and students excellent research opportunities. Facilities are available for multiple students through three of these programs: Montana INBRE program, a \$5.4 million grant from National Institutes of Health (NIH) to enhance research into emerging infectious diseases and zoonotic diseases, and is now being practiced in a \$10.7 million NIH grant to fund the Center for Health Equity Research (CAIRHE) and in a \$20 million NIH grant to fund the American Indian/Alaska Native Clinical and Translational (CTRIN) project to continue

Montana Board of Regents
CURRICULUM PROPOSAL FORM

to the work of the Montana INBRE program, this time with a special focus on building research capacity in tribal and rural regions.

Existing labs and facilities have the ability to accommodate increased use from students in this program.

- 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 additional facilities, equipment, space, laboratory instruments 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] 193 words*

Instructional: Over 20 MSU faculty members from 5 colleges have signed on as affiliate faculty members of this program. They will teach graduate courses and serve as committee chairs and members for PhD students. Faculty members who teach other courses identified as relevant to this PhD program have agreed to allow students in this program to enroll in their courses. All faculty members stated that they have room in their courses for these students and welcome these students who will provide additional viewpoints and experiences. Therefore, the impact on existing programs will be minimal and likely positive.

Student support: Montana INBRE, the Center for American Indian and Rural Health Equity (CAIRHE) and the American Indian/Alaska Native Alaska Center for Translational Research Program (CTR), are all National Institutes of Health funded (approximate total \$50 million) and will be able to fund approximately graduate students within each center (1-2 through INBRE, 1-2 through CAIRHE and 1 through the CTR). Internal funding from the CAIRHE program can be used to support students. These students will be conducting research in American Indian and rural health equity within their funded research projects and will enhance research conducted through these centers.

- 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]*

Beginning in year 1, approximately .1 FTE of an existing faculty member's workload will be allocated by the Department of Health and Human Development to serve as the Program Director and .2 FTE of an existing staff member's time will be allocated for recruiting students, managing applications, and supporting students through the program. By year 2 or, depending on enrollment, the allocation of a staff member's time may increase to .3 FTE. As a faculty line becomes available, this will be allocated to the program within the Department of Health and Human Development or another collaborating department to provide program and student support and coordination.

Sources: Existing faculty and staff in the Department of Health and Human Development will assume the roles described above. The faculty member will be one who has been involved in the development of the program with expertise in community and indigenous health. The staff member will be one who is

Montana Board of Regents
CURRICULUM PROPOSAL FORM

accustomed to working with graduate programs and whose responsibilities will be adjusted to accommodate new tasks. As a faculty line becomes available, and depending on program enrollment, an appropriate national search will be conducted for someone who is a leader in the area of Indigenous and/or rural health. Start-up for the faculty member will come from grant resources. The new faculty member will take responsibility for the new core coursework of the program: CHTH 6xx Introduction to Indigenous and Rural Health and CHTH 6xx Seminar – 1 week on campus each summer (1 credit).

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]*

Available library and information 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 student services have the capacity to accommodate the proposed program. We envision no implications 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]*

This program provides a net revenue as a result of expected enrollment. Additional revenue is expected to come from the enhanced research capacity that these students will provide such that there will be a positive increase in research expenditures and indirect costs. No graduate teaching assistantships are requested for this program. Students will be self-paying or supported by graduate research assistantships included in external grants.

- 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	\$49,970	\$180,912	\$191,582
Expenses	\$34,960	\$180,912	\$188,037
Net Income/Deficit (revenues-expenses)	\$15,010	\$0	\$3,544

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

Personnel needs are described under 10B. We will hold a weeklong program orientation and have received a commitment of \$10,000 for the orientation from the Montana INBRE program and the Center for American Indian and Rural Health Equity for the first year.

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]*

The college will reallocate faculty and staff time internally to support this program. At this time, no additional institutional support has been identified or budgeted for the program and no new or additional faculty lines or GTA support are available from central sources to support this program. Depending on enrollment, the college will repurpose a faculty line as one becomes available.

- 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]*

As needed, funding for start-up for a new faculty member (if a line becomes available) will come from the Center for American Indian and Rural Health Equity (CAIRHE) grant and will be time-limited to three years, so will not need to be sustained. Funding for the orientation will be coming from INBRE for the initial year. The orientation is a credit-bearing experience, so funding will be sustained by the summer tuition model when enrollment in the summer course is adequate.

- 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]*

See iii above.

- 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 will be imposed. .

- 14.** Complete the fiscal analysis form.

Completed.

Montana Board of Regents

CURRICULUM PROPOSAL FORM

<u>Signature/Date</u>	DocuSigned by: <i>Alison Harmon</i> 8596262C40F2420...	6/15/2021 1:01 PM MDT
College or School Dean:	DocuSigned by: <i>Robert Mokwa</i> 212A28411AC04BD...	6/15/2021 1:01 PM MDT
Chief Academic Officer:	DocuSigned by: <i>[Signature]</i> 7D6A4CE96C3F415...	6/15/2021 1:01 PM MDT
Chief Executive Officer:	DocuSigned by: <i>Robert Mokwa</i> 212A28411AC04BD...	6/15/2021 1:01 PM MDT
Flagship Provost*:	DocuSigned by: <i>[Signature]</i> 7D6A4CE96C3F415...	6/15/2021 1:01 PM MDT
Flagship President*:	DocuSigned by: <i>[Signature]</i> 7D6A4CE96C3F415...	6/15/2021 1:01 PM MDT

*Not applicable to the Community Colleges.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

Admission Requirements: Bachelor’s Degree or Master’s Degree or equivalent from an accredited college or university.

Application Requirements

1. Completed MSU Graduate School Application and meet Graduate School requirements.
2. Curriculum Vita/Resume
3. Personal essay (2-3 typed, double-spaced pages) addressing: research interests and experiences, alignment with faculty interests and expertise, and professional goals.
4. Three letters of recommendation, at least one from the candidate’s master’s committee if applicant has a master’s degree.
5. Official academic transcripts from prior degrees and coursework.

