

LEVEL II MEMORANDUM

DATE: April 29th, 2019

TO: Chief Academic Officers, Montana University System

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

RE: May 2019 Level II Proposals

The campuses of the Montana University System have proposed new academic programs or changes under the Level II approval process authorized by the Montana Board of Regents. The Level II proposals are being sent to you for your review and approval. 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 May 8th. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, May 10th. If no concerns are received, OCHE will assume that the proposals have your approval.

Level II Items

Montana University System

- Request for authorization to establish the Montana University System Institute for Interprofessional Education and Collaborative Practice in Health and Medicine (joint UM-Missoula / MSU-Bozeman institute)
[Item #183-101-R0519](#) | [Request Form](#) | [Center Proposal Form](#) | [Fiscal Analysis](#) | [Intent to Plan](#)

The University of Montana Missoula:

- Request for authorization to establish a Paramedicine A.A.S.
[Item #183-1001-R0519](#) | [Request Form](#) | [Curriculum Proposal](#) | [Fiscal Analysis](#) | [Intent to Plan](#)
- Request for authorization to establish a Social Work option in the Public Health PhD
[Item #183-1002-R0519](#) | [Request Form](#) | [Curriculum Proposal](#) | [Fiscal Analysis](#) | [Intent to Plan](#)
- Request for authorization to retitle the Department of Modern and Classical Languages and Literatures to World Languages and Cultures
[Item #183-1003-R0519](#) | [Request Form](#)
- Request for authorization to retitle the College of Visual and Performing Arts to College of the Arts and Media
[Item #183-1004-R0519](#) | [Request Form](#)
- Request for authorization to retitle the Phyllis J. Washington College of Education and Human Sciences to the Phyllis J. Washington College of Education
[Item #183-1004-R0519](#) | [Request Form](#)

Montana Tech of the University of Montana:

- Request for authorization to establish a Master of Engineering Degree Program
[Item #182-1501-R0119](#) | [Request Form](#) | [Curriculum Proposal](#) | [Fiscal Analysis](#) | [Intent to Plan](#) | [Attachment 1](#)

May, 2019

ITEM 183-2010-R0519

Request authorization to establish The Montana University System (MUS) Institute for Interprofessional Education and Collaborative Practice in Health & Medicine

THAT

The Montana University System (MUS) Institute for Interprofessional Education and Collaborative Practice in Health & Medicine, co-led by the two flagship universities in Montana (MSU, UM), will enhance interprofessional education and collaborative health care practice throughout the state. The proposed institute will centralize training resources for interprofessional education and collaborative practice for students, faculty, and healthcare preceptors.

EXPLANATION

Traditionally, students train in professional silos then graduate to practice in a complex and fragmented healthcare system. While skilled in their unique disciplines, this traditional model fails to prepare students to collaborate effectively with other healthcare disciplines. The **Montana University System (MUS) Institute for Interprofessional Education and Collaborative Practice (hereinafter referred to as MUS-IPE Institute)**, will lead efforts to prepare students, faculty, and current healthcare workers for interprofessional collaborative practice by creating a:

- IPE resource and training center for MUS health profession students, faculty, and healthcare sites,
- Conduit between statewide healthcare sites and MUS healthcare programs,
- IPE funding clearing house, and
- Grant-writing and publication liaison/interchange.

Administrative support for enhanced coordination via the proposed institute will enhance opportunities for collaboration among MUS health profession programs. **The MUS IPE Institute** will build infrastructure for interdisciplinary collaborations and support healthcare education that

ATTACHMENTS

Academic Request form
Center Proposal Form
Fiscal Analysis Form
Intent to Plan

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 183-101-R0519 Submission Month or Meeting: May 22-23, 2019

Institution: MSU-Bozeman & UM-Missoula CIP Code: _____

Program/Center/Institute Title: Institute for Interprofessional Education

Includes (please specify below): Online Offering _____ Options _____

Please mark the appropriate type of request and submit with an Item Template and 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*

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X **B. Level II:**

- 1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Intent to Plan Form)
- 2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Intent to Plan Form)
- 3. Exceeding the 120 credit maximum for baccalaureate degrees** *Exception to policy 301.11*
- X **4. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and Completed Intent to Plan Form, except when eliminating or consolidating)
- 5. Re-titling an academic, administrative, or research unit**

Proposal Summary [360 words maximum]

What

The Montana University System (MUS) Institute for Interprofessional Education and Collaborative Practice in Health & Medicine, co-led by University of Montana and Montana State University.

University of Montana: The primary unit that will be responsible for co-leading the MUS-IPE Institute is the College of Health Professions and Biomedical Sciences.

Montana State University: The primary unit that will be responsible for co-leading the MUS-IPE Institute is the Division of Health Sciences.

Why

Resources

Relationship to similar MUS programs

This is a Level II proposal for a new Montana University System-level Institute. UM and MSU have collaborated on this proposal.

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1. State the proposed Institute/Center's name and purpose.

The Montana University System (MUS) Institute for Interprofessional Education and Collaborative Practice in Health & Medicine, co-led by the two flagship universities in Montana (MSU, UM), will enhance interprofessional education and collaborative health care practice throughout the state. The proposed institute will centralize training resources for interprofessional education and collaborative practice for students, faculty, and healthcare preceptors.

Traditionally, students train in professional silos then graduate to practice in a complex and fragmented healthcare system. While skilled in their unique disciplines, this traditional model fails to prepare students to collaborate effectively with other healthcare disciplines. The **Montana University System (MUS) Institute for Interprofessional Education and Collaborative Practice (hereinafter referred to as MUS-IPE Institute)**, will lead efforts to prepare students, faculty, and current healthcare workers for interprofessional collaborative practice by creating a:

- IPE resource and training center for MUS health profession students, faculty, and healthcare sites,
- Conduit between statewide healthcare sites and MUS healthcare programs,
- IPE funding clearing house, and
- Grant-writing and publication liaison/interchange.

Administrative support for enhanced coordination via the proposed institute will enhance opportunities for collaboration among MUS health profession programs. The MUS IPE Institute will build infrastructure for interdisciplinary collaborations and support healthcare education that is clinically relevant and responsive to the comprehensive health needs of Montanans.

2. A comprehensive statement of the Institute/Center's mission and its relationship to the University mission.

A. State the Institute/Center's mission.

The MUS IPE Institute seeks to improve the experience and clinical outcomes for patients/clients and the overall health of communities by preparing future and current healthcare providers and others to collaborate effectively to deliver high quality, patient and community-centered, team-based services.

B. Identify the Institute/Center's goals and objectives.

Goal #1

MUS IPE CENTRALIZED RESOURCE

Serve as a centralized resource and primary contact for interprofessional education and practice for MUS health profession students, faculty, and clinical sites.

OBJECTIVE 1.1 Increase the knowledge of IPE best practices, IPE events, and interprofessional collaborations among MUS health profession students, faculty, and clinical sites.

Goal # 2 STUDENT DEVELOPMENT

Enhance interprofessional education experiences for health profession students across the MUS.

OBJECTIVE 2.1 Increase didactic, clinical, and simulation IPE opportunities for MUS health profession students.

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Goal # 3 FACULTY DEVELOPMENT

Enhance opportunities for interprofessional didactic and clinical learning experiences and scholarship opportunities highlighting IPE and interprofessional collaborative practice in Montana.

OBJECTIVE 3.1 Increase knowledge of interprofessional didactic and clinical learning experiences and provide teaching/learning resources for MUS faculty in health profession programs.

OBJECTIVE 3.2 Facilitate cross-discipline and cross-university collaborations among MUS faculty in health profession programs.

Goal # 4 CLINICAL SITE AND PRECEPTOR DEVELOPMENT

Assist hospital, clinic, ambulatory and community interprofessional practice programs to incorporate exemplary and relevant clinical practices statewide.

OBJECTIVE 4.1 Develop a standardized approach to to build and grow IPE clinical experiences among clinical learning sites and preceptors.

Goal #5 STATEWIDE ENGAGEMENT

Ensure statewide engagement of educational and clinical partners to inform the development and implementation of the MUS-IPE institute.

OBJECTIVE 5.1 Increase collaboration across the state among MUS health profession programs and clinical sites.

OBJECTIVE 5.2 Develop an advisory board with statewide representation to assure MUS-IPE Institute goals align with statewide healthcare needs.

C. What specific need is being responded to in developing the proposed Institute/Center?

The World Health Organization states that interprofessional education occurs when students “from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, p. 13, 2010). Interprofessional education prepares a collaborative-practice ready health workforce (WHO, 2010), which is essential to combat fragmented healthcare that plagues communities across the state.

While team-based care is important in all settings, rural healthcare demands high functioning interprofessional collaboration due to resource limitations in the healthcare environment. There are numerous health profession programs affiliated with the Montana University System, located in all corners of the state. Currently, there are approximately 70 undergraduate and graduate health-related programs offered via four-year universities under the MUS umbrella and 125 health-related certificates and associated degrees offered via Montana tribal and community college (AHEC, 2017). While some interprofessional education and training efforts are occurring in varying degrees, there exists considerable opportunity for more intentional collaboration to enhance these important efforts. Feedback from interviews with rural hospital administrators suggest that students need to be better prepared to practice collaboratively once in the workforce. A principal reason for this unfulfilled potential is the lack of a coordinating entity. Because the current healthcare landscape demands collaborative practice across disciplines to improve patient care outcomes and resource allocation, current efforts must be better coordinated and expanded for a more pressing impact.

The literature evaluating interprofessional efforts at universities highlights the challenges of securing external funding, integrating IPE into core curricula, and engaging in continuous innovation without a

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“strategically designed structure that is supported by high-level administration” (Brashers, et al., 2015, p. 96). Brashers and colleagues recommend the development of a center to appropriately support and sustain university IPE efforts to enhance faculty development, better align health system priorities with university education goals, to disseminate scholarship, and to secure external funding.

According to Montana Department of Labor and Industry, healthcare has been one of the largest sectors of employment growth in Montana in the last ten years (Labor Day Report, 2018). Additionally, the healthcare industry is expected to add the most jobs in the state over the next ten years (Montana Employment Projections 2016-2026). The MUS Institute for Interprofessional Education and Collaborative Practice in Health & Medicine will prepare better graduates from the MUS health profession programs to step into these job opportunities prepared for interprofessional collaborative practice.

D. Describe how the Institute/Center benefits the department, college, or institution.

Accreditation standards of most health profession programs mandate interprofessional education via didactics and clinical experiences. These standards are rooted in the need to prepare health profession students to practice team-based care. See Appendix A for a list of IPE requirements for health professional programs in the Montana University System.

While the trend from accrediting bodies is to mandate IPE, little direction is given on the ways in which programs can be most effective in its implementation. Traditionally, health profession programs have trained students independently and within their educational silos. While interprofessional education activities exist currently, the efforts are varied and communication among disciplines is inconsistent. The MUS IPE Institute will serve as a resource center for interprofessional education for students and continuing education for faculty among healthcare and associated programs. As a resource center, the different health profession programs will benefit from shared educational resources and better promotion of interprofessional activities, thereby using human and fiscal resources efficiently. Additionally, the research mission of UM and MSU also will be enhanced by the MUS-IPE Institute as a means to serve as a state-wide Institute to apply for and receive grant funding, and to coordinate IPE scholarly activities between campuses. UM and MSU will coordinate with their satellite campuses to disseminate resources.

E. Describe the Institute/Center’s relationship to the University mission.

The goals of the **MUS IPE Institute** aligns with the Montana University System Strategic Plan 2018, specifically: *goal 2: Workforce and Economic Development* and *goal 3: Efficiency and Effectiveness*. A sharper focus on interprofessional education among MUS health profession programs will better prepare graduates for the demands of the 21st century healthcare workforce, including the demand for professionals competent in interprofessional collaborative practice. The MUS experienced a 50% increase in healthcare degrees and certificates awarded from 2006 to 2016 (OCHE-MUS Strategic Plan Workforce Development, July 2017). The increase in degrees and certificates is critical to meet the increasing healthcare workforce demands in Montana. The proposed MUS-IPE Institute will allow MUS to meet its goal of increasing the responsiveness to workforce development needs (goal 2) by ensuring that the health profession programs stay clinically relevant and that students are ready for collaborative practice upon entering the workforce. The Institute will meet these goals by: 1) expanding and coordinating education and research efforts on interprofessional practice in the healthcare arena; 2) providing opportunities for students in various state-wide health professional educational programs to learn about interprofessional educational core competencies, 3) preparing graduates to practice as a member of an interprofessional collaborative team, and 4) acting as a

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liaison between healthcare sites and health profession educational programs to ensure educational efforts meet workforce needs.

Additionally, the proposed **MUS IPE Institute** will assist MUS in improving efficiency and effectiveness (goal 3) by providing statewide coordination and centralized resources among the many of health profession programs in the Montana University System.

The goals of the **MUS Institute for Interprofessional Education and Collaborative Practice in Health & Medicine** align with the University of Montana-Missoula's mission and the mission and strategic goals of the Montana University System. UM-Missoula's mission emphasizes academic excellence through an interdisciplinary emphasis (UM Mission statements, n.d). The proposed institute will serve as a coordinating entity to bridge health professions offered by University of Montana, as well as the ancillary academic disciplines that support health and wellness. Better coordination will reduce barriers that often inhibit successful collaboration among programs. These efforts will enhance the interdisciplinary educational experience so that students from varied disciplines are learning from and with one another. The MUS-IPE Institute aligns with Montana State University's newly adopted mission (fall, 2018), "*As the state's land-grant university, Montana State integrates education, creation of knowledge and art, and service to communities.*" Specifically, the new strategic plan identified six core values including *Collaboration*, illuminated as "*We believe that working together produces better outcomes.*" Collaboration is at the core of MSU and the work of the proposed MUS-IPE Institute.

3. Briefly describe the Institute/Center's anticipated activities.

A. Identify faculty expertise available for participation in the Institute/Center's activities.

Current IPE efforts at the University of Montana-Missoula are led by faculty trained in interprofessional education. Three faculty members from University of Montana and Montana State University-Missoula campus attended a Train-the-Trainer (T3) Interprofessional Faculty Development Program in Seattle, Washington. This training has informed current IPE efforts on the Missoula campus which include the work of three subcommittees: an IPE didactic subcommittee; an IPE simulation subcommittee; and an IPE clinical experiences subcommittee focused on developing IPE clinical experiences in campus clinics located at UM. Faculty who participate in the current subcommittees are champions of IPE with at least five years of experience teaching interprofessional education and combined decades of interprofessional collaborative practice professional experience. Using current faculty expertise, the proposed institute will support professional development of the current champions and will build expertise among all faculty who teach in the MUS health profession programs.

Similarly, faculty at Montana State University have deep expertise and training in interprofessional education. The current dean of MSU college of nursing co-lead the development of the Foundations in Interprofessional Practice course at University of Washington and is published in IPE curricular efforts and practice. In addition, multiple WWAMI faculty regularly teach IPE active learning modules and participate in training around IPE through UW medical school faculty development activities. The MSU CON regularly submits and receives grant funding that includes components that support IPE clinical training efforts. In combination, MSU faculty offer the proposed MUS-IPE Institute experience and varied collaborations outside of the MUS system to enrich IPE within Montana.

