LEVEL II MEMORANDUM

DATE: February 16, 2017

TO: Chief Academic Officers, Montana University System

FROM: John Cech, Deputy Commissioner for Academic and Student Affairs

RE: March 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 February 22, 2017. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, February 24. If no concerns are received, OCHE will assume that the proposals have your approval.

Level II Items

The University of Montana Missoula:

• Request for authorization to establish a B.S. in Pharmaceutical Sciences
  Item 174-1004-R0317 | Academic Proposal Request Form | Curriculum Proposal Form | Intent to Plan

• Request for authorization to establish a D.PT and M.P.H dual degree
  Item 174-1005-R0317 | Academic Proposal Request Form | Curriculum Proposal Form | Intent to Plan

• Request for authorization to establish a Pharm.D.-M.P.H. dual degree
  Item 174-1006-R0317 | Academic Proposal Request Form | Curriculum Proposal Form | Intent to Plan

• Request for authorization to establish a Pharm.D. – Pharmaceutical Sciences M.S. dual degree
  Item 174-1007-R0317 | Academic Proposal Request Form | Curriculum Proposal Form | Intent to Plan

• Request for authorization to establish a Community Health and Prevention Sciences option in the M.P.H
  Item 174-1008-R0317 | Academic Proposal Request Form | Curriculum Proposal Form | Intent to Plan

The University of Montana Western:

• Request for authorization to establish a Minor, Certificate, A.A., and a B.A. in Glass
  Item 174-1601-R0317 | Academic Proposal Request Form | Curriculum Proposal Form | Attachment 1
  | Attachment 2 | Attachment 3 | Attachment 4 | Attachment 5 |

Montana State University Bozeman:

• Request for authorization to create The Western Lands and Peoples Center (WLPC)
  Item 173-2012-R1116 | Academic Proposal Request Form | Research Center and Institute Proposal Form
  | Intent to Plan | Attachment 1
ITEM 174-1004-R0317
Request for authorization to establish a B.S. in Pharmaceutical Science

THAT
The University of Montana-Missoula requests authorization from the Montana Board of Regents to establish a bachelor of science degree in Pharmaceutical Sciences.

EXPLANATION
The pharmacy program is a six-year program in which students complete a minimum of two years of pre-professional curriculum that include the physical, chemical and biological sciences. After satisfying these prerequisites, students apply for entrance into the four-year professional program. Upon completion of the professional program, students are awarded a Doctor of Pharmacy (Pharm.D.) degree. Those students that do not have a degree upon entering the professional program do not receive a Bachelor’s Degree at any point in the program. The proposed B.S. in Pharmaceutical Sciences would fulfill this unmet need for the Skaggs School of Pharmacy. Students would receive the degree following completion of the second professional year (P2 Year) meaning that they would have at least 4 years of basic science and pharmaceutical science courses. The curriculum for the B.S. degree would mirror the pre-pharmacy requirements and professional pharmacy courses.

ATTACHMENTS
Academic Request Form
Curriculum Proposal Form
Intent to Plan
Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 174-1004-R0317 Submission Month or Meeting: March 9-10, 2017

Institution: University of Montana-Missoula CIP Code: 51.20

Program/Center/Institute Title: Pharmaceutical Sciences B.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/preparingacademicproposals.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

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

3. 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)

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

Specify Request:

The pharmacy program is a six-year program in which students complete a minimum of two years of pre-professional curriculum that include the physical, chemical and biological sciences. After satisfying these prerequisites, students apply for entrance into the four-year professional program. Upon completion of the professional program, students are awarded a Doctor of Pharmacy (Pharm.D.) degree. Those students that do not have a degree upon entering the professional program do not receive a Bachelor’s Degree at any point in the program. The proposed B.S. in Pharmaceutical Sciences would fulfill this unmet need for the Skaggs School of Pharmacy. Students would receive the degree following completion of the second professional year (P2 Year) meaning that they would have at least 4 years of basic science and pharmaceutical science courses. The curriculum for the B.S. degree would mirror the pre-pharmacy requirements and professional pharmacy courses.
1. Overview

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

A Bachelor of Science (B.S.) degree in Pharmaceutical Sciences is proposed. At the present time, the Skaggs School of Pharmacy (SSOP) offers the entry level Doctor of Pharmacy degree but not an undergraduate Bachelor’s degree. Students who are accepted into the pharmacy program may have a Bachelor’s degree, but most Doctor of Pharmacy students enter the program without an undergraduate degree. The new B.S. degree would be granted following a minimum of two years of pre-pharmacy courses and the first two basic science intensive years of the four-year professional curriculum.

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The proposed B.S. degree will fill an unmet need for a Bachelor’s level degree for the Skaggs School of Pharmacy. Most importantly, it will allow professional pharmacy students to enroll in graduate studies and receive graduate credit for graduate level courses.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

The proposal will not require any changes.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

There are no closely related programs at the University of Montana.

D. How does the proposed program serve to advance the strategic goals of the institution?

The new B.S. degree fits within the mission of the new University of Montana Health and Medicine (UMHM) initiative that serves as the virtual home for all health-related courses, programs, clinics and laboratories across campus. The new degree will prepare professional pharmacy students to apply for admission to UM graduate programs and to receive graduate credit for graduate level courses broadening the options for UM students. It will also provide an alternative track to a degree for students who decide that professional pharmacy practice does not fit with their ultimate career goals.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

There are no similar programs within the Montana University System.

3. Program Details
A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents’ Policy 301.12 have been met.

The curriculum for the B.S. Pharmaceutical Sciences will mirror the Pharm.D. curriculum for the First (P1) and Second (P2) Professional Years and will also include the pre-pharmacy course requirements. The pre-pharmacy course requirements and the professional curriculum for the P1 and P2 years follow:

### Pre-Pharmacy First Year

<table>
<thead>
<tr>
<th>Subject &amp; Course #</th>
<th>Course Title</th>
<th>Autumn</th>
<th>Spring</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOH 112 &amp; 113</td>
<td>Human Form &amp; Function I &amp; II</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>CHMY 141 &amp; 143</td>
<td>College Chemistry I &amp; II</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>M 162</td>
<td>Applied Calculus</td>
<td>Either semester</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>WRIT 101</td>
<td>College Writing I</td>
<td>Either semester, depending on last name</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Pre-Pharmacy Second Year

<table>
<thead>
<tr>
<th>Subject &amp; Course #</th>
<th>Course Title</th>
<th>Autumn</th>
<th>Spring</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOB 260</td>
<td>Cell/Molecular Bio</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>CHMY 221, 222, &amp; 223</td>
<td>Organic Chemistry I, lab, &amp; II</td>
<td>3, 2</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>ECNS 201S</td>
<td>Principles of Microeconomics</td>
<td>Either semester</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSX 205N &amp; 206N</td>
<td>College Physics I &amp; lab</td>
<td>-</td>
<td>4, 1</td>
<td>5</td>
</tr>
<tr>
<td>^1STAT 216</td>
<td>Introduction to Statistics</td>
<td>Either semester</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Pre-Pharmacy, either year, any semester – Required

<table>
<thead>
<tr>
<th>Subject &amp; Course #</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYX 100S or SOCI 101S</td>
<td>Intro to Psychology or Sociology</td>
<td>4 or 3</td>
</tr>
<tr>
<td>THTR 120A or COMX 111A</td>
<td>Intro to Acting I or Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>
Pre-Pharmacy, either Year, any semester – Recommended courses to fulfill UM General Education requirements

<table>
<thead>
<tr>
<th>Subject &amp; Course #</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2ANTY 101H or NASX 105H</td>
<td>Anthropology &amp; the Human Experience or Intro to Native American Studies</td>
<td>3</td>
</tr>
<tr>
<td>3LIT 110L or 120L</td>
<td>Intro to Literature or Poetry</td>
<td>3</td>
</tr>
<tr>
<td>4ANTY 122S, HSTR 101H, or HSTA 101H</td>
<td>Race &amp; Minorities, Western Civilization, or American History I</td>
<td>3 or 4</td>
</tr>
</tbody>
</table>

1 Other acceptable courses for the Statistics requirement include PSYX 222 or SOCI 202.

2 ANTY 101H & NASX 105H are double-dipper General Education courses (Group VI & X).

3 LIT 110L & LIT 120L are double-dipper General Education courses (writing course and Group V).

4 Select one course to meet the Democracy and Citizenship (Group IX) for General Education.

**PHARMACY FIRST PROFESSIONAL YEAR**

<table>
<thead>
<tr>
<th>Autumn Semester</th>
<th>Cr.</th>
<th>Spring Semester</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM 400 Medical Microbiology</td>
<td>3</td>
<td>PHAR 310 Pharmacy Practice II</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 300 Pharmacy Practice I</td>
<td>3</td>
<td>PHAR 328 Antimicrobial Agents</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 341 Physiological Systems I</td>
<td>4</td>
<td>PHAR 331 Pharmaceutics</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 361 Pharm Sci Lab I</td>
<td>1</td>
<td>PHAR 342 Physiological Systems II</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 371 Integrated Studies I</td>
<td>1</td>
<td>PHAR 362 Pharm Sci Lab II</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 381 Pharmaceutical Biochemistry</td>
<td>4</td>
<td>PHAR 363 Pharm Care Lab I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHAR 372 Integrated Studies II</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td><strong>Total</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

**PHARMACY SECOND PROFESSIONAL YEAR**

<table>
<thead>
<tr>
<th>Autumn Semester</th>
<th>Cr.</th>
<th>Spring Semester</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 421 Med Chem I</td>
<td>3</td>
<td>PHAR 412 Pharmacy Practice III</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 432 Clinical Pharmacokinetics</td>
<td>3</td>
<td>PHAR 422 Med Chem II</td>
<td>3</td>
</tr>
</tbody>
</table>
Montana Board of Regents
CURRICULUM PROPOSAL FORM

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 443 Pharmacol/Tox I</td>
<td>4</td>
<td>PHAR 444 Pharmacol/Tox II</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 451 Therapeutics I</td>
<td>3</td>
<td>PHAR 452 Therapeutics II</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 460 Pharm Care Lab II</td>
<td>1</td>
<td>PHAR 463 Pharm Care Lab III</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 471 Integrated Studies III</td>
<td>1</td>
<td>PHAR 472 Integrated Studies IV</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>1</td>
<td>Electives</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Students must complete all General Education requirements and pass 120 credits. They can apply for graduation with a B.S. Pharmaceutical Sciences during Spring Semester of their P2 year.

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

Approximately 30-40 students in each class enter the Pharm.D. program without a Bachelor’s degree. We expect that at least half of those will choose to receive the new B.S. degree. Implementation will require no additional time or resources on the part of the SSOP faculty and staff since students will not be required to deviate from the requirements for the Pharm.D. degree.

4. Need

A. To what specific need is the institution responding in developing the proposed program?

The new B.S. degree will meet several needs. In addition to rewarding students with a degree for work accomplished, there are other more practical reasons for awarding a B.S. degree to students at the mid-point of the pharmacy program. Students with a B.S. degree would be eligible to apply for graduate school admission and to receive graduate credit for graduate-level courses. Currently, only pharmacy students with prior degrees or those that enroll in established dual degree programs can apply to graduate school or take graduate courses for credit. The new B.S. degree would give all pharmacy students that option, which would allow them to add to their skill set and improve their prospects for employment in leadership and academic pharmacy positions. For those students who decide at some point that they no longer wish to pursue a career as a pharmacist, the B.S. degree would give them employment options that they would not have without a college degree, despite the fact that they had completed four years of challenging, science-based curriculum. They could also opt for graduate school as an alternative to professional pharmacy practice.

B. How will students and any other affected constituencies be served by the proposed program?

Students who choose not to pursue professional pharmacy practice after the P2 year will leave UM with a Bachelor’s degree, which will be invaluable as they search for employment. Students who want to pursue graduate studies will be able to seamlessly enter into graduate programs assuming other criteria for admission are met.

C. What is the anticipated demand for the program? How was this determined?
Approximately 5-10 students in each class have expressed interest in entering graduate programs in conjunction with their clinical training or at a minimum, taking graduate courses for graduate credit. It is unknown how many other students will opt for the B.S. degree at the midpoint of the professional program.

5. Process Leading to Submission

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

This proposal was initiated by Professors Beall and Noonan and vetted by the SSOP faculty at several of their monthly meetings. It was approved by the Faculty Senate.

6. Resources

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

No additional resources will be required for implementation of the B.S. Pharmaceutical Sciences degree.

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

No additional resources will be required for success.

7. Assessment

A. How will the success of the program be measured?

The program will be evaluated at the end of each academic year by collecting the following data:

- How many students opted for receiving the B.S. degree following completion of the P2 year
- How many students chose to go to UM because of the existence of the B.S. degree
- How many students enrolled in graduate programs or took graduate courses for credit after receiving the B.S. degree

How many students who voluntarily left the program would have previously left with no degree.
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.

A Bachelor of Science (B.S.) degree in Pharmaceutical Sciences is proposed. At the present time, the only degree offered by the Skaggs School of Pharmacy is the entry level Doctor of Pharmacy degree. Students who are accepted into the pharmacy program may or may not have a Bachelor’s degree while most do not. The new B.S. degree would be granted following a minimum of two years of pre-pharmacy courses and the first two years of the four-year professional curriculum.

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 pharmacy program is a six-year program where students complete a minimum of 2 years of pre-professional curriculum that includes physical, chemical and biological sciences. After satisfying these prerequisites, students apply for entrance into the four-year professional program. Upon completion of the professional program, students are awarded a Doctor of Pharmacy (Pharm.D.) degree. Those students that do not have a degree upon entering the professional program do not receive a Bachelor’s Degree at any point in the program. The proposed B.S. in Pharmaceutical Sciences would fulfill this unmet need for the Skaggs School of Pharmacy. Students would receive the degree following completion of the second professional year (P2 Year) meaning that they would have at least 4 years of basic science and pharmaceutical science courses. The curriculum for the B.S. degree would mirror the pre-pharmacy requirements and professional pharmacy courses.

In addition to rewarding students with a degree for work accomplished, there are other more practical reasons for awarding a B.S. degree to students at the mid-point of the pharmacy program. Students with a B.S. degree would be eligible to apply for graduate school admission and to receive graduate credit for graduate-level courses. Currently, only pharmacy students with prior degrees or those that enroll in established dual degree programs can apply to graduate school or take graduate courses for credit. The new B.S. degree would give all pharmacy students that option, which would allow them to add to their skill set and improve their prospects for employment in leadership and academic pharmacy positions. For those students who decide at some point that they no longer wish to pursue a career as a pharmacist, the B.S. degree would give them employment options that they would not have without a college degree, despite the fact that they had completed four years of
challenging, science-based curriculum. They could also opt for graduate school as an alternative to professional pharmacy practice.

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

The new B.S. Degree in Pharmaceutical Sciences would provide a mechanism for pharmacy students to pursue graduate training, which is consistent with the mission of the University of Montana. It would also add an additional degree track to the University of Montana Health and Medicine initiative.

4) How does the proposed program/center/institute fit within the MUS system?

The B.S. degree in Pharmaceutical Sciences would be available at the University of Montana-Missoula in the College of Health Professions and Biomedical Sciences. This B.S. degree in Pharmaceutical Sciences is not offered elsewhere in the MUS. Other than the Pharm.D. program at the University of Montana-Missoula within which this new B.S. degree would be housed, the only related programs are Pharmacy Technician/Technology certificates and pre-pharmacy programs. Pharmacy Technician/Technology programs are offered at Miles Community College, Great Falls College MSU, Missoula College UM, Flathead Valley Community College, and Highlands College of MT Tech. The Pharmacy Technician/Technology certificates are two-semester programs and not equivalent in breadth or depth to the curriculum offered through the proposed four-year B.S. degree in Pharmaceutical Sciences. Helena College – UM offers an Associate of Science degree in Pre-Pharmacy. Many other MUS institutions offer pre-pharmacy courses/curricula that are equivalent and would be applicable to the B.S. degree in Pharmaceutical Sciences upon admission to the Pharm.D. program at the University of Montana-Missoula. Pre-pharmacy equivalent courses offered by MUS institutions and other nearby institutions can be viewed at the following link:

Prerequisite Course Equivalents

Signature/Date

College/School Dean:

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

Flagship President*:

*Not applicable to the Community Colleges.

Date of Final Review: November 18, 2016

When submitting the proposal to the BOR, include this signed form with the Level II request.
ITEM 174-1005-R0317
Request for authorization to establish a D.P.T and M.P.H dual degree

THAT
The University of Montana requests authorization from the Montana Board of Regents to establish a doctor of physical therapy and master of public health dual degree program.

EXPLANATION
The proposed dual degree program for Doctor of Physical Therapy (DPT) and Master of Public Health would integrate two already existing programs into a formalized dual degree program (DPT/MPH). The University of Montana (UM) College of Health Professions and Biomedical Science (CHPBS) includes the School of Physical Therapy and Rehabilitation Sciences which offers the DPT degree and the School of Public and Community Health Sciences which offers the MPH degree. The proposed dual degree option for graduate students will delineate a clear path for students to earn both a DPT and MPH through UM.

ATTACHMENTS
Academic Proposal Request Form
Curriculum Proposal Form
Intent to Plan
Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

ITEM 174-1005-R0317 Submission Month or Meeting: March 9-10, 2017

Institution: University of Montana-Missoula CIP Code: 51.2308 & 51.2208

Program/Center/Institute Title: DPT-MPH dual degree program

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/preparingacademicproposals.asp.