Admissions Committee

An admissions committee made up of affiliate faculty who will serve as PhD committee chairs or committee members will serve as the admissions committee to evaluate applications and admit students to the PhD program. The admissions committee will include a representative from each of the four participating colleges. In order to be admitted to the program, there needs to be an affiliated faculty member who agrees to accept a student into the program and to act as their advisor/committee chair/mentor.

Program Requirements:

1. Completion of 60 credits, including 18-28 dissertation credits
2. Completion of comprehensive examination
3. Completion of dissertation

Committee Requirements:

Doctoral committees will be made up of at least four PhD prepared individuals with appropriate expertise. At least two committee members will be faculty who are officially affiliated with the PhD program. For students whose research focuses on community application, an additional committee member with applied expertise may be added. These committee members may come from the community in which the student’s research is being conducted.

Comprehensive Examination:

The PhD program comprehensive exam will be conducted by the student’s committee, typically in the beginning of the third year of the program. Students will prepare a grant proposal based on one or more elements of his/her proposed dissertation research. The proposal will be prepared according to specifications of a potential funding source that is relevant to the student’s career trajectory. For example, if a student is interested in a practice-based career, they may write a grant proposal for a project grant from agencies such as the Centers for Disease Control and Prevention, Substance Abuse and Mental Health Services, the Montana Healthcare Foundation, Robert Wood Johnson Foundation, or the Headwaters Foundation. If a student is interested in a research-based career, they may write a grant proposal for a research grant from agencies such as the National Institutes of Health or the National Science Foundation. The choice of topic and agency or organization will be a collaborative decision between the student and their committee. The proposal will be submitted to the committee a minimum of seven days prior to an oral exam. The oral exam will consist of questions relating to the contents of the grant proposal.

Dissertation Requirements:

Students in the Indigenous and Rural Health PhD program will complete dissertations and can select either an academic track or an applied track depending on their career goals after graduation. The academic track will likely take the form of the Manuscript Format Option of the Montana State University Graduate School, with a minimum of three completed manuscripts. The applied track will be focused on meeting community-defined interests and needs, where students, in consultation with their committee and community, will select three projects to complete such as a community needs

Montana Board of Regents
CURRICULUM PROPOSAL FORM

assessment, program evaluation, and other projects that assist community well-being. This option will include a community presentation/workshop/report back (how it helped the community – what are they leaving with the community) and a public presentation defense to their committee and public. This option can include completed manuscripts.

Indigenous and Rural Health Curriculum

Option 1a: Master's and PhD at MSU (3.5-4 years to complete PhD)

MS in Community Health

Required Courses

Credits

These do not count toward the PhD program

HHD 501	Professional Communication Skills in HHD	3
HHD 512	Research Methods in HHD	3
HDFS 515	Statistical Approaches to Studying Children/Families/Communities	3
or		
EDCI 501	Educational Statistics I	3
CHTH 575	Professional Paper and Project	6

Example courses that count toward the PhD program

CHTH 503	Community-based Participatory Research	3
CHTH 540	Principles of Epidemiology	3
CHTH 548	Program Planning and Evaluation	3
CHTH 502	Theories and Models in Health	3
HDCO 554	Developmental Theory Across the Lifespan	3

Total MS Program	30
Transfer to PhD	15

Core Courses

Credits

CHTH 6xx Introduction to Indigenous and Rural Health (this is a new course to be developed)	3
CHTH 6xx Seminar – 1 week on campus each summer/1 credit/seminar (this is a new course to be developed)	2
CHTH 690 – Dissertation	18-28
Electives determined by doctoral committee (including 15 transferred; see list of electives below)	27-37
Total credits required to complete the program	60

Indigenous and Rural Health Curriculum

Option 1b: Master's done elsewhere, start directly into PhD (3 years depending on prior coursework)

Up to 21 credits from prior master's degree can be considered for PhD (exact courses to be considered for credit determined by department)

Montana Board of Regents
CURRICULUM PROPOSAL FORM

<u>Core Courses</u>	<u>Credits</u>
CHTH 6xx Introduction to Indigenous and Rural Health (this is a new course to be developed)	3
CHTH 6xx Seminar – 1 week on campus each summer/1 credit/ (this is a new course to be developed)	2
CHTH 690 – Dissertation	18-28
Electives determined by doctoral committee (including maximum of 21 transferred; see list of electives below)	27-37
Total credits required to complete the program	60

Indigenous and Rural Health Curriculum

Option 2: Nursing; start program with BSN; 3-year program

If a student comes in with graduate credits, they may transfer up to 21 credits into PhD (exact courses to be transferred for credit determined by College of Nursing). Students in this option may receive a master's degree in community health if they decide to leave the program prior to completing the PhD requirements. Students must meet community health master's degree requirements to receive this degree.

<u>Core Courses</u>	<u>Credits</u>
CHTH 6xx Introduction to Indigenous and Rural Health (this is a new course to be developed)	3
CHTH 6xx Seminar – 1 week on campus each summer/1 credit/ (this is a new course to be developed)	2
CHTH 690 – Dissertation	18-28
Electives determined by doctoral committee (including 21 transferred; see list of electives below)	27-37
Total credits required to complete the program	60

Electives

Area: Environmental Health/Infectious Disease

MB 527 Toxicology (approved for program – distance)	3
LRES 507 Environmental Risk Assessment (approved for program – distance and in-person)	3
MB530 Virology (approved for program – currently in-person)	3
MB539 Infection and Immunity (approved for program – distance)	3
MB 560 Infectious Disease Ecology & Spillover (approved for program – currently in-person)	3
MB536 Exploring Microbiology (approval for program pending – Nancy Burritt last instructor on record)	3