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B. Which departments on campus will be involved and how will the Institute/Center contribute to the academic programs of the institution?

The **MUS-IPE Institute** will support and enhance the interprofessional efforts within and among health profession programs across the Montana University System.

The MUS-IPE Institute will be co-led by UM and MSU. The purpose of the Institute will be to provide faculty teaching/learning resources across the MUS health profession programs.

University of Montana: The primary unit that will be responsible for co-leading the MUS-IPE Institute is the College of Health Professions and Biomedical Sciences.

Montana State University: The primary unit that will be responsible for co-leading the MUS-IPE Institute is the Division of Health Sciences.

4. Identify the organizational structure of the Institute/Center within the institution.

The **MUS Institute for Interprofessional Education and Collaborative Practice in Health & Medicine** will be operated by a .25 FTE Co-Director and .50 FTE Program Manager from the University of Montana and a .25 Co-Director and .50 FTE Program Manager from Montana State University.

The UM CHPBS Dean will oversee the work of the UM-housed Co-Director and program manager and the MSU College of Nursing Dean will oversee the MSU-housed Co-Director and program manager.

The following outlines the primary responsibilities of the Co-Directors and Program Managers:

UM and MSU Co-Directors (ea. @ .25 FTE)	Program Managers (ea. @ .5 FTE)
<ul style="list-style-type: none"> • Maintain a focus on Institute’s mission • Coordinate efforts between the two academic institutions to ensure goals and objectives are consistent and unified • Develop Institute’s strategic plan and oversee completion of goals. • Coordinate interprofessional education and research efforts statewide. • Engage in continuous grant writing, development, evaluation, and dissemination of findings • Ensure adequate professional faculty development is implemented • Identify IPE collaboration opportunities with internal and external teams • Act as the primary representatives for IPE Institute to academic units, Universities, MUS, legislative bodies, foundations, etc. 	<ul style="list-style-type: none"> • Support activities of Co-directors and working groups as needed • Schedule meetings with agenda and minutes • Communicate IPE opportunities to students • Build and maintain an IPE website • Facilitate communication between clinical sites and IPE Institute • Manage budget and recordkeeping for all IPE-related funding sources • Provide support to project teams in the implementation of IPE grants • Support evaluation activities --Work with co-directors in the evaluation of IPE student activities and faculty development; assist in the dissemination of findings • Facilitate communication to and among statewide stakeholders

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<ul style="list-style-type: none">• Foster IPE training opportunities in clinical sites across MT• Oversee the efforts of working groups; ensure efforts are consistent with Institute’s mission and short-term and long-term goals	<ul style="list-style-type: none">• Create and implement a unified brand for IPE in Montana• Create and disseminate IPE teaching and learning resources with a unified brand and approach
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A. Identify all agencies, organizations and/or institutions that will be involved.

The following agencies, centers and institutions will be involved in the work of the **MUS IPE Institute**.

University of Montana and Montana State University, their MUS affiliates, and affiliated health profession programs of the MUS, including but not limited to:

- Western Montana Area Health Education Center (AHEC)
- South Central AHEC
- North Central AHEC
- North Eastern AHEC
- Eastern Montana AHEC
- Montana AHEC Program Office
- Montana Geriatric Education Center located at the University of Montana
- WWAMI Medical Education Program located at Montana State University

Growth plan:

The MUS Institute for Interprofessional Education and Collaborative Practice in Health & Medicine will focus its initial efforts on University of Montana-Missoula and Montana State University-Bozeman. Within five years, the IPE Institute plans to expand to all MUS health profession programs.

B. Identify advisory council information.

The advisory board will be comprised of champions of interprofessional collaborative practice who serve as healthcare representatives in education and in clinical practice from across the state. The MUS IPE Institute will partner with the Montana Area Health Education Centers to identify a clinical or educational partner in each of the five AHEC regions. Additionally, the Director of each of the five AHEC regions will serve on the advisory board to assure needs across the state are represented. The UM CHPBS Dean, the MSU College of Nursing Dean, and the co-directors will also serve on the advisory board.

5. Identify first year and continuing finances necessary to support the Center/Institute, including the sources of funding.

A. Will additional faculty and other resources be required to implement this Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

Additional faculty will be not be required to implement the MUS IPE Institute. Existing faculty at MSU and UM will be recruited to assume leadership of the institute and .25 of their FTE will be designated towards these activities. A .5 FTE program manager housed at UM and another .5 FTE program manager housed at MSU will be hired.

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UM and MSU will share the financial responsibilities associated with operating the MUS IPE Institute. Funds to support these efforts have been identified from each academic institution. The Co-Directors will seek extramural funding to expand the goals of the institute and to ensure sustainability.

B. Are other, additional resources required to ensure the success of the proposed Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

As indicated in the attached budget, the resources needed to support the MUS IPE Institute include: personnel, statewide travel and meeting costs, supplies, and consulting costs for website design.

6. Describe other similar Centers/Institutes or research capacities in the state and surrounding region.

A. Describe the relationship between the proposed Center/Institute and any similar Centers/Institutes, programs, or research capacities within the Montana University System.

There are multiple entities across MUS that train health profession students; however, each program operates within its own silo and none focus specifically on preparing students for interprofessional collaborative practice. The **MUS IPE Institute** will not only continue to partner with and utilize expertise available within the MUS health profession programs but will also serve as the coordinating entity to bridge all existing IPE efforts among MUS healthcare programs.

B. In cases of substantial duplication, explain the rationale for the proposed Center/Institute.

There is no substantial duplication with other MUS efforts. The **MUS IPE Institute** will serve as the leader for interprofessional education and collaborative practice for the state of Montana.

7. Assessment: How will the success of the center/institute be measured?

One goal of the IPE Institute will be to build and promote a robust website that serves as resource hub for students, faculty, and preceptors across the state. Outreach and educational efforts via the website will be measured in the following ways:

- Total number of hits on the IPE website
- Number of hits per page
- Pages with the most hits
- IPE educational efforts will be measured thorough use of the Interprofessional Collaborative Competencies Attainment Survey (ICCAS), a self-report tool used to measure participants' skills in communication, collaboration, roles and responsibilities, collaborative patient-family-centered approach, conflict management and team functioning. The tool will be used in one of two ways: 1) as a modified assessment used before and after trainings, or 2) as a retrospective pre-post approach. Faculty facilitators of the IPE educational efforts will administer this tool.

Quantitative and qualitative feedback will be obtained from students and faculty who engage in IPE development activities. Quantitative measures will include use of Interprofessional Collaborative Competencies Attainment Survey (ICCAS), a self-report tool used to measure participants' skills in communication, collaboration, roles and responsibilities, collaborative patient-family-centered approach, conflict management and team functioning. Qualitative measures will include use of focus groups, informal interviews, and group discussions after IPE development activities.

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The Institute will keep track of the faculty, student and clinical preceptor participation in IPE events and trainings to ensure trainings and resources are well-allocated among health profession programs across the state.

Additionally, the following will be tracked:

- Faculty participation at continuing education workshops
- The number of AHEC Scholar Participants statewide
- The number of IPE elective courses offered through the MUS and student enrollment
- The number of clinical sites providing IPE specific preceptor training.

8. State the internal campus review and approval process which has occurred prior to submission to the Commissioner's Office. Indicate, where appropriate, involvement by faculty, students, community members, professional constituencies, etc.

Because of the intended wide reach of the proposed IPE Institute, the authors held meetings with educational partners, clinical sites, and statewide partners from March 2018 - July 2018. The goals of stakeholder meetings were to gather feedback to inform the development of the proposal IPE Institute, and to build partnerships.

The following chart identifies the stakeholders who were interviewed between March 2018 – July 2018:

EDUCATIONAL PARTNERS

Educational Program/Institution	Stakeholder(s)
UM Department of Speech, Language and Hearing Sciences	Department Chair, Julie Wolter Director of Clinical Education, Jennifer Closson Associate Professor, Catherine Off Clinical Educator, Jenna Griffin
UM Athletic Training Program	Program Director, Val Moody
UM Physical Therapy Clinic	Clinic Director, Sue Ostertag
Missoula College Health Professions and the Nursing program	Health Professions Chair, Dan Funsch Director of Nursing, Linda Barnes
UM Clinical Psychology	Professor, Bryan Cochran
MSU – Billings	Director of Interprofessional Education, Paul Cooke Program Director Athletic Training, Suzette Nynas
MSU, Division of Health Sciences	Director, Kathy Jutila
MSU, College of Nursing	Dean, Sarah Shannon
Blackfeet Community College	Division Chair – Human Services, Angela Johnson Interim Director of Nursing, Keith McDivitt
WWAMI Medical Education Program	Director, Martin Teintze

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CLINICAL PARTNERS

Healthcare Organization	Stakeholder(s)
Clark Fork Valley Hospital	Director of Human and System Resources, Barry Fowler
St. Luke Community Hospital	Director of Nursing, Abigail Byers,
Community Hospital of Anaconda	Director of PT, Meghan Cromwell Director of Social Services, Sue Kaasch VP of Nursing, Jamie Johnson Associate Director of Nursing, Amy Reisenauer Human Resources, Amber Benes
Deer Lodge Medical Center	CEO, Tony Pfaff CNO, Michelle Buchanan Physical Therapy, Jenn Lorengo Pharmacy Director, Lori Yount
Curry Health Center	Medical Director, Dr. Mary Kleschen Physician, Dr. Carla Fritz
Providence St. Patrick Hospital	CMO, Dr. Jim McKay CNO, Carol Bensen Education Director, Kerry Shultz
Community Medical Center	CMO, Dr. David Lechner
Partnership Health Center	Executive Director, Laurie Francis

STATEWIDE PARTNERS

Organization	Stakeholder
Montana Area Health Education Center – Program Office	Director, Kris Juliar
Western Montana Area Health Education Center	Director, Barry Kenfield
Montana Hospital Association	President, Dick Brown

The following statements from stakeholders reinforce the importance of creating and implementing the MUS Institute for Interprofessional Education and Collaborative Practice in Health & Medicine:

“It would be helpful to provide resources to hospital leadership on how to design for collaboration.” Dick Brown, President MHA.

“Faculty across the state do not need to reinvent the wheel. IPE Institute could serve as a clearing house for connections.” Dean Sarah Shannon, MSU Nursing.

“Medicine is a team sport. We need to train students to team think.” Dr. Lechner, Chief Medical Officer, CMC.

“Accreditation standards are stating IPE as a requirement but not offering best practices for how to formally integrate IPE into curriculum.” Val Moody, Director of Athletic Training Program UM.

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“The IPE Institute is a good way to link academic institutions and Area Health Education Centers across the state in a stronger more sustainable way.” Kris Juliar, State Director Montana AHEC.

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Sources:

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Appendix A: Accreditation Standards Interprofessional Education and Practice

Nursing

The CCNE Standards for Accreditation Baccalaureate and Graduate Nursing Programs (Amended 2013) require that baccalaureate program curricula incorporate *The Essentials of Baccalaureate Education for Professional Nursing Practice* (AACN, 2008), that master's program curricula incorporate *The Essentials of Master's Education in Nursing* (AACN, 2011), and that Doctor of Nursing Practice (DNP) program curricula incorporate *The Essentials of Doctoral Education for Advanced Nursing Practice* (AACN, 2006).

Statements below excerpted from: *The Essentials of Baccalaureate Education for Professional Nursing Practice* (October 20, 2008); Accessed September 29, 2016.

p. 3. These *Essentials* address the key stakeholders' recommendations and landmark documents such as the IOM's recommendations for the core knowledge required of all healthcare professionals. This document emphasizes such concepts as patient-centered care, interprofessional teams, evidence-based practice, quality improvement, patient safety, informatics, clinical reasoning/critical thinking, genetics and genomics, cultural sensitivity, professionalism, and practice across the lifespan in an ever-changing and complex healthcare environment.

p. 11 In Essential I. Liberal Education...

...Skills of inquiry, analysis, critical thinking, and communication in a variety of modes, including the written and spoken word, prepare baccalaureate graduates to involve others in the common good through use of information technologies, team work, and interprofessional problem solving.

p.13 In Essential II. Basic Organizational and Systems Leadership for Quality Care and Patient Safety... ...To be effective, baccalaureate graduates must be able to practice at the microsystem level within an everchanging healthcare system. This practice requires creativity and effective leadership and communication skills to work productively within interprofessional teams in various healthcare settings.

p.22 In Essential VI. Interprofessional Communication and Collaboration for Improving Patient Health Outcomes...

...Communication and collaboration among healthcare professionals are critical to delivering high quality and safe patient care.

p.24 In Essential VII: Clinical Prevention and Population Health...

...Baccalaureate program prepares the graduate to ... collaborate with other healthcare professionals and patients to provide spiritually and culturally appropriate health promotion and disease and injury prevention interventions.

Statements below excerpted from: *The Essentials of Master's Education in Nursing* (March 21, 2011); Accessed September 29, 2016.

p.3 Master's education must prepare graduates to...build and lead collaborative interprofessional care teams.

p.11 In Essential II, Organizational and Systems Leadership...To be effective, graduates must be able to demonstrate leadership by initiating and maintaining effective working relationships using mutually respectful

Montana Board of Regents
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

communication and collaboration within interprofessional teams, demonstrating skill in care coordination, delegation, and initiating conflict resolution strategies. ...The master's degree program prepares graduates to...Assume a leadership role in effectively implementing patient safety and quality improvement initiatives within the context of the interprofessional team using effective communication.

p.22 In Essential VII, Interprofessional Collaboration for improving Patient and Population Health Outcomes...In a redesigned health system, a greater emphasis will be placed on cooperation, collaboration, and communication among all health professionals in order to integrate care in teams and ensure that care is continuous and reliable.

p.27 In Essential IX, Master's Level Nursing Practice...The master's degree program prepares the graduate to...Use leadership skills to teach, coach, and mentor other members of the healthcare team.

Statements below excerpted from: *The Essentials of Doctoral Education for Advanced Nursing Practice* (October, 2006); Accessed September 29, 2016.

p. 14 In Essential V, Health Care Policy for Advocacy in Health Care...The DNP program prepares the graduate to...Critically analyze health policy proposals, health policies, and related issues from the perspectives of consumers, nursing, other health professions, and other stakeholders in policy and public forums.

p.14 In Essential VI, Interprofessional Collaborations for Improving Patient and Population Health Outcomes...In order to accomplish the IOM mandate for safe, timely, effective, efficient, equitable, patient-centered care in a complex environment, healthcare professionals must function as highly collaborative teams (AACN 2004; IOM 2003; O'Neil 1998). DNP members of these teams have advanced preparation in the interprofessional dimensions of health care that enable them to facilitate collaborative team functioning and overcome impediments to interprofessional practice.

p.16 In Essential VII, Clinical Prevention and Population Health for Improving the Nation's Health...Analyze epidemiological, biostatistical, environmental, and other appropriate scientific data related to individual, aggregate, and population health
Synthesize concepts, including psychosocial dimensions and cultural diversity, related to clinical prevention and population health in developing, implementing, and evaluating interventions to address health promotion/disease prevention efforts, improve health status/access patterns, and /or address gaps in care of individuals, aggregates, or populations.