A. Level I:

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

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

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   OCHE Approvals

   5. Re-titling an existing postsecondary educational program

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B. Level II:

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2. Exceeding the 120 credit maximum for baccalaureate degrees  Exception to policy 301.11

3. 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)

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

Specify Request:
The proposed dual degree program for Doctor of Physical Therapy (DPT) and Master of Public Health would integrate two already existing programs into a formalized dual degree program (DPT/MPH). The University of Montana (UM) College of Health Professions and Biomedical Science (CHPBS) includes the School of Physical Therapy and Rehabilitation Sciences which offers the DPT degree and the School of Public and Community Health Sciences which offers the MPH degree. The proposed dual degree option for graduate students will delineate a clear path for students to earn both a DPT and MPH through UM.
1. Overview

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

The proposed dual degree program for Doctor of Physical Therapy (DPT) and Master of Public Health would integrate two already existing programs into a formalized dual degree program (DPT/MPH). The University of Montana (UM) College of Health Professions and Biomedical Science (CHPBS) includes the School of Physical Therapy and Rehabilitation Sciences which offers the DPT degree and the School of Public and Community Health Sciences which offers the MPH degree. The proposed dual degree option for graduate students will delineate a clear path for students to earn both a DPT and MPH through UM.

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The DPT/MPH dual degree would be offered in collaboration with UM’s School of Physical Therapy and Rehabilitation Sciences (SPTRS) and the School of Public and Community Health Sciences (SPCHS). Both programs provide related graduate programs that would be retained. SPTRS offers an “on-campus” Doctor of Physical Therapy degree, which is a clinically-focused degree that prepares students for clinical practice in a variety of health care settings. SPCHS offers an “on-line” generalist MPH degree that provides training across the five core public health content areas (i.e., biostatistics, epidemiology, health policy, environmental health, biostatistics, and social and behavioral sciences).

Student will apply for and enroll in each of the programs. The degree requirements will be configured such that students will take one additional semester of classes in order to complete the two degrees concurrently. The new dual degree option provides a distinct path of training that will prepare new practitioners in physical therapy practice focused on public and community health.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

This proposal will not require changes to any existing programs.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

N/A

D. How does the proposed program serve to advance the strategic goals of the institution?

The addition of this new dual degree is consistent with the mission of the new UM Health and Medicine program (UMHM) that serves as the virtual home for all health-related courses, programs, clinics and laboratories across campus. The proposed option is also consistent with the UM Academic Alignment and Innovation Program, which calls for growth in the Public Health graduate program. Finally, the proposed program meets UM’s strategic plan’s “Initiatives and Goals” to cultivate discovery and learning in graduate education by: 1) growing graduate education to enhance the intellectual atmosphere and create cultural and economic impacts in Montana and, 2) increasing the number of graduate students in Montana.
E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

The new program would be housed at the University of Montana-Missoula. UM-Missoula is the only university or college in the MUS that offers a MPH degree or a DPT degree. There are degree programs within the Montana University System that provide similar academic content as some courses in the proposed new dual degree option. However, none offer a program of study leading to a MPH degree or a DPT degree. For example, the Department of Health and Human Development at Montana State University Bozeman currently offers programs of study leading to Master of Science (MS) degrees in: (1) Exercise and Nutrition Sciences, (2) Family and Consumer Sciences, and (3) Food, Family, and Community Health Sciences. Additionally, Montana State University Bozeman has requested authorization to establish a Master of Science (MS) degree in Community Health, which is part of a broader request to restructure the degree programs offered by the Department of Health and Human Development. Montana State University Billings also offers a degree program in Master of Health Administration (MHA). To reiterate, none of these other programs in the Montana University System lead to a MPH degree, none include courses in the five core public health content areas (i.e., biostatistics, epidemiology, health policy, environmental health, biostatistics, and social and behavioral sciences), and none can be accredited by the Council on Education for Public Health. Flathead Valley Community College and Great Falls College – Montana State University both offer Physical Therapy Assistant programs. These are two-year associate degree programs that educate physical therapy assistants who are legally required to practice under the supervision of a licensed physical therapist.

3. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents’ Policy 301.12 have been met.

The table below presents the course and sequence for the dual degree.

<table>
<thead>
<tr>
<th>Semester 1 (summer before starting the DPT program)</th>
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</thead>
<tbody>
<tr>
<td><strong>Term</strong></td>
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<tr>
<td>----------</td>
</tr>
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<td>Summer</td>
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<td><strong>TOTAL CREDITS FOR SEMESTER:</strong></td>
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<table>
<thead>
<tr>
<th>Semester 2 (DPT Year 1, Semester 1)</th>
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</thead>
<tbody>
<tr>
<td><strong>Term</strong></td>
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<tr>
<td>----------</td>
</tr>
<tr>
<td>Fall</td>
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<tr>
<td></td>
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### Semester 3 (DPT Year 1, Semester 2)

<table>
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<tr>
<th>Term</th>
<th>Course in Program</th>
<th>Taken in place of</th>
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<th>MPH Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>P T 519 - Musculoskeletal Management I</td>
<td></td>
<td>4</td>
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<tr>
<td></td>
<td>P T 530 - Clinically Applied Ex Physiology</td>
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<td>4</td>
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<td></td>
<td>P T 582 - Clinical Experience</td>
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<tr>
<td></td>
<td>P T 524 - Clin Med II Intro to Med</td>
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<tr>
<td></td>
<td>P T 536 - Neurosciences</td>
<td></td>
<td>5</td>
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<tr>
<td></td>
<td>P T 560 - Clinical Reasoning I</td>
<td></td>
<td>1</td>
<td></td>
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<tr>
<td></td>
<td>P T 520 - Development Through Life Span</td>
<td>MPH Elective</td>
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<td>2</td>
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<tr>
<td></td>
<td>P T 527 - Physical &amp; Electrophysiologic Agents</td>
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<td><strong>TOTAL:</strong></td>
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**TOTAL CREDITS FOR SEMESTER:** 21

### Semester 4 (DPT Year 1, Semester 3)

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<th>Term</th>
<th>Course in Program</th>
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<th>MPH Cr.</th>
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<tbody>
<tr>
<td>Summer</td>
<td>PUBH 580 Rural Health or 550 Program Eval (offered in odd years)</td>
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<td></td>
<td>P T 587 - Clinical Internship I</td>
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**TOTAL CREDITS FOR SEMESTER:** 9

### Semester 5 (DPT Year 2, Semester 4)

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<th>Course in Program</th>
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<th>MPH Cr.</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>P T 525 - Clin Med III</td>
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<tr>
<td></td>
<td>P T 576 - Clinical Reasoning II</td>
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<td></td>
<td>P T 563 - Cardiopulmonary PT</td>
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<td></td>
<td>P T 565 - PT for Children</td>
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<td>P T 569 - Musculoskeletal Mgt II</td>
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<td></td>
<td>P T 567 - Neurorehabilitation I</td>
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**TOTAL CREDITS FOR SEMESTER:** 17

### Semester 6 (DPT Year 2, Semester 5)

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<th>MPH Cr.</th>
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</thead>
<tbody>
<tr>
<td>Spring</td>
<td>PUBH 510 Intro to Epidemiology</td>
<td>PT 679: Trends and Scholarly Activity</td>
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### Semester 7 (DPT Year 2, Semester 6)

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<th>Term</th>
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<th>MPH Cr.</th>
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<tr>
<td>Summer</td>
<td>PUBH 599 Professional Paper¹</td>
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<td></td>
<td>P T 589 - Clinical Internship III</td>
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### Semester 8 (DPT Year 3, Semester 7)

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<th>MPH Cr.</th>
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<tbody>
<tr>
<td>Fall</td>
<td>PUBH 520 Fundamentals of Biostatistics</td>
<td>PT 679:Trends and Scholarly Activity</td>
<td>3</td>
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<tr>
<td></td>
<td>PUBH 540 Social &amp; Behavioral Sci in PH</td>
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<tr>
<td></td>
<td>P T 626 - Clin Med IV</td>
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<tr>
<td></td>
<td>PT 570 Psychology of Illness and Disability</td>
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<td></td>
<td>P T 627 - Prevention &amp; Wellness Educ</td>
<td>PUBH 599 Professional Paper²</td>
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<td>P T 676 - Clinical Reasoning III</td>
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<td>PT 584 Integrated Clinical Experience Neuro</td>
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<td></td>
<td>PUBH 530 Public Health Admin &amp; Mgnt</td>
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<td><strong>TOTAL CREDITS FOR SEMESTER:</strong></td>
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</table>

¹ The PUBH capstone courses may be extended and completed as part of PT 680

² The PUBH capstone courses may be extended and completed as part of PT 680
Montana Board of Regents
CURRICULUM PROPOSAL FORM

<table>
<thead>
<tr>
<th>Semester 9 (DPT Year 3, Semester 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.</td>
</tr>
<tr>
<td>We anticipate that three to five new graduate students in the year after formal approval (Fall 2018) will enroll in the new dual degree option. Thereafter, we anticipate three to five students will enroll in the program each year. Applications would be evaluated by the SPTRS and SPCHS Admissions Committees separately and will enroll concurrently in each program.</td>
</tr>
</tbody>
</table>

4. Need

A. To what specific need is the institution responding in developing the proposed program?

The new dual degree program will create a clear pathway for students to attain an MPH and a DPT degree. At UM, students are already seeking the Certificate in Public Health while completing their DPT degree. This new option will allow students to complete both a DPT and an MPH in the most succinct and least time-consuming way. The dual degree track has been designed to maximize learning by aligning courses from each program. Specifically, the courses are organized so that students will be able to apply their public health training during their DPT courses and clinical experiences. The new dual degree DPT/MPH option will increase the number of graduate students served by UM. Specifically, there is a movement in the physical therapy field to expand the scope of practice to address population health issues. Also, there are increasing numbers of physical therapists and physical therapy students who are engaging in global health work. The interests and needs of some prospective graduate students are best met by establishing a clear path for those motivated to address community health issues related to physical activity and wellness. By completing both a DPT and an MPH, new graduates will be well prepared to address community health needs in rural, underserved, and international settings. With the implementation of the new dual degree program, students would be able to earn a degree from a public health program and physical therapy program that are both nationally accredited.

B. How will students and any other affected constituencies be served by the proposed program?

The proposed DPT/MPH dual degree program provides the opportunity for physical therapy students to add public health expertise to their clinical and administrative competencies. This approach is consistent with the evolving focus on integrated approaches to health care and prevention. The US Bureau of Labor projects a 34% growth in employment of Physical Therapists, which is much faster than average for all occupations. Demand for physical therapists is partly driven by the ageing US population and the growing focus on prevention. The median annual salary for physical therapists with a DPT degree (a requirement for licensure) was $82,390 in
Montana Board of Regents  
CURRICULUM PROPOSAL FORM

2014. With changes in the US medical system, physical therapists with an MPH will be better equipped to address health care policy and administration as well as improve the health of individuals, families, communities and the environment.

The new DPT/MPH dual degree option could serve as a feeder program for the new PhD in Public Health, thus enhancing graduate work at UM. Collectively these programs would increase UM’s public health visibility both regionally and nationally.

C. What is the anticipated demand for the program? How was this determined?

Currently, there are no on-campus accredited MPH programs in Montana or in its neighboring states of North Dakota, South Dakota and Wyoming. Also, there is no other DPT program in Montana as well as no programs in Wyoming or Alaska. Nationwide, less than ten universities offer a DPT/MPH dual degree. By creating this dual degree program, University of Montana will be poised to have a greater pool of applicants for each program. DPT graduate students are currently completing courses in the UM Certificate of Public Health Program. Some of these students have expressed interest in completing an MPH but have been unable to identify a clear path to complete these two degrees concurrently. A new dual degree option would better meet these students’ curriculum needs and provide MPH and DPT degrees that are highly regarded, recognizable, and accredited.

5. Process Leading to Submission

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

The concept of offering prospective graduate students a choice of enrolling concurrently in the DPT and MPH programs has been a point of discussion by both programs for several years. Consensus among faculty and administrators was to ensure that a plan was developed that would ensure student success in both programs and would minimize the duplication of coursework. Given the current success of students who are completing the Certificate of Public Health while taking DPT courses, discussions regarding a dual degree option were initiated. A working group comprised of faculty from the SPCHS and SPTRS initially developed the proposal. The proposal was then reviewed and approved by the respective department review processes. Next, the preliminary proposal was reviewed and approved by the UM Dean of the College of Health Professions and Biomedical Sciences, and the UM Provost reviewed and approved the preliminary proposal.

6. Resources

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

No additional faculty resources are required at this time. The tuition surcharge would be adjusted and aligned to annual tuition increases throughout the program lifespan.

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

Over time more students may be drawn to the new DPT/MPH option, which might put strain on the current capacity on some courses. Additional resources or reconfiguring of MPH course offerings may be necessary if the new option experiences rapid and sustained growth.

7. Assessment

A. How will the success of the program be measured?

The new option will be evaluated at the end of each academic year. Important questions and data will include the following:

- How many applicants were received for the new DPT/MPH dual degree?
- How many applicants were admitted into the new DPT/MPH dual degree?
- How many students enrolled in the new DPT/MPH dual degree?
- How many students in the dual degree program dropped out of either the MPH or DPT program, and what were their reasons?
- How many students graduated with the dual degree?
- How many students applied for and passed the national physical therapy licensing exam and met the identified competencies for the MPH program?
- What were the types and locations of students’ employment upon graduation?
Montana University System
INTENT TO PLAN FORM

Program/Center/Institute Title: Dual Degree: Doctor of Physical Therapy-Master in Public Health (DPT-MPH)

UM-Missoula, College of Health Professions & Biomedical Sciences/School of Physical Therapy and Rehabilitation Sciences & School of Public & Community Health Sciences

Expected Submission Date: Spring 2017

Contact Name/Info: Kari Harris/406-243-4685, Jennifer Bell/406-243-6827

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.

A dual degree of Doctor of Physical Therapy-Master in Public Health (DPT-MPH) is proposed. This would enable students to complete a Master of Public Health (MPH, 42 credits) while also completing a Doctor of Physical Therapy (DPT, 118 credits). The proposal will allow students to complete both programs in nine semesters (adding one semester to the current eight semesters required to earn a DPT).

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 proposed DPT-MPH dual degree program provides the opportunity for physical therapy students to add public health expertise to their clinical and administrative competencies. This approach is consistent with the evolving focus on integrated approaches to health care and prevention. The US Bureau of Labor projects a 34% growth in employment of Physical Therapists, which is much faster than average for all occupations. Demand for physical therapists is partly driven by the ageing US population and the growing focus on prevention. The median annual salary for physical therapists with a DPT degree (a requirement for licensure) was $82,390 in 2014. With changes in the US medical system, physical therapists with an MPH will be better equipped to address health care policy and administration as well as improve the health of individuals, families, communities and the environment.

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

At the University-level, an addition of the new dual DPT-MPH degree is consistent with the mission of UM’s new Health and Medicine program, which is organizing existing courses across campus. The new dual degree also responds to the UM Academic Alignment and Innovation Program’s call for growth in Public Health graduate programs. This dual degree program will also help create health professionals that are well-trained to address the unique health care system of a mainly rural state.

4) How does the proposed program/center/institute fit within the MUS system?

The new dual degree program would be housed at the University of Montana-Missoula. The component programs, the DPT and MPH degrees, are not offered elsewhere in the Montana University System.

Signature/Date

College/School Dean: 

Chief Academic Officer: 

Chief Executive Officer: 

Flagship Provost*: 

Flagship President*: 

*Not applicable to the Community Colleges.

Date of Final Review: November 18, 2016

When submitting the proposal to the BOR, include this signed form with the Level II request.
ITEM 174-1006-R0317

Request for authorization to establish a Pharm.D.-M.P.H. dual degree

THAT

The University of Montana requests authorization from the Montana Board of Regents to establish a doctor of pharmacy and master of public health dual degree program.

EXPLANATION

The proposed dual degree for Doctor of Pharmacy (PharmD) and Master in Public Health (MPH) would integrate two already existing programs into a formalized dual degree (PharmD/MPH). The University of Montana (UM) College of Health Professions and Biomedical Sciences offers both degrees. The dual degree program offers efficient pathways for students to pursue both degrees concurrently.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form
Intent to Plan
Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

ITEM 174-1006-R0317

Submission Month or Meeting: March 9-10, 2017

Institution: University of Montana-Missoula

CIP Code: 51.2001 & 51.2201

Program/Center/Institute Title: Pharm.D - M.P.H. dual degree

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/preparingacademicproposals.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. Exceeding the 120 credit maximum for baccalaureate degrees Exception to policy 301.11

3. 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)

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

Specify Request:
The proposed dual degree for Doctor of Pharmacy (PharmD) and Master in Public Health (MPH) would integrate two already existing programs into a formalized dual degree (PharmD/MPH). The University of Montana (UM) College of Health Professions and Biomedical Sciences offers both degrees. The dual degree program offers efficient pathways for students to pursue both degrees concurrently.
1. Overview

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

The proposed dual degree for Doctor of Pharmacy (PharmD) and Master in Public Health (MPH) would integrate two already existing programs into a formalized dual degree (PharmD/MPH). The University of Montana (UM) College of Health Professions and Biomedical Sciences offers both degrees. The dual degree program offers efficient pathways for students to pursue both degrees concurrently.

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The dual degree would allow students to concurrently complete the 42-credit MPH degree and 200-credit PharmD degree in 4 years (11-12 semesters). Only students enrolled in both programs would be allowed to select the dual degree curriculum.

Pharmacy students are not required to have an undergraduate degree when applying for admission. Pharmacy students that enter the program without a bachelor’s degree have the unique status of being enrolled in a professional doctorate program but not eligible for enrollment in the Graduate School.