Montana Board of Regents
CURRICULUM PROPOSAL FORM

MB540 Environmental Microbiology (approval for program pending – Nancy Burritt last instructor on record)	3
 <u>Area: Native American History</u>	
NASX 550 Native Americans: Dispelling the Myths (approved for program – distance 2019)	3
 <u>Area: Native American and Rural Health Methods and Ethics</u>	
NASX 541 Critical Approach to NAS Methods (approved for program – in person 2019)	3
BIOB 524 Ethical Practice of Science (approved for program – in person)	3
 <u>Area: Health Policy</u>	
NASX 530 Federal Law and Indian Policy (approved for program – distance 2020)	3
NRSRG 612 Ethics, Law, and Policy for Advocacy in Healthcare (approved for program – distance)	3
 <u>Area: Health Systems</u>	
MEDS 515 Ecology of Health and Medicine - Foundations (note: taught in increments over multiple semesters. Approved for program – possible distance option)	1
NRSRG 608 Design of health care Delivery Systems (approved for program – distance)	3
NRSRG 613 Finance & Budget of health care systems (approved for program – distance)	2
 <u>Area: Programming and Evaluation</u>	
CHTH 548 Program Planning and Evaluation (approved for program - distance)	3
NASX 570 Indigenous Planning: Strategic Economic and Human Development Approaches (approved for program – distance 2019)	3
NRSRG 611 Program Planning & Evaluation, Outcomes, & Quality Improvement (approved for program – distance)	3
AGED 507 Program Planning and Evaluation (approved for program – distance)	3
EDCI 504 Assessment and Evaluation in Education (approved for program - online)	3
CHTH 502 Theories and Models in Health (approved for program – currently in-person)	3
 <u>Area: Research Methods and Statistics</u>	
CHTH 540 Principles of Epidemiology (approved for program)	3
MEDS 595 Research Methods (Approved for program – possible distance option)	6
HDFS 515 Statistical Approaches to Studying Children, Families and Communities (approved for program – distance option – does not transfer over from master’s program)	3

Montana Board of Regents
CURRICULUM PROPOSAL FORM

EDU 613 Indigenous Methodologies in Educational Research (approved for program – typically in-person)	3
PSCI 551 Research Methods for Public Administrators (approved for program – on-site only)	3
NASX 542 Research Praxis in Native American Studies (approved for program – in person 2020)	6
NRSG 605 Evidence Based Practice II (approved for program)	3
NRSG 606 Statistical Applications (approved for program)	3
EDCI 501 Educational Statistics I (approved for program - online)	3
EDCI 506 Applied Educational Research (approved for program - online)	3
EDCI 604 Advanced Ed Psych (approved for program - online)	3
EDU 602 Educational Statistics II (approved for program – hybrid/online)	3
EDU 606 Mixed Methods Research (approved for program – weekend currently)	3
EDU 607 Quantitative Education Research (approved for program – weekend/online)	3
EDU 608 Advanced Quantitative Research (approved for program - weekend)	3
EDU 610 Qualitative Educational Research (approved for program - weekend)	3
EDU 611 Advanced Qualitative Research (approved for program – weekend/online)	3
 <u>Area: Leadership Skills</u>	
EDLD 643 Leading Social Justice (approved for program – currently in-person)	3
 <u>Area: Indigenous and rural food systems</u>	
NASX 515 Native Food Systems (approved for program – in person 2019/2020)	3
NUTR 520 Advanced Diet and Disease Systems (approved for program)	3
 <u>Area: Cultural competency/humility</u>	
HDCO 563 Multicultural Awareness (approved for program – in person)	3
EDU 612 Critical Race Theory (approved for program – in person typically)	3
 <u>Area: CBPR and other community-led research methods</u>	
CHTH 503 Community-Based Participatory Research (approved for program – distance?)	3
EDU 617 Participatory Research in Education	3

Montana Board of Regents
CURRICULUM PROPOSAL FORM

(approved for program – typically in-person)

Area: Mental/Emotional/Behavioral health

PSYX 584 Stress and Health (approved for program – on-site only)	3
HHD course being developed: Professional issues in mental health (approval for program pending – distance course in summer – approval fall 2020)	3
HHD course being developed: Introduction to mental health (approval for program pending – distance course in summer – approval fall 2020)	3
HHD course being developed: Communication and helping skills (approval for program pending – distance course in summer – approval fall 2020)	3
HHD course being developed: Lens of helping and being helped (approval for program pending – distance course in summer – approval fall 2020)	3

Area: Social determinants of Health/Health disparities

MEDS 624 Health Equity and Community Organizing (Approved for program – possible distance option)	1
NRSRG 614 Vulnerability and Health Care in Diverse Communities (approved for program – distance)	4
PSYX 562 Psychology of Prejudice, Stereotypes, Discrimination and Stigma (approved for program)	3

Area: Anatomy & Physiology

BIOH 595 Anatomy & Physiology for Teachers (sent message to Scott Taylor)	3
--	---

Area: Teaching

EDLD 501 Foundations of Adult Education (approved for program - online)	3
EDLD 509 Issues and Trends in Higher Education (approved for program - online)	3
EDLD 512 Finance and Administration in Higher Education (approved for program – summer hybrid)	3
EDLD 529 Post-Secondary Distance Delivered Education (approved for program - online)	3
EDLD 531 Student Development Theory (approved for program – currently in person)	3
EDLD 533 Law and Policy in Higher Education (approved for program – currently in person)	3
EDLD 535 Student Services (approved for program – currently in person)	3
EDLD 543 Social Justice in Education (approved for program – note: not offered in awhile)	3
EDLD 605 Higher Education History and Philosophy (approved for program – currently in person)	3
EDLD 616 Organization and Administration of Higher Education (approved for program – currently in person)	3
EDLD 628 College Students (approved for program – currently in person)	3

Montana Board of Regents
CURRICULUM PROPOSAL FORM

EDLD 635 College Teaching (approved for program – currently in person, may go online)	3
EDLD 614 Planning Program Assessment (approved for program – currently in person, may go online)	3
EDU 637 Institutional Research and Assessment (approved for program – currently in person)	3
NASX 523 American Indians and Minorities in Higher Education (approved for program – distance? Note: not offered in awhile)	3

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	Bozeman
AWARD LEVEL:	Grad
PROGRAM NAME:	Indigenous and Rural Health PhD
PROGRAM CODE:	

	FY2022	FY2023	FY2024	FY2025	FY2026
ENROLLMENT PROJECTIONS					
Headcount					
annual unduplicated headcount of students with declared major or minor within the program	12	24	34	40	46
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	6	12	17	20	23
Completions					
Annual number of program completers	0	0	5	10	10

