

NOTIFICATION AND LEVEL I APPROVAL MEMORANDUM

DATE: February 11, 2015

TO: Chief Academic Officers, Montana University System

FROM: Neil Moisey, Deputy Commissioner for Academic, Research, & Student Affairs
John Cech, Deputy Commissioner for Two-Year & Community College Education

RE: Notifications and Level I Approvals

This memorandum is intended to inform you of the Notifications and Level I changes in academic programs that have been approved on an MUS campus or in the Office of the Commissioner of Higher Education since the November 2014 meeting of the Board of Regents. Any comments regarding items below must be received by the Office of the Commissioner of Higher Education no later than February 18, 2015.

1. Notifications

A. Terminations and Placement into/Withdraw from Moratorium

Montana State University-Bozeman:

- Notice of intent to terminate the Japan Studies Minor and Major
[Item #166-2013-R0315](#) | [Academic Proposal Request Form](#) | [Program Termination Checklist-Phase I](#)

The University of Montana-Missoula:

- Notice of intent to terminate options within the Psychology degree
[Item #166-1005-R0315](#) | [Academic Proposal Request Form](#) | [Program Termination Checklist-Phase I](#)

The University of Montana-Western:

- Notification of the placement of the B.A. Major and Minor in Global Politics into Moratorium
[Item #166-1602-R0315](#) | [Academic Proposal Request Form](#)

B. CAS/AAS and BAS/AA/AS

Montana State University-Billings:

- Notification of the establishment of a Welding and Fabrication 1 Certificate of Technical Study
[Item #166-2702-R0315](#) | [Academic Proposal Request Form](#)
- Notification of the establishment an Energy Technician Certificate of Technical Studies
[Item #166-2704-R0315](#) | [Academic Proposal Request Form](#)

Great Falls College Montana State University:

- Notification of the retitling of the Professional Certificates to Certificate of Technical Studies
[Item #166-2903-R0315](#) | [Academic Proposal Request Form](#)

NOTIFICATION AND LEVEL I APPROVAL MEMORANDUM

The University of Montana-Missoula:

- Notification of the establishment of a certificate in Allied Health Administration
[Item #166-1004-R0315](#) | [Academic Proposal Request Form](#)
- Notification of the establishment of a Big Data Analytics Certificate
[Item #166-1007-R0315](#) | [Academic Proposal Request Form](#) | [Attachment #1-Summary of Certificate](#)
- Notification of the establishment of an Energy Auditor/Commissioning Agent Certificate of Technical Skills
[Item #166-1009-R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)
- Notification of the establishment of an Environmental Health Certificate
[Item #166-1010-R0315](#) | [Academic Proposal Request Form](#) | [Attachment #1-Required Coursework](#)

2. Level I Items

A. Terminations-Step 2

Helena College University of Montana:

- Request for termination of A.A.S. in Water Resources
[Item #166-1901+R0315](#) | [Academic Proposal Request Form](#) | [Program Termination Checklist](#)

B. Level I Items-Other

Montana State University-Billings:

- Request for authorization to rename the Sustainable Energy Technician Certificate of Applied Science the Energy Technician Certificate of Applied Science
[Item #166-2703+R0315](#) | [Academic Proposal Request Form](#)

Montana State University-Northern:

- Request for authorization to alter the curriculum of the Masters of Science in Education, Instruction and Learning
[Item #166-2802+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)

The University of Montana-Missoula:

- Request for authorization to offer Electronics Technology Certificate of Applied Science
[Item #166-1011+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)
- Request for authorization to add an Ecocriticism Option in M.A., English
[Item #166-1012+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)
- Request for authorization to retitle the Department of Applied Computing to the Department of Applied Computing and Engineering Technology
[Item #166-1013+R0315](#) | [Academic Proposal Request Form](#)
- Request for authorization to offer a Literature and the Environment Option, English B.A.
[Item #166-1014+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)

NOTIFICATION AND LEVEL I APPROVAL MEMORANDUM

- Request for authorization to offer a Minor in Business Administration
[Item #166-1015+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)
- Request for authorization to retitle the Community Health options in the HHP B.S. and M.S. to Community Health and Prevention Science
[Item #166-1016+R0315](#) | [Academic Proposal Request Form](#)
- Request for authorization to retitle Women's and Gender Studies Program and Minor to Women's, Gender, and Sexuality Studies Program
[Item #166-1017+R0315](#) | [Academic Proposal Request Form](#)
- Request for authorization to create a Biochemistry Minor
[Item #166-1018+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)
- Request for authorization to create an UM-Missoula and FVCC Partnership in Elementary Education
[Item #166-1027+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)

Montana Tech of the University of Montana:

- Request for authorization to establish a Bachelor of Science Degree in Nursing
[Item #166-1501+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)
- Request for authorization to establish a Natural Resource Management Option in the Business & Information Technology (BIT) Degree Program
[Item #166-1502+R0315](#) | [Academic Proposal Request Form](#) | [Curriculum Proposal Form](#)

March 5-6, 2015

ITEM 166-2013-R0315

Notification of intent to terminate the Japan Studies Major and Minor

THAT

Montana State University Bozeman notifies the Montana Board of Regents of the intent to terminate the Japan Studies major and minor.

EXPLANATION

The purpose of this proposal is to request authorization to terminate/withdraw the Japan Studies major and minor at Montana State University Bozeman. The programs will be replaced by a major and minor in Asian Studies.