Therefore, two pathways are suggested: one for students entering the pharmacy program with a bachelor’s degree and one for students without an undergraduate degree.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

This proposal will not require changes to any existing programs.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

N/A

D. How does the proposed program serve to advance the strategic goals of the institution?

The addition of this dual degree is consistent with the mission of the new UM Health and Medicine program (UMHM) that serves as the virtual home for all health-related courses, programs, clinics and laboratories across campus. The proposed dual degree also is consistent with the UM Academic Alignment and Innovation Program which calls for improving the synergy among existing programs and growth in public health graduate programs.

This dual degree program will serve as a marketing tool for student recruitment. The entry of new schools of pharmacy as well as the increased class size of existing schools of pharmacy has resulted in a recent trend of pharmacy training supply outpacing student demand. In this more competitive environment the University of Montana Skaggs School of Pharmacy continues to fill its class rosters with exceptional students, but identifying opportunities to further enhance the school’s strong marketability is warranted.
implementation of this dual degree serves as another factor to distinguish the UM Skaggs School of Pharmacy from many of its regional competitors.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

The new program would be housed at the University of Montana-Missoula. UM-Missoula is the only university or college in the Montana University System that offers a PharmD or MPH degree.

There are degree programs within the Montana University System that provide preparatory academic training for the Doctorate in Pharmacy. Helena College and Montana State University Billings offer pre-pharmacy programs. Most other university and colleges in the Montana University system, such as Montana State University, offer advising for students interested in professional and pre-professional programs of study. There are other degree programs that have courses that provide similar academic content as some courses in the MPH. However, none offer a program of study leading to a MPH degree. For example, the Department of Health and Human Development at Montana State University Bozeman currently offers related programs of study leading to Master of Science (MS) degrees in: (1) Exercise and Nutrition Sciences, (2) Family and Consumer Sciences, and (3) Food, Family, and Community Health Sciences. Additionally, Montana State University Bozeman has requested authorization to establish a Master of Science (MS) degree in Community Health, which is part of a broader request to restructure the degree programs offered by the Department of Health and Human Development. Montana State University Billings also offers a degree program in Master of Health Administration (MHA). To reiterate, none of these other programs in the Montana University System lead to a PharmD, MPH, or dual PharmD/MPH degree.

3. Program Details

   A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents’ Policy 301.12 have been met.

       The course pathway for students who have completed their undergraduate degree prior to admission to the PharmD and MPH program is listed below.
## Montana Board of Regents
### CURRICULUM PROPOSAL FORM

### Year 1 (Pharmacy Year P1) TRACK 1

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<td>PHAR xxx Med Micro &amp; Antimicrobials</td>
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### Year 3 (Pharmacy Year P3) TRACK 1

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03/2017 Submission for Action  
Level II Memorandum  
29
### Montana Board of Regents
#### CURRICULUM PROPOSAL FORM

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#### Year 4 (Pharmacy Year P4) TRACK 1

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The course pathway for students who do not enter the PharmD program with a bachelor’s degree is listed below. The courses are identical, but students in this pathway devote one year after the Pharmacy Year 2 to completing most of the public health courses.

#### Year 1 (Pharmacy Year P1) TRACK 2

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<td>PHAR 372 Integrated Studies II</td>
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<td>Spring</td>
<td>PHAR xxx Interprofessional Education</td>
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Montana Board of Regents  
CURRICULUM PROPOSAL FORM

### Year 2 (Pharmacy Year P2) TRACK 2

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### Year 3 (Public Health Immersion Year)

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### Year 4 (Pharmacy Year P3) TRACK 2

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\(^1\) The capstone courses may be extended, or scheduled for completion in the P 3 & P 4 years
Montana Board of Regents
CURRICULUM PROPOSAL FORM

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<th>MPH Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any</td>
<td>PHAR 5XX Advanced Pharmacy Practice Experience</td>
<td></td>
<td>28 ²</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL: 28

² 8 credits (2 APPEs) have been completed through completion of the PUBL capstone courses (PUBL 591, 593, and 599), giving the total PharmD. 36 credits obtained through the APPE program

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

We anticipate that three new graduate students in the year after formal approval (Fall 2018) will enroll in the new degree option. Thereafter, 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.

4. Need

A. To what specific need is the institution responding in developing the proposed program?

The profession of pharmacy has evolved to create roles for pharmacists as integral providers within the more integrated health care approach to patient care. Pharmacists in many settings participate in various health
promotion programs including immunization, smoking cessation, health screening, and disease prevention and education. Moreover, epidemiological and outcomes based research has become critical to the evaluation of, and guidance for optimal medication use. As such, pharmacy practice and public health issues commonly merge. There is an increasing demand for pharmacy expertise and knowledge in population-based health care organizations including private and public health care institutions, managed care and group provider organizations, and all levels of government including public health organizations such as the Centers for Disease Control and Prevention (CDC).

A review of 2015 data from the American Association of Colleges of Pharmacy (AACP) illustrates the perceived value of the PharmD-MPH option, being the second most common dual-degree pathway after the PharmD-MBA dual-degree in U.S. Pharmacy Programs. The PharmD-MPH dual degree is offered in 34 of the 82 programs described.²

B. How will students and any other affected constituencies be served by the proposed program?

Dual degrees such as the PharmD-MPH will increase the employability of graduates in the UM PharmD program, who face an increasingly competitive job market. Employment of pharmacists is projected to grow 3 percent, which is slower than the average for all occupations. While the increase in demand for prescription medications is expected to lead to higher demand for pharmaceutical services, employment in traditional pharmacies is projected to decline slightly. However the median annual wage for pharmacists remains high--$121,500 in 2015,³ which is among the highest paid occupations in health care.⁴

C. What is the anticipated demand for the program? How was this determined?

Each year several pharmacy students express interest in taking public health courses. Faculty have accommodated these interests as much as possible given the accreditation requirements of both programs. Indeed, five pharmacy students in the last five years completed the public health certificate program, which consists of taking 12 graduate credits in the public health program. A formal program that defines a clear pathway and course savings will increase the student demand for the dual degree.

5. Process Leading to Submission

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

² http://www.aacp.org/resources/student/pharmacyforyou/admissions/admissionrequirements/Documents/Table%204.pdf
A working group of faculty from both departments initially drafted the Intent to Plan Form and, subsequently, the full proposal. The plan and proposal was reviewed and approved by the respective department review processes. The Intent to Plan Form was reviewed and approved by the UM Dean of the College of Health Professions and Biomedical Sciences, the UM Provost, and Faculty Senate.

6. Resources

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

No additional faculty resources are required.

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

Over time more students may be drawn to the dual degree, which might put strain on the current capacity on some public health courses. Additional resources or reconfiguring of public health course offerings may be necessary if the dual degree experiences rapid and sustained growth.

7. Assessment

A. How will the success of the program be measured?

The dual degree will be evaluated at the end of each academic year. Important questions and data will include the following:

- How entering UM Skaggs School of Pharmacy students were motivated to attend the school due to the availability of the dual degree program?
- How many applicants were admitted into the new dual degree program?
- How many students enrolled in the new dual degree program?
- How many students dropped out of the new dual degree, and what were their reasons?
- How many students graduated with the new dual degree option?
- How many students met the identified competencies for the new dual degree option?
- What were the types and locations of students’ employment upon graduation?
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.

A dual degree of Doctor of Pharmacy (PharmD)- Master of Public Health (MPH) is proposed. The dual degree track would allow students admitted to, and completing the PharmD and MPH programs to concurrently complete the 42-credit MPH degree and 200-credit PharmD degree. The proposal will seek to allow completion of both degrees in 4 years (11-12 semesters) after admission to the PharmD program. Only students enrolled in both programs would be allowed to select the dual-degree curriculum.

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 profession of pharmacy has evolved to create roles for pharmacists as integral providers within the more integrated health care approach to patient care. Pharmacists in many settings participate in various health promotion programs including immunization, smoking cessation, health screening, and disease prevention and education. Moreover, epidemiological and outcomes based research has become critical to the evaluation of, and guidance for optimal medication use. As such, pharmacy practice and public health issues commonly merge. There is an increasing demand for pharmacy expertise and knowledge in population-based health care organizations including private and public health care institutions, managed care and group provider organizations, and all levels of government including public health organizations such as the Centers for Disease Control and Prevention (CDC).

A review of 2015 data from the American Association of Colleges of Pharmacy (AACP) illustrates the perceived value of the PharmD-MPH option, being the second most common dual-degree pathway after the PharmD-MBA
Montana University System

INTENT TO PLAN FORM

dual-degree in U.S. Pharmacy Programs. The PharmD-MPH dual degree is offered in 34 of the 82 programs described.¹

**Dual degrees such as the PharmD-MPH will increase the employability of graduates in the UM PharmD program, who face an increasingly competitive job market.** Employment of pharmacists is projected to grow 3 percent, which is slower than the average for all occupations. While the increase in demand for prescription medications is expected to lead to higher demand for pharmaceutical services, employment in traditional pharmacies is projected to decline slightly. However the median annual wage for pharmacists remains high—$121,500 in 2015,² which is among the highest paid occupations in health care.³

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

The dual-degree program utilizes existing degree tracks to expand student options in the health care field, consistent with the mission of UM’s Health and Medicine program. The new dual-degree pathway also enhances the College’s response to the UM Academic Alignment and Innovation Program’s call for growth in Public Health graduate programs.

4) **How does the proposed program/center/institute fit within the MUS system?**

The degree program would be available at the University of Montana-Missoula as part of the existing programs in Pharmacy and Public Health. The component programs, the Pharm.D. and MPH degrees, are not offered elsewhere in the Montana University System.

**Signature/Date**

College/School Dean:  
Chief Academic Officer:  
Chief Executive Officer:  
Flagship Provost:

¹ [http://www.aacp.org/resources/student/pharmacyforyou/admissions/admissionrequirements/Documents/Table%204.pdf](http://www.aacp.org/resources/student/pharmacyforyou/admissions/admissionrequirements/Documents/Table%204.pdf)
Montana University System
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Flagship President*: [Signature]

*Not applicable to the Community Colleges.

Date of Final Review: November 18, 2016

When submitting the proposal to the BOR, include this signed form with the Level II request.
ITEM  174-1007-R0317
Request for authorization to establish a Pharm.D. – Pharmaceutical Sciences M.S. dual degree

THAT
The University of Montana requests authorization from the Montana Board of Regents to establish a doctor of pharmacy and master of science in pharmaceutical sciences dual degree program.

EXPLANATION
The proposed dual degree program for Doctor of Pharmacy (Pharm.D.) and Master of Science in Pharmaceutical Sciences and Drug Design (M.S. PSDD) would integrate two already existing programs into a formalized dual degree program (Pharm.D./M.S.). The University of Montana (UM) Skaggs School of Pharmacy in the College of Health Professions and Biomedical Science (CHPBS) offers the Pharm.D. degree as well as Masters- and Ph.D.-level graduate research degrees. Many courses are shared between these two programs, yet the pathway for motivated Pharm.D. students to concurrently pursue a graduate M.S. degree is not clearly delineated or facilitated within the school.

ATTACHMENTS
Academic Proposal Request Form
Curriculum Proposal Form
Intent to Plan
Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 174-1007-R0317 Submission Month or Meeting: March 9-10, 2017

Institution: University of Montana-Missoula CIP Code: 51.20

Program/Center/Institute Title: PharmD – Pharmaceutical Sciences M.S. dual degree

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/preparingacademicproposals.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. Exceeding the 120 credit maximum for baccalaureate degrees
   Exception to policy 301.11

3. 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)

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

Specify Request:

The proposed dual degree program for Doctor of Pharmacy (Pharm.D.) and Master of Science in Pharmaceutical Sciences and Drug Design (M.S. PSDD) would integrate two already existing programs into a formalized dual degree program (Pharm.D./M.S.). The University of Montana (UM) Skaggs School of Pharmacy in the College of Health Professions and Biomedical Science (CHPBS) offers the Pharm.D. degree as well as Masters- and Ph.D.-level graduate research degrees. Many courses are shared between these two programs, yet the pathway for motivated Pharm.D. students to concurrently pursue a graduate M.S. degree is not clearly delineated or facilitated within the school.
Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

The proposed dual degree program for Doctor of Pharmacy (Pharm.D.) and Master of Science in Pharmaceutical Sciences and Drug Design (M.S. PSDD) would integrate two already existing programs into a formalized dual degree program (Pharm.D./M.S.). The University of Montana (UM) Skaggs School of Pharmacy in the College of Health Professions and Biomedical Science (CHPBS) offers the Pharm.D. degree as well as Masters- and Ph.D.-level graduate research degrees. Many courses are shared between these two programs, yet the pathway for motivated Pharm.D. students to concurrently pursue a graduate M.S. degree is not clearly delineated or facilitated within the school.

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

Students planning to enter the Pharm.D. program complete two years of pre-professional curriculum that includes basic physical and biological sciences. Students then apply to enter the four-year professional program. Pharmacy students are not required to have an undergraduate degree when applying for admission. Pharmacy students that enter the program without a bachelor’s degree have the unique status of being enrolled in a professional program but not eligible for enrollment in the Graduate School. This unique status complicates the pathway for Pharm.D. students who have an interest in simultaneously pursuing a graduate research degree in the Department of Biomedical and Pharmaceutical Sciences. The formalization of a Pharm.D./M.S. dual degree program would provide a clear path for pharmacy students that are interested in coupling their professional pharmacy training with a Master’s level research degree.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

This proposal will not require changes to any existing programs.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

N/A

D. How does the proposed program serve to advance the strategic goals of the institution?

The addition of this dual degree is consistent with the mission of the new UM Health and Medicine program (UMHM) that serves as the virtual home for all health-related courses, programs, clinics and laboratories across campus. The proposed dual degree also is consistent with the UM Academic Alignment and Innovation Program that calls for improving the synergy among existing programs.

This dual degree program will serve as a marketing tool for student recruitment. The entry of new schools of pharmacy as well as the increased class size of existing schools of pharmacy has resulted in a recent trend of pharmacy training supply outpacing student demand. In this more competitive environment the University of Montana Skaggs School of Pharmacy continues to fill its class rosters with exceptional students, but identifying opportunities to further enhance the school’s strong marketability is warranted. The implementation of this dual
degree serves as another factor to distinguish the UM Skaggs School of Pharmacy from many of its regional competitors.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

There are no other Pharmacy programs in the MUS.

3. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents’ Policy 301.12 have been met.

The following are the current general requirements for the M.S. degree program in the Department of Biomedical and Pharmaceutical Sciences:

1. Successful completion of all Graduate School requirements for the M.S. degree. Current requirements for the M.S. degree are found on the websites for the Graduate School and the Department of Biomedical and Pharmaceutical Sciences:
   - [http://health.umt.edu/biomed/graduate/biomedical-pharmaceutical-sciences/default.php](http://health.umt.edu/biomed/graduate/biomedical-pharmaceutical-sciences/default.php)

2. Successful completion of at least 30 graduate semester credits as follows:
   a. At least 20 credits in the major (BMED), including research and thesis credits.
   b. Of these, at least 10 credits in 500 and 600 level courses, not including research and thesis.
   c. No more than 10 credits total of research and thesis (BMED 597/599) may be applied to the 30-credit requirement for the M.S. degree.

3. Successful completion and defense of a research thesis as defined by the Graduate School.

Students accepted into the Pharm.D./M.S. dual degree program would complete both degrees in five years. The Pharm.D. required coursework (i.e., Professional Years P1-P4) would remain unchanged. The student’s dual degree curriculum would be adapted as follows:

- To be eligible for this dual degree, students would first need to be accepted into the Pharm.D. program.
- By the end of summer between the Pharm.D. P1 and P2 years, the student will have completed a minimum of two laboratory rotations (PHAR 491).
- By late Fall of the P2 year, the student will formally apply for the Pharm.D./M.S. dual degree program. As part of the application the student will submit a signed Advisory Committee form. The student’s Advisory Committee will include their M.S. Advisor, a minimum of one additional faculty from the Department of Biomedical and Pharmaceutical Sciences and one faculty from the Department of Pharmacy Practice.
Montana Board of Regents
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- Upon admission to the Pharm.D./M.S. program and completion of their P2 year, the student will transfer up to nine credits of relevant coursework from their Pharm.D. curriculum to be applied to the graduate degree.
- Between the P2 and P3 years the student will complete a M.S. Immersion year that will include core graduate courses, graduate course electives and laboratory research.
- During the P3 year, the student will be expected to take research topics courses (BMED 637 or equivalent) and continue working in their chosen laboratory on a part-time basis.
- The student will take three Advanced Pharmacy Practice Experience (APPE) electives (i.e., 12 credits) devoted to laboratory research. Two of these electives (i.e., 8 credits) will count toward the required Pharm.D. APPE requirements. Thus, the Pharm.D./M.S. student will be taking one additional APPE elective.
- During the P4 year, the student will defend their Thesis and enroll for Thesis credit (BMED 599) during the relevant semester.