REVENUE					
Tuition Revenue (net of waivers)	\$49,970	\$99,940	\$141,582	\$166,567	\$191,552
Institutional Support		\$30,972			
Other Outside Funds (grants, gifts, etc.)		\$50,000	\$50,000	\$50,000	
Program Tuition/Fees					
Total Revenue	\$49,970	\$180,912	\$191,582	\$216,567	\$191,552
Total Revenue per Student FTE	\$8,328	\$15,076	\$11,270	\$10,828	\$8,328

EXPENDITURES						
Tenure Track Faculty	FTE	0.1	1.1	1.1	1.1	1.1
	Salary + Benefits	\$10,711	\$106,663	\$106,663	\$106,663	\$106,663
Non-tenure Track Faculty <small>*Includes Adjunct Instructors</small>	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Graduate Teaching Assistants	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Staff	FTE	0.2	0.2	0.3	0.3	0.3
	Salary + Benefits	\$14,250	\$14,250	\$21,374	\$21,374	\$21,374
Total Faculty & Staff	FTE	0.3	1.3	1.4	1.4	1.4
	Salary + Benefits	\$24,960	\$120,912	\$128,037	\$128,037	\$128,037
Operations (supplies, travel, rent, etc)		\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Start-up Expenses (OTO)			\$50,000	\$50,000	\$50,000	
Total Expenses		\$34,960	\$180,912	\$188,037	\$188,037	\$138,037
Student FTE to Faculty (TT + NTT) Ratio		60.0	10.9	15.5	18.2	20.9
Net Income/Deficit (Revenue - Expenses)		\$15,010	\$0	\$3,544	\$28,529	\$53,514

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:  6/16/2021 | 1:52 PM MDT
5302B65C2C4746C...

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Approval of the fiscal form by the CFO does not guarantee funding for the expenditures described in the form or the proposal. The expectation is that funding for the program will be acquired from donors, external grants and by reallocation of internal funding within the unit or college. If these sources of funding are not sufficient to cover the estimated cost of the new program, then a request for additional institutional funding would need to be included in the normal campus processes for acquiring institutional investments.

Montana University System
REQUEST TO PLAN FORM

ITEM 194-2015-R0521**Meeting Date: May, 2021****Item Name: Request for authorization to establish a PhD in Indigenous and Rural Health**Program/Center/Institute Title: **PhD in Indigenous and Rural Health**Planned 6-digit CIP code: **51.2208**Campus, School/Department: **MSU-Bozeman, Colleges of EHHD, CLS, CON,
COA, Health and Human Development Dept**Expected Final Submission Date: **June 2021**Contact Name/Info: **Suzanne Held, Suzanne@montana.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.

By leveraging interdisciplinary knowledge across the university, this doctoral program will prepare professionals equipped to lead the development, implementation, and evaluation of health systems, programs and policies; direct research programs; and educate and train the next generation of health professionals. Students will learn to apply best practice including Indigenous research methods, community engagement, health care systems and policy, public health infrastructure, environmental health, social determinants of health, Indigenous wellness knowledge preservation and interdisciplinary and mixed qualitative and quantitative methods. We intend for this program to be available to students both at a distance and onsite in Bozeman through a blended teaching modality. The goal is to develop scholars, educators and practitioners who can address the health concerns and needs of Indigenous and rural communities in Montana and beyond.

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).

The Montana Healthcare Workforce Advisory Committee's (MHWAC) statewide strategic plan¹ cites a need to transform the workforce to meet the state's unique health-related challenges through academic degree programs tailored to meet demonstrated state and regional needs. They cite the need for research, policy development, and health systems development that will address existing health disparities in the state. These needs can be directly addressed by graduates of this interdisciplinary PhD program.

MHWAC's strategic plan also suggests utilizing the best practice of "growing your own" as a method to meet workforce demands and of providing academic programs to those in rural and underserved areas. With the options of distance and onsite learning, workers who are in tribal, county, and state health departments and tribal and other college and university health programs can advance their training. This includes those in nursing, as there is a lack of PhD programs for this audience. Professionals in these positions from other states can also take advantage of this program.

PhD-prepared health scientists are needed to solve health issues faced by Montana. For example, there is a disparity in median age at death between whites and American Indians in the state with American Indians having life expectancies that are 18 years shorter than white—this equates to American Indians having approximately three quarters the typical life expectancy of whites². Another challenge Montana faces is reducing the highest per capita suicide rate in the nation,

Montana University System
REQUEST TO PLAN FORM

which has risen 38% in the last decade to nearly double the national average³. Additionally, the state faces unique economic challenges as the average household income consistently trends \$7,000 or more below the national average with housing, food, and healthcare costs comparable to or higher than national average^{4,5}. Altering these statistics calls for innovative, multi-disciplinary and collaborative solutions generated by the research of emerging health scientists.

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

Beginning in year 1, approximately .1 FTE of an existing faculty member's workload will be allocated by the Department of Health and Human Development to serve as the Program Director and .2 FTE of an existing staff member's time will be allocated for recruiting students, managing applications, and supporting students through the program. By year 2, or depending on enrollment, the allocation of a staff member's time may increase to .3 FTE. As a faculty line becomes available, this will be allocated to the program within the Department of Health and Human Development or another collaborating department to provide program and student support and coordination.

Existing faculty and staff in the Department of Health and Human Development will assume the roles described above. The faculty member committing .1 FTE will have expertise in community and Indigenous health. The staff member will be one who is accustomed to working with graduate programs and whose responsibilities will be adjusted to accommodate new tasks. As a faculty line becomes available, and depending on program enrollment, an appropriate national search will be conducted for someone who is a leader in the area of Indigenous and/or rural health. Start-up for the faculty member will come from grant resources. The new faculty member will take responsibility for the new core coursework 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).