Pharmacy

Statements below excerpted from: *Accreditation Standards and Key Elements for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree -- "Standards 2016"* (February 2, 2015); Accessed September 29, 2016.

p. iii...Establishing a commitment to continuing professional development (CPD) by students and graduates is also addressed, as are contemporary educational concepts such student readiness to...Contribute as a member of an interprofessional collaborative patient care team (Team ready)

Montana Board of Regents
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

p. 1 In the preamble to Section 1 (Educational Outcomes): The educational outcomes² described herein have been deemed essential to the contemporary practice of pharmacy in a healthcare environment that demands interprofessional collaboration and professional accountability for holistic patient well-being.

p. 2 In Standard 3: Approach to Practice and Care: Key Element 3.4 is: **Interprofessional collaboration** – The graduate is able to actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.

p. 7-8 Standard 11 is Interprofessional Education (IPE): The curriculum prepares all students to provide entry-level, patient-centered care in a variety of practice settings as a contributing member of an interprofessional team. In the aggregate, team exposure includes prescribers as well as other healthcare professionals.

Key Elements:

11.1. Interprofessional team dynamics – All students demonstrate competence in interprofessional team dynamics, including articulating the values and ethics that underpin interprofessional practice, engaging in effective interprofessional communication, including conflict resolution and documentation skills, and honoring interprofessional roles and responsibilities. Interprofessional team dynamics are introduced, reinforced, and practiced in the didactic and Introductory Pharmacy Practice Experience (IPPE) components of the curriculum, and competency is demonstrated in Advanced Pharmacy Practice Experience (APPE) practice settings.

11.2. Interprofessional team education – To advance collaboration and quality of patient care, the didactic and experiential curricula include opportunities for students to learn about, from, and with other members of the interprofessional healthcare team. Through interprofessional education activities, students gain an understanding of the abilities, competencies, and scope of practice of team members. Some, but not all, of these educational activities may be simulations. **11.3. Interprofessional team practice** – All students competently participate as a healthcare team member in providing direct patient care and engaging in shared therapeutic decision-making. They participate in experiential educational activities with prescribers/student prescribers and other student/professional healthcare team members, including face-to-face interactions

p.8. In Standard 12 (Pre-Advanced Pharmacy Practice Experience), Key Element 12.5 : Introductory Pharmacy Practice Experience (IPPE) expectations...IPPEs expose students to common contemporary U.S. practice models, including interprofessional practice involving shared patient care decision-making, professional ethics and expected behaviors, and direct patient care activities.

p.9. In Standard 13 (Advanced Pharmacy Practice Experience), Key Element 13.3: **Interprofessional experiences** – In the aggregate, students gain in-depth experience in delivering direct patient care as part of an interprofessional team.

p.13. In Standard 18 (Faculty and Staff-Quantitative Features), Key Element 18.1: **18.1. Sufficient faculty** – The college or school has a sufficient number of faculty members to effectively address the following programmatic needs...Intraprofessional and interprofessional collaboration.

p.15. In Standard 21 (Physical Facilities and Educational Resources), Key Element 21.2: **Physical facilities' attributes** – The college or school's physical facilities also include adequate...Space that facilitates interaction of administrators, faculty, students, and interprofessional collaborators.

Montana Board of Regents
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

p.17. In Standard 24 (Assessment Elements for Section I: Educational Outcomes), Key Element 24.3: **24.3. Student achievement and readiness** – The assessment plan measures student achievement at defined levels of the professional competencies that support attainment of the Educational Outcomes in aggregate and at the individual student level. In addition to college/school desired assessments, the plan includes an assessment of student readiness to...Contribute as a member of an interprofessional collaborative patient care team.

p. 18. In Standard 25 (Assessment Elements for Section II: Structure and Process), Key Element 25.6: **Interprofessional preparedness** – The college or school assesses the preparedness of all students to function effectively and professionally on an interprofessional healthcare team.

p.20-22 In Appendix 1 (Required Elements of the Didactic Doctor of Pharmacy Curriculum), under Social/Behavioral/Administrative Systems:

Healthcare Systems

- Examination of U.S. health systems and contemporary reimbursement models in which patient-centered and/or population-based care is provided and paid for, and how social, political, economic, organizational, and cultural factors influence providers' ability to ensure patient safety and deliver coordinated interprofessional care services.

Professional Communication

- Analysis and practice of verbal, non-verbal, and written communication strategies that promote effective interpersonal dialog and understanding to advance specific patient care, education, advocacy, and/or interprofessional collaboration goals. Exploration of technology- based communication tools and their impact on healthcare delivery, healthcare information, and patient empowerment.

p.24. In Appendix 2 (Expectations within the APPE Curriculum):

... IPPE involves interaction with practitioners and patients to advance patient welfare in authentic practice settings, and provides exposure to both medication distribution systems and high-quality, interprofessional, team-based patient care.

... Collectively, APPE hones the practice skills, professional judgment, behaviors, attitudes and values, confidence, and sense of personal and professional responsibility required for each student to practice independently and collaboratively in an interprofessional, team-based care environment.

... The APPE curriculum, in the aggregate, includes but is not limited to: (1) direct patient care, (2) interprofessional interaction and practice, (3) medication dispensing, distribution, administration, and systems management, and (4) professional development. Examples of possible activities within these broad areas are listed in the Guidance document.

... **Interprofessional interaction.** The need for interprofessional interaction is paramount to successful treatment of patients. Colleges and schools provide pharmacy students the opportunity to gain interprofessional skills using a variety of mechanisms including face-to-face interactions in clinical settings or in real-time telephonic or video-linked interactions. Regardless of the methods used, students demonstrate those interprofessional skills articulated in Standard 11.

... **Ambulatory care.** Ambulatory care pharmacy practice is the provision of integrated, accessible health care services by pharmacists who are accountable for addressing medication needs, developing sustained partnerships with patients, and practicing in the context of family and community.⁵ The ambulatory care setting involves interprofessional communication and collaboration to provide acute and chronic patient care that can be accomplished outside the inpatient setting.

Montana Board of Regents
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

Physical Therapy

Statements below excerpted from: CAPTE "[Standards and Required Elements for Accreditation of Physical Therapist Education Programs](#)" (Revised 11/11/15, effective on January 1, 2016; Revised 3/4/16); Accessed September 29, 2016.

p. 26 Standard 7D: The physical therapist professional curriculum includes content and learning experiences designed to prepared students to achieve educational outcomes required for initial practice of physical therapy. Courses within the curriculum include content designed to prepare program students to:

p. 27. Standard 7D7: Communicate effectively with all stakeholders, including patients/clients, family members, caregivers, practitioners, interprofessional team members, consumers, payers, and policymakers.

p. 30. Standard 7D39: Participate in patient-centered interprofessional collaborative practice.

Public Health

Statements below excerpted from [Accreditation Criteria: Schools of Public Health and Public Health Programs](#) (Amended October 2016); Accessed December 9, 2016.

p. 18

In the Section on MPH Foundational Competencies, "Interprofessional Practice" is footnoted as follows:

...Interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes." From: Framework for Action on Interprofessional Education & Collaborative Practice (WHO/HRH/HPN/10.3). In this context, "interprofessional" refers to engagement with professionals outside of public health (eg, architects, nurses), rather than to engagement with individuals from other public health disciplines (eg, biostatisticians, health promotion specialists).

p. 18 In a new section on Master of Public Health (MPH) Foundational Competencies, the following competency is required:
Perform effectively on interprofessional teams

p. 19 In a new section on Doctor of Public Health (DrPH) Foundational Competencies, the following competency is required:
Propose interprofessional team approaches to improving public health

p. 38 In the new section on Faculty Instructional Effectiveness, one of the sub-indicators, School- or Program-level Outcomes, includes the following indicator:
Courses that are team-taught with interprofessional perspectives

Social Work

Council on Social Work Education

Montana Board of Regents
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

Social work undergraduate and graduate students need to demonstrate competency in the following area:

Social workers value the importance of **interprofessional teamwork and communication** in interventions, recognizing that beneficial outcomes may require **interdisciplinary, interprofessional, and interorganizational collaboration**. Social workers:

- critically choose and implement interventions to achieve practice goals and enhance capacities of clients and constituencies;
- apply knowledge of human behavior and the social environment, person-in-environment, and other multidisciplinary theoretical frameworks in interventions with clients and constituencies;
- use **interprofessional collaboration as appropriate to achieve beneficial practice outcomes**;

Athletic Training

Commission on **Accreditation of Athletic Training** Education

Standard 8 Planned interprofessional education is incorporated within the professional program.

Standard 61 Practice in collaboration with other health care and wellness professionals

Varying methods can be used to incorporate interprofessional education. To meet this standard, each student in the program must have multiple exposures to interprofessional education.

Communicative Sciences and Disorders (Council on Academic Accreditation in Speech Language Pathology)

3.1.1 Professional Practice Competencies (3.1.1A Audiology and 3.1.1B Speech-Language Pathology)

The program must provide content and opportunities for students to learn so that each student can demonstrate the following attributes and abilities and can demonstrate those attributes and abilities in the manners identified.

- Accountability: Understand how to work on interprofessional teams to maintain a climate of mutual respect and shared values.
- Effective Communication Skills: Communicate—with patients, families, communities, interprofessional team colleagues, and other professionals caring for individuals—in a responsive and responsible manner that supports a team approach to maximize care outcomes.
- Professional Duty: Understand the roles and importance of interdisciplinary/interprofessional assessment and intervention and be able to interact and coordinate care effectively with other disciplines and community resources.
- Collaborative Practice: Understand how to apply values and principles of interprofessional team dynamics.
- Collaborative Practice: Understand how to perform effectively in different interprofessional team roles to plan and deliver care—centered on the individual served—that is safe, timely, efficient, effective, and equitable.

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	Montana State/Univeristy of Montana
AWARD LEVEL:	Level II
PROGRAM NAME:	Montana University System (MUS) Institute for Interprofessional Education and Collaborative Practice in Heal
PROGRAM CODE:	

	FY2020	FY2021	FY2022	FY2023	FY2024
ENROLLMENT PROJECTIONS					
Headcount					
annual unduplicated headcount of students with declared major or minor within the program					
Credit Hours					
annual avg. credits hours earned per student in program related curriculum					
Student FTE					
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	0	0	0	0	0
Completions					
Annual number of program completers					

REVENUE					
Tuition Revenue (net of waivers)					
Institutional Support	\$45,000				
Other Outside Funds (grants, gifts, etc.)	\$5,000	\$60,000	\$75,000	\$75,000	\$100,000
Program Tuition/Fees					
Total Revenue	\$50,000	\$60,000	\$75,000	\$75,000	\$100,000
Total Revenue per Student FTE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

EXPENDITURES					
Tenure Track Faculty	FTE				
	Salary + Benefits				
Non-tenure Track Faculty <small>*Includes Adjunct Instructors</small>	FTE	0.25	0.25	0.25	0.25
	Salary + Benefits	\$23,971	\$23,971	\$23,971	\$23,971
Graduate Teaching Assistants	FTE				
	Salary + Benefits				
Staff	FTE	0.25	0.40	0.40	0.40
	Salary + Benefits	\$17,726	\$28,361	\$28,361	\$28,361
Total Faculty & Staff	FTE	0.50	0.65	0.65	0.65
	Salary + Benefits	\$41,697	\$52,332	\$52,332	\$52,332
Operations (supplies, travel, rent, etc)		\$8,300	\$7,500	\$7,500	\$7,500
Start-up Expenses (OTO)					
Total Expenses		\$49,997	\$59,832	\$59,832	\$59,832
Student FTE to Faculty (TT + NTT) Ratio		0.0	0.0	0.0	0.0
Net Income/Deficit (Revenue - Expenses)		\$3	\$168	\$15,168	\$40,168

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



 Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Montana University System
INTENT TO PLAN FORM

Program/Center/Institute Title: **Institute for Interprofessional Education and Collaborative Practice in Health and Medicine**

Campus, School/Department: **MUS- MSU and UM**

Expected Submission Date: _____

Contact Name/Info: **Charlotte (Kathy) Jutila, MD/ charlotte.jutila2@montana.edu/ (406) 994-2555**

To increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process, please complete this form not more than 18 months in advance of the anticipated date of submission of the proposed program/center/institute to the Board of Regents for approval. The completed form should not be more than 2-3 pages. For more information regarding the Intent to Plan process, please visit <http://mus.edu/che/arsa/academicproposals.asp>.

1) Provide a description of the program/center/institute.

The Montana University System (MUS) Institute for Interprofessional Education and Collaborative Practice in Health and Medicine, co-led and co-housed by the MSU College of Nursing and UM College of Health Professions and Biomedical Sciences, will enhance the interprofessional efforts among healthcare educational programs. The development of an institute will strengthen the momentum already established and will ensure sustainability for interprofessional education across the rural state. The Institute for Interprofessional Education and Collaborative Practice in Health and Medicine will enhance the impact of interprofessional education and training efforts by:

- Serving as a resource for interprofessional education for students and continuing education for faculty among healthcare programs. These efforts will support the Area Health Education Center (AHEC) Scholars Program, a Health Resources and Services Administration (HRSA) mandated initiative and will house a proposed Rural Collaborative Practice Certificate Program;
- Ensuring that interprofessional education efforts across the state are well coordinated;
- Serving as a clearinghouse to receive and distribute funding to advance the mission of the Institute;
- Coordinating grant-writing and scholarship activities, including publications and presentations;
- Strengthening interprofessional education (IPE) relationships between health care professional educational programs;
- Providing a venue for Montana patients and families to share their perspectives regarding the delivery of team-based, patient-centered care;
- Acting as a conduit between healthcare sites including hospitals and clinics across the state and the MUS health profession programs to ensure educational programs stay clinically relevant;
- Coordinate ongoing education and training for clinical instructors/preceptors in healthcare sites that host MUS students across Montana.

It is important to underscore that the Institute will recruit leaders from other campuses in the MUS to ensure best practices are shared, and the goals of the Institute are relevant to practice.

Montana University System
INTENT TO PLAN FORM

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student and workforce demands. (Please cite sources).

The World Health Organization states that interprofessional education occurs when students “from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, p. 13, 2010). Interprofessional education prepares a collaborative-practice ready health workforce (WHO, 2010), which is essential to combat fragmented healthcare that plagues communities across the state.

While team-based care is important in all settings, rural healthcare demands high functioning interdisciplinary collaboration due to resource limitations. There are numerous health profession programs affiliated with the Montana University System, located in all corners of the state. Currently, there are approximately 70 undergraduate and graduate health-related programs offered via four-year universities under the MUS umbrella and 125 health-related certificates and associate degrees offered via Montana tribal and community college (AHEC, 2017). While some interprofessional and training efforts are to varying degrees, such as MSU’s WWAMI IPE programs with nursing, pharmacy and dietician students, there exists considerable opportunity for more intentional collaboration to enhance these important efforts. Feedback from rural hospital administrators suggest that students need to be better prepared to practice collaboratively once in the workforce. The principle reason for this unfulfilled potential is the lack of a coordinating entity. Because the current healthcare landscape demands collaborative practice across disciplines to improve patient care outcomes and resource allocation, current efforts must be better coordinated and expanded for a more pressing impact.