M.S. CURRICULUM

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Semester(^a)</th>
<th>Course Credits</th>
<th>Total Credits Toward M.S.</th>
</tr>
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<tr>
<td>CORE COURSES (Required)</td>
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<tr>
<td>BMED 595(^b)</td>
<td>Introduction to Pharmaceutical Sciences</td>
<td>Fall</td>
<td>3</td>
<td></td>
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<tr>
<td>BMED 609(^c)</td>
<td>Biomedical Statistics</td>
<td>Fall or Spring</td>
<td>3</td>
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<tr>
<td>BMED 637(^d)</td>
<td>Topics in Pharmaceutical Sciences and Drug Design</td>
<td>Three semesters: immersion year and P3</td>
<td>3 (3 X 1cr)</td>
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<tr>
<td>BMED 594</td>
<td>Informational Seminar</td>
<td>Spring</td>
<td>1</td>
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<tr>
<td>BMED 597</td>
<td>Research</td>
<td>Fall and Spring</td>
<td>6 (2 X 3cr)</td>
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<td>BMED 599</td>
<td>Thesis</td>
<td>Fall or Spring of P4</td>
<td>1</td>
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<td>ELECTIVES, Minimum two courses from the following:</td>
<td>6-8</td>
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<td></td>
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<tr>
<td>BMED 615</td>
<td>Molecular Pharmacology</td>
<td>Spring</td>
<td>3</td>
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<td>BCH 582</td>
<td>Physical Biochemistry</td>
<td>Fall or Spring</td>
<td>3</td>
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<td>BMED 632</td>
<td>Advanced Pharmacokinetics</td>
<td>Spring</td>
<td>3</td>
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<td>BMED 621</td>
<td>Drug Design</td>
<td>Fall</td>
<td>4</td>
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<tr>
<td>BMED 622</td>
<td>Drug Pharmacodynamics</td>
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<td>4</td>
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<tr>
<td>BMED 623</td>
<td>Drug Diversity and Target</td>
<td>Fall or Spring</td>
<td>3</td>
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<tr>
<td>BMED 641</td>
<td>Toxicology I</td>
<td>Fall</td>
<td>4</td>
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Montana Board of Regents
CURRICULUM PROPOSAL FORM

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Session</th>
<th>Credit</th>
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<tbody>
<tr>
<td>BMED 642</td>
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<td>4</td>
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<tr>
<td>BMED 661</td>
<td>Neuroscience I</td>
<td>Fall</td>
<td>4</td>
</tr>
<tr>
<td>BMED 662</td>
<td>Neuroscience II</td>
<td>Spring</td>
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COURSES TRANSFERRED FOR GRADUATE CREDIT, Maximum 9 credits from the following:

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Session</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>PHAR 421</td>
<td>Medicinal Chemistry I</td>
<td>P2 Fall</td>
<td>3</td>
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<tr>
<td>PHAR 422</td>
<td>Medicinal Chemistry II</td>
<td>P2 Spring</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 443</td>
<td>Pharmacology/Toxicology I</td>
<td>P2 Fall</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 444</td>
<td>Pharmacology/Toxicology II</td>
<td>P2 Spring</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 432</td>
<td>Clinical Pharmacokinetics</td>
<td>P1 Spring</td>
<td>3</td>
</tr>
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OTHER COURSES DEVOTED TO RESEARCH

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Session</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 588e</td>
<td>Research APPE</td>
<td>P3, P4</td>
<td>12 (3 X 4cr)</td>
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</table>

a During M.S. Immersion year unless otherwise indicated
b Or parallel course (e.g., BMED 621, BMED 641, BMED 661) per advice from the student’s mentor.
c Or equivalent (e.g., PUBH 520).
d Or parallel course (e.g., BMED 624, BMED 647, BMED 657, BMED 667) per advice from the student’s mentor.
e The student will take three Advanced Pharmacy Practice Experience (APPE) electives (i.e., 12 credits) devoted to laboratory research. Two of these electives (i.e., 8 credits) will count toward the required Pharm.D. APPE requirements. Thus, the Pharm.D./M.S. student will be taking one additional APPE elective.

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

We anticipate that two Pharm.D. P2 students will initially enroll in the program. Ultimately, we anticipate as many as six students within each Pharm.D. cohort will enroll in the dual degree program.

4. Need

A. To what specific need is the institution responding in developing the proposed program?

The Pharm.D./M.S. dual degree will meet the demands and interests of current students. Some UM pharmacy students have successfully completed a graduate research degree during the professional pharmacy training or shortly thereafter. These few success stories have required an ad-hoc approach and substantial effort on the part of faculty and staff in wading through the various administrative impediments posed by uncertain graduate student
status, financial aid impacts and graduate program curricular accommodations. Bright, exceptional pharmacy students have been turned away from concurrently seeking a related research degree. Students that entered pharmacy school without an undergraduate degree were met with problems related to graduate versus non-graduate status. Some students that did have a bachelor’s degree prior to entering pharmacy school were unsuccessful in concurrently pursuing a graduate research degree because the pathway for doing so was unclear and unsupported.

B. How will students and any other affected constituencies be served by the proposed program?

With the integration of laboratory-based research and pharmacy practice curriculum, graduates would be more competitive for drug development and drug discovery job opportunities in the pharmaceutical industry and academics. Pharmacy students in dual degree programs develop additional professional competencies, thereby strengthening their credentials as qualified practitioners [1]. Despite recent slowing in the growth of pharmacy positions overall, leadership positions (e.g., pharmacy directors and managers) have experienced growth as have opportunities for pharmacy residency programs [2,3]. Pharmacy students pursuing dual degree programs will be well positioned to compete for residency positions and ultimately attain pharmacy leadership positions.

Graduate programs at the University of Montana and affiliated research programs struggle to recruit graduate students. Pharm.D. students offer a pool of talented students with a proven track record in basic science curriculum. Thus, in addition to serving the interests of Pharm.D. students who wish to expand their career opportunities, this program will serve as a resource for research laboratories seeking talented students, thereby furthering the research mission of the CHPBS and UM.


C. What is the anticipated demand for the program? How was this determined?

Each year several pharmacy students express interest in conducting laboratory-based research. The Skaggs School of Pharmacy faculty have accommodated these interests when possible. With a formal program that clearly defines a pathway for these pharmacy students to gain laboratory experience and to ultimately complete a graduate research degree, we anticipate that approximately three to five students per pharmacy class would pursue this dual degree option. It is possible that the demand among students will grow over time, but the availability of funded laboratories where pharmacy students can pursue their research may remain as a cap on future growth.

5. Process Leading to Submission

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

The proposal was initially developed and vetted through the CHPBS Research Working Group, a faculty group with representatives from all academic units within the College. The proposal was further developed by the Associate Dean for the Skaggs School of Pharmacy and several faculty from the Department of Pharmacy Practice and the
Montana Board of Regents  
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Department of Biomedical and Pharmaceutical Sciences. It was then reviewed and approved by the faculty of these two contributing departments. Finally, the proposal was reviewed and approved by the CHPBS Dean.

6. Resources

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

N/A

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

Tuition waivers and stipends would be allocated at the departmental level (BMED) in the same way that they are currently allocated for the other graduate programs. Specifically, tuition waivers and stipends are available through the Graduate School and via support from extramural funding. We also anticipate that this program would be appropriate for requesting graduate student support from foundation sources and industry sources.

7. Assessment

A. How will the success of the program be measured?

The program will be evaluated at the end of each academic year. Important questions and data collected will include the following:

- How many entering UM Skaggs School of Pharmacy students were motivated to attend the school due to the availability of research opportunities and/or graduate research degrees?
- How many pharmacy students formally enrolled in the Pharm.D./M.S. program?
- How many students graduate with a Pharm.D./M.S.?
- How many faculty members mentored a Pharm.D./M.S. student?
- What extramural resources have been secured to support the Pharm.D./M.S. program?
Montana University System

INTENT TO PLAN FORM

Program/Center/Institute Title: Dual Degree: Doctor of Pharmacy/Master of Science in Pharmaceutical Sciences (PharmD/MS)

Campus, School/Department: UM-Missoula, College of Health Professions & Biomedical Sciences, Skaggs School of Pharmacy

Expected Submission Date: Spring 2017

Contact Name/Info: Curtis Noonan/406-243-4957, Howard Beall/406-243-5112

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 proposed dual degree program for Doctor of Pharmacy and Master of Science in Pharmaceutical Sciences (Pharm.D./M.S.) would integrate two already existing programs into a formalized dual degree program. Many courses are shared between the professional pharmacy and the pharmaceutical sciences graduate curricula. This overlap would allow for pursuit of this dual degree by motivated PharmD students.

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

In recent years some pharmacy Skaggs School of Pharmacy students have successfully pursued graduate research studies while pursuing the Pharm.D. degree. However, the approaches and pathways for accomplishing this pursuit of a Pharm.D./M.S. dual degree has been unclear and ad-hoc. The formalization of a Pharm.D./M.S. in Pharmaceutical Sciences dual degree would provide a clear path for students to pursue pharmacy practice training concurrent with a research degree.

The dual degree would open additional career opportunities for the pharmacy students that choose to pursue this dual degree program. With the integration of in depth laboratory research and pharmacy practice, graduates would be more competitive for drug development and drug discovery job opportunities in the pharmaceutical industry. Pharmacy students in dual degree programs develop additional professional competencies, thereby strengthening their credentials as qualified practitioners [1]. Despite recent slowing in the growth of pharmacy positions overall, leadership positions (e.g., pharmacy directors and managers) have experienced growth as have opportunities for pharmacy residency programs [2,3]. Pharmacy students pursuing dual degree programs will be well positioned to compete for residency positions and ultimately attain pharmacy leadership positions.

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.

At the University-level, an addition of the new dual DPT-MPH degree is consistent with the mission of UM’s new Health and Medicine program, which is organizing existing courses across campus. The new dual degree also is consistent with the UM Academic Alignment and Innovation Program which call for improving the synergy among existing programs.

4) How does the proposed program/center/institute fit within the MUS system?

The new program would be housed at the University of Montana-Missoula. The component programs, the Pharm.D. and M.S. in Pharmaceutical Sciences degrees, are not offered elsewhere in the Montana University System.

Signature/Date
College/School Dean:  
Chief Academic Officer:  
Chief Executive Officer:  
Flagship Provost*:  
Flagship President*:

*Not applicable to the Community Colleges.

Date of Final Review: November 18-2016

When submitting the proposal to the BOR, include this signed form with the Level II request.
ITEM 174-1008-R0317
Request for authorization to establish a Community Health and Prevention Sciences option in the M.P.H

THAT
The University of Montana requests authorization from the Montana Board of Regents to establish a community health & prevention sciences option in the master of public health.

EXPLANATION
A Master in Public Health (MPH) option in Community Health and Prevention Sciences is proposed. This option capitalizes on the intellectual strengths and resources across two academic units, the Department of Health and Human Performance (HHP) and the School of Public and Community Health Sciences (SPCHS). The proposed integrative program will lead to a distinct 42 credit graduate degree (Master in Public Health with an option in Community Health and Prevention Sciences) that can be accredited by the Council on Education for Public Health (CEPH).

ATTACHMENTS
Academic Proposal Request Form
Curriculum Proposal Form
Intent to Plan
Montana Board of Regents

ACADEMIC PROPOSAL REQUEST FORM

ITEM 174-1008-R0317 Submission Month or Meeting: March 9-10, 2017

Institution: University of Montana-Missoula CIP Code: 51.2207

Program/Center/Institute Title: Community Health & Prevention Sciences option in M.P.H.

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/preparingacademicproposals.asp.

A. Level I:

Campus Approvals

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

1b. Withdrawing a postsecondary educational program from moratorium

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

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

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

OCHE Approvals

5. Re-titling an existing postsecondary educational program

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

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

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

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

10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:

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

2. Exceeding the 120 credit maximum for baccalaureate degrees Exception to policy 301.11

3. 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)

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

Specify Request:
A Master in Public Health (MPH) option in Community Health and Prevention Sciences is proposed. This option capitalizes on the intellectual strengths and resources across two academic units, the Department of Health and Human Performance (HHP) and the School of Public and Community Health Sciences (SPCHS). The proposed integrative program will lead to a distinct 42 credit graduate degree (Master in Public Health with an option in Community Health and Prevention Sciences) that can be accredited by the Council on Education for Public Health (CEPH).
1. Overview

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

A Master in Public Health (MPH) option in Community Health and Prevention Sciences is proposed. This option capitalizes on the intellectual strengths and resources across two academic units, the Department of Health and Human Performance (HHP) and the School of Public and Community Health Sciences (SPCHS). The proposed integrative program will lead to a distinct 42 credit graduate degree (Master in Public Health with an option in Community Health and Prevention Sciences) that can be accredited by the Council on Education for Public Health (CEPH).

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The MPH in Community Health and Prevention Sciences would be offered through collaboration between UM’s Department of Health and Human Performance (HHP) and the School of Public and Community Health Sciences (SPCHS). Both programs provide related graduate programs that would be retained. HHP offers an on-campus MS option in Community Health and Prevention Sciences, which is a research-focused degree that prepares students for PhD-level training in behavioral sciences. SPCHS offers an online generalist MPH degree that provides training across the five core public health content areas (i.e., biostatistics, epidemiology, health policy, environmental health, and social and behavioral sciences).

Faculty from both programs would contribute expertise to the new MPH degree option in Community Health and Prevention Sciences. This allows UM to meet the accreditation requirement to have three faculty members for each MPH concentration. In addition to taking nine courses (27 credits) in community health and prevention sciences offered by HHP, students would attain additional public health core content by taking five of the existing MPH generalist on-line courses (i.e., biostatistics, epidemiology, health services, environmental health, and ethics, 15 credits). The new option provides a distinct combination of courses and training that will prepare new practitioners in public health focused on community and behavioral sciences.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

This proposal will not require changes to any existing programs.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

This new concentration would add a second MPH degree option that complements the current MPH generalist degree. The generalist degree draws students who are working full-time, unable to attend traditional on-campus courses, and are typically part-time students. The current campus-based MS in Community Health and Prevention Sciences (CHPS) is a research-oriented degree with an empirical thesis track, whereas the proposed MPH option trains practitioners in public health and has practice-based capstone projects. The proposed MPH option also includes coursework across all core content areas in public health that is not requisite in the current MS degree in CHPS.
The new option provides students the opportunity to develop greater depth of expertise in one of the core content areas in public health—social and behavioral sciences. This concentration will be especially attractive to students interested in health promotion, health education, program planning, and program evaluation. Courses in the new degree option would be delivered in a prescribed sequence to a cohort of full-time students. The blend of on-line and on-campus courses makes the new option attractive to students who want an on-campus experience that provides more in-person opportunities to work collaboratively with faculty mentors. The new concentration will be of interest to new public health practitioners and students recently graduated from undergraduate programs.

D. How does the proposed program serve to advance the strategic goals of the institution?

The addition of this new degree option is consistent with the mission of the new UM Health and Medicine program (UMHM) that serves as the virtual home for all health-related courses, programs, clinics and laboratories across campus. The proposed option is also consistent with the UM Academic Alignment and Innovation Program, which calls for growth in Health and Human Performance and Public Health graduate programs. Finally, the proposed program meets UM’s strategic plan’s “Initiatives and Goals” to cultivate discovery and learning in graduate education by: 1) growing graduate education to enhance the intellectual atmosphere and create cultural and economic impacts in Montana and, 2) increasing the number of graduate students in Montana.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

The new program would be housed at the University of Montana-Missoula. UM-Missoula is the only university or college in the MUS that offers a MPH degree. 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 MPH degree. For example, the Department of Health and Human Development at Montana State University Bozeman currently offers related programs of study leading to Master of Science (MS) degrees in: (1) Exercise and Nutrition Sciences, (2) Family and Consumer Sciences, and (3) Food, Family, and Community Health Sciences. Additionally, Montana State University Bozeman has requested authorization to establish a Master of Science (MS) degree in Community Health, which is part of a broader request to restructure the degree programs offered by the Department of Health and Human Development. Montana State University Billings also offers a degree program in Master of Health Administration (MHA). To reiterate, none of these other programs in the Montana University System lead to a MPH degree, none include courses in the five core public health content areas (i.e., biostatistics, epidemiology, health policy, environmental health, biostatistics, and social and behavioral sciences), and none can be accredited by the Council on Education for Public Health.

3. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents’ Policy 301.12 have been met.
The table below presents the course and sequence for the MPH degree option in Community Health and Prevention Sciences. Students would be able to complete the 42 credit degree in four semesters and one summer term.

<table>
<thead>
<tr>
<th>Program Year</th>
<th>Term</th>
<th>Course Title</th>
<th>Cr.</th>
<th>Department Offering the Course</th>
<th>Mode of Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Fall</td>
<td>HHP 540 Community Health Promotion Strategies</td>
<td>3</td>
<td>HHP</td>
<td>In-person</td>
</tr>
<tr>
<td>Year 1</td>
<td>Fall</td>
<td>HHP 544 Community Based Participatory Research</td>
<td>3</td>
<td>HHP</td>
<td>In-person</td>
</tr>
<tr>
<td>Year 1</td>
<td>Fall</td>
<td>Elective (negotiated with HHP Faculty)</td>
<td>3</td>
<td>Any</td>
<td>In-person</td>
</tr>
<tr>
<td>Year 1</td>
<td>Spring</td>
<td>PUBH 510 Introduction to Epidemiology</td>
<td>3</td>
<td>SPCHS</td>
<td>On-line</td>
</tr>
<tr>
<td>Year 1</td>
<td>Spring</td>
<td>PUBH 560 Environmental and Rural Health</td>
<td>3</td>
<td>SPCHS</td>
<td>On-line</td>
</tr>
<tr>
<td>Year 1</td>
<td>Spring</td>
<td>HHP 541 Program Planning in Community Health</td>
<td>3</td>
<td>HHP</td>
<td>In-person</td>
</tr>
<tr>
<td>Year 1</td>
<td>Spring</td>
<td>HHP 485 Theories of Health Behavior and Counseling</td>
<td>3</td>
<td>HHP</td>
<td>In-person</td>
</tr>
<tr>
<td>Year 1</td>
<td>Summer</td>
<td>PUBH 570 Ethical Issues in Public Health</td>
<td>3</td>
<td>SPCHS</td>
<td>On-line</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>PUBH 530 Public Health Admin &amp; Mgmt</td>
<td>3</td>
<td>SPCHS</td>
<td>On-line</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>Elective (negotiated with HHP Faculty)</td>
<td>3</td>
<td>Any</td>
<td>In-person</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>PUBH 520 Fundamentals of Biostatistics</td>
<td>3</td>
<td>SPCHS</td>
<td>On-line</td>
</tr>
<tr>
<td>Year 2</td>
<td>Spring</td>
<td>HHP 599 Professional Paper</td>
<td>3</td>
<td>HHP</td>
<td>In-person</td>
</tr>
<tr>
<td>Year 2</td>
<td>Spring</td>
<td>HHP 598 Internship</td>
<td>3</td>
<td>HHP</td>
<td>In-person</td>
</tr>
<tr>
<td>Year 2</td>
<td>Spring</td>
<td>HHP XXX Portfolio</td>
<td>3</td>
<td>HHP</td>
<td>In-person</td>
</tr>
</tbody>
</table>

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

We anticipate that three new graduate students in the year after formal approval (Fall 2018) will enroll in the new degree option. Thereafter, 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.