Faculty from four colleges, four centers, and the University of Washington School of Medicine regional medical school in Montana (WWAMI program), including MSU Extension specialists, with support from multiple health-related agencies are creating this interdisciplinary doctoral program in the social, behavioral, health and natural sciences. Faculty currently involved in planning are from disciplines including agriculture, anthropology, business, community health, engineering, graphic design, Native American Studies, sociology, nutrition, psychology, nursing, environmental health, microbiology, medicine, and as well as WWAMI, and four centers working in this area: IDEa Network of Biomedical Research Excellence (INBRE), the Center for American Indian and Rural Health Equity, the Center for Mental Health Research and Recovery, and the American Indian/Alaska Native Center for Translational Research. Planning members also represent relevant health-related agencies including Montana's Office of Rural Health, the Montana Area Health Education Center, the Montana Healthcare Foundation, the Rocky Mountain Tribal Leaders Council–Epidemiology Center and the Billings Area Indian Health Service.

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 will align with MSU's mission to integrate education, knowledge creation, and service to communities. This program addresses the intentional focus areas outlined in MSU's 2019 "Choosing Promise" Strategic plan and aligns with several priorities in the MSU Academic Priority and Planning Statement:

Montana University System REQUEST TO PLAN FORM

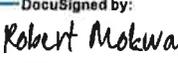
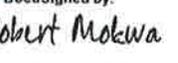
Intentional Focus 1: This program will support MSU’s goal to “expand high-quality graduate education” both in terms of balancing our portfolio of degrees offered (goal 1.2.1) and increasing the number of research doctoral degrees awarded annually (goals 1.2.3).

Intentional Focus 2: This program will support MSU to reach its goal of enhancing “the significance and impact of scholarship.” Students affiliated with this program will engage in interdisciplinary scholarship that addresses “access and equity in education and health outcomes” thus “promoting wellness in our Montana communities” (goal 2.1.1; and a “Grant Challenges” topic area). In addition, this PhD program will help enhance the education of “graduation students through increased participation in research” (goal 2.1.3).

Intentional Focus 3: This program will support MSU to “increase mutually beneficial collaborations with tribal nations and partners.” This program will “improve and increase tribal partnerships with mutually defined outcomes” (goal 3.2.1) and is “tailored to demonstrate state and region needs with attention to national trends (goal 3.4.2).

References:

1. Montana Healthcare Workforce Advisory Committee, Montana Office of Rural Health, Area Health Education Center. (2016). *Montana Healthcare Workforce: Statewide Strategic Plan*
2. Montana Department of Public Health and Human Services (2018). *2016 Montana Vital Statistics*. Public Health and Safety Division, Office of Epidemiology and Scientific Support.
3. Centers for Disease Control and Prevention (2017). National Center for Health Statistics: suicide mortality by state. Retrieved from <https://www.cdc.gov/nchs/pressroom/sosmap/suicide-mortality/suicide.htm>
4. US Bureau of Labor Statistics (2019, February 21). Economy at a glance: Montana. retrieved from <https://www.bls.gov/eag/eag.mt.htm>
5. Department of Numbers (2017). Montana household income. Retrieved from <https://www.deptofnumbers.com/income/montana/>

Signature/Date	
Chief Academic Officer:	DocuSigned by:  9EDD74A82C3A419...
Chief Research Officer*:	
Chief Executive Officer:	DocuSigned by:  7D6AMCE96C3F415...
Flagship Provost**:	DocuSigned by:  9EDD74A82C3A419...
Flagship President**:	DocuSigned by:  7D8A4CE96C3E415...
*Center/Institute Proposal only **Not applicable to the Community Colleges.	

ACADEMIC ITEMS MEMORANDUM

DATE: August 15, 2021

TO: Chief Academic Officers, Montana University System

FROM: Brock Tessman, Deputy Commissioner for Academic, Research, and Student Affairs

RE: July 2021 Academic Items

Contained within this memorandum are Level I and Level II proposals submitted by the institutions of the Montana University System in July 2021. 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 Chief Academic Officer's conference call on August 25th, 2021. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, August 27th. You will be notified of approved proposals by August 31st. The Board of Regents will be notified of the approved proposals at the September meeting of the Board.

LEVEL II ITEMS:

Montana State University Bozeman:

- Request for authorization to establish a Master of Science in Materials Science
[Item #2010-LI0721](#) | [Curriculum Form](#) | [Fiscal Form](#) | [Request to Plan](#)

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:**

 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*

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
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 proposed Master's of Science program in Materials Science (Mat Sci) will provide students from a broad background of physical science and engineering disciplines with the opportunity to earn a Master's degree in Materials Science. The proposed program will complement the existing multi-campus Materials Science Ph.D. program. Students in the MS program will be required to take the full complement of 1st year Mat Sci courses being offered to Ph.D. students and then additional, elective courses in their second year to complete the remaining credit requirements. The MS program will be directed/administered by the existing Mat Sci Ph.D. program leadership at MSU-Bozeman.

- 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 Mat Sci MS program mirrors the vision found in MSU's strategic plan "Choosing Promise." The Mat Sci MS program aims to expand high quality graduate education, especially to individuals who may not desire a Ph.D. but do want an advanced degree. Offering a MS program in Mat Sci will broaden access to students from different backgrounds as well as those students drawn to interdisciplinary topics. The MS program will also add opportunities for students who desire further education and professional advancement without a long-term academic commitment.

Students in the program will sit for courses taught by faculty on our campus and from faculty at Montana Tech. The partnership between institutions will enable students to see firsthand, the diverse academic and research activities that impact our state and beyond and how the efforts from both institutions transform learning.

The MS option will provide students with a solid foundation in materials science and enable them to become highly skilled professionals in ready to assume leadership positions in both the public and private sectors. This MS program will be reviewed and adapted to keep pace with emerging workforce needs for trained scientists and engineers.

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

The need for a MS degree in Mat Sci has emerged gradually following the creation of the cooperative Mat Sci Ph.D. program in 2013. Specifically, the Mat Sci campus leadership have identified a MS Mat Sci degree as a useful stepping stone for students whose professional ambitions require an advanced degree as well as a prospective recruiting tool for the Ph.D. program and an option for those students currently enrolled in the Ph.D. program who are unable to continue their Ph.D. studies. A Request to Plan document filed in Summer, 2020 and approved at the September BOR meeting.