The literature evaluating interprofessional efforts at universities highlights the challenges of securing external funding, integrating IPE into core curricula, and engaging in continuous innovation without a “strategically designed structure that is supported by high-level administration” (Brashers et al, 2015, p. 96). Brashers et al recommend the development of a center to appropriately support and sustain IPE university efforts to enhance faculty development, better align health system priorities with university education goals, and to disseminate scholarship, and to secure external funding.

3) Describe how the program/center/institute fits with the institutional mission, strategic plan, and existing institutional program array.

The goals of the MUS Institute for Interprofessional Education and Collaborative Practice in Health and Medicine align with the Montana University System Strategic Plan 2017, specifically: *goal 2: Workforce and Economics Development and goal 3: Efficiency and Effectiveness*. A sharper focus on interprofessional education among MUS health professional programs will better prepare graduates for the demands of the 21st century healthcare workforce and improve coordination among programs by reducing duplication and maximizing resources.

The proposed Institute will allow MUS to meet its goal of increasing the responsiveness to workforce development needs (goal 2) by ensuring that the health profession programs stay clinically relevant and that students are ready for collaborative practice upon entering the workforce. The Institute will meet this goals by: 1) expanding and coordinating education and research efforts on interprofessional practice in the healthcare arena;

Montana University System
INTENT TO PLAN FORM

2) providing opportunities for students in various state-wide health professional educational programs to learn about interprofessional educational core competencies, 3) preparing graduates to practice as a member of an interprofessional collaborative team, and 4) acting as a liaison between healthcare sites and health profession educational programs to ensure educational efforts meet workforce needs.

The proposed MUS Institute for Interprofessional Education and Collaborative Practice in Health and Medicine will allow MUS to meet its goal of efficiency and effectiveness (goal 3) by providing efficient and coordinated services state wide among many health professions programs across the state of Montana.

4) Describe how the program/center/institute overlaps, complements, or duplicates existing efforts in the MUS. Describe efforts that will be made to collaborate with similar programs at other institutions. If no efforts will be made, please explain why.

To the best of our knowledge the proposed Institute for Interprofessional Education and Collaborative Practice in Health and Medicine does not overlap or duplicate any existing efforts in the MUS. We propose to be the first coordinated effort to maximize activities among health profession programs across Montana. These programs often intersect in clinical healthcare sites where, depending on the level of on-site coordination from healthcare providers, students may or may not interact. Improved administrative support and coordination from the Institute for Interprofessional Education and Collaborative Practice in Health and Medicine will enhance on-site interprofessional training opportunities. Currently, the Montana State University's College of Nursing (CON) faculty collaborates with the UM College of Health Professions and Biomedical Science (CHPBS), WWAMI faculty, Montana AHEC, among other partners. Disciplines represented on the IPE Steering Committee include MSU Nursing, MSU-WWAMI, MSU Division of Health Sciences, UM Social Work, UM Physical Therapy, UM Pharmacy, and the Family Medical Residency of Western Montana. The IPE steering committee supports smaller workgroup efforts that focus on enhancing IPE clinical experiences, IPE in the classroom, and IPE through simulation experiences. These efforts include all programs in the CHPBS, MSU CON, MSU Division of Health Sciences, and MSU-WWAMI, along with participation from UM Psychology, UM Communicative Sciences and Disorders, and UM Athletic Training. Additionally, the IPE Steering Committee partners with Montana AHEC to address rural healthcare needs across the state. This proposal to establish the MUS Institute for Interprofessional Education and Collaborative Practice in Health and Medicine will build off the current momentum of these efforts. Through better coordination, existing initiatives will be enhanced, better coordinated, and more efficient.

Interprofessional educational opportunities are varied among health profession programs. The MUS Institute for Interprofessional Education and Collaborative Practice in Health and Medicine will serve as resource center for interprofessional education for students and continuing education for faculty among healthcare and associated programs. As a resource center, the different health profession programs will benefit from shared educational resources and better promotion of interprofessional activities, thereby using human and fiscal resource efficiently. Additionally, the research mission of MSU and UM also will be enhanced by this Institute as a means to serve as a state-wide institute to apply for and receive grant funding, and to coordinate IPE scholarly activities between campuses.

Montana University System
INTENT TO PLAN FORM

Signature/Date

College/School Dean:

Chief Academic Officer: *RL Mohr* 9-26-18

Chief Executive Officer: *DeWayne* Sept 26, 2018

Flagship Provost*: *RL Mohr* 9-26-18

Flagship President*: *DeWayne* Sept 26, 2018

*Not applicable to the Community Colleges.

Date of Final Review:

When submitting the proposal to the BOR, include this signed form with the Level II request.

May 22-23, 2019

ITEM 183-1001-R0519

Request for authorization to establish a Paramedicine A.A.S.

THAT

Missoula College-UM requests authorization from the Montana Board of Regents to establish a Paramedicine associate of applied science.

EXPLANATION

Reflecting state and national trends, Western Montana's emergency service providers face a shortage of trained paramedics. Missoula College has an opportunity to establish a community partnership to address this shortage, positively impacting community health and safety by helping to provide critical service to rural areas. MESI supports the partnership to enhance recruitment of qualified paramedics, and to attain independent accreditation for the program, allowing graduates to qualify for national certification.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form
Fiscal Analysis Form
Intent to Plan

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 183-1001-R0519 Submission Month or Meeting: May 22-23, 2019

Institution: Missoula College-UM CIP Code: 51.0904

Program/Center/Institute Title: Paramedicine A.A.S.

Includes (please specify below): Online Offering _____ Options _____

Please mark the appropriate type of request and submit with an Item Template and 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*

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

X **B. Level II:**

- X **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Intent to Plan Form)
- 2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Intent 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 Intent to Plan Form, except when eliminating or consolidating)
- 5. Re-titling an academic, administrative, or research unit**

Proposal Summary [360 words maximum]

What

Missoula College-UM request authorization to establish a Paramedicine A.A.S. degree.

Why

Reflecting state and national trends, Western Montana’s emergency service providers face a shortage of trained paramedics. Missoula College has an opportunity to establish a community partnership to address this shortage, positively impacting community health and safety by helping to provide critical service to rural areas. Missoula Emergency Services Incorporated (MESI) supports the partnership to enhance recruitment of qualified paramedics, and to attain independent accreditation for the program, allowing graduates to qualify for national certification. Paramedicine is described by the Montana Dept. of Labor and Industry as a high-demand occupation (“Meeting State Worker Demand,” 2017), and in recent years Missoula’s primary emergency services provider, MESI, has encountered difficulty filling open positions for paramedics. While MESI has offered paramedic training for over 30 years, their program is not accredited, preventing graduates from seeking paramedic employment in other states. As with many allied health programs, a substantial number of contact hours for clinical training are required. While this hands-on training in hospitals and aboard ambulances (approximately 1000 hours) is essential for skill development, this increases the required credits for the degree (beyond that of a typical AAS degree).

Resources

The Program will be executed through a Contract for Services Agreement and is projected to generate modest revenue for both MESI and UM through a combination of tuition and Program Fees. The human resources needed include a .2 FTE Program Director, faculty affiliate agreements with MESI instructors, advising support, and support for Program Accreditation. Finally, program applicants will require access to General Education pre-requisite classes. Through the Agreement, MESI has agreed to fund the Program Director position and Accreditation costs.

Relationship to similar MUS programs

Three Paramedicine AAS programs are currently offered in the MUS (MSU-Great Falls, MSU Billings City College & Flathead Valley CC). All programs depend on local health facilities and emergency service providers to host rotations for clinical

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

training, so all programs are place-based and offer limited enrollment. In Missoula, MESI is experiencing a shortage of trained paramedics and has asked to partner with Missoula College to address this shortage. In addition, by facilitating Program Accreditation, the partnership will allow graduates to seek work in any other State.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- 1. Overview of the request and resulting changes.** Provide a one-paragraph description of the program. Is this program related or tied to other programs on campus? *[100 words]*

Missoula College seeks to partner with an existing local organization (MESI-Missoula Emergency Services, Inc.) to create a 73-credit Associate of Applied Science degree (AAS) in Paramedical science. As with many allied health programs, a substantial number of contact hours for clinical training are required. While this hands-on training in hospitals and aboard ambulances (approximately 1000 hours) is essential for skill development, this increases the required credits for the degree.

The program builds upon an existing EMT course offered through the Department of Health & Human Performance by AERIE. Under a Contract for Services agreement, Missoula College will delegate the curriculum instruction to MESI, with the exception of several general education pre-requisite classes. MESI will deliver the educational content and coordinate/supervise student clinical rotations.

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

Missoula College's Mission of workforce development will be well-supported by the Program, which seeks to educate and train students in the area of emergency medicine. Demand for Paramedics is high in Montana and across the US, as noted by Department of Labor and Industry.

The Paramedic Program will be delivered through a community-based partnership, engaging many healthcare facilities and contributing to community health and safety, in strong alignment with Missoula College's mission.

Individual student growth and success will be a primary focus of the program, with intensive, hands-on training in small class sizes complemented by clinical placements in hospitals and aboard ambulances. This aligns well with Missoula College's mission.

The Program provides a foundation for advanced academic achievement for aspiring health professionals, as the Paramedicine AAS degree functions well in preparing students for Physician's Assistant or Medical School programs. This also fits nicely with Missoula College's mission of transfer education.

- 3. Process leading to submission.** Briefly detail the planning, development, approval and early implementation process of the program at the institution. *[200 words]*

Planning for the program began in Spring 2018 following outreach by MESI staff, who cited a worker shortage, and noted that requirements now call for all programs to be nationally accredited. MESI expressed a desire to link up with Missoula College to facilitate workforce development, as well as the Accreditation process. Discussions with MESI's owner and manager resulted in choosing the Contract for Services model for program delivery.

Because MESI has been offering the program for over 20 years, it is already well-developed and requires little effort in the area of curriculum development.

- 4. Program description.** Please include a complete listing of the program's curriculum in Appendix A of this document.

See Appendix A

Montana Board of Regents
CURRICULUM PROPOSAL FORM

a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	60
Credits in required courses offered by other departments	4
Credits in institutional general education curriculum	9
Credits of free electives	0
Total credits required to complete the program	73

As with many allied health programs, a substantial number of contact hours for clinical training are required. While this hands-on training in hospitals and aboard ambulances (approximately 1000 hours) is essential for skill development, this increases the required credits for the degree.

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

Upon completion of the program, students will demonstrate the ability to:

- Integrate a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems
- Integrate comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.
- Integrate comprehensive knowledge of pathophysiology of major human systems.
- Integrate comprehensive knowledge of life span development.
- Apply fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.
- Integrate comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.
- Integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
- Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.
- Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- Integrate comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states.
- Integrate a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.
- Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- Integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for patients with special needs.

5. Need for the program. To what specific student, regional, and statewide needs is the institution responding with the program? How does the program meet those needs? Has demand for the program met the institution’s expectations? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

Missoula’s emergency service providers report a shortage of qualified paramedics; the proposed program will address this shortage and contribute to workforce development. Montana’s Department of Labor and Industry characterizes Paramedicine as a “high demand” field, which echoes national trends.

Health Professions students who are unable to gain entry into one of Missoula College’s competitive programs (Nursing, for example) will benefit from an option previously unavailable.

The Proposed Paramedicine program will provide a foundation for advanced and graduate degrees in Health Professions and Biomedical Sciences.

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

Institution Name	Degree	Program Title
MSU Billings City College	AAS	Paramedicine
Great Falls College MSU	AAS	Paramedicine
Flathead County Community College	AAS	Paramedicine

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

While Common Course Numbering will be employed for program courses, collaboration with other MUS Programs is impractical for two main reasons:

1. MESI reached out to Missoula College to initiate discussions to establish a partnership to provide the program;
2. All the state’s Paramedic programs are place-based and rely on local health facilities and emergency service providers to host student clinical rotations. Therefore, collaboration from a distance is impractical.

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7. Implementation of the program. When was the program be first offered? Describe the process of implementation [100 words]

The proposed AAS Program has not been offered before. Missoula College will execute a Contract for Services Agreement with MESI to provide the program, pending BOR and Faculty Senate approval.

- a. Complete the following table indicating the actual and projected enrollments in and graduates from the program since the program was first offered. **New Program - Projected enrollment/graduation only**

Fall Headcount Enrollment					Graduates				
AY2019	AY2020	AY2021	AY2022	AY2023	AY2019	AY2020	AY2021	AY2022	AY2023
0	15	15	15	15	0	0	15	15	15

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

These projections are based on MESI’s record of Program participation over the past 10 years.

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

Program success will be measured by student enrollments, AAS degree completions and successful employment outcomes following graduation. In addition to the number of students graduating, the quality of student graduates will provide another measure of program success. Achieving independent program Accreditation will also be an indicator of success.

Independent Accreditation requires annual reporting of student retention, graduation, and job placement; such reporting will provide insight to Missoula College and MESI regarding program success.

Because MESI will incur all program expenses through the Contract for Services agreement, Missoula College will not be at risk should program enrollment drop.

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

Ultimately, student success on the national certification examination will provide a key measure to assess learning outcomes. Independent Accreditation reporting requirements will also contribute to an evaluation of student outcomes.

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

In a direct sense, student learning and skill assessments will be completed on a weekly basis by MESI instructors, through written examinations and closely-monitored skills-based testing exercises. Written examinations and laboratory exercises are used in the class and lab settings, while preceptor evaluations will assess student learning and skill development in the clinical setting.

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Indirectly, annual Accreditation reports will facilitate evaluation of the program's success in delivering learning outcomes.

- c. How are assessment findings employed to ensure the quality of the program? *[100 words]*

Feedback from preceptors and class/lab instructors will provide direct input into program assessment. Trends and success rates will be closely monitored to provide regular feedback.

- d. Where appropriate, describe applicable specialized accreditation and explain why you have or have not sought accreditation. *[100 words]*

The Missoula College-MESI partnership will seek independent program Accreditation through CoAEMSP (Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions) upon BOR approval. This process is time consuming and costly, therefore, our application will await approval for the program's adoption.

9. Physical resources.

- a. Describe the existing facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment that support the program. What has been the impact on existing programs of increased use of existing physical resources by the program? How has the increased use been accommodated? *[200 words]*

Because the program will be offered through a Contract for Services Agreement with a partner organization, few physical resources will be required from Missoula College. MESI will retain faculty affiliates to deliver program content, and instruction will be delivered at MESI's Educational Center with dedicated classroom and lab spaces. There will be little impact on Missoula College resources, spaces, or physical equipment, with the exception of additional sections of the pre-requisite classes.

- b. What new facilities, equipment, space, laboratory instruments, etc., have been obtained or will be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How has or will the need for these additional resources be met? *[150 words]*

No new facilities or equipment will be required.