4. Need

A. To what specific need is the institution responding in developing the proposed program?

The new MPH degree option will increase the number of graduate students served by UM. The interests and needs of some prospective graduate students are not met by either of the existing degree programs, but would be met by the new option. Specifically, many graduates of the Community Health and Prevention...
Montana Board of Regents
CURRICULUM PROPOSAL FORM

Sciences option in HHP seek employment in the field of public health. With the implementation of the new program, students would be able to earn a MPH degree in community health from a public health program that is nationally accredited. Graduating from a nationally accredited program would no doubt enhance HHP graduates’ marketability and increase their prospects for gainful employment. In addition, some students in the current on-line MPH program, particularly those with no prior public health work experience, would benefit from the enhanced incidental learning, research opportunities, and community building that can occur in face-to-face learning environments.

B. How will students and any other affected constituencies be served by the proposed program?

Community health and prevention practice is a growing field. New employment opportunities are partly a result of the reimbursement changes associated with the Affordable Care Act. For example, the US Bureau of Labor projects a 13% growth in employment of health educators, which is faster than average for all occupations. The need is driven by efforts to improve health outcomes and reduce healthcare costs by addressing health behaviors and environments with an increased focus on prevention. The 2014 annual mean salary for health educators ranges from $42,540 to $55,260.¹

The new MPH option in Community Health and Prevention Sciences could serve as a feeder program for the new PhD in Public Health, thus enhancing graduate work at UM. Collectively these programs would increase UM’s public health visibility both regionally and nationally.

C. What is the anticipated demand for the program? How was this determined?

Currently, there are no on-campus accredited MPH programs in Montana or in its neighboring states of South Dakota and Wyoming. Each year several prospective graduate students express written and verbal interest in an on-campus MPH program focused on community health rather than a fully on-line program. Some of these students have opted not to attend UM. In other cases, faculty in both programs have partly accommodated students’ interest by adjusting some of the electives in each of the existing programs. A new degree option would better meet these students’ curriculum needs and provide the MPH degree that is highly regarded, recognizable, and can be accredited.

5. Process Leading to Submission

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

The concept of offering prospective graduate students a choice of enrolling in an on-line MPH program or enrolling in a blended on-line/on-campus MPH program has been a point of discussion since the inception of the current MPH program. Consensus among faculty and administrators was to ensure that the on-line program was well established and accredited before considering the addition of a blended option. Given the

Montana Board of Regents  
CURRICULUM PROPOSAL FORM

current success of the on-line program and its fully accredited status, discussions regarding a second, blended option were initiated. A working group comprised of faculty from the SPCHS and HHP initially developed the proposal. The proposal was then reviewed and approved by the respective department review processes. Next, the preliminary proposal was reviewed and approved by the Deans of the College of Education and Human Sciences and the College of Health Professions and Biomedical Sciences. The UM Provost reviewed and approved the preliminary proposal and finally, the proposal was approved by Faculty Senate.

6. Resources

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

No additional faculty resources are required at this time. As with the current generalist MPH, program tuition charges 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.

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

Over time more students may be drawn to the new MPH 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 MPH option in Community Health and Prevention Sciences experiences rapid and sustained growth. The Dean of College of Education and Human Sciences has agreed to provide resources for release time for HHP CHPS faculty for program development such as accreditation of the new track in the existing MPH program and evaluation. It is possible that a new faculty line (or lines) would be needed within the next few years if the program grows as anticipated. Meetings with HHP CHPS faculty and the Dean of College of Education and Human Sciences have produced agreement that, when future funding is available and/or a current line opens up, an additional line for the CHPS program is a priority.

7. Assessment

A. How will the success of the program be measured?

The new option will be evaluated at the end of each academic year. Important questions and data will include the following:

- How many applicants were received for the new MPH option?
- How many applicants were admitted into the new MPH option?
- How many students enrolled in the new MPH option?
- How many students dropped out of the new MPH option, and what were their reasons?
- How many students graduated with the new MPH option?
- How many students met the identified competencies for the new MPH option?
- How many students applied for and passed the national certification exam for health educators (Certified Health Education Specialist)?
- What were the types and locations of students’ employment upon graduation?
Montana University System
INTENT TO PLAN FORM

Program/Center/Institute Title: MPH Option in Community Health and Prevention Sciences

Campus, School/Department: UM-Missoula, College of Education/Health & Human Performance & College of Health Professions & Biomedical Sciences/School of Public & Community Health Sciences

Expected Submission Date: Spring 2017

Contact Name/Info: Kari Harris/406-243-4685, Annie Sondag/406-243-5215, Laura Dybdal/406-243-6988

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.

A Master in Public Health (MPH) degree with a concentration in Community Health and Prevention Sciences is proposed. This would add a second MPH degree option that would be a blend of on-line and on-campus courses at UM-Missoula. This degree option would complement the current MPH generalist degree that is fully accredited and on-line. The MPH in Community Health and Prevention Sciences would be offered in collaboration with UM’s Department of Health and Human Performance and the School of Public and Community Health Sciences.

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 US Bureau of Labor projects a 13% growth in employment of health educators, which is faster than average for all occupations. The need is driven by efforts to improve health outcomes and reduce healthcare costs by addressing health behaviors and environments with an increased focus on prevention. The 2014 annual mean salary for health educators ranges from $42,540 to $55,260.¹

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

At the University-level, an additional MPH degree option is consistent with the mission of UM’s new Health and Medicine program, which is organizing existing courses across colleges by health career areas. The new degree option also responds to the UM Academic Alignment and Innovation Program’s call for

Montana University System
INTENT TO PLAN FORM

growth in Health and Human Performance and Public Health graduate programs. For UM students, the new MPH with a concentration in community health would provide an on-campus MPH option. It also provides an alternate attractive option beyond the existing MS in Community Health and Prevention Sciences because the MPH is a degree program that can be accredited by the Council on Education for Public Health (CEPH).

4) How does the proposed program/center/institute fit within the MUS system?

The new program would be housed at the University of Montana-Missoula. Currently UM is the only MUS institute that offers a MPH degree. The MPH generalist degree at UM is an online program. The proposed MPH in Community Health & Prevention Sciences at UM would fill three main gaps in the MUS system: 1) It will be the only MPH blended program in the MUS system that is offered both on campus and online, as opposed to merely online. 2) It will be the only MPH program in the MUS system that is research based where students will have the option of conducting Thesis projects or professional papers. The current MPH generalist program does not have this option, as it is a portfolio-based program. 3) The current MPH generalist program tends to target Montana professionals who are already established in the field (MD’s, RN’s, etc.) and require an online program to participate. The proposed MPH in Community Health & Prevention Sciences will more often target new practitioners and students recently graduated from their B.S programs who are interested in a research track that requires some on-campus based courses and mentoring (i.e. lab work).

Signature/Date

College/School Dean: C. Rogers Hughes, Dean 5/11/16

Chief Academic Officer: 6/4/16

Chief Executive Officer: 6/4/16

Flagship Provost*: 6/29/16

Flagship President*: 6/29/16

*Not applicable to the Community Colleges.

Date of Final Review: September 15, 2016

When submitting the proposal to the BOR, include this signed form with the Level II request.
ITEM 174-1601-R0317
Request for authorization to establish a Minor, Certificate, A.A., and a B.A. in Glass

THAT
The University of Montana Western requests authorization from the Montana Board of Regents to establish a minor, certificate, associate of arts, and a bachelor of arts in Glass.

EXPLANATION
Workforce opportunities in glass work and blowing is growing across the nation. Since Montana is encircled by eleven states that do not offer a degree in glass and UMW would be the only four-year institution offering a specialization in scientific glassblowing in the nation, there is great potential for enrollment growth from students seeking this expertise in both the fields of science and art.

ATTACHMENTS
Academic Proposal Request Form
Curriculum Proposal
Intent to Plan
Attachment #1- Outline of Certificate, Minor, A.A., and B.A.
Attachment #2- Annual Courses Offered in Glass
Attachment #3- Map of Glass Programs Throughout the Nation
Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 174-1601-R0317 Submission Month or Meeting: March 9-10, 2017

The University of Montana
Western CIP Code: 50.0799

Program/Center/Institute Title: Minor, Certificate, A.A., and a B.A. in Glass

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/preparingacademicproposals.asp.

A. Level I:

Campus Approvals

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

1b. Withdrawing a postsecondary educational program from moratorium

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

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

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

OCHE Approvals

5. Re-titling an existing postsecondary educational program

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

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

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

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

10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:

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

2. Exceeding the 120 credit maximum for baccalaureate degrees
   Exception to policy 301.11

3. 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)

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

Specify Request:

The University of Montana Western intends to establish a Minor, Certificate, A.A., and a B.A. in Glass.
1. Overview

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

Proposed is a Glass Program that will offer stackable degrees: certificate, associate, minor and BA. This Curriculum Proposal (CP) would expand The University of Montana Western’s (Western) coursework beyond the three courses we currently offer, to include all disciplines of glassworking: furnace glass, torch-worked (including scientific glassblowing and artistic), fusing, casting (hot and kiln), and coldworking. These disciplines will function to advance the careers of Western’s students in commercial and fine arts, entrepreneurship, teaching, arts management (artistic directors, curators, gallerists, etc.), technical careers in scientific glassblowing, and will benefit cross disciplinary science students whose prospective job placement potential will be enriched from the knowhow of scientific glassblowing (chemists, biologists, physicists, etc.).

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The proposed program in glass is an expansion and development of the already existing courses and facilities at Western. Western currently offers three courses in glassblowing. These classes contribute to a student’s degree, which is currently a BA with an option in Art. This proposed CP in Glass would expand the course offerings so that a student can tailor their interest to the appropriate level of commitment: certificate, associate, minor, or BA degree.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

No, it would not.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

There are no other programs similar to this one on this campus, nor in the state or region. This program will be unique to Western. Western is encircled by 10 other states that do not offer a degree in glass. Moreover, there are only two other schools in the United States that offer degrees in scientific glassblowing, in Arizona and New Jersey.

D. How does the proposed program serve to advance the strategic goals of the institution?

In accordance with the Strategic Plan of Western, the following correspond to the intentions set forth therein:

- Success (recruitment): The Glass Program offers Western a unique recruiting opportunity to attract students from Montana and the surrounding states (Oregon, Nevada, Idaho, Utah, Wyoming, Colorado, New Mexico, North Dakota, South Dakota, and Oklahoma) whom otherwise do not have a regional option to study and work with glass.
- Development: The development of the Glass Program makes use of preexisting resources and facilities at Western in order to help students pursue creative and fulfilling career paths.

Priority One:
- 1A: The program offers five general education classes which are innately experiential.
- The program offers courses that:
Montana Board of Regents
CURRICULUM PROPOSAL FORM

o 1D: Teach the student how to start and maintain their own studio.

o 1B, 1C: Allow the students to obtain knowledge and understanding by directly engaging with the thinking and making processes.

o 1F, 1C: Help students directly develop professional artistic practices by working with companies, cities, agencies, etc., to install public or private artworks.

o 1F: Invite visiting artists to come to Western to teach for a block, providing the students, teacher, and Western community new and innovative approaches to making and thinking.

Priority Two:
• 2A: The program is cross disciplinary, offering future artists, scientists, and larger Western community opportunities to interact and innovate.

• 2B: Students learn to interact with the community beyond Western by developing individually driven professional experiences in order to make, promote and place their product.

Priority Three:
• 3A: Western has developed a system in order to ensure enrollments are met (specifically in the upper division courses with smaller enrollments) by combining multiple level classes into one class period.

• 3B: Annual promotion and recruitment efforts at appropriate venues (symposia, conferences, college fairs, high schools, etc.) have already been enacted and are presently continuing.

• 3C: The recruitment efforts previously mentioned are in larger cities with diverse demographics.

Priority Four:
• 4A: The support shown to advance this curriculum proposal is evidence of Western’s efforts to help faculty “act on their commitments to excellence.”

• 4B: The nature of the art-studio-class-environment is such that diversity and difference are welcome and encouraged to inspire new and valuable perspectives and outcomes.

Priority Five:
• 5B: Western has approved funding in order to compliment and expand the preexisting glass studios, and to accommodate new working methods: a dedicated torchworking facility.

• 5C: The web design and development team is currently working to detail and create a webpage on Western’s site to promote the glass classes and facilities.

Priority Six:
• 6A: Western currently conserves energy and resources by only utilizing equipment as needed, minimizing the financial impact and freeing those resources for other efforts.

• 6B: Western just received funding from an approved Perkins Grant proposal in order to expand the equipment of the glass facilities.

• 6C: Alumni have been invited back to Western to demonstrate and interact with our students.

Priority Seven:
• 7A: Should this curriculum proposal be approved, Western will have another niche program to promote and help to continue to distinguish it as an institution with unique opportunities.

• 7B: Western’s marketing department and web team is currently developing a webpage in order to promote the current glass facilities and classes, and is working, in anticipation of the approval of this proposal, to be able to then alter that webpage in order to promote a full glass program.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

This proposed Glass Program would be the only one of its kind in the MUS system, and in the region.
3. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents’ Policy 301.12 have been met.

Please see the attached documents: *Annual Courses Offered in Glass, Glass Program course listings, Suggested Plans of Study* for a certificate, associate, minor, and BA.

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

The projected plan to implement this program is organized in the attached *Annual Courses Offered in Glass* document. The document shows that the Glass Program would continue to utilize the consolidated class system developed at Western to account for its smaller student body. This system allows Western to still offer necessary but smaller upper division classes to its students. Western accomplishes this task by combining multiple level classes into one block setting. This practice of offering the consolidated-multi-level glass classes currently available to Western students has been consistently sought and attended with enrollment caps just recently increased from 15 to 20 to accommodate demand. We plan to keep those caps if this program is approved. The point at which the courses exceed 20 students is when we discussed looking to hire more faculty to accommodate that increased demand.

4. Need

A. To what specific need is the institution responding in developing the proposed program?

We are responding to a shortage of supply of institutions in the United States and regionally that offer courses in glass arts and scientific glassworking. As previously mentioned, Western would be one of only two other institutions to offer degrees in scientific glass blowing. It would also be the only Glass Program in the Montana University System, as well as the only one in the encircling 10 state region.

On the demand side of the equation, we are responding to the continued high enrollment in glass classes at Western and positive student feedback and interest from students in glass making. Western has offered classes in glass for the past 41 years, and the demand continues to grow as evidenced in enrollment and recently increased enrollment caps.

Research was conducted in the forming of this proposal with The University of Washington, Princeton University, Tyler School of Art at Temple University, Cal State-Fullerton, and Salem Community College (one of the two scientific programs in the United States). Salem CC confirms a consistently high demand for glass courses, which are often either filled or overfilled. They boast a near 100% job placement rate for scientific glass students into national labs, pharmaceutical companies, private practices, and academic institutions. They also have a regular waitlist of 10 applicants, and deny many others.
B. How will students and any other affected constituencies be served by the proposed program?

The glass program at Western would offer the students, and other interested parties, the ability to attend classes in a cross disciplinary field which can lead to many career choices in the arts and sciences:

- Scientists can separate themselves from other qualified resumes with the added knowledge-set of scientific glass blowing.
- There is a confirmed high demand and placement in the scientific glass working industry (per Salem Community College’s statistics).
- The careers in the glass arts are numerous, previously mentioned in the answer to question 1A, and in addition, the research conducted with the aforementioned institutions that place graduates with careers in commercial glass studios, lighting, work as a glazier, custom design and fabrication work, staff at galleries and museums, teaching (high school, private and public studios, and universities), advance to receive graduate degrees, establish private studios, architectural collaborations, write for national publications, become glass jewelers, cold-workers (those who grind, polish, detail and design glass after it is in the cold-state), stained glass artists, etc.

In sum, the program will provide Western and the surrounding communities and states the opportunity to develop skills in specialized trades of the glass arts that engage the participant to advance their creativity and critical thinking. The National Governor’s Association Center for Best Practices says: “To compete in today’s economy, a robust creative sector is necessary. The United States economy relies heavily on services, information, technology and intellectual property. Along with the increasing dominance of these enterprises comes the need for greater creativity and innovation in the workforce...The arts and cultural sectors are proven anchors for attracting and improving these assets. Investment in the arts may be among the most innovative workforce development tools at the disposal of state governments.” This Glass Program would provide Western, and its nearby community members, a forum in which creativity is paramount and is critically cultivated. Graduates of this program then insert that original thought and innovative thinking into the workforce.