- 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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Credits in required courses offered by the department offering the program	20
Credits in required courses offered by other departments	0
Credits in institutional general education curriculum	0
Credits of free electives	10
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.

- Demonstrate mastery of fundamental principles in Materials Science including but not limited to bonding in materials; relating fundamental structure and bonding at the atomic level to macroscopic material properties; and differentiating between how rates of transformation and thermodynamic stability often compete to control material structure and properties
- Be well versed in modern instrumental and analytical methods so that when faced with a materials-related challenge, students will know the salient properties to measure and how to measure them.
- Be capable of assessing the importance and validity of newly reported advances in the general field of materials science by being able to critically read relevant literature reports and background material.
- Be able to present complex scientific content re: advances in the Materials Science field, broadly defined to peers and committee
- Demonstrate the highest standards of ethics and professionalism expected in members of the Materials Science community.

c. 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 Montana Mat Sci Ph.D. program is a cooperative effort leveraging expertise and capacity at MSU and Montana Technical University (MTU). Recently, MTU created its own MS degree in Materials *Engineering* with the intent of meeting many of the goals noted in item 3, above. The MS degree at MTU is available solely for MTU students. The MS degree in *Materials Science* will serve a complementary role at MSU. Mat Sci campus leadership at MSU has consulted closely with colleagues at MTU to design a MS program that takes advantage of the existing MUS Mat Sci graduate curriculum and affords students the broadest exposure to topics in Mat Sci, broadly defined, at MSU. This proposal has the unequivocal and full-throated support from the Mat Sci campus leadership at MTU.

5. **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]

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Because the proposed Mat Sci MS program does not require any new course development nor any new administrative infrastructure, the program can be offered as soon as it is approved. We anticipate that the majority of new students will begin the program at the start of an academic year.

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

Fall Headcount Enrollment					Graduates				
AY 21-22	22-23	23-24	24-25	25-26	AY 21-22	22-23	23-24	24-25	25-26
4	4	7	9	11	0	3	4	6	6

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

The numbers in the above table (mirrored in the fiscal form) were estimated after considering the number of MS degrees conferred annually by the Departments of Chemistry and Biochemistry (5), Physics (9), Mechanical and Industrial Engineering (12), and Chemical Engineering (7). (Numbers represent averages over the past 2 academic years.) These estimates are conservative and actual enrollment may exceed expectations if federal and industry priorities continue to emphasize materials related initiatives and students see that an advanced degree furthers their opportunities for professional advancement.

- c. What is the initial capacity for the program?

The initial capacity of the program is limited solely by the number of qualified applicants up to an anticipated cap of 11 incoming 1st year students.

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

Program success will be evaluated by several metrics including but not limited to number of new students matriculating each year, number of degrees conferred (starting at the end of the program's second year), time to degree, and professional positions taken by recent graduates. The numerical metrics will be assessed annually by the Mat Sci campus leadership. This assessment and the numbers themselves will be reviewed by the Graduate Dean and amended as necessary. In the event that the number of matriculated students lags expectations, Mat Sci leadership will work aggressively to market and recruit students from the region. If the number of degrees conferred is less than expected or that the time to degree regularly exceeds 4 semesters, a review of program expectations and programs of study will be undertaken with the goal of improving and streamlining the program's efficiency. Specific learning outcome assessments are provided in the sections below.

- 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 learning outcomes identified in Section 4b will be assessed directly and quantitatively throughout a student's program of study.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Direct measures used to assess student learning will include result from the Qualifying Exam students sit for prior to the start of their third semester. In addition, student learning will be assessed from their performance in required and elective courses. Rubrics have been created for instructors to assess student performance in presentations (learning outcome #4) and all students will complete online professional ethics training offered by MSU (learning outcome #5).

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

Assessment findings will ensure program quality and accountability by applying standards adapted from the MTSI Ph.D. program. Specifically, the Qualifying Exam will consist of 6 questions, 1 from each required course, and to be successful, MTSI MS students will need to earn an aggregate score of 65% or higher with at least 5 questions earning individual scores of 50% or higher. Similar rubrics assessing quality and clarity of presentations and course performance have also been developed. Degree conferral will only happen for those students who have met every program requirement.

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

The MTSI MS program does not require specialized accreditation.

7. 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]*

Degree candidates in the Mat Sci MS program will enroll in classes already being taught in classrooms capable of accommodating the anticipated 4-8 additional students (in a pre-Covid-19, non-socially distanced setting).

- 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 (The Mat Sci MS program will leverage classes already being taught.)

Montana Board of Regents
CURRICULUM PROPOSAL FORM**8. 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]*

Given that the Mat Sci MS program will coordinate closely with the existing Mat Sci Ph.D program and will not require new course offerings or research commitments, few new resources will be needed other than modest compensation (\$5,000 requested) for administrative staff who will ensure that MS Mat Sci students remain on track and continue to follow their program of study in a timely fashion.

Additional support will be needed for operational expenses including professional development trips to different Materials Science related industries around the state and to promote networking opportunities.

- 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]*

N/A. See response to 8a.

9. 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 MSU students, degree candidates in the Mat Sci MS program will have full access to MSU's library and information resources. No additional resources will be required.

- 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 services have the capacity to accommodate the proposed program. The proposed Mat Sci MS program is expected to expand graduate education opportunities at MSU. In doing so, degree candidates will boost enrollment in existing graduate courses being offered across (at least) 7 departments in 2 colleges. This additional enrollment will strengthen graduate education across campus in materials related classes offered by Physics, Chemistry and Biochemistry, and Engineering departments.

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

The Mat Sci MS program is intended to be self-sufficient financially. As a coursework MS degree, the program will not require support from the institution in the form of teaching assistantships or tuition remission. Rather enrolled students will be expected to pay the costs associated with tuition and fees. We have worked with Megan Lasso in the MSU University Budget Office to arrive at the figures appearing in the table below and on the accompanying Fiscal Analysis Form.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- 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.

(Figures rounded to the nearest \$100.)