10. Personnel resources.

- a. Describe the existing instructional, support, and administrative resources that support the program. What has been the impact on existing programs of increased use of existing personnel resources by the proposed program? How has the quality and productivity of existing programs been maintained? *[200 words]*

Since Summer 2018, the Health Professions Department Chair has held bi-weekly meetings with MESI staff to develop the proposed curriculum and begin negotiations on the business agreement. No other personnel resources have been devoted.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

MESI has been operating the program for over 20 years, and will continue to employ their instructional staff to deliver the program. As per Unit Standards for the Health Professions Dept, these individuals will become Faculty Affiliates of Missoula College. The new Program Director will provide program oversight and Accreditation reports, while working with Missoula College to recruit students.

- b. Identify new personnel that have been or will be hired to support the program. (Enter the costs of those personnel resources into the budget sheet.) How have you secured the needed qualified faculty and staff? *[150 words]*

One new position will be created, a .20 FTE Program Director, who will be retained at MESI's expense.

11. Other resources.

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

Existing resources are sufficient.

- b. What impacts has the program had on student services? What are the implications of the new program on services for the rest of the student body? *[150 words]*

The proposed program will require basic support from admissions, registration, advising, and financial aid staff to process student inquires, admissions, and awards.

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

Through the Contract for Services Agreement, both MESI and UM are projected to receive a modest income from student enrollments, with projection of between \$2,000-\$3,000 expected per student completion.

- a. Describe expenses associated with the implementation of the program. How have these expenses been met? *[200 words]*

Aside from time spent planning, there have been no expenses to date.

- i. If funding came from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact has the reallocation of funds in support of the program had on other programs? *[150 words]*

N/A

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

N/A

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CURRICULUM PROPOSAL FORM

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

N/A

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

N/A

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

No additional fees beyond tuition and mandatory fees would apply to students taking pre-requisites for the program. Once admitted to the actual program, a program fee of approximately \$1950 per semester would be imposed in addition to tuition, and would be imposed for each of the 4 semesters in the program. No course or lab fees would be imposed.

14. Complete the fiscal analysis form, starting from the inception of the program and noting which fiscal years show actual program data and which are projected.

A Fiscal Analysis form is included as part of the proposal.

Signature/Date

College or School Dean:

DocuSigned by:
Roger Maclean
8C092E924171486...

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

DocuSigned by:
Jon Harbor
34E1E62599324B7...

Flagship President*:

DocuSigned by:
Seth Bodnar
94F80417FFA449D...

*Not applicable to the Community Colleges.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

Missoula College Health Professions Department
Paramedicine A.A.S. Program
Scope & Sequence

Pre-Requisites (Spring or Summer start)

AHMS 144	Medical Terminology	3 cr	
BIOH 104/5	Basic Human Anatomy	3	
COMX 115S	Interpersonal Communications	3	
MATH 105	Contemporary Mathematics	3	
WRIT 101	College Writing	3	
TOTAL PRE-REQS		15 credits	

Program CourseworkFall Semester Year I

ECP 200	Transition to Paramedic care	3	
ECP 201	Paramedic Fundamentals	3	
ECP 202	Paramedic Fundamentals Lab	1	
ECP 207	Cardiology	4	
ECP 208	Cardiology Lab & ACLS	1	12 cr total

Spring Semester

ECP 206	EMS Case Studies	4	
ECP 216	Hospital Clinical I	5	
ECP 220	Special Considerations	1	
ECP 221	OB/Neonate/Pediatrics	2	
ECP 222	Neonate/Pediatric Lab PALS/Stable	1	13 cr total

Summer Semester

ECP 230	Trauma	2	
ECP 232	Pulmonary	2	
ECP 233	Trauma/Pulmonary Lab & PHTLS	1	
ECP 242	Medical Considerations	2	
ECP 243	Medical Lab	1	
ECP 246	Hospital Clinical II	6	14 cr total

Fall Semester Year II

ECP 247	Hospital Clinical III	6	
ECP 250	NREMT Exam Preparation	3	
ECP 251	NREMT Exam Preparation Lab	1	
ECP 295	Field Internship	8	18 cr total

Total Pre-requisite Credits **15****Total In-Program Credits** **57****Total AAS Degree Credits** **72**

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	Missoula College
AWARD LEVEL:	UG
PROGRAM NAME:	Paramedical Sciences
PROGRAM CODE:	

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
ENROLLMENT PROJECTIONS					
Headcount					
annual unduplicated headcount of students with declared major or minor within the program	30	30	30	30	30
Credit Hours					
annual avg. credits hours earned per student in program related curriculum	28.5	28.5	28.5	28.5	28.5
Student FTE					
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	28.5	28.5	28.5	28.5	28.5
Completions					
Annual number of program completers	15	15	15	15	15

REVENUE					
Tuition Revenue (net of waivers)	\$96,772	\$96,772	\$96,772	\$96,772	\$96,772
Institutional Support					
Other Outside Funds (grants, gifts, etc.)					
Program Tuition/Fees	\$111,150	\$111,150	\$111,150	\$111,150	\$111,150
Total Revenue	\$207,922	\$207,922	\$207,922	\$207,922	\$207,922
Total Revenue per Student FTE	\$7,296	\$7,296	\$7,296	\$7,296	\$7,296

EXPENDITURES						
Tenure Track Faculty	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits					
Non-tenure Track Faculty <small>*Includes Adjunct Instructors</small>	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits					
Graduate Teaching Assistants	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits					
Staff	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits					
Total Faculty & Staff	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits					
Operations (MESI Contract, Instruction & Administration)		\$156,670	\$156,670	\$156,670	\$156,670	\$156,670
Start-up Expenses (OTO)						
Total Expenses		\$156,670	\$156,670	\$156,670	\$156,670	\$156,670
Student FTE to Faculty (TT + NTT) Ratio		0.0	0.0	0.0	0.0	0.0
Net Income/Deficit (Revenue - Expenses)		\$51,252	\$51,252	\$51,252	\$51,252	\$51,252

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:

 7136A4198B2D415...

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Montana University System
INTENT TO PLAN FORM

Program/Center/Institute Title: A.A.S. in Paramedical Science

Campus, School/Department: Missoula College, Health Professions Dept.

Expected Submission Date: Spring '19

Contact Name/Info: Dan Funsch, Chair, Health Professions Dept., Missoula College

To increase communication, collaboration, and problem solving opportunities throughout the MUS in the program/center/institute development process, please complete this form not more than 18 months in advance of the anticipated date of submission of the proposed program/center/institute to the Board of Regents for approval. The completed form should not be more than 2-3 pages. For more information regarding the Intent to Plan process, please visit <http://mus.edu/che/arsa/academicproposals.asp>.

1) Provide a description of the program/center/institute.

Missoula College seeks to partner with an existing local organization (MESI- Missoula Emergency Services, Inc.) to create a two-year Associate of Applied Science degree (AAS) in Paramedical science.

The Paramedicine Program will consist of approximately 72 semester credit hours, including approximately 15 general education credits and approximately 1000 clock hours of clinical rotation. The A.A.S. degree will qualify students for national certification and help to meet workforce demand in the field of emergency medicine. MESI instructors will be vetted to ensure their qualifications meet Missoula College instructor standards, and may be retained through Faculty Affiliate agreements or hired directly as Missoula College faculty.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student and workforce demands. (Please cite sources).

Paramedicine is described by the Montana Dept. of Labor and Industry as a high-demand occupation ("Meeting State Worker Demand," 2017), currently served by a combination of college and community-based programs. Because of intensive requirements for clinical training aboard ambulances and in hospital settings, all programs are "place-based" and rely on local ambulance and hospital facilities for this student clinical training.

In Missoula, the privately-owned Missoula Emergency Services Inc. (MESI) operates a Paramedicine Program that is recognized by the State. And while MESI graduates help meet workforce demand in western Montana, they cannot obtain a national certification because standards call for programs to be Accredited (either independently or through a DOE-recognized Regional Accreditor). MESI seeks to partner with Missoula College to meet this national accreditation requirement.

Student demand for MESI's program is consistently high, with class enrollments of 15 students common (personal communication, MESI).

Montana University System
INTENT TO PLAN FORM

3) Describe how the program/center/institute fits with the institutional mission, strategic plan, and existing institutional program array.

The proposed Paramedicine Program fits squarely with Missoula College's Mission to meet Montana's workforce demand, and will supply Montana with highly-qualified paramedics.

The Program will also provide graduates a "stepping stone" into other health care careers such as Physicians' Assistants, Physical Therapy, and Nursing.

The proposed Program would rely on many facility partners with whom Missoula College already has well-established partnerships to provide student clinical experiences.

The proposed Program does not necessitate development of any new classes, but would require, and support, several general education classes that are existing requirements of other Health Professions programs.

The proposed Program offers unique opportunities for recruitment.

4) Describe how the program/center/institute overlaps, compliments, or duplicates existing efforts in the MUS.

The Proposed A.A.S. in Paramedical Science would complement the State's three existing Paramedicine Programs and would employ Common Course Numbering. MSU Billings City College and MSU Great Falls College both offer Paramedicine Programs leading to the A.A.S. degree, as does Flathead Valley Community College in western Montana.

All Programs rely on local ambulance services and hospital facilities to provide opportunities for student training, so Missoula College students would remain in the Missoula area for this training. As a result, no adverse impact to enrollment in other College programs is expected.

Signature/Date

College/School Dean:

 9/12/18

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

 9/25/18

Flagship President*:

 17 Oct 18

*Not applicable to the Community Colleges.

Date of Final Review:

When submitting the proposal to the BOR, include this signed form with the Level II request.

May 22-23, 2019

ITEM 183-1002-R0519

Request for Authorization to establish a Social Work option in the Public Health PhD

THAT

The University of Montana-Missoula requests authorization from the Montana Board of Regents to establish a Social Work option in the Public Health PhD.

EXPLANATION

The School of Public and Community Health Sciences (SPCHS) and the School of Social Work propose an option in Social Work within the existing PhD in Public Health program. The option will meet the needs of students interested in developing the requisite skill set to respond to both the public health and social justice challenges faced in many areas of professional practice. The program will be developed through coordination and utilization of existing resources in both Schools, leveraging two already existing successful programs that offer dual modalities (online and in person). An MSW degree will be required to apply to this program.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form
Fiscal Analysis Form
Intent to Plan

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 183-1002-R0519 Submission Month or Meeting: May 22-23, 2019

Institution: University of Montana-Missoula CIP Code: 51.2211; 51.2207

Program/Center/Institute Title: Social Work option, Public Health PhD

Includes (please specify below): Online Offering Options Social Work option

Please mark the appropriate type of request and submit with an Item Template and 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*

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

B. Level II:

1. **Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Intent to Plan Form)
2. **Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Intent 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 Intent to Plan Form, except when eliminating or consolidating)
5. **Re-titling an academic, administrative, or research unit**

Proposal Summary [360 words maximum]

What

The School of Public and Community Health Sciences (SPCHS) and the School of Social Work propose an option in Social Work within the existing PhD in Public Health program.

Why

The option will meet the needs of students interested in developing the requisite skill set to respond to both the public health and social justice challenges faced in many areas of professional practice. The program will be developed through coordination and utilization of existing resources in both Schools, leveraging two already existing successful programs that offer dual modalities (online and in person). An MSW degree will be required to apply to this program. Interdisciplinary education has become increasingly popular as a means of addressing the ever increasing complexity and needs of today's world. The need becomes particularly apparent when looking at patient-care giving services, such as healthcare, substance use treatment, and mental health (Report of an Expert Panel, 2011). Social work and public health have an intertwined history that dates back early 20th century efforts including settlement houses, communicable-disease control, and infant and maternal health. The two professions espouse mutual commitments to social justice, enhancing people's wellbeing, and reducing social health problems. As a result, social work and public health frequently borrow from one another and overlap in their approaches (Ruth et al., 2008).

Resources

No additional resources are required at this time. As with the current Social Work and Public Health programs, program tuition charges (already a component of each program) would support the accreditation activities and overall delivery of the program. The tuition surcharge would be adjusted and aligned to annual tuition increases throughout the program lifespan.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Over time more students may be drawn to this new Concentration, which might put strain on the current capacity on some courses and subsequently, faculty within both units. Additional resources or reconfiguring of course offerings may be necessary if the new Concentration experiences rapid and sustained growth.

Relationship to similar MUS programs

The proposed Social Work option in the PhD in Public Health will be the only one of its kind in not only Montana, but our region. UM offers the only accredited Public Health program in the state of Montana, while the School of Social Work is also the only accredited program in the state.

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 School of Public and Community Health Sciences (SPCHS) and the School of Social Work propose an option in Social Work within the existing PhD in Public Health program. The option in Social Work will meet the needs of students interested in developing the requisite skill set to respond to both the public health and social justice challenges faced in many areas of professional practice. The program will be developed through coordination and utilization of existing resources in both Schools, leveraging two already existing successful programs that offer dual modalities (online and in person). An MSW degree will be required to apply to this 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]*

The University of Montana seeks to prepare students qualified to effectively engage within the workforce. The University of Montana’s recent prioritization process identified the Master of Social Work program as a “Priority for Development and Growth” and the Bachelor of Social Work and Public Health programs in the category “Consider for Development and/or Modification” (Office of the President, 2017). The Master of Public Health program was also placed in the category of “Consider for Development and/or Modification” (Office of the President, 2017). This proposed joint program addresses former President Stearns’ recommendations: “investing in growing graduate programs unique to UM”, “ensuring sustainability of independently accredited programs and to support new professional/specialized accreditations” (APASP Recommendations and Reflections, 2017). The addition of this new degree option is also consistent with the mission of the UM Health and Medicine initiative (UMHM) that serves as the virtual home for all health-related courses, programs, clinics and laboratories across campus.

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

In developing this proposal, Drs. Curtis Noonan and Tony Ward from the SPCHS initially met with Dr. Jim Caringi from the School of Social Work in early Spring 2018. Multiple planning meetings were then conducted during the Spring and Summer 2018. After a proposed plan of study / proposal was developed, Drs. Ward and Caringi then consulted with the rest of their faculty during their respective faculty meetings. Next, the preliminary proposal was reviewed and approved by Dean Humphrey of the College of Health Professions and Biomedical Sciences before submission to the Provost’s Office and then Faculty Senate review.

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

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

	Credits
Credits in required courses offered by the department offering the program	63 PUBH / 12 SW
Credits in required courses offered by other departments	
Credits in institutional general education curriculum	0

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Credits of free electives	15 transfer credits
Total credits required to complete the program	90

- 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.

This option in Social Work within the existing Public Health Doctoral program will allow students to complete core classes in their respective discipline (Social Work and Public Health) required for national accreditation competencies while specializing in a research area. Students that graduate with a PhD in Public Health, Social Work option will be prepared for leadership and academic roles within academic institutions, government agencies, and community healthcare settings.

- 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]*

Interdisciplinary education has become increasingly popular as a means of addressing the ever increasing complexity and needs of today’s world. The need becomes particularly apparent when looking at patient-care giving services, such as healthcare, substance use treatment, and mental health (Report of an Expert Panel, 2011).

Social work and public health have an intertwined history that dates back early 20th century efforts including settlement houses, communicable-disease control, and infant and maternal health. The two professions espouse mutual commitments to social justice, enhancing people’s wellbeing, and reducing social health problems. As a result, social work and public health frequently borrow from one another and overlap in their approaches (Ruth et al., 2008).