C. What is the anticipated demand for the program? How was this determined?

We anticipate the demand for the program, if approved, to, at the onset of the program, be similar to its current demand, which is currently full and overfilled for Fall 2016. As the program progresses, we expect the enrollment to increase because the frequency of course offerings in glass will increase from two classes per year, to six classes per year. This continuity will provide the students the ability to gain a stronger proficiency in this subject matter, and help keep the embers burning, so to speak, if they find an interest in glass arts.

Nancy Rowley and Alecia McDougal, in the registrar’s office, continually receive enthusiastic feedback and interest from students about the glass classes. Consistently positive feedback and interest in glass courses is also documented in the students’ class evaluations.

Data from the institutions mentioned above state a consistent demand for their glass classes, and an increase in the growth of their glass programs. To accommodate that growth, Tyler, Cal State-Fullerton and Salem CC have added courses and instructors to their programs.

5. Process Leading to Submission
A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

In order to ensure that the level I Glass Program Curriculum Proposal was comprehensive and well considered, I placed counsel in Ewa Mastandrea - the Printing and Painting Chair, Delena Norris-Tull – Professor of Education, Interim Provost Sylvia Moore, Vice Chancellor Susan Briggs, Chancellor Beth Weatherby, the entire faculty senate and their respective departments, Registrar Charity Walters, Dean of Outreach Anneliese Ripley, and countless other faculty and staff who gave input and feedback on the Glass Curriculum Proposal. I am currently working with Provost Deb Hedeen and Registrar Charity Walters on the Level II form.

6. Resources

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

No, the Glass Program will not need additional faculty members at this point. If the course enrollments begin to exceed 20 students, we will then reassess to determine if the demand merits hiring additional faculty.

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

No, Western has a fully functioning glass facility for hot, cold, warm and casting processes (both hot and kiln). Western is currently adding a dedicated studio space for torchworking, to be completed in February, 2017. This studio will provide students a facility in which they can develop both scientific glassblowing and artistic practices on the torch. Western is equipped to expand into the projected program this proposal details.

7. Assessment

A. How will the success of the program be measured?

The Glass Program has to maintain high enrollment numbers in order to be sustainable, from the fiscal perspective of success. In terms of student performance, each course description (found on the Glass Program Course Listings document, at the end of each course description) details the manner in which the success of a student’s performance will be measured within the program. Feedback in the class evaluations will give a glimpse of the student’s idea of the program’s success.

All of the courses also involve a critique after each project in order to assess the students’ proficiency with the project’s objective, and as a forum to discuss methods and working practices, the research that fuels the content of the projects, form, color, composition, etc., and how those factors contribute the artworks’ effectiveness. This component of assessment helps the students not only cultivate better working practices, but also helps them to develop the vocabulary necessary to discuss the subject matter pertinent to their craft, and a comfortability in public speaking, all of which are considered in the students’ performance in the class, and are also a marker for how well the program served the students to better themselves.

Ultimately, though, the success of the program will be the students who fill that space, who feel the passion of the material, who find their muse. When people find glass, it changes trajectories. I am looking for this program to change lives, to provide a place where students can finally settle into the calm that comes when you know you have found your calling. When I begin to see students turn this fledgling idea
from a proposal to careers of passion and excitement that is contagious and continuous, that is when I
will feel comfortable in believing that everyone who came together and believed in this proposal enough
to make it a reality were validated in their efforts.

\[\text{Reference: Montana: Land of Creativity the Power and Potential of Arts-Driven Economic Impact in Montana © Montana Arts Council, 2009}\]
## Glass Certificate

### Glass Certificate Credit Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARTH 200 Art of World Civilization</td>
<td>4</td>
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<tr>
<td>ARTH 201 Art of World Civilization</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 191a Introduction to Glassblowing and Sculpting</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 191b Introduction to Torch Working</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 191c Scientific Glass</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 291a Cold Fabrication</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 291b Fundamental Fusing, Casting, Pate de Verre</td>
<td>4</td>
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Select 1 course/4 credits from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARTZ 291c Intermediate Glassblowing and Sculpting</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 291e Intermediate Flame Working</td>
<td>4</td>
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</tbody>
</table>

**GLASS CERTIFICATE TOTAL CREDITS** 32

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## Glass Minor

### Glass Minor Credit Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
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<tr>
<td>ARTZ 191a Introduction to Glassblowing and Sculpting</td>
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<tr>
<td>ARTZ 191b Introduction to Torch Working</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 191c Scientific Glass</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 291a Cold Fabrication</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 1 course/4 credits from the following:

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Course must be the 200 level step from the previous selection</td>
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</tr>
<tr>
<td>ARTZ 291c Intermediate Glassblowing and Sculpting</td>
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<tr>
<td>ARTZ 291d Intermediate Flame Working</td>
<td>4</td>
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<tr>
<td>ARTZ 291e Intermediate Scientific Glass</td>
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Select 1 course/4 credits from the following:

<table>
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<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
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<tr>
<td>ARTZ 391a Advanced Glassblowing and Sculpting</td>
<td>4</td>
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<tr>
<td>ARTZ 391b Encasements</td>
<td>4</td>
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<tr>
<td>ARTZ 391c Advanced Scientific Glass</td>
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</tr>
<tr>
<td>ARTZ 391d Advanced Cold Fabrication</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 391e Neon</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 391f Advanced Fusing, Casting &amp; Pate de Verre</td>
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Select 2 courses/4 credits from the following:

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<th>Course</th>
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<tbody>
<tr>
<td>Cannot be the same course completed for a previous section</td>
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<tr>
<td>ARTZ 291a Cold Fabrication</td>
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</tr>
<tr>
<td>ARTZ 291b Fundamental Fusing, Casting, Pate de Verre</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 291c Intermediate Glassblowing and Sculpting</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 291d Intermediate Flame Working</td>
<td>4</td>
</tr>
<tr>
<td>ARTZ 291e Intermediate Scientific Glass</td>
<td>4</td>
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</tbody>
</table>

**GLASS MINOR TOTAL CREDITS** 20

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* 91 numbers represent new courses that need to be common course numbered if curriculum proposal is approved.
**Associate of Art- Glass**

**Credit Requirement**

**GENERAL EDUCATION**

Written & Oral Communication 4

The remaining general education is tailored to the career goal of the student within the following general education categories. Work with advisor to select the remaining 12 credits from the following areas of General Education.

Math (4)
Behavioral and Social Science (4)
Humanities: Expressive Arts (4)
Humanities: Literary Arts (4)
Natural Sciences (8)

**MAJOR CORE**

ARTH 200 Art of World Civilization I 4
ARTH 201 Art of World Civilization II 4
ARTH 350 Contemporary Art History and Theory 4
ARTZ 108 Visual Language 3-D Foundations 4
ARTZ 191a Introduction to Glassblowing and Sculpting 4
ARTZ 291c Intermediate Glassblowing and Sculpting 4

Select 1 course/4 credits from the following:
ARTZ 105 Visual Language-Drawing (4)
ARTZ 106 Visual Language 2-D Foundation (4)

Select 1 course/4 credits from the following:
ARTZ 191b Introduction to Torch Working (4)
ARTZ 191c Scientific Glass (4)

**PROFESSIONAL ELECTIVES**

Select 12 credits from the following:
ARTZ 291a Cold Fabrication (4)
ARTZ 291b Fundamental Fusing, Casting, Pate de Verre (4)
ARTZ 391a Advanced Glassblowing and Sculpting (4)
ARTZ 391b Encasements (4)
ARTZ 391e Neon (4)

**AA-GLASS TOTAL CREDITS**

60

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**Bachelor of Art in Glass**

**Credit Requirement**

**GENERAL EDUCATION**

Complete the following for Humanities: Expressive Arts and Humanities: Literary Arts.

ARTH 200 Art of World Civilization I 4
ARTH 105 Visual Language-Drawing 4

**MAJOR CORE**

ARTH 201 Art of World Civilization II 4
ARTH 350 Contemporary Art History and Theory 4
ARTZ 106 Visual Language 2-D 4
ARTZ 108 Visual Language 3-D Foundations 4

Select 1 course/4 credits from the following:
ARTH 191a Introduction to Glassblowing and Sculpting (4)
ARTH 191b Introduction to Torch Working (4)
ARTH 191c Scientific Glass (4)

Select 4-8 credits from the following. If only four are completed in this area, eight must be completed in the ARTZ 300 in the next section.

ARTZ 291a Cold Fabrication (4)
ARTZ 291b Fundamental Fusing, Casting, Pate de Verre (4)
ARTZ 291c Intermediate Glassblowing and Sculpting (4)
ARTZ 291d Intermediate Flame Working (4)
ARTZ 291e Intermediate Scientific Glass (4)

Select 4-8 credits from the following. If only four are completed in this area, eight must be completed in the ARTZ 200 in the previous section.

ARTH 391a Advanced Glassblowing and Sculpting (4)
ARTH 391b Encasements (4)
ARTH 391c Advanced Scientific Glass (4)
ARTH 391d Advanced Cold Fabrication (4)
ARTH 391e Neon (4)

ARTZ 391f Advanced Fusing, Casting & Pate de Verre (4)
ARTZ 391g Advanced Glass Concept-Visiting Artist Series (4)

Select 4 credits from the following:
ARTZ 490b Advanced Studio: Glass (4)
ARTZ 494a Art Seminar: Prof. Practices-Workshops Beyond Western (4)
ARTZ 494b Art Seminar: Prof. Practices-Public Art (4)
ARTZ 494c Art Seminar: Prof. Practices- Equip Building & Studio Mngt (4)
ARTZ 498 Internship (4)
ARTZ 499 Senior Exhibit and Thesis (4)

**ELECTIVES**

Choose elective credits from any college-level catalog courses to bring degree total to 120.

**BA-GLASS TOTAL CREDITS**

120

* 91 numbers represent new courses that need to be common course numbered if curriculum proposal is approved.
New ARTZ Courses Descriptions

**ARTZ 191A INTRODUCTION TO GLASS-BLOWING AND SCULPTING (4)**
This is an introductory class that will cover a broad breadth of topics and furnace worked techniques, including blowing, sculpting, coldworking and studio equipment operations. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. This course will provide you with the comfortability to gather molten glass from a furnace, shape it, move safely through the studio, blow glass, sculpt glass, understand the working principals of glass and the teamwork required to produce glass, make work that is gallery-ready, use glass as an expressive material to convey ideas, rather than to just master technique, and have a grasp on contemporary art making methodologies.

**ARTZ 191B INTRODUCTION TO TORCH WORKING (4)**
This course introduces the principals of glass working with a bench torch. The students will learn how to make small sculpture, beads, pendants, marbles, and use tools such as graphite, heat, timing, and gravity, in order to form and develop your work. This course will focus on using and developing an understanding of how to torchwork with soda-lime glass. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

**ARTZ 191C SCIENTIFIC GLASS (4)**
This course will cover the fundamentals of torch working borosilicate glass in order to render scientific apparatuses. It is a course geared toward both the non-art student as a means to develop and bolster one's proficiency in science oriented endeavors, and also for the art student who would like to develop a strong technical foundation in the principals of torch worked glass. Welds, marias, bends, hot popping, scoring, pulling points, heats for punties and their application, heat color index, flame settings, flame guides, and principals and working methods of glass will be covered in this course. This course requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.

**ARTZ 291A COLD FABRICATION (4)**
Glass making processes including cutting, grinding, laminating, etching, grails, and sandblasting will be covered in this course. Students will gain an understanding of both hot and cold processes. This course will free the student of the technical challenges that building hot presents, and, in turn, open the door to artwork based in completely different and liberating outcomes. The students will have four hours of hot shop time per week to produce items to affect in the cold shop. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

**ARTZ 291B FUNDAMENTAL FUSING, CASTING, PATE` DE VERRE (4)**
This course will explore various aspects of casting, including sand, kiln casting (this style of work incorporates traditional lost wax casting techniques, but casts with glass instead of metals) and hot casting, as well as pate` de verre (paste of glass) and fusing techniques. These working methods allow for greater control and detail, without the heat and heavy physical demands typical of other glass working methods. Students will be able to build models, make molds, and understand various casting methods, through which they will be able to channel their ideas and render significant commentary. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. Building on the skills acquired in ARTZ 191c, this course will add in the use of fritted glass, ground joints, bridges, sealing maria welds, flat optical welds, butts, seals, T-seals, flares, (45 and 90), rings seals (straight and side), ground joint welds and attachment techniques, bull nose reamers and no-blow welds. Students will gain proficiency and refine the fundamentals of torch-worked borosilicate. Scientific glass work requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.

**ARTZ 291C – INTERMEDIATE GLASSBLOWING AND SCULPTING (4)**
This course provides the student a deeper look into technical and conceptual refinement within contemporary glass working methods, both sculpturally and blown forms in the off-hand method. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. The course will build on the students’ knowledge base acquired in the 100 level course(s), and will add the use of a hand torch and garage to the students’ repertoire in order to combine the precision and detail of the torch with the ability to construct more intricate and unique works with the introduction of the garage.

**ARTZ 291D INTERMEDIATE FLAME WORKING (4)**
This course will focus on using borosilicate for an artistic application. The students will learn how to use tubing to blow glass by pulling points. They will also work with glass rods and color to make solid work such as implosion marbles, sculpture and lattice built structures. Their ability to allow their ideas to form glass will provide a path towards unique conceptually and technically sound artworks. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

**ARTZ 291E INTERMEDIATE SCIENTIFIC GLASS (4)**
Building on the skills acquired in ARTZ 191c, this course will add in the use of fritted glass, ground joints, bridges, sealing maria welds, flat optical welds, butts, seals, T-seals, flares, (45 and 90), rings seals (straight and side), ground joint welds and attachment techniques, bull nose reamers and no-blow welds. Students will gain proficiency and refine the fundamentals of torch-worked borosilicate. Scientific glass work requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.

**ARTZ 391A – ADVANCED GLASSBLOWING AND SCULPTING (4)**
Students who wish to continue to develop their skills learned in the hot shop, with the torch, fusing and casting techniques, and in the cold shop will deepen their knowledge in this course. Students will hone technical developments with art theory in order to create a more polished and thought provoking outcome. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. This course requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.
ARTZ 391B – ENCASEMENTS (4)
This course will unify flame working, off-hand, and casting disciplines in order to combine the detail of the torch with the optical volume of furnace work. The students will work to create conceptual narratives by developing topic-oriented objects on the torch, and manipulate the glass that encompasses the torch worked components contained therein, either in the off-hand or hot casting methods. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. Prereq: ARTZ 151 and 252

ARTZ 391C – ADVANCED SCIENTIFIC GLASS (4)
This course will introduce students to lathe working techniques, the lathe anatomy and how to control it, which will enable students to work larger, more complex, and with more physical and technical ease. Use of stoppers, blow hoses, Bunsen burners, premix hand torches will be covered. Introduction to quartz, sodium silicate, fused silica, and other exotic glass types, as well as use of hydrogen as a fuel will be covered in this course work. This course requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.

ARTZ 391D – ADVANCED COLD FABRICATION (4)
Students will continue to build on their cold fabrication foundation. This course will cover battuto and inciso surface ornamentation, as well as Rayzist. Students will learn about lamination techniques including flood coating. They will become familiar and knowledgeable with the use of UV glue, epoxies, and silicone. Students will be given four hours of hot shop time per week to produce work to affect in the cold shop. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

ARTZ 391E – NEON
Using the fundamentals of torchworking, students will learn how to make bends in tubing, sculpt hollow forms, vacuum and fill the forms with different gases for different effects and colors, and turn their glassworks into lighting, décor, art, and statement pieces to their intention. Students will be assessed by the proficiency they evidence in their artwork, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. Prereq: ARTZ 151 and 252

ARTZ 391F ADVANCED FUSING, CASTING & PATE DE VERRE (4)
This course is an opportunity to delve deeper into the optical world of casting. Students will work to incorporate the use of components created either on the torch or in the hot-shop into their castings to deepen the meaning of their work and separate their voice and artistic vision further from the pack. Students will also work to refine, rearrange and recombine fused work, as well as pate de verre techniques. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

ARTZ 391G ADVANCED GLASS CONCEPT-VISITING ARTIST SERIES (4)
This course is an opportunity for the student gain exposure to working techniques by a professional artist who will come to Western to teach a course in the Visiting Artist's particular topic or technique of interest. This class will offer the student diversified methods of working and conceptual approaches to art. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content, as well as by the considerations of the visiting instructor.

ARTZ 494B ART SEMINAR: PROFESSIONAL PRACTICES-PUBLIC ART (4)
Students will apply for either a "call to artists" commission for a public work, or personally design art while working with a public or private enterprise in order to complete and install artwork into a public or private setting, build professional experience, resume, and learn the business of art. Students will be assessed by the proficiency they evidence in their artwork, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. In addition, The finalized work in its installed space and how it came to exist in that space will be assessed by the following criteria: how effectively and aesthetically considered was the work presented; does the work respond and relate well to the space around it; how well did the student work with the company, city, or agency; and was the student timely and accountable for all involved parties.

ARTZ 494C ART SEMINAR: PROFESSIONAL PRACTICES-EQUIPMENT BUILDING AND STUDIO MANAGEMENT (4)
Students will have the opportunity to help build studio equipment and observe, firsthand, how the equipment is installed properly and safely into a functional, working studio. Students will gain the ability to apply this information to their own studio building process, career as a shop manager or technician and equipment builder. The students will be assessed based upon their ability to show that they understand specific working methods, evidenced by the accuracy with which they execute those techniques in the making of the equipment for the class.
Annual Courses Offered in Glass

The following proposed course-loads (2-4) per block integrates into the faculty member’s already existing course load.