	Year 1	Year 2	Year 3
Revenues	\$35,569	\$36,280	\$64,760
Expenses	\$15,860	\$15,860	\$15,860
Net Income/Deficit (revenues-expenses)	+\$19,709	+\$20,420	+\$48,900

(Estimated revenues and expenses resulted from collaboration with Megan Lasso in MSU's University Budget Office)

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

The Mat Sci MS program is intended to be financially self-sustaining shortly after implementation. There will be no need to request tuition waivers nor is their any intent to request residency status for out-of-state students who choose to enroll in the program. Costs associated with administrative assistance, networking and student recruitment will be covered by tuition from students enrolled in the program.

- 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]*

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

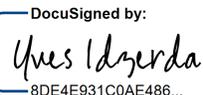
11. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

N/A

12. Complete the fiscal analysis form.

Completed.

Signature/Date

College or School Dean:  DocuSigned by:
8DE4E931C0AE486... 7/16/2021 | 5:38 PM MDT

Chief Academic Officer:  DocuSigned by:
212A28411AC04BD... 7/16/2021 | 5:38 PM MDT

Chief Executive Officer:  DocuSigned by:
7D6A4CE96C3F415... 7/16/2021 | 5:38 PM MDT

Flagship Provost*:  DocuSigned by:
212A28411AC04BD... 7/16/2021 | 5:38 PM MDT

Flagship President*:  DocuSigned by:
7D6A4CE96C3F415... 7/16/2021 | 5:38 PM MDT

*Not applicable to the Community Colleges.

Montana Board of Regents
CURRICULUM PROPOSAL FORM**Appendix A – Proposed New Curriculum**

In Year 1, Mat Sci MS coursework is the same as for the Ph.D. MTSI program. The first year consists of 20 credits, 9 of which are taught by faculty at Montana Tech via synchronous distance delivery.

Per MSU Graduate School requirements, students must earn a minimum of 30 credits (and no more than 9 credits from 400-level courses) to earn a MS degree.

Semester 1:

MTSI 500 (1 credit)

MTSI 501 (3 credits)

MTSI 511 (3 credits)

MTSI 551 (3 credits)

Semester 2:

MTSI 500 (1 credit)

MTSI 502 (3 credits)

MTSI 503 (3 credits)

MTSI 512 (3 credits)

Summer 1: (optional)

Discipline specific independent study (e.g. CHMY 592 (up to 3 credits))

Summer internship in private sector company or government lab.

Semester 3: Discipline specific graduate courses including but not limited to (choose up to 3)

One course in either Semester 3 or Semester 4 must be XXXX 575, Independent Study in an appropriate discipline chosen by the student and approved by the MTSI campus director for the program of study. This course will serve as the mechanism for writing a professional paper.

CHMY 557 (3 credits)

CHMY 558 (3 credits)

PHSX 441 (3 credits)

PHSX 444 (4 credits)

PHSX 461/506 (3/3 credits)

PHSX 531 (3 credits)

EELE 407 (3 credits)

Montana Board of Regents
CURRICULUM PROPOSAL FORM

EELE 482 (3 credits)

EELE 556 (3 credits)

EELE 556 (3 credits)

EELE 581 (3 credits)

EMAT 463 (3 credits)

EMAT 560 (3 credits)

EMEC 444 (3 credits)

Semester 4 (if necessary): Discipline specific graduate courses including but not limited to (choose up to 3)

BIOB 524 (3 credits)

CHMY 515 (3 credits)

CHMY 564 (3 credits)

PHSX 446 (3 credits)

PHSX 535 (3 credits)

EELE 448 (3 credits)

EELE 505 (3 credits)

EELE 582 (3 credits)

EMAT 461 (3 credits)

EMAT 462 (3 credits)

EMAT 464 (3 credits)

EMAT 553 (3 credits)

EMEC 445 (3 credits)

EMEC 467 (3 credits)

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	Bozeman
AWARD LEVEL:	Grad
PROGRAM NAME:	MS in Material Science
PROGRAM CODE:	

ENROLLMENT PROJECTIONS	FY2023	FY2024	FY2025	FY2026	FY2027
Headcount					
annual unduplicated headcount of students with declared major or minor within the program	4	4	7	9	11
Credit Hours					
annual avg. credits hours earned per student in program related curriculum	20	20	20	20	20
Student FTE					
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	3.333333333	3.333333333	5.833333333	7.5	9.166666667
Completions					
Annual number of program completers	0	3	4	6	6

REVENUE	FY2023	FY2024	FY2025	FY2026	FY2027
Tuition Revenue (net of waivers)	\$35,569	\$36,280	\$64,760	\$84,928	\$105,877
Institutional Support					
Other Outside Funds (grants, gifts, etc.)					
Program Tuition/Fees					
Total Revenue	\$35,569	\$36,280	\$64,760	\$84,928	\$105,877
Total Revenue per Student FTE	\$10,671	\$10,884	\$11,102	\$11,324	\$11,550

EXPENDITURES		FY2023	FY2024	FY2025	FY2026	FY2027
Tenure Track Faculty	FTE	0.000	0.000	0.000	0.000	0.000
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Non-tenure Track Faculty <small>*Includes Adjunct Instructors</small>	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Graduate Teaching Assistants	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Staff	FTE	0.1	0.1	0.1	0.1	0.1
	Salary + Benefits	\$5,860	\$5,860	\$5,860	\$5,860	\$5,860
Total Faculty & Staff	FTE	0.1	0.1	0.1	0.1	0.1
	Salary + Benefits	\$5,860	\$5,860	\$5,860	\$5,860	\$5,860
Operations (supplies, travel, rent, etc)		\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Start-up Expenses (OTO)						
Total Expenses		\$15,860	\$15,860	\$15,860	\$15,860	\$15,860
Student FTE to Faculty (TT + NTT) Ratio		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Net Income/Deficit (Revenue - Expenses)		\$19,709	\$20,420	\$48,900	\$69,068	\$90,017

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:

5302B85C2C4746C 7/13/2021 | 11:24 AM MDT

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Approval of the fiscal form by the CFO does not guarantee funding for the expenditures described in the form or the proposal. The expectation is that funding for the program will be acquired from donors, external grants and by reallocation of internal funding within the unit or college. If these sources of funding are not sufficient to cover the estimated cost of the new program, then a request for additional institutional funding would need to be included in the normal campus processes for acquiring institutional investments.