Ten years ago, roughly 20 Master of Social Work and Master of Public Health dual degree programs existed in the United States (Ruth et al., 2008). As of 2015, the number of dual degree programs has grown to over 40. Researchers conducted a survey of 41 of the 42 administrators of the MSW/MPH dual degree programs. The findings suggest that MSW/MPH programs are increasing in number and popularity and are drawing talented students interested in trans-disciplinary public health social work practice (Ziperstein et al., 2015). Building on the MSW/MPH model, this PhD program will be the only program of its kind within Montana and the Northern Rocky Mountain region. Developing this program addresses an important need, and provides opportunities for students to directly engage with research activities related to Social Work/Public Health issues in our region.

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

The new program would be housed at the University of Montana-Missoula. UM-Missoula is the only institution in the MUS that offers a PhD in Public Health degree, and this would be the only PhD option in Social Work in the region. There are degree programs within the Montana University System that provide similar academic content as some courses in the proposed new degree option. However, none offer a program of study leading to a PhD in Public Health degree, and none are accredited by the Council on Education for Public Health like our public health offerings currently are.

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]*

The proposed PhD in Public Health with a Social Work option will be the only one of its kind in not only Montana, but our region. The proposed PhD will be composed of existing programs within the MUS system. The SPCHS maintains the only accredited Public Health program in the state of Montana, while the School of Social Work is also the only accredited program in the state. The proposed campus-based PhD in Public Health with a option in Social Work will allow students to utilize the existing resources of other programs on the University of Montana's campus, including those of the Master of Social Work program.

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

Both the Social Work and PhD in Public Health programs are at the University of Montana. Given that all of the needed courses for this degree will be offered by these respective programs, no collaborations with similar program at other institutions was explored.

- 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]*

We anticipate the first cohort of students enrolling in Fall 2019. As all of the classes proposed in this degree are already developed and offered, no phased implementation will occur.

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

We anticipate that three new graduate students in the year after formal approval (Fall 2019) will enroll in the new degree option. Further, we anticipate three to five students will enroll in the program each year. Applications would be evaluated by an Admissions Committee comprised of faculty drawn from both programs. We have determined these projections based on informal discussions with interested students.

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

Both programs provide related graduate programs that would be retained. The current PhD in Public Health program has nine students. Adding another three to five students per year would not adversely impact the capacity of either program, at least for the first several years of 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]*

Similar to our existing Public Health and Social Work programs, we intend to have this new program accredited by our respective accrediting bodies. For the PhD program, this includes the Council on Education for Public Health (CEPH). For the Social Work program, this is the Council on Social Work Education (CSWE). The success of the graduate program will be evaluated using a variety of metrics. We intend to form a four-person

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Assessment Committee to track the metrics listed below. Overall success of the program will be evaluated by the metrics listed below. Based on the results of these metrics over time, if these metrics are not met, then changes will be made to address any identified problems or weaknesses with the joint degree.

- 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]*

An Assessment Committee composed of both Social Work and Public Health faculty will track the metrics below. Metrics will be tracked during the application process, throughout the duration of the program, during graduation, and post-graduation. The Assessment Committee will meet each semester to review metrics data, and ensure the overall quality of the program.

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

Important questions and data will include the following:

- How many applicants were received for the new PhD option?
- How many applicants were admitted into the new PhD option?
- How many students enrolled in the new PhD option?
- How many students dropped out of the new PhD option, and what were their reasons?
- How many students graduated with the new PhD option?
- How many students met the identified competencies for the new PhD option?
- Number of teaching faculty in program compared to class sizes
- Number of research faculty in program
- Job type and location of student employment post-graduation
- Number of papers, technical reports, etc. published by students
- Number of presentations / posters given by students at conferences
- Number of research programs instigated through networks
- Number of Ph.D. level students accessing international collaborative opportunities (internships, international training courses, research opportunities) through Institute partnerships

Similar to our PhD Generalist program, we intend to have our Social Work option accredited by the CEPH by 2019. We have informed CEPH of our intentions, and have received approval to seek accreditation for our new PhD option.

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

As part of our CEPH accreditation, we are mandated to implement and maintain a strong assessment/evaluation program. This includes a variety of different evaluation strategies, as well as a commitment to using the collected data to continually improve the MPH program. The Assessment Committee will utilize these same strategies with the Social Work / Public Health program.

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

Similar to our Generalist PhD program, this new option will be accredited by CEPH.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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]*

Within the College of Health Professions and Biomedical Sciences, the Social Work program is located in Rankin Hall, while the SPCHS is located within the Skaggs Building. Faculty from both programs are provided with adequate facilities and space to support the successful implementation of the program. We do not anticipate any significant impacts to our existing programs due to the implementation of this new option.

- 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]*

We are not requesting additional facilities, space, laboratory instruments etc. to support the proposed program.

10. Personnel resources.

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

The Social Work and Public Health programs, respectively, are currently supported by faculty within their programs, as well as the Dean of the College of Health Professions and Biomedical Sciences (Dr. Reed Humphrey). Faculty from both programs would contribute expertise to this new option. Given the modest increase in students within an infrastructure with significant capacity, we do not anticipate a significant increase in personnel resources by the proposed program. As the PhD Generalist program has to meet stringent accreditation requirements, the quality and productivity of existing programs will be maintained through the existing comprehensive assessment programs, as well as the new Assessment Committee.

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

No additional faculty resources are required at this time. As with the current Social Work and Public Health programs, program tuition charges (already a component of each program) would support the accreditation activities and overall delivery of the program. The tuition surcharge would be adjusted and aligned to annual tuition increases throughout the program lifespan.

Over time more students may be drawn to this new option, which might put strain on the current capacity on some courses and subsequently, faculty within both units. Additional resources or reconfiguring of course offerings may be necessary if the new option experiences rapid and sustained growth. It is possible that a new faculty line (or lines) would be needed within the next few years if the program grows

Montana Board of Regents
CURRICULUM PROPOSAL FORM

more than anticipated. When future funding is available and/or a current line opens up, an additional line for the option is a priority.

11. Other resources.

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

Yes. The University of Montana library already supports students from the Social Work and Public Health programs. No additional library resources will be needed.

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

Yes. Given that the Social Work and Public Health programs are already established, we do not expect any implications of the new program 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 new option has the opportunity to generate tuition resources for the University of Montana. Beyond normal tuition revenue, program tuition for both the Social Work and Public Health programs will be used to support any financial needs (such as paying for an instructor) for this new program.

We are not requesting any monies to develop and implement this new option; it has the opportunity to generate significant resources for the UM in the future.

- 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	\$26,257	\$61,267	\$96,277
Expenses	\$0	\$0	\$0
Net Income/Deficit (revenues-expenses)	\$26,257	\$61,267	\$96,277

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

We do not anticipate any new expenses. This proposed program already takes advantage of existing classes taught within both the Social Work and Public Health programs.

- 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]*

Not applicable.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

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]

Not applicable.

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

Not applicable.

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

No course, class, lab, or program fees will be imposed. Students will be assessed program fees that currently exist within both programs.

14. Complete the fiscal analysis form.

Signature/Date

College or School Dean:

DocuSigned by:
Reed Humphrey
D3FE78AF0D42425...

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

DocuSigned by:
Jon Harbor
34E1E62599324B7...

Flagship President*:

DocuSigned by:
Seth Bodnar
94E80417FFA449D...

*Not applicable to the Community Colleges.

Montana Board of Regents

CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

General Description

Ph.D. degree training typically consists of two years of course work and one-three years of research leading to the completion and defense of a Ph.D. dissertation. Students will take 90 total credits: 15 transfer credits from previous MSW Degree, 33 credits from the Public Health offerings, 12 credits from the Social Work offerings, and 30 research and dissertation credits focused on Social Work related study.

Core Public Health Courses

The following core courses are required of all students in the Ph.D. program:

- PUBH 525 Multi-cultural Public Health (3 cr. Fall)
- BMED 605 Biomedical Research Ethics (1 cr. Spring)
- STAT 451 & 457 Statistical Methods I (4 cr. Fall)
- STAT 452 & 458 Statistical Methods II (4 cr. Spring)
- PUBH 620 Adv Quant Methods 1 (3 cr. Fall)
- PUBH 621 Adv Quant Methods 2 (3 cr. Spring)
- PUBH 640 Qualitative Research Methods (3 cr. Spring, alternating years)
- PUBH 612 Neuroepidemiology (3 cr. Spring, alternating years)
- PUBH 613 Spatial epidemiology (3 cr. Spring, alternating years)
- PUBH 600 Research Rotations (3 cr.)
- PUBH 694 Seminar (3 cr.)

- PUBH 690/699 Research/Dissertation (up to 30 cr.)

Elective Social Work Courses

- SW505 (3 credits) Foundations in Social Work Practice
- SW521 (3 credits) Advanced Research
- SW552 (3 credits) Psychopathology and Social Work
- SW596 (3 or more credits) Independent Study

- 15 transfer credits would be allowed from the student's prior work in their MSW Programs (required for application)

Proposed Plan of Study for Ph.D. in Public Health, Social Work Concentration

Year 1

- Core course work
- Research rotations
- Selection of research advisor
- Selection of advisory committee
- Approval of Plan of Study

Year 2

- Completion of core and elective course work
- Informational Seminar
- Research

Year 3

- Approval of Research Proposal
- Research Progress Seminar
- Comprehensive Exam

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- Research

Year 4/5

- Dissertation research
- Dissertation Presentation Seminar
- Dissertation Defense
- Preparation of manuscript submissions

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:	UM-Missoula
AWARD LEVEL:	Graduate
PROGRAM NAME:	PhD in Public Health, Concentration in Social Work
PROGRAM CODE:	PUBH/SW

ENROLLMENT PROJECTIONS	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Headcount					
annual unduplicated headcount of students with declared major or minor within the program	3	7	11	15	15
Credit Hours					
annual avg. credits hours earned per student in program related curriculum	18	18	18	18	18
Student FTE					
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	2.25	5.25	8.25	11.25	11.25
Completions					
Annual number of program completers	0	0	0	0	4

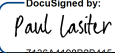
REVENUE	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Tuition Revenue (net of waivers)	\$16,159	\$37,705	\$59,251	\$80,796	\$80,796
Institutional Support	\$0	\$0	\$0	\$0	\$0
Other Outside Funds (grants, gifts, etc.)	\$0	\$0	\$0	\$0	\$0
Program Tuition/Fees	\$10,098	\$23,562	\$37,026	\$50,490	\$50,490
Total Revenue	\$26,257	\$61,267	\$96,277	\$131,286	\$131,286
Total Revenue per Student FTE	\$11,670	\$11,670	\$11,670	\$11,670	\$11,670

EXPENDITURES		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Tenure Track Faculty	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Non-tenure Track Faculty <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	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Total Faculty & Staff	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0

Operations (supplies, travel, rent, etc)	\$0	\$0	\$0	\$0	\$0
Start-up Expenses (OTO)	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$0	\$0	\$0	\$0	\$0

Student FTE to Faculty (TT + NTT) Ratio	0.0	0.0	0.0	0.0	0.0
Net Income/Deficit (Revenue - Expenses)	\$26,257	\$61,267	\$96,277	\$131,286	\$131,286

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:

713644198828115

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Montana University System
INTENT TO PLAN FORM

Program/Center/Institute Title: PhD in Public Health with a Concentration in Social Work

Campus, School/Department: School of Public and Community Health Sciences, School of Social Work Expected Submission Date: 1/4/19

Contact Name/Info: Tony Ward and Jim Caringi

To increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process, please complete this form not more than 18 months in advance of the anticipated date of submission of the proposed program/center/institute to the Board of Regents for approval. The completed form should not be more than 2-3 pages. For more information regarding the Intent to Plan process, please visit <http://mus.edu/che/arsa/academicproposals.asp>.

1) Provide a description of the program/center/institute.

The School of Public and Community Health Sciences and the School of Social Work intend to begin planning for an optional Concentration in Social Work within the existing Public Health Doctoral program. The Concentration in Social Work will meet the needs of students interested in developing the requisite skill set to respond to both the public health and social justice challenges faced in many areas of professional practice. The program will be developed through coordination and utilization of existing resources in both Schools.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student and workforce demands. (Please cite sources).

Interdisciplinary education has become increasingly popular as a means of addressing the ever increasing complexity and needs of today's world. Social work and public health have an intertwined history that dates back early 20th century efforts including settlement houses, communicable-disease control, and infant and maternal health. The two professions espouse mutual commitments to social justice, enhancing people's wellbeing, and reducing social health problems. Ten years ago, roughly 20 Master of Social Work and Master of Public Health dual degree programs existed in the United States (Ruth et al., 2008). As of 2015, the number of dual degree programs has grown to over 40. Researchers conducted a survey of 41 of the 42 administrators of the MSW/MPH dual degree programs. The findings suggest that MSW/MPH programs are increasing in number and popularity and are drawing talented students interested in trans-disciplinary public health social work practice (Ziperstein et al., 2015). As this will be the only program of its kind within Montana and the Northern Rocky Mountain region, developing this program addresses an important need, and provides opportunities for students to directly engage with research activities related to Social Work/Public Health issues in our region.

Montana University System
INTENT TO PLAN FORM

3) Describe how the program/center/institute fits with the institutional mission, strategic plan, and existing institutional program array.

The University of Montana seeks to prepare students qualified to effectively engage within the workforce. The University of Montana's recent Academic Program and Administrative Services Prioritization has identified the Master of Social Work program as a "Priority for Development and Growth" and the Bachelor of Social Work and Public Health programs in the category "Consider for Development and/of Modification" (Office of the President, 2017).

This proposed program also addresses former President Stearns' Recommendation 13 of "investing in growing graduate programs unique to UM", and Recommendation 15 of "ensuring sustainability of independently accredited programs and to support new professional/specialized accreditations" (APASP Recommendations and Reflections, 2017).

4) Describe how the program/center/institute overlaps, complements, or duplicates existing efforts in the MUS. Describe efforts that will be made to collaborate with similar programs at other institutions. If no efforts will be made, please explain why.

The proposed doctoral Concentration in Social Work within the existing Public Health Doctoral program compliments existing programs within the MUS system. The School of Social Work and the School of Public and Community Health Sciences share similar goals for their graduates. The School of Public and Community Health Sciences currently offers an online Master of Public Health, as well as recently established campus-based Doctorate of Public Health. The proposed campus-based PhD in Public Health with a concentration in Social Work will allow students to utilize the existing resources of other programs on the University of Montana's campus, including those of the Master of Social Work program.

Montana University System
INTENT TO PLAN FORM

Signature/Date

College/School Dean: DocuSigned by:
Reed Humphrey
79ACC42A42E7413... 1/4/2019

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*: DocuSigned by:
Jon Harbor
305804175FA449D... 1/8/2019

Flagship President*: DocuSigned by:
Seth Bodnar
94F804175FA449D... 1/11/2019

*Not applicable to the Community Colleges.

Date of Final Review:

When submitting the proposal to the BOR, include this signed form with the Level II request.

May 22-23, 2019

ITEM 183-1003-R0519

Request for authorization to retitle the Department of Modern and Classical Languages and Literatures to World Languages and Cultures

THAT

The University of Montana-Missoula requests authorization from the Montana Board of Regents to retitle the Department of Modern and Classical Languages and Literatures to the Department of World Languages and Cultures.