- All blocks are capped at 20 total students, for all courses per each block.
- When enrollment increases in excess of 20 students per block, Western will then start to separate the classes by hiring another teacher to offset the students’ demand for courses. By keeping with Western’s current structure of consolidating 2-4 courses to a block, class size is used to determine the instructor demand, as needed, maintaining the cost per instructor efficiency.

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+490b & +499 as stringer, *494 a, b, c TBD – as needed

Degrees and Coursework Offered in Glass:

Certificate in Glass – Students will complete 24 credits in glass courses, and 8 credits of Arts History – a one year degree. (32 total credits)

Associate Degree in Glass – Students will complete 28 credits of glass courses, and 32 credits in general education credits – this is a two-year degree. (60 total credits)

Minor in Glass – Students must complete at least 20 credits in glass.

BA – Art: Students must enroll in 30 art credits, beyond the five prerequisite art courses. (120 total credits)
For the novice who hears the term Scientific Glassblowing or Studies in Glass, one’s mind automatically goes to the basic beaker in the chemistry lab, or the pretty souvenir collected from the gift shop on a trip to the coast. But Scientific Glassblowing and other methods of glasswork such as torch-work, fusing, off-hand-furnace-worked, casting, cold-working, etc. represents over $4.6 \text{ billion} in annual wages in the US in the glass industry, per the 2015 data provided by the Bureau of Labor Statistics. Montana specific combined annual wages in this field have ranged from $80,000-$1,023,000 between 2003 and 2014 per the Bureau of Labor Statistics. These data encompass careers in the glass arts, and glass working methods which interface with STEM careers in electrical engineering, photonics, environmental science, mining, combustion and medical research, photolysis, petrochemical, academia, etc.
Scenario Future Map for Glass Program

The following page provides an abbreviated scenario future map for the glass program based on analyzed data which informs the preferred future of the program. The goal of this abbreviated future map is to outline a scenario(s) that leads to the stated preferred future, including goals, strategies for success, yellow flags or warnings to consider, and other potential futures that could develop from opportunities afforded through this program.

**Statement of Preferred Future:** The University of Montana Western, as one of the few bachelor degree granting glass programs, and one of only two post-secondary institutions in the United States to offer a degree specialization in scientific glassblowing, provides premier graduates to STEM as research assistants, and to the art world overall. Through existing recruitment and retention strategies, and interaction with faculty and specialists in the field of glass, Western moves students from recruitment, to retention and persistence, to graduation, eventually becoming sought after employees based on their skills developed in glass, and the level of degree earned at Western: certificate, associate, minor, and bachelor of arts.

**Reading the Future Map**

The map moves from left to right and highlights how a student at Western progresses through the process of admissions, persistence, graduation, and career.

- **Blue Boxes:** Goals of the program in the represented student stage
- **Yellow Boxes:** Yellow Flags or concerns that may interrupt the flow of the program
- **Green Boxes:** Potential resolutions to the yellow flags
- **Orange Boxes:** Potential futures that could develop at each stage
- **Text Boxes concluding each section:** Data sources supporting the scenario
**Year Four Goal:** Minimally 6 newly enrolled. Likely: realistic.

**Year Three Goal:** 11-15 students (6-10 new students/5 students changing major) 

**Year Two Enrollment:** 16-20 students 

**Year Three Enrollment:** 22-25 students 

**Year Four Enrollment:** Maintain at least 25 students 

**Fiscal Considerations**
- Based on AY17 Tuition Costs with 5% adjustment *
  - Year One Adjusted Gross Tuition: $49,485
  - Year Two Adjusted Gross Tuition: $82,826
  - Year Three Adjusted Gross Tuition: $124,180
  - Year Four Adjusted Gross Tuition: $138,403

Fine Arts has additional funding to facilitate ongoing curricular and program maintenance. 

**Potential Futures:** Stackable Degrees - Certificate, Associate, minor, and Bachelor - will lend itself to support. 

**Solution:** Recruitment Strategy - If course enrollment appears low for the year, additional strategic recruitment could be implemented to support the certificate degree with professionals in the field seeking specialization (i.e., STEM research assistants; artists). However, this is not expected to be an issue, as glass course enrollment has remained consistently full at Western since the onset of its course offerings in glass in 1976. 

**Graduates:** Through stackable degrees this program should anticipate 10-15 certificate and/or associate graduates minimally by the 2nd or 3rd year. In addition, 10-12 Bachelor degrees (depending on transfer population) will be posting as early as the third and fourth year. 

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**Potential Futures:** Summer Institute; Community Art Festivals; Internship Opportunities Expanded 

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**Current recruitment plan and strategies with additional support from glass faculty align with these goals.**

**Year One Goal:** Minimally 6 Newly Enrolled, Max Ten 

**Year Two Goal:** Add an additional five to six newly enrolled 

**Year Three Goal:** Add an additional five to six newly enrolled 

**Year Four Goal:** Add an additional seven to eight newly enrolled 

**Yellow Flag:** Will this program pull from recruits interested in Visual Arts instead of establishing its own recruitment base? 

**Not Likely:** While there could be some students that choose glass blowing over visual arts, recruitment data support that there are enough students interested in the arts and STEM research integration to support recruitment for the program. In addition, program is unique to the art and science world particularly in the North Western United States. Based on analysis, recruitment goals are realistic. 

**Potential Futures:** Nature of Program will also appeal to out of state students in the surrounding region. A solid reputation based on graduates will develop a recruitment base for the program beyond standard recruitment strategies. 

**Fiscal Considerations**
- Based on AY17 Cost of Tuition with 5% adjustment *
  - Year One Adjusted Gross Tuition: $49,485
  - Year Two Adjusted Gross Tuition: $82,826
  - Year Three Adjusted Gross Tuition: $124,180
  - Year Four Adjusted Gross Tuition: $138,403

Fine Arts has additional funding to facilitate ongoing program and equipment maintenance through Emerick and Mary Baker Trust. 

**Potential Futures:** Stackable Degrees offered - Certificate, Associate, minor, and Bachelor - will lend itself to support Performance Based Funding; further co-curricular opportunities with STEM Degrees; As reputation grows potential for outreach to Artists/Researchers who specialize in the field. 

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**Supporting Data:** Data from CollegeBoard Purchased Names - Montana graduating seniors interested in art majors; DWH 3 and 5 year averages of newly enrolled students declaring an Art degree; Glass Program in America Google Map: Salem Community College, the only degree offering academic institution in scientific glassblowing has an ongoing wait list - currently 60 on SCC waitlist. 

**Supporting Data:** UMW Retention, Course Enrollment, Residency Report and Graduation Reports. Tuition estimation is based on current AY17 Tuition Costs; calculation does not assume tuition increases for formula purposes. *A five percent adjustment to gross tuition has been applied to the calculation to adjust for standard tuition discounting opportunities.
Beyond the previous page future map, the following outlines other plans/details supporting the student experience and Montana Western campus through the development of the Glass program. These bullets elaborate on some of the previous notations but are provided in the following format for ease of notation and are also available on the main future map located at Western.

**Recruitment/Admissions**

- Current Recruitment Strategies: Faculty in Fine Arts and particularly in the glass program have already been in discussion with the admissions office regarding how they can support the recruitment process of this program and draft development will begin upon approval of program to prepare common supplemental recruitment supports such as: Letters from the faculty to students interested in the program; rack cards; and recommended degree completion maps for the certificate, associate, and bachelor’s degrees in glass.
- Potential Future Recruitment Strategy: Re-evaluate scholarship allocation from the Emerick Fund and use this approach as leverage to attract sought after student population for program. Current discussions are subject to change but include scholarships such as: one at $7,500; four at $2,000; and 10 at $500.
- Potential Future Recruitment Strategy: Consider adding one time scholarship for a student who a program or faculty recruits outside of the normal admissions procedures to enroll at Montana Western in their specific program.

**Retention/Persistence**

- *Five % adjustment to gross tuition estimates is applied to formula in map to allow for scholarship and other standard discounting of tuition.
- Current and Future Fiscal Stability: The required equipment is already available for this program in the Emerick Art Studio. No additional funding is needed to start this program and the Emerick and Mary Baker Trust Fund will continue to provide funding to replace and upgrade equipment in future years.
- Potential Future Retention Strategy: Offering International professional development travel for internships; Visiting artist seminars and one on one training opportunities.
- Potential Future Retention Strategy and Community Outreach: As the program’s reputation grows, there is a potential to develop an Annual Art Festival where students and professionals can highlight their work attracting attention to the art and STEM programs of the institution as well as the Dillon, Montana community overall.

**Graduation/Career/Alumni**

- Potential Future Outreach Strategy: In year two or three of the program, begin the summer institute surrounding fine arts to support not just students, but hobbyist and professionals in the STEM and art world.
- Potential Future: Development of a Mobile Furnace that travels to events and seminars demonstrating the skills invested in Scientific Glass and studies in glass.
The University of Montana Western
Glass Program Data

Job Opportunities and Data for Scientific Glass Students at Western:

- Western is currently working with Batelle Energy Alliance in Idaho Falls, ID and their scientific glassworker – Russel Lewis – as well as Technical Glass in Boise, ID, and Mike Souza at Princeton University to establish annually paid internships for Western students pursuing a career in scientific glassblowing.
- Some of the regional jobs performed by regional scientific glassworkers were for MSU, UM-Missoula, BYU, Idaho State - Pocatello, Boise State, Micron Technology (Boise, ID), state laboratories, petrochemical, mining, environmental sciences, pharmaceuticals, etc.
- National and international jobs in the field are offered in:
  - Academia: U of AZ, U of CT, Notre Dame, U of CO, U of KY, UC-Santa Barbara, U of Newfoundland, U of MN, TX Tech, Brown University, Princeton University, TCU, Iowa St., UW-Madison, UW-Milwaukee, IN U, U of VT, U of Montreal, OH St., U of Southampton, U of Houston, U of DE, U of Otago, USC, , Yale University, U of AL, U of North TX, UNC, U of UT, TN Tech, Cornell University, Central Oregon CC, etc.
- Salary range for scientific glassblowing position in Idaho Falls is between $75,000 and $118,000.
- The American Scientific Glassblowers Society current data shows that approximately 120 new positions for scientific glassblowers are expected to open over the next decade, based solely upon retirement-aged members (between 54-64 years of age) retiring.
- Current job listings in scientific glassblowing are in Oregon, North Carolina, Georgia, Michigan, New York, New Jersey, Oklahoma, Maryland, Virginia, Texas and Canada.
- If the Glass Program CP is approved, Western will be one of only two institutions in the United States offering a degree specializing in scientific glass, and the only four-year institution in the US offering this specialization.

Demand for Glass at Western, and Supportive Data:

- The University of Montana Western continues to build on its 41-year history offering glass arts, and high demand thereof, by continuing to fill its courses, and recently expanding its enrollment cap from 15 to 20 students per class to accommodate that demand.
- The first scientific glass blowing course to be offered in Block 7 of 2017, is currently overfilled.
- Scientific glassblowing only makes up 1/5th of the proposed disciplines offered within the CP for the Glass Program.
Scientific not only serves the orthodox career-oriented scientific glassblower, but the students pursuing careers in glass art as much: precision is the fundamental necessity that scientific glassworking requires, and that control serves the artist’s vision as much as the scientific glassblower by providing material mastery.

Many of the students will take scientific solely to better their ability in the arts.

- Per data collected by the Montana Government, artists contribute a quarter billion dollars annually to Montana’s economy, much of which was attributed to out-of-state customers.
- The Fine Arts Department is funded by the Mary Baker Emerick Foundation which provides $50,000 annually to support and expand the arts at Western.
- The new torchworking facility (which will serve the art and scientific torchworking classes), is fitted for 20 stations and has three new annealing ovens, two exhaust hoods rated for 10,000 cfm, 25 new torches, new oxygen and gas piping run to service the room, etc.
ITEM 173-2012-R1116

Request for authorization to create The Western Lands and Peoples Center (WLPC)

THAT Montana State University requests authorization from the Montana Board of Regents to establish the Western Lands and Peoples Center (WLPC)

EXPLANATION
The core mission of the proposed center is to foster the integrated study of the North American West with a focus on human/environmental interactions, or the “lands and peoples,” of the region. Situated within a public, land-grant institution whose charter is to serve and educate all citizens in the state of Montana, the proposed WLPC will be part of an established academic network that conveys research and learning to every county in the state. With its emphasis on developing connections throughout the sciences, social sciences, humanities, and the arts, the proposed center will position MSU as an important site for creative scholarship across interdisciplinary fields that are dedicated to advancing knowledge about the land and people of the North American West.

ATTACHMENTS
Academic Proposal Form
Research Center Proposal Form
Intent to Plan
Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 173-2012-R1116
Submission Month or Meeting: November 17-18, 2016
Institution: Montana State University
CIP Code: 

Program/Center/Institute Title: The Western Lands and Peoples Center (WLPC)

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/preparingacademicproposals.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. Exceeding the 120 credit maximum for baccalaureate degrees Exception to policy 301.11

3. 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)

4. Retitling an academic, administrative, or research unit

Specify Request:
Request for authorization from the Montana Board of Regents for Montana State University to establish the Western Lands and Peoples Center (WLPC)
Montana Board of Regents  
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

1. State the proposed institute/center's name and purpose.

The Western Lands and Peoples Center (WLPC)

The proposed WLPC builds on a strong base of scholarship on the North American West in the College of Letters and Science and Montana State University, more generally. Through the proposed Center, MSU will become an international hub for the study of critical issues involving the western US and Canada. MSU is the ideal home for such a center due to our already-existing expertise, our community networks, our geographic location at the meeting place between the Great Plains and the Mountain West, as well as our proximity to Yellowstone National Park. By supporting and advancing interdisciplinary research, publication, graduate and undergraduate scholarship, as well as engagement with the Digital Humanities—the interface between the new information sciences and traditional humanistic inquiry—we seek to establish a research-based resource for the regional, national, and global community.


A. State the institute/center’s mission.

The core mission of the proposed center is to foster the integrated study of the North American West with a focus on human/environmental interactions, or the “lands and peoples,” of the region. Situated within a public, land-grant institution whose charter is to serve and educate all citizens in the state of Montana, the proposed WLPC will be part of an established academic network that conveys research and learning to every county in the state. With its emphasis on developing connections throughout the sciences, social sciences, humanities, and the arts, the proposed center will position MSU as an important site for creative scholarship across interdisciplinary fields that are dedicated to advancing knowledge about the land and people of the North American West.

B. Identify the institute/center’s goals and objectives.

1]. The proposed center seeks to bring the various nodes of excellence in research, teaching, and scholarship on the North American West at MSU into interaction with each other and make the University a major hub for the development of cutting-edge research and digital projects on the region. This work will be made available to the public through scholarly presentations at local, regional, national, and international conferences; online publications; and peer-reviewed journals.

2]. The proposed center’s initiatives and publications will be interdisciplinary in scope as will any undergraduate and graduate student activities and initiatives introduced by the proposed WLPC. Interdisciplinary is often difficult to implement due to the dominance of disciplinary silos in academic structures and their budgets. This proposed center will enable faculty and students to better coordinate and publicize the many scholarly projects that are ongoing at MSU. Creating a center with an independent budget focused on regional studies and a mission that broadly encompasses the humanities, the social sciences, and the environmental sciences from the outset
will thus offer a major advance in promoting interdisciplinary research, outreach, and teaching endeavors at MSU.

3). MSU faculty and graduate students will become more competitive in garnering external research funds for their ongoing scholarly projects by having their work associated with the resources and support of the proposed center.

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

Demographic studies indicate that the population of the United States is becoming increasingly concentrated in the West, a trend that is likely to continue over the next decades. Establishing a Western Lands and Peoples Center at MSU will help the academic and larger community gain a deeper understanding of the many social, political, and economic changes driven by this region. It will provide a forum for discussion between the university and public over issues facing the state and region, and heighten the importance of imagining the North American West from a variety of viewpoints.

D. Describe how the institute/center benefits the department, college, or institution.

The proposed center draws on the cross-disciplinary expertise that already exists in various academic units at MSU. These include Agriculture, American Studies, Architecture, Art, Earth Sciences, Ecology, English, Film and Photography, History and Philosophy, Native American Studies, Political Science, and Sociology and Anthropology. Faculty and students in various departments often work without knowledge of complementary research taking place in other sections of the university. The proposed center will bring together scholars from different disciplines in order to enrich their research and productivity. Collaboration will enable them to be more competitive in applying for local, national, and international grants, which will enhance their research initiatives. Such opportunities are likely to also favorably impact students’ future job opportunities and academic plans.

E. Describe the institute/center’s relationship to the University mission.

As part of a land-grant institution, the scholarly community at MSU has a special responsibility to foster understanding of the local spaces and larger region in which we live, work, and study. As such, a proposed Western Lands and Peoples Center will help integrate learning, discovery, and engagement by bringing together students, faculty, and community members who share an interest in the interdisciplinary study and ongoing centrality of the North American West across national and international contexts.
3. Briefly describe the institute/center’s anticipated activities.

The activities scheduled in the upcoming months at MSU include

1. Hosting a week-long public program of lectures and hands-on workshops called “Building Community through Historic Preservation” in Bozeman in September 2016, which will be co-sponsored with the Extreme History Project and funded in part by the National Humanities Alliance. Participants include members of the university faculty, staff from the State Historic Preservation Office, and staff from the city of Bozeman.

2. A “Perspectives on the American West” speaker series will take place at the MSU Museum of the Rockies in fall 2016, funded through the MSU College of Letters and Science and featuring MSU History Professor and Wallace Stegner Chair of Western American Studies Mark Fiege, University of Colorado Distinguished Professor and Moses Lasky Professor of Law Charles Wilkinson, Montana native and award-winning author Maile Meloy, and Conservation Scientist David Theobald from Colorado State University in Fort Collins.