Montana University System
REQUEST TO PLAN FORM

ITEM 190-2001-R0920**Meeting Date: September 2020****Item Name**Program/Center/Institute Title: **Master's Degree in Materials Science**Planned 6-digit CIP code: **40.1001**Campus, School/Department: **MSU-Bozeman, Graduate School**Expected Final Submission Date: **11/30/2020**Contact Name/Info: **Professor Rob Walker (rawalker@montana.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 proposed Master's program in Materials Science (Mat Sci) will provide students from a broad background of physical science and engineering disciplines with the opportunity to earn a Master's degree in Materials Science. The proposed program will complement the existing multi-campus Materials Science Ph.D. program. Students in the MS program will be required to take the full complement of 1st year Mat Sci courses being offered to Ph.D. students and then additional, elective courses in their second year to complete the remaining credit requirements. A list of those elective courses will be drawn from 400 and 500-level offerings in the College of Engineering and the College of Letters and Sciences. While students will be able to pursue a thesis-MS degree, we expect that most students will choose a course-work MS degree with a professional paper. The MS program will be directed/administered by the existing Mat Sci Ph.D. program leadership.

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).

The proposed Master's program in Materials Science will serve three important purposes:

1. The MS program is an "accelerated" advanced degree program allowing students from a host of different disciplines who have earned a BS/BA/BE degree to complete an advanced degree in a minimum of 3 semesters (coursework MS). A thesis-based MS will require slightly longer.
2. The MS program will likely prove an effective recruiting tool for the Ph.D. program. In particular, current MSU undergraduates already interested in materials related science/engineering may wish to remain and earn an advanced degree. With this additional engagement, some of those students will find themselves drawn towards the research and discovery elements of the graduate experience and transition into the Ph.D. program. Anecdotally, many faculty in MSU's Mat Sci Ph.D. program have relayed these sentiments expressed by undergraduates whom they mentor.
3. For those students already enrolled in the Mat Sci Ph.D. program who choose not to continue their program of study but remain in good standing, the MS option would provide an exit ramp so that their work to date is recognized and rewarded. Currently, students who find themselves looking to leave the Ph.D. program must transfer to another department in order to earn a MS degree.

Montana University System
REQUEST TO PLAN FORM

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

Given that the Mat Sci MS program will coordinate closely with the existing Mat Sci Ph.D program and will not require new course offerings or research commitments, few new resources will be needed other than modest compensation for administrative staff who will ensure that MS Mat Sci students remain on track and continue to follow their program of study in a timely fashion.

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 mentioned above, MS students will be required to take the same complement of courses in the first year of the program as the Mat Sci PhD students in the first year. We will continue to utilize the expertise of faculty from different departments on MSU's and Montana Tech's campuses to teach the first year Mat Sci courses. (Note: these Mat Sci courses are available to *all* graduate students at MSU and MT-Tech regardless of major/graduate program.) These MTSI courses have witnessed increasing enrollment from graduate students in other degree programs. Student evaluations have noted that Mat Sci courses are rigorous and challenging but also useful and well-taught.

If the MS student elects to complete a thesis-based MS, research and scholarship activities can take place in any affiliated materials science laboratory on the Bozeman campus. Students will select a research advisor from the materials science affiliated faculty.

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.

The Mat Sci MS program fits well with MSU's strategic plan "Choosing Promise." The Mat Sci MS program aims to expand high quality graduate education, especially to individuals who may not desire a PhD but do want an advanced degree. Offering a MS program in Mat Sci will broaden access to students from different backgrounds as well as those students drawn to interdisciplinary topics. The MS program will also add opportunities for students who desire further education and professional advancement without a long-term academic commitment.

Students in the program will sit for courses taught by faculty on our campus and from faculty at Montana Tech. The partnership between institutions will enable students to see firsthand, the diverse academic and research activities that impact our state and beyond and how the efforts from both institutions transform learning.

The MS option will provide students with a solid foundation in materials science and enable them to become highly skilled professionals in industry and academics. This MS program will be tailored to keep up with emerging workforce needs for trained scientists and engineers.

Montana University System
REQUEST TO PLAN FORM

<u>Signature/Date</u>	
Chief Academic Officer:	<p>DocuSigned by: <i>Robert Mokuwa</i> 212A28411AC04BD... 6/22/2020 4:40 PM MDT</p>
Chief Research Officer*:	
Chief Executive Officer:	<p>DocuSigned by: <i>[Signature]</i> 7D6A4CE96C3F415... 6/22/2020 4:40 PM MDT</p>
Flagship Provost**:	<p>DocuSigned by: <i>Robert Mokuwa</i> 212A28411AC04BD... 6/22/2020 4:40 PM MDT</p>
Flagship President**:	<p>DocuSigned by: <i>[Signature]</i> 7D6A4CE96C3F415... 6/22/2020 4:40 PM MDT</p>
<p>*Center/Institute Proposal only **Not applicable to the Community Colleges.</p>	

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 190-2001-R0920

ITEM NAME: Master’s Degree in Materials Science

OCHE ANALYSIS						
Materials science and materials engineering as occupations are projected to have slower than average growth (0-3%) between 2018-2028 (O*NET).						
Labor market outlook		Material Scientist		Material Engineer		
		Montana	Nation	Montana	Nation	
	Current Employment	6	8100	51	27,700	
	Annual Openings	*	800	5	1,700	
	Median Wage	*	\$96,810	\$63,310	\$93,360	
SOURCE: O*NET & Montana Department of Labor and Industry. * indicates data not available.						
Related programs / centers / institutes	Materials Science Ph.D. Program – co-administered by MSU and Montana Tech M.S. in Material Science and Engineering, Montana Tech (launched 2019)					
Budget Impact	X	LOW • Only incidental costs		MEDIUM		HIGH • substantial commitment of resources relative to institutional budget
CAO discussion and follow-up	Montana Tech supports this proposal.					
ARSA/BOR comment and direction for Level II proposal						