EXPLANATION

The department has a number of reasons for requesting this retitling. First, it better represents the department's class offerings and the faculty's research, since we do not only focus on language and literature, but on many facets of world cultures, such as the media, the environment, and gender. Additionally, we request the name change because "Modern and Classical Languages and Literatures" is too long, too difficult for students to remember, and makes us appear fragmented rather than as the cohesive unit we are.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 183-1003-R0519 Submission Month or Meeting: May 22-23, 2019

Institution: University of Montana-Missoula CIP Code: 16

Program/Center/Institute Title: Department of Modern and Classical Languages and Literatures retitled to World Languages and Cultures

Includes (please specify below): Online Offering Options

Please mark the appropriate type of request and submit with an Item Template and 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*

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

X **B. Level II:**

- _____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Intent to Plan Form)
- _____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Intent 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 Intent to Plan Form, except when eliminating or consolidating)
- X **5. Re-titling an academic, administrative, or research unit**

Proposal Summary [360 words maximum]

What

The Department of Modern and Classical Languages and Literatures requests authorization to retitle the department to World Languages and Cultures.

Why

The department has a number of reasons for requesting this retitling. First, it better represents the department's class offerings and the faculty's research, since we do not only focus on language and literature, but on many facets of world cultures, such as the media, the environment, and gender. Additionally, we request the name change because "Modern and Classical Languages and Literatures" is too long, too difficult for students to remember, and makes us appear fragmented rather than as the cohesive unit we are.

Resources

NA

Relationship to similar MUS programs

NA

May 22-23, 2019

ITEM 183-1004-R0519

Request for authorization to retitle the College of Visual and Performing Arts to College of the Arts and Media

THAT

The University of Montana-Missoula requests authorization from the Montana Board of Regents to retitle the College of Visual and Performing Arts to the College of the Arts and Media.

EXPLANATION

The School of Journalism is moving to join the College of Visual and Performing Arts and the new title acknowledges that addition. The Interim Dean of the School of Journalism and the Directors of the Schools within the College of Visual and Performing Arts have been consulted and approve of the retitling.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 183-1004-R0519 Submission Month or Meeting: May 22-23, 2019

Institution: University of Montana-Missoula CIP Code: 09.04; 50

Program/Center/Institute Title: Retitling the College of Visual and Performing Arts to College of the Arts and Media

Includes (please specify below): Online Offering _____ Options _____

Please mark the appropriate type of request and submit with an Item Template and 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*

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

X **B. Level II:**

- _____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Intent to Plan Form)
- _____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Intent 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 Intent to Plan Form, except when eliminating or consolidating)
- X **5. Re-titling an academic, administrative, or research unit**

Proposal Summary [360 words maximum]

What

The College of Visual and Performing Arts requests authorization to retitle itself to the College of the Arts and Media.

Why

The School of Journalism is moving to join the College of Visual and Performing Arts and the new title acknowledges that addition. The Interim Dean of the School of Journalism and the Directors of the Schools within the College of Visual and Performing Arts have been consulted and approve of the retitling. The College also includes the Montana Repertory Theatre and the Montana Museum of Art and Culture. The School of Journalism brings the Montana Media Lab.

Resources

NA

Relationship to similar MUS programs

This is a unique college in the MUS with the only professional programs in Theatre & Dance, Visual & Media Arts, Music, and Journalism.

May 22-23, 2019

ITEM 183-1005-R0519

Request for authorization to retitle the Phyllis J. Washington College of Education and Human Sciences to the Phyllis J. Washington College of Education

THAT

The University of Montana-Missoula requests authorization from the Montana Board of Regents to retitle the Phyllis J. Washington College of Education and Human Sciences to the Phyllis J. Washington College of Education.

EXPLANATION

The college is entering a period of transition, which brings an opportunity for renewal of its overall mission and scope. Effective May 2019, the college will renew its focus on education, leadership, and counseling when two current departments (Health and Human Performance and Speech, Language, and Hearing Sciences) move to the College of Health Professions and Biomedical Sciences to seek stronger alignment with UM's health/medicine initiatives. The requested name change to the Phyllis J. Washington College of Education better reflects the renewed mission of the College.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 183-1005-R0519 Submission Month or Meeting: May 22-23, 2019

Institution: University of Montana-Missoula CIP Code: 13.01

Program/Center/Institute Title: Retitle Phyllis J. Washington College of Education and Human Sciences

Includes (please specify below): Online Offering _____ Options _____

Please mark the appropriate type of request and submit with an Item Template and 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*

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

X **B. Level II:**

- _____ **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Intent to Plan Form)
- _____ **2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Intent 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 Intent to Plan Form, except when eliminating or consolidating)
- X **5. Re-titling an academic, administrative, or research unit**

Proposal Summary [360 words maximum]

What

The University of Montana requests authorization to retitle the Phyllis J. Washington College of Education and Human Sciences to the Phyllis J. Washington College of Education.

Why

The college is entering a period of transition, which brings an opportunity for renewal of its overall mission and scope. Effective May 2019, the college will renew its focus on education, leadership, and counseling when two current departments (Health and Human Performance and Speech, Language, and Hearing Sciences) move to the College of Health Professions and Biomedical Sciences to seek stronger alignment with UM's health/medicine initiatives. The requested name change to the Phyllis J. Washington College of Education better reflects the renewed mission of the College.

Resources

The name change will require new signage and updates for print and web materials. Signage changes will be part of the new construction project that is funded by philanthropic gifts. College personnel will be responsible for updating print and web-based materials.

Relationship to similar MUS programs

The college name change will have no impact on other similar programs in the MUS.

January 2019

ITEM 182-1501-R0119

Request to Establish Master of Engineering Degree Program

THAT

The Board of Regents of Higher Education authorizes Montana Technological University to establish a Master of Engineering Degree program.

EXPLANATION

Montana Tech proposes to create a Master of Engineering (M.Eng.) with options in 12 engineering disciplines: Civil, Electrical, Environmental, Geological, Geophysical, Geotechnical, Hydrogeological, Mechanical, Metallurgical/Minerals Processing, Materials, Mining, and Petroleum. Tech currently offers B.S. degrees in these disciplines and M.S. degrees in most of them. The proposed program is a coursework-only master's degree for those with B.S. degrees in engineering. It provides an avenue for professional advancement and licensure. It also provides a curriculum path for high-achieving undergraduate engineering students seeking a Master's degree, but who aren't interested in research careers. The degree program serves a recognized need for post-baccalaureate engineering education.

This proposed program directly supports the Montana Tech mission as well as Objectives 2.3.1 and 2.3.2 of the MUS Strategic Plan.

ATTACHMENTS

Curriculum Proposal Form
Proposal Request Form
Fiscal Analysis Form
Attachment 1: Enrollment Analysis

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 182-1501-R0119 Submission Month or Meeting: January 2019

Institution: Montana Technological University CIP Code: 14.0000

Program/Center/Institute Title: Masters of Engineering (M.Eng)

Includes (please specify below): Online Offering Options

Please mark the appropriate type of request and submit with an Item Template and 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*

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

 B. Level II:

- X** **1. Establishing a new postsecondary educational program** (Curriculum Proposal and Completed Intent to Plan Form)
- 2. Permanent authorization for a temporary C.A.S. or A.A.S degree program** (Curriculum Proposal and Completed Intent 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 Intent to Plan Form, except when eliminating or consolidating)
- 5. Re-titling an academic, administrative, or research unit**

Proposal Summary [360 words maximum]

What: Montana Tech proposes to create a Master of Engineering (M.Eng.) with options in 12 engineering disciplines: Civil, Electrical, Environmental, Geological, Geophysical, Geotechnical, Hydrogeological, Mechanical, Metallurgical/Minerals Processing, Materials, Mining, and Petroleum. Tech currently offers B.S. degrees in these disciplines and M.S. degrees in most of them. The proposed program is a coursework-only master's degree for those with B.S. degrees in engineering. It provides an avenue for professional advancement and licensure. It also provides a curriculum path for high-achieving undergraduate engineering students seeking a Master's degree, but who aren't interested in research careers. The degree program serves a recognized need for post-baccalaureate engineering education.

Why : Montana Tech is designated as a Special Focus Science & Engineering institution. This program directly supports the university's mission as well as the Special Focus designation. This program will also support a number of the objectives identified in the *MUS Strategic Plan*. Specifically, Objective 2.3.1 (*Increase the number and percentage of graduate students in the Montana University System*) and Objective 2.3.2 (*Increase graduate degree production, maintaining a strong concentration in science, technology, engineering, and math (STEM) fields*). In addition, in 2015 the National Council of Examiners for Engineering and Surveying (NCEES) adopted the position that the educational requirement for engineering professional licensure is a master's degree in engineering.

Resources: PHYSICAL: Montana Tech has significant facilities in place for this new program. The physical facilities that support our existing B.S. and M.S. engineering programs will be used. PERSONNEL: The current faculty that support our B.S. and M.S. programs are sufficient to support the M.Eng. as well.

Relationship to similar MUS programs: MSU-Bozeman has a curricular-based M.Eng. program with options in: Bioengineering, Electrical Engineering, Chemical Engineering, and Mechanical Engineering.

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]*

Montana Tech proposes to create a Master of Engineering (M.Eng.) with options in 12 engineering disciplines: Civil, Electrical, Environmental, Geological, Geophysical, Geotechnical, Hydrogeological, Mechanical, Metallurgical/Minerals Processing, Materials, Mining, and Petroleum. Tech currently offers B.S. degrees in these disciplines and M.S. degrees in most of them. The proposed program is a coursework-only master's degree for those with B.S. degrees in engineering. It provides an avenue for professional advancement and licensure. It also provides a curriculum path for high-achieving undergraduate engineering students seeking a Master's degree, but who aren't interested in research careers. The degree program serves a recognized need for post-baccalaureate engineering education.

- 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]*

Montana Tech is designated as a Special Focus Science & Engineering institution. This program directly supports this mission and focus. The proposed M.Eng. degree will be housed within Montana Tech's School of Mines and Engineering which has the mission to

- 1. provide a quality undergraduate education that prepares graduates to practice their discipline at the professional level and to be leaders within their chosen field;*
- 2. provide a quality graduate education that enables graduates to solve advanced problems within their discipline;*
- 3. create and disseminate new knowledge that solves problems for the betterment of the world, the nation, and the state of Montana.*

Our primary foci are the

- a) safe and reliable development and use of natural resources;*
- b) safe and reliable development and delivery of energy;*
- c) development of new materials and material applications.*

As reflected in the SME mission, two strategic goals are to educate engineers at the professional level and to solve advanced problems. The M.Eng. directly supports both of these goals.

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

This proposal was developed in AY 2017/18 by the School of Mines and Engineering department heads with oversight by the SME Dean. This proposal has been reviewed and approved by Dean of SME (3/23/2018), Graduate Council (4/5/2018), Dean of Graduate School (4/5/2018), Curriculum Review Committee (9/6/2018), Faculty Senate (10/5/2018), and Provost & Vice Chancellor for Academic Affairs (10/12/18).

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

The proposed M.Eng. is a 31-credit, coursework-only master’s degree for those with B.S. degrees in engineering, including practicing professionals and recent graduates. Students are required to select an option. All students must take six core credits from a core. The remaining credits are dictated by the option. Appendix A provides more details.

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

	Credits
Credits in required courses offered by the department offering the program	16
Credits in required courses offered by other departments	6
Credits in institutional general education curriculum	0
Credits of technical electives	9
Total credits required to complete the program	31

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

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

- command the appropriate breadth and depth of fundamental knowledge in their chosen option
- employ the highest ethical and professional standards
- solve advanced engineering problems by applying engineering, science, and mathematics principles.

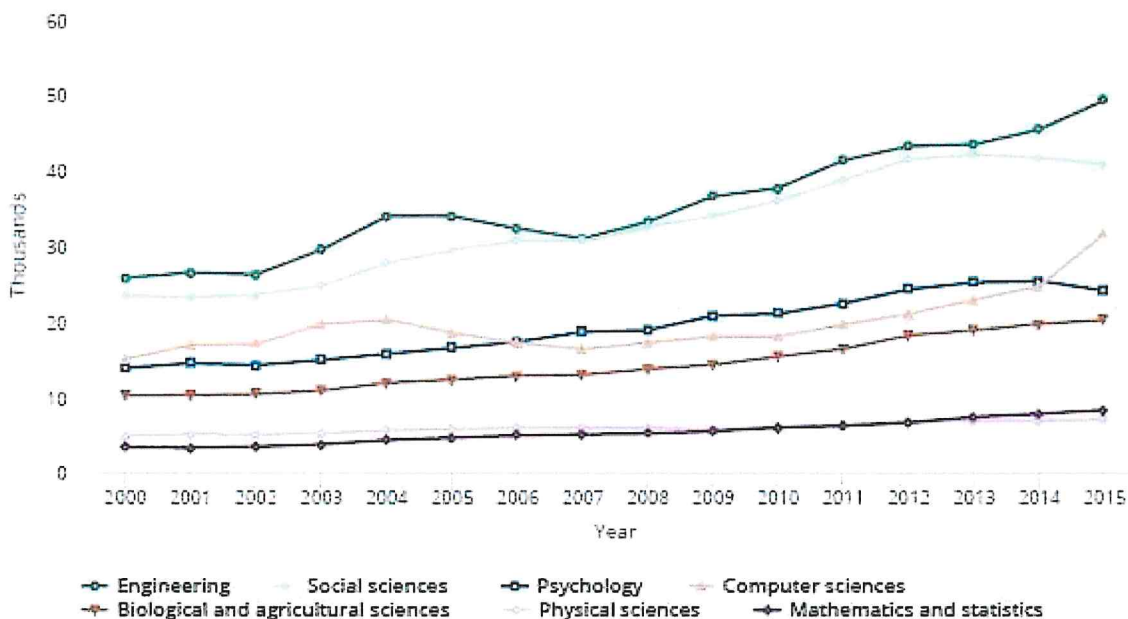
5. Need for the program. To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. *[250 words]*

The gold standard for practicing engineering at the professional level is Professional Engineering Licensure. Nearly all states, including Montana, follow the Model Law prescribed by the National Council of Examiners for Engineering and Surveying for engineering licensure. Currently, the Model Law states that the educational requirement for engineering professional licensure is an accredited B.S. engineering degree. In 2015, NCEES adopted “Position Statement 35” which basically recommends increasing the educational requirement to a masters degree in engineering (<https://ncees.org/about/publications/ncees-position-statement-35/>). The M.Eng. is a primary tool many universities are adopting to prepare for this pending requirement. The expectation is that a large number of B.S. graduates and practicing engineers will seek a master’s degree to fulfill professional licensure requirements. Montana Tech’s goal is to educate engineers to practice at the professional level. The M.Eng. will be the degree of choice for many students.

Montana Board of Regents CURRICULUM PROPOSAL FORM

Independent of the pending licensure changes, many engineers are seeking advanced education outside of research. Society's engineering problems are becoming more complex and fluid resulting in an increased demand for advanced training. Nationally, this is revealed by examining the number of master's degrees awarded per year per discipline (below figure). As seen, engineering is growing the fastest with a nearly doubling in awards per year over the past 15 years.