3. Beginning in fall 2016, the proposed center will establish a research cluster that will pull together faculty and graduate students who are conducting research on the region. The group will determine a broad theme to explore through shared readings that connect to the mission of the proposed Center. Faculty and graduate students from different disciplines will meet frequently throughout the year to discuss the readings related to the topic.

4. MSU faculty are organizing a symposium on Ivan Doig scheduled for fall 2017 which will highlight the recently acquired Ivan Doig Papers in MSU’s Special Collections and will result in a set of scholarly publications.

5. The proposed center is also organizing a series of interdisciplinary scholarly presentations on “Digital Cultures and the American West” in spring 2017.

6. Starting in spring 2016 and with the help of a Phase II HASS Award from MSU, faculty began offering research support for graduate students in the form of travel grants and writing awards.

A. Identify faculty expertise available for participation in the institute/center’s activities.

MSU’s existing faculty expertise on the North American West draws from the Department of Earth Sciences, including Institute on Ecosystems Director Professor Cathy Whitlock, who is nationally and internationally recognized in the field of past climatic and environmental change with particular reference to the American West. The Department also has a strong group of geographers whose research focuses on the human and physical geography of the American West, including Professor William Wyckoff and Assistant Professors Jordy Hendrikx, Julia Haggerty, and Jamie McEvoy.

The proposed center draws on faculty in the Department of Ecology, particularly Professors Andy Hansen, Scott Creel, Andrea Litt, and Wyatt Cross, many of whom are also involved in the Institute on Ecosystems.
The Department of English includes noted scholars of western US and environmental literature such as Professors Robert Bennett, Linda Karell, and Susan Kollin. In addition, Rick Bass, the current Western Writer-in-Residence, was appointed in August 2015 and will serve in the position through the 2017-18 academic year.

The School of Film and Photography houses an MFA program in Science and Natural History Filmmaking; Professor Andrew Parker Nelson in particular has expertise in the history and criticism of the cinematic Western; Professor Alexis Pike’s photography and Professor Cindy Stillwell’s films have also investigated and represented the region in many award-winning works.

The Department of History and Philosophy is the current home of the Wallace Stegner Chair in Western American Studies, which is presently held by western environmental historian Dr. Mark Fiege. The Department also features distinguished historians of western American and Canadian history such as Professors Mary Murphy and Robert Rydell along with emerging scholars such as Professor Amanda Hendrix-Komoto. The Department likewise has distinguished environmental historians, including Dr. Brett Walker and Dr. Timothy LeCain, as well as Dr. Susan Cohen who has expertise in museum-based exhibitions. Philosophy professors in the Department include Dr. Sara Waller who studies animal intelligence and is hosting a conference on “Wild Animals in the Wild West” in fall 2016 as well as Dr. Kristin Intemann who works on environmental ethics and feminist philosophy of science.

The Department of Native American Studies has a strong group of scholars whose research focuses on Native American culture and issues facing American Indians today, including Professor Walter Fleming, Associate Professors Kristen Ruppel and Matthew Herman, as well as Assistant Professors Gail Small and Gina Richard. The Sheldon and Audrey Katz Chair is an endowed Chair for Visiting Scholars and public figures in the field of Native American Studies. Recent holders of the Chair have included major figures such as Bill Yellowtail, Dr. Henrietta Mann, and Dr. Joseph Gone.

The Department of Political Science includes faculty member Dr. David Parker, who is widely recognized as a major authority on Montana Politics and the politics of the West more generally.

The Department of Sociology & Anthropology includes Professor Kaylin Greene who works on health and family issues as well as Professor Colter Ellis who researches rural sociology.

Also, in the College of Agriculture, Dr. Cathy Zabinski from the Department of Land Resources and Environmental Sciences is an expert in plant and soil ecology as well as restoration ecology and sustainable agriculture.

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

The departments at MSU that would be involved in the proposed center include American Studies, Architecture, Art, Earth Sciences, Ecology, English, Film and Photography, History and Philosophy, Land Resources and Environmental Sciences, Native American Studies, Political Science, and Sociology and Anthropology. The proposed center offers support to academic programs in the form of graduate student mentoring and funding, which includes research grants and dissertation
Montana Board of Regents

RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

completion awards. Through the establishment of a research cluster, the proposed center will enable faculty and graduate students to gain deeper interdisciplinary knowledge of the North American West, which will enhance their research initiatives and teaching activities.

4. Identify the organizational structure of the institute/center within the institution.

The proposed center is organized by a Director (Prof. Susan Kollin/English) and two Co-Directors (Prof. Mary Murphy/History and Prof. Robert Rydell/History) who will be responsible for writing reports, fundraising, event organizing, and publicity. In addition, a Faculty Advisory Board comprised of nearly a dozen MSU professors from eight departments or academic units will help establish, determine, and organize the proposed center’s various initiatives and activities.

A. Identify all agencies, organizations and/or institutions that will be involved.

The proposed Western Lands and Peoples Center will be housed at MSU. The proposed center builds on established relationships with the Montana Historical Society; the Western Heritage Center in Billings; the Butte Silver Bow Archives; the Buffalo Bill Center of the West in Cody, Wyoming; and Yellowstone National Park. The proposed center also anticipates establishing additional initiatives and partnerships with the Institute on Ecosystems housed at both MSU-Bozeman and UM-Missoula as well as MSU’s Burton K. Wheeler Center for Public Policy.

B. Identify advisory council information.

The members of the Faculty Advisory Council for the proposed WLPC include Rick Bass (Western Writer-in- Residence/English), Mark Fiege (Wallace Stegner Chair in Western American Studies/History and Philosophy); Walter Fleming (Native American Studies); Julia Haggerty (Earth Sciences); Andrew Hansen (Ecology); Amanda-Hendrix-Komoto (History and Philosophy); Susan Kollin (English); Mary Murphy (History and Philosophy); Andrew Patrick Nelson (Film and Photography); Gina Richard (Native American Studies); Robert Rydell (History and Philosophy); William Wyckoff (Earth Sciences); Cathy Zabinski (College of Agriculture/Land Resources and Environmental Science); Jan Zauha (MSU Libraries).

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

In spring 2016, Professors Susan Kollin, Mary Murphy, and Robert Rydell received a competitive, 3-year Humanities and Social Science Phase II grant for $350,000 from the Office of the Vice President of Research and Economic Development and the Office of the President at MSU. A faculty member associated with the proposed center also received a grant from the National Humanities Alliance to fund a series of week-long public history events scheduled for fall 2016. Additional funding for the proposed center has been included in the ongoing MSU capital campaign. We also plan to apply for additional sources of funding from appropriate regional and national foundations as well as federal agencies.
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.

No

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.

The proposed WLPC will need to locate office space on campus to house an administrative assistant and the Director as well as the center’s various activities.

6. Describe other similar centers/institutes or research capacities in the state and surrounding region.

The University of Montana at Missoula is home to the O’Connor Center for the Rocky Mountain West, which has developed a focus that does not overly compete or intersect with the activities that MSU is pursuing. In July 2016, two MSU faculty members, Profs. Susan Kollin and Mary Murphy, met with Dr. Larry Swanson, the Director of the CRMW, to discuss plans to develop a Western Lands and Peoples Center in Bozeman. The focus of the CRMW in Missoula is on regional growth and development (economics, geography, demography, and regional sciences), regional journalism (online and radio), and regional history. The proposed WLPC at MSU seeks to build on our already-existing research expertise in the study of the North American West’s geography and geology; ecological studies of wildlife, fisheries, and resources in the West; studies of Indigenous societies and issues facing Native American peoples across the region; human/environmental interactions; the Digital Humanities; museum studies; and the culture, film, literature, and history of the region.

The University of Colorado-Boulder is home to the Center of the American West, which maintains a focus on public policy and debate, and thus also does not overlap with or duplicate the primary activities of the proposed Western Lands and Peoples Center at MSU.

A. Describe the relationship between the proposed center/institute and any similar centers/institutes, programs, or research capacities within the Montana University System.

During our July 2016 visit in Missoula with the Director of the CMRW, MSU faculty came to a deeper understanding of the ongoing need for developing future collaborations across the state to address the many social, environmental, and economic issues facing our local communities, Montana, and the region as a whole.
B. In cases of substantial duplication, explain the differences between these and the need for the proposed center/institute at an additional institution. Describe any efforts that were made to collaborate with these centers/institutes, programs or research capacities. If no efforts were made explain why.

As noted above, we do not foresee substantial duplication with the CRMW in Missoula, but hope to develop collaborative activities and programming of relevance to the future initiatives of both campuses.

7. Assessment: How will the success of the program be measured?

The success of the proposed center’s program will be measured through evaluations solicited from audience members and participants at relevant activities. Likewise, our success will be measured by the grants and funds we are able to raise, as well as the publications, workshops, and conferences we are able to develop during the proposed center’s first few years. We will also complete a report at the end of the academic year that outlines our activities and successes during that period.

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.

The proposed center received an initial review and approval in spring 2016 by garnering a Phase II Humanities and Social Science Grant from the MSU Office of the VPRED and MSU Office of the President, which provides funding for its first 3 years. The Dean of the MSU College of Letters and Science supports the proposed center and has provided funds for various initiatives related to the proposed Center. Two MSU faculty visited the Director of the O’Conner Center for the Rocky Mountain West in summer 2016 to discuss plans to develop a Western Lands and Peoples Center at MSU. In addition, MSU faculty have met with the Director of the Montana Historical Society; the Curator of History at the Museum of the Rockies in Bozeman; and the Curator of the Buffalo Bill Museum and Western American History at the Center for the American West in Cody, Wyoming.
Montana University System
NOTICE OF INTENT TO PLAN

Program/Institute Title: Western Lands and Peoples Center
Campus, School/Department: MSU-Bz, Department of English/College of Letters and Science
Contact Name/Info: Susan Kollin, susan.kollin@msu.montana.edu
Expected Submission Date: NOV 2016
Mode of Delivery: N/A

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.

For more information regarding the Intent to Plan process, please visit the Academic and Student Affairs Handbook.

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

The Western Lands & Peoples Center (WLPC) will build on a broad base of scholarship on the North American West in the College of Letters and Science and Montana State University more generally. Through the WLPC, MSU will become an international hub for the study of critical issues involving the western US and Canada. MSU is the ideal home for such a Center due to our already-existing expertise, our community networks, our geographic location at the meeting place between the Great Plains and the Mountain West, and our proximity to the border between the US and Canada. By supporting and advancing interdisciplinary research, publication, graduate and undergraduate scholarship, as well as engagement with the Digital Humanities—the interface between the new information sciences and traditional humanistic inquiry—we seek to establish a research-based resource for the regional, national, and global community. The activities scheduled in the upcoming months at MSU include a series of talks in fall 2016 on historic preservation which will be co-sponsored with the Extreme History Project and funded in part by the National Humanities Alliance; a “Perspectives on the American West” speaker series at the Museum of the Rockies in fall 2016 funded through the MSU College of Letters and Science; a symposium on Ivan Doig scheduled for fall 2017 that will highlight the recently acquired Ivan Doig Papers in MSU’s Special Collections; a series of interdisciplinary presentations on “Digital Cultures and the American West” in 2017; and research support for graduate and undergraduate students in the form of grants and writing workshops.
2) **Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student and workforce demands. (Please cite sources).**

According to the Center for Public Education, the population of the United States is becoming increasingly concentrated in the West, which grew by 14.3% between 2000 and 2010. This trend will continue, as the region’s population is projected to continue growing by 45.8% from 2000 to 2030. (See “The United States of Education: The Changing Demographics of the United States and Their Schools” at www.centerforpubliceducation.org). Establishing a Western Lands and Peoples Center at Montana State University will help the academic and larger community gain a deeper understanding of the many changes and vital importance of a region whose presence and population have been greatly increasing over the years. Not only will the establishment of a WLPC enable students and faculty to obtain a stronger interdisciplinary perspective on the local spaces in which they live and work, but it will also enable them to be more competitive in applying for local, national, and international grants to enhance their research initiatives. Such opportunities are likely to have a favorable impact on students’ future job opportunities and their academic plans.

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

As members of a land-grant institution, the scholarly community at MSU has a special responsibility to foster understanding of the local spaces and larger region in which we live, work, and study. As such, the Western Lands and Peoples Center integrates learning, discovery, and engagement by bringing together students, faculty, and community members who share an interest in the interdisciplinary study and ongoing centrality of the North American West in a national and international context. The MSU departments that currently have a base of faculty expertise in the American West include Ecology, English, Film and Photography, Geography, Health and Human Development, History and Philosophy, Modern Languages, Native American Studies, Political Science, and Sociology and Anthropology.

4) **How does the proposed program/center/institute fit within the MUS system?**

The Western Lands and Peoples Center draws on the cross-disciplinary expertise that already exists in various academic departments at MSU-Bozeman. These research areas include the history, literature, and culture of the North American West; the study of Indigenous societies and the issues facing Native American peoples across the region and the US; ecological studies of wildlife, fisheries, and resources in the West; research on region-specific issues pertaining to rural health, health disparities, and mental health; and the study of the North American West’s geography and geology.
Signatures

Intent to Plan

Program/Institute/Center Title: Western Lands and Peoples Center
Campus: MSU-Bz, Department of English/College of Letters and Science
Expected Submission Date: NOV 2016

Signature/Date

College/School Dean: ________________________________ 7/19/2016

Graduate Dean: ________________________________ (Graduate academic programs only)

Vice President Research: ________________________________ (Research centers/institutes only)

Chief Academic Officer: ________________________________ 7/21/2016

Chief Executive Officer: ________________________________ 7/25/2016

Flagship Provost: ________________________________ 7/21/2016

Flagship President: ________________________________ 7/25/2016

Date of Final Review: September 15, 2016

When submitting the proposal to the BOR, include this signed form with the Level II request.
Western Lands and Peoples Initiative Activities, July 2016-April 2017
Susan Kollin, Mary Murphy, Robert Rydell

- Organizing the Festival of the West, April 20, 2017: talks by nine MSU faculty and posters from over a dozen graduate students presenting the most recent research on the American West.
- Organizing "Double Feature" in late March/early April 2017: lectures on the western film by Pulitzer Prize-winning author Glenn Frankel and Emmy Award-winning producer Kirk Ellis.
- Co-sponsoring with English Dept. a reading by Portland-based novelist Willy Vlautin.
- Organizing the symposium, “Doig Country: Imagining Montana and the West,” for September 14-16, 2017. Scholars from the U.S. and Canada, along with students and community members, will gather to discuss the literary legacy of this celebrated Montana author.
- WLP is partnering with the MSU Library to develop a Digital Humanities program at MSU, including a two-year postdoc recruited through the Council on Library and Information Resources. Hosted a half-day workshop with Tammy Troup, Digital Services Manager for the Montana Historical Society in November.
- Support for Graduate Students: beginning in summer 2016, the Initiative has funded small research grants for nearly a dozen graduate students working on western American research programs in American Studies, Earth Sciences, and History.
- Graduate Student Professional Development: organized 4 professional development workshops on grant writing; constructing an engaging abstract; creating a professional presence in social media; curriculum vitae and resume writing.
- Supported an exhibit on Montana architect Fred Willson, with installations at the Emerson Center and in Wilson Hall, curated by graduate student Richard Brown.
- Co-sponsoring a reading group organized by Earth Sciences graduate students on western lands and nature.
- Faculty Research Support: competitive small research grants awarded to faculty in Earth Sciences, English, and History.
- Partnered with the Montana Historical Society to support the Sleeping Child retreat on gender studies in the West. Scholars, public historians, and graduate students from Montana, Wyoming & Idaho participated in two-day program in July, 2016.
- Partnered with the non-profit Extreme History Project, received a $2,500 grant from the National Humanities Alliance to run a week-long public program, “Building Community through Historic Preservation,” September 12-17, 2016.
- With the Dean's Office of the College of Letters & Science, The “Perspectives on the American West” lecture series at the Museum of the Rockies in fall 2016: Mark Fiege, the Wallace Stegner Chair in Western American Studies in the Dept. of History and Philosophy at MSU; Charles Wilkinson, the Moses Lasky Professor of Law at the University of Colorado; Maile Meloy, a Montana native and award-winning fiction writer; and David Theobold, a senior scientist with Conservation Science Partners and adjunct instructor of Fish, Wildlife, and Conservation Biology at Colorado State University.
- Support for the 2016 Michael P. Malone conference, “Wild Animals in the Wild West” in October 2016, organized by Sara Waller, a Philosophy professor. MSU hosted prominent local, national, and international scholars to discuss topics related to animals, animal minds, and the relationship of other animals to humans and wildness as these concepts have been understood by philosophers, scientists, cultural theorists, historians, and literary critics.
- Support for the 51st annual Western Literature Association conference in Big Sky, Montana in September 2016. Organized by WLA President, Professor Linda Karell of the MSU English Department, the conference attracted more than 300 international scholars and featured Maxine Hong Kingston as a keynote speaker.
WLPI Collaborations

Our program for the upcoming Ivan Doig Symposium in fall 2017 includes faculty members from other Montana campuses, including the University of Montana-Missoula, the University of Montana-Western, Montana Tech, and Montana State University-Billings.

A research collaboration currently underway with faculty from the University of Montana-Missoula, MSU-Bozeman and the Montana Historical Society will result in a book on Montana women’s history.

An English Professor from the University of Montana in Missoula contributed invited chapters on Montana literature for two volumes of scholarly essays edited by an English professor at MSU-Bozeman published in 2007 and 2015.

The Sleeping Child Workshop came about in summer 2016 through a collaboration between faculty at UM-Missoula, MSU-Bozeman, and the Montana Historical Society.