S&E master's degrees, by field: 2000-15



Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions Survey; National Science Foundation, National Center for Science and Engineering Statistics, WebCASPAR database, <https://ncesdata.nsf.gov/webcaspar/>.

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
Montana State University - Bozeman	Master's	Masters of Engineering. Options in Bioengineering Electrical Engineering, Chemical Engineering, and Mechanical Engineering

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]*

As referenced above, MSU-Bozeman has an M.Eng. program with options in: Bioengineering, Electrical Engineering, Chemical Engineering, and Mechanical Engineering. As with the degree proposed here, the MSU program is a curricular-based master's degree. The curricular requirements for the MSU degree has no common courses between the options. The Montana Tech degree has six credits of common curriculum.

- 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]*

Montana Tech is actively involved in the Montana University System collaboration discussion, especially at the graduate school level. MSU-Bozeman and Montana Tech have existing graduate-level courses that students at one school can take from the other. Economies and efficiencies will develop as these two schools develop additional course-sharing relationships.

- 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]*

Once approved, the program will be offered beginning in the Fall 2019 semester. All courses are currently offered thru the M.S. programs.

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

Fall Headcount Enrollment					Graduates				
AY19-20	AY20-21	AY21-22	AY22-23	AY23-24	AY19-20	AY20-21	AY21-22	AY22-23	AY23-24
4	8	16	24	24	0	2	4	8	12

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

We estimate the steady-state enrollment in the M.Eng. to be near 24 students with 12 graduates per year. This estimate is based upon the demand and enrollment of our M.S. and B.S. programs. In 2016/17, Montana Tech had 61 students enrolled and 23 graduates in our M.S. engineering programs. In recruiting and maintaining our M.S. programs, we estimate we could increase the enrollment half again by serving students who are interested in advanced training without a research requirement.

These conservative estimates are based upon our experience in delivering our M.S. degrees. When the NCEES Model Law proposal is enacted (see section 5 above), we expect a significant increase in the enrollment. The timing of this is impossible to predict as the process is national. Also, some programs may desire to deliver their M.Eng. option on-line. This also has the potential to increase enrollment above the estimates.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

The limiting factor for the M.Eng. capacity is course enrollment. The M.Eng. will leverage our existing graduate curriculum developed to serve primarily our M.S. programs; therefore, no new curriculum is necessary. In large part, these classes are under enrolled. Based upon discussions with program department heads, a conservative estimate is that each option could absorb 10 to 15 students which puts the overall enrollment capacity of the M.Eng. near 112 students. This enrollment level would require additional sections of MPEM 5010 and 5020.

- 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]*

Program success will be measured according to traditional metrics of enrollment, retention, graduation rate, time to completion, industrial demand, and fulfillment of program outcomes. The resultant data will be examined to identify positive or negative trends and trace them to specific courses or practices; where necessary, curricular changes will be effected to improve quality and to better serve student interests

- 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]*

Assessment and evaluation will be conducted on a biennial basis using the standard process employed by Montana Tech. Department heads of all programs shall provide the Dean of the SME and the Dean of the Graduate School with an assessment report for their particular option. The report shall address enrollment, retention, graduation rate, time to completion, industrial demand, and fulfillment of program outcomes.

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

Direct measures include fulfillment of program outcomes, and performance on an exit exam. Faculty will employ various mechanisms to assess and, where necessary, address particular learning outcomes. These mechanisms may include: classroom quizzes and examinations, term projects, portfolios, questionnaires, interviews, and focus groups. Student responses will be evaluated to obtain information about individual student learning and performance and compared with the aggregate performance of students and classes to discern the relative strengths and weaknesses in the instruction of individual classes and of the entire curriculum. All options will utilize an exit exam to assure the student has achieved desired outcomes.

- 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

The department head of each option area of the M.Eng. will prepare a biennial report to consolidate the assessment data described above. The reports will present the data to the Graduate School Dean and the Dean of the SME to identify program strengths and weaknesses and establish an action plan to ensure program quality.

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

Montana Tech is accredited through the Northwest Commission on Colleges and Universities (NWCCU), and its engineering programs are accredited through the Accreditation Board for Engineering and Technology (ABET). The M.Eng. program will operate in conformance with Montana Tech policies and practices regarding accreditation of masters-level engineering programs.

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]*

Montana Tech has significant facilities for its existing B.S. and M.S. engineering programs. The net increased use from the M.Eng. is not expected to have any significant impact beyond scheduling more lab sections for some courses.

- 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]*

None.

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]*

Montana Tech's existing engineering programs have extensive instructional resources. This includes approximately 65 full-time faculty and many other part-time faculty. The enrollment for the M.Eng. will have little impact other than an increase in mostly under-enrolled graduate courses, and an increase advising load for faculty. The advising load for a typical M.Eng. student is similar to that of an undergraduate engineering student. As of Fall 2017, Tech has 1164 undergraduate engineering students. The addition of approximately 24 M.Eng. students will have little impact on the advising load of the faculty.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- 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]*

None.

11. Other resources.

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

The Montana Tech library and information resources are sufficient to support the proposed program.

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

Existing student services have the capacity to accommodate the proposed program.

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

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

	Year 1	Year 2	Year 3
Revenues	32784	62430	132773
Expenditures	21560	38360	72114
Net Revenue (revenues-expenditures)	11224	24070	60659

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

With the excess capacity in the School of Mining & Engineering there shouldn't be a need to reallocate state appropriated funds.

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

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

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

No new fees are planned.

- 14. Complete the budget template below with the following information:**

- Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first three fiscal years of the program.
- Include reallocation of existing personnel and resources and anticipated or requested new resources.
- Amounts should reconcile subsequent pages where budget explanations are provided.

Signature/Date

College or School Dean:

 10/24/18
10-24-18

Chief Academic Officer:

 10/24/18

Chief Executive Officer:

 10/24/18

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Flagship President*:

*Not applicable to the Community Colleges.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

The Masters of Engineering (M.Eng.) degree is a 31-credit coursework-only master's degree for those with a B.S. degrees in engineering, including practicing professionals and recent graduates. It provides an avenue for professional advancement and licensure. It also provides a curriculum path for high-achieving undergraduate engineering students seeking a Master's degree, but who aren't interested in research careers.

Students are required to select a discipline option from Civil, Electrical, Environmental, Geological, Geophysical, Geotechnical, Hydrogeological, Mechanical, Metallurgical/Minerals, Materials, Mining, and Petroleum. The student will take advanced courses within the option in addition to 6 credits of core credits. All options require a one-credit exit exam.

Requirements are 31 credits of coursework to include:

- 6 credits of 500-level core classes to include
 - MPEM 5020, Project and Engineering Management, 3 credits
 - Three credits selected from the following list:
 - MPEM 5010, Entrepreneurship & Economic Feasibility, 3 credits
 - *Note: More classes will be added to this list over time.*
- 16 credits of courses at 400 level or higher focused on the chosen option. Courses are approved by the department housing the option. 10 or more of these credits must be at the 500 level including a one-credit M.Eng. exit exam.
- 9 credits of approved electives at the 400-level or higher. Elective courses are approved by the department housing the option.

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS: Montana Tech
AWARD LEVEL: GR
PROGRAM NAME: MENG
PROGRAM CODE:

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
ENROLLMENT PROJECTIONS					
Headcount					
annual unduplicated headcount of students with declared major or minor within the program	4	8	16	24	24
Credit Hours					
annual avg. credits hours earned per student in program related curriculum	15	15	15	15	15
Student FTE					
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24	2.5	5	10	15	15
Completions					
Annual number of program completers	0	2	4	8	12

REVENUE					
Tuition Revenue (net of waivers)	\$25,848	\$49,425	\$105,090	\$169,442	\$167,664
Institutional Support	\$0	\$0	\$0	\$0	\$0
Other Outside Funds (grants, gifts, etc.)	\$0	\$0	\$0	\$0	\$0
Program Tuition/Fees	\$6,936	\$13,005	\$27,683	\$43,757	\$43,680
Total Revenue	\$32,784	\$62,430	\$132,773	\$213,199	\$211,344
Total Revenue per Student FTE	\$13,114	\$12,486	\$13,277	\$14,213	\$14,090

EXPENDITURES						
Tenure Track Faculty	FTE	0.2	0.2	0.5	1.0	1.0
	Salary + Benefits	\$21,560	\$21,560	\$54,978	\$109,956	\$112,155
Non-tenure Track Faculty <small>*Includes Adjunct Instructors</small>	FTE	0.0	0.2	0.2	0.2	0.2
	Salary + Benefits	\$0	\$16,800	\$17,136	\$17,136	\$17,480
Graduate Teaching Assistants	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Staff	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Total Faculty & Staff	FTE	0.2	0.4	0.7	1.2	1.2
	Salary + Benefits	\$21,560	\$38,360	\$72,114	\$127,092	\$129,635
Operations (supplies, travel, rent, etc)		\$0	\$0	\$0	\$0	\$0
Start-up Expenses (OTO)		\$0	\$0	\$0	\$0	\$0
Total Expenses		\$21,560	\$38,360	\$72,114	\$127,092	\$129,635
Student FTE to Faculty (TT + NTT) Ratio		12.5	12.5	14.3	12.5	12.5
Net Income/Deficit (Revenue - Expenses)		\$11,224	\$24,070	\$60,659	\$86,107	\$81,709

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



 Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Montana University System
INTENT TO PLAN FORM

Program/Center/Institute
Title: **Master of Engineering degree program**

Campus, School/Department: **Montana Tech Graduate School**

Expected Submission Date: **Spr. 2018**

Contact Name/Info: **Brian Kukay, Ph.D. bkukay@mtech.edu**

To increase communication, collaboration, and problem solving opportunities throughout the MUS in the program/center/institute development process, please complete this form not more than 18 months in advance of the anticipated date of submission of the proposed program/center/institute to the Board of Regents for approval. The completed form should not be more than 2-3 pages. For more information regarding the Intent to Plan process, please visit <http://mus.edu/che/arsa/preparingacademicproposals.asp>.

1) Provide a description of the program/center/institute.

The Master of Engineering (M.E.) program would complement the current graduate programs at Montana Tech that lead to Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees. The M.E. degree emphasizes coursework and professional practice and requires a minimum of 30 credits of technical and scientific coursework. In contrast to the established, thesis and non-thesis M.S. degrees, the M.E. degree will provide a path to a master's degree that does not require the student to complete a research thesis or other master's project.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student and workforce demands. (Please cite sources).

The M.E. program is a professional degree designed to meet the changing needs of society and advance the careers and lives of engineers through advanced coursework in and relevant to engineering. It fulfills the need for engineering professionals to pursue lifelong learning, and it addresses proposed changes to professional licensing requirements for engineers. It will be able to be offered to distant as well as on-campus students, through multiple modalities, thus serving engineers whose positions are located in communities far from university campuses. It will complement existing graduate degree programs by making available advanced courses, technical electives, and options from Montana Tech's engineering specialties to graduate students, and working engineers alike. Coursework comprised of engineering and engineering-related science, mathematics, business, communications, contract law, management, ethics, public policy, and quality control would be available to the M.E. students.

3) Describe how the program/center/institute fits with the institutional mission, strategic plan, and existing institutional program array.


The proposed program fits Montana Tech's mission in supporting the sustainable development and use of natural resources and provides specialized career-focused graduate engineering education and coursework helpful for professional licensure with degree options in Montana Tech's distinctive and economically important engineering fields. It is an appropriate complement to and utilizes courses already offered for the research-based engineering M.S. degree programs designed especially to serve working engineers.

Montana University System
INTENT TO PLAN FORM

4) Describe how the program/center/institute overlaps, complements, or duplicates existing efforts in the MUS. Montana State University currently has four M.E. programs. Those degrees are in Bioengineering, Electrical Engineering, Chemical Engineering and Mechanical Engineering, and they are site-based in Bozeman. Montana Tech has on-campus, non-thesis M.S. options in its degree areas, but most require a research or design project. The proposed M.E. degree at Montana Tech will serve both a local and remote student population, making lifelong learning, professional advancement, and professional licensure available to deployed engineers. M.E. degree options would be available for all engineering specialties offered at Montana Tech, concentrating initially in natural resources and other engineering fields. It would be limited to specialties where the M.S. is offered by Montana Tech.

Signature/Date

College/School Dean

Burt K. Hartin 2/5/18 

Chief Academic Officer:

Douglas M. Albatt 2/6/18

Chief Executive Officer:

Donald M. Schubert 2/6/18

Date of Final Review:

When submitting the proposal to the BOR, include this signed form with the Level II request.

Montana Tech
Revenue Production for Proposed MENG
October 17, 2018

	FY 2020		FY 2021		FY 2022		FY 2023		FY 2024	
	2019 Fall	2020 Spring	2020 Fall	2021 Spring	2021 Fall	2022 Spring	2022 Fall	2023 Spring	2023 Fall	2024 Spring
Fall Headcount - New '20	4	4								
Continuing			3	2						
Fall Headcount - New '21			5	5						
Continuing					5	4				
Fall Headcount - New '22					11	11				
Continuing							7	8		
Fall Headcount - New '23							17	17		
Continuing									12	12
Fall Headcount - New '24									12	12
Total Headcount	4	4	8	7	16	15	24	25	24	24
Graduates '21				2						
Graduates '22						4				
Graduates '23							8			
Graduates '24										12
Tuition **	\$ 3,231.00	\$ 3,231.00	\$ 3,295.00	\$ 3,295.00	\$ 3,390.00	\$ 3,390.00	\$ 3,458.00	\$ 3,458.00	\$ 3,493.00	\$ 3,493.00
Fees	867.00	867.00	867.00	867.00	893.00	893.00	893.00	893.00	910.00	910.00
Total Semester Tuition	12,924.00	12,924.00	26,360.00	23,065.00	54,240.00	50,850.00	82,992.00	86,450.00	83,832.00	83,832.00
Total Semester Fees	3,468.00	3,468.00	6,936.00	6,069.00	14,288.00	13,395.00	21,432.00	22,325.00	21,840.00	21,840.00
	16,392.00	16,392.00	33,296.00	29,134.00	68,528.00	64,245.00	104,424.00	108,775.00	105,672.00	105,672.00
FY Tuition	\$25,848.00		\$49,425.00		\$105,090.00		\$169,442.00		\$167,664.00	
FY Fees	\$6,936.00		\$13,005.00		\$27,683.00		\$43,757.00		\$43,680.00	
FY Grand Total	\$32,784.00		\$62,430.00		\$132,773.00		\$213,199.00		\$211,344.00	

* Retention calculated at 65%

** Tuition increases of 3% annually through FY22, 2% for FY23, 1% for FY24

Graduate Retention

	Cohort	Returned 2nd Fall	Returned 2nd Fall
Fall 05	10	5	50%
Fall 06	16	7	44%
Fall 07	18	9	50%
Fall 08	19	13	68%
Fall 09	23	18	78%
Fall 10	13	9	69%
Fall 11	31	19	61%
Fall 12	30	24	80%
Fall 13	23	17	74%
Fall 14	35	33	94%
Fall 05-14	218	154	71%
Fall 05-13	183	121	66%