ATTACHMENTS

Academic Proposal Request Form

Program Termination Checklist-Phase 1

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-2013-R0315

Meeting Date: March 5-6, 2015

Institution: Montana State University

CIP Code: 05.0127

Program Title: Japan Studies – Major and Minor

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request: This submission notifies the regents of the intent to terminate/withdraw the Japan Studies major and minor at Montana State University Bozeman. The programs will be replaced by a major and minor in Asian Studies.

Montana University System
PROGRAM TERMINATION CHECKLIST

Phase I- Complete with Step 1 of the Program Termination Process

- X 1. **Research the programs of study for all students currently enrolled in program and define a reasonable deadline for degree completion for all current students. Plan course offerings accordingly.**

Comments: All students currently enrolled in the Japan Studies major and minor should be able to complete their degree programs no later than Spring 2017. Courses required in both the major and minor will continue to be offered until all students have completed their programs.

- X 2. **Notify affected program faculty of impending layoff and timing based on reasonable program completion for existing students (both verbally and in writing).**

Comments: No faculty positions will be affected by termination of the major or minor.

- X 3. **Meet with students to discuss program completion deadlines, course scheduling and options.**

Comments: Faculty advisors are scheduling meetings with all students in Japan Studies. The students will be presented with information about program completion deadlines, course scheduling and options.

- X 4. **Notify all internal curriculum committees and Faculty Senate of impending program closure.**

Comments: Notification is being sent to the Curriculum and Programs Committee and to Faculty Senate.

- X 5. **Notify Faculty Union (where applicable).**

Comments: Not applicable.

- X 6. **Notify public advisory committee for program (where applicable).**

Comments: Not applicable.

- X 7. **File Notice of Intent to Terminate/Withdraw via Level I Request Form for Board of Regents agenda to ensure adequate public notice.**

Comments: Notice of Intent to Terminate/Withdraw the program is being submitted concurrently with this form.

Phase II- Complete with Step 2 of the Program Termination Process

8. **Notify high school counselors, feeder colleges, and other constituents.**

Comments:

9. **Revise hardcopy and electronic catalog to remove the program or indicate planned program closure. Work with current students to ensure they will be able to complete their program within a reasonable deadline.**

Comments:

Montana University System
PROGRAM TERMINATION CHECKLIST

_____ 10. File Level I request for Program Termination and documented checklist with Office of Commissioner of Higher Education.

Comments:

_____ 11. Level I Memo published to the Board of Regents and Montana University System.

Comments:

March 5-6, 2015

ITEM 166-1005-R0315

Notification of Intent to Terminate the Options within the Psychology Degree– University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of Higher Education of the intent to change the undergraduate requirements for the Psychology degree and eliminate the options.

EXPLANATION

We are changing the psychology major to have no options to allow us to more succinctly advise majors for their particular career interests. The old options are insufficient and outdated. We added the requirement of 5 upper division elective courses within the major specifically and that transfer students need to complete three courses at UM to be considered a graduate of our major.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1005-R0315

Meeting Date: March 5-6, 2015

Institution: University of Montana

CIP Code: _____

Program Title: Psychology 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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

We are changing the psychology major to have no options to allow us to more succinctly advise majors for their particular career interests. The old options are insufficient and outdated. We added the requirement of 5 upper division elective courses within the major specifically and that transfer students need to complete three courses at UM to be considered a graduate of our major.

Montana University System
PROGRAM TERMINATION CHECKLIST

Phase I- Complete with Step 1 of the Program Termination Process

- X 1. **Research the programs of study for all students currently enrolled in program and define a reasonable deadline for degree completion for all current students. Plan course offerings accordingly.**

Comments: Nothing will change for our students so no one needs warning or deadline for degree completion. We are taking away options within our program that will make it simpler and apply more clearly to all students in the major. For now we plan to allow students who entered when there was a choice of options to choose the old or new format.

- X 2. **Notify affected program faculty of impending layoff and timing based on reasonable program completion for existing students (both verbally and in writing).**

Comments: No one will be affected by this change. There are no changes in class offerings as a result of this removal of options. We are streamlining for clarity for students.

3. **Meet with students to discuss program completion deadlines, course scheduling and options.**

Comments: Does Not Apply

- X 4. **Notify all internal curriculum committees and Faculty Senate of impending program closure.**

Comments: We are not closing a program.

5. **Notify Faculty Union (where applicable).**

Comments: NOT relevant

6. **Notify public advisory committee for program (where applicable).**

Comments: Not relevant

- X 7. **File Notice of Intent to Terminate with the Board of Regents to ensure adequate public notice.**

Comments: Again we aren't terminating a major, we are removing the changing options within a major which were not meaningful and accordingly have no impact.

Phase II- Complete with Step 2 of the Program Termination Process

8. **Notify high school counselors, feeder colleges, and other constituents.**

Comments:

9. **Revise hardcopy and electronic catalog to remove the program or indicate planned program closure. Work with current students to ensure they will be able to complete their program within a reasonable deadline.**

Comments:

Montana University System
PROGRAM TERMINATION CHECKLIST

10. File Level I request for Program Termination and documented checklist with Office of Commissioner of Higher Education.

Comments:

11. Level I Memo published to the Board of Regents and Montana University System.

Comments:

March 5-6, 2015

ITEM 166-1602-R0315

**Notification of the placement of the of B. A. Major and Minor in Global Politics into Moratorium –
The University of Montana Western**

THAT

The University of Montana Western notifies the Board of the placement of the Bachelor of Arts Major and Minor in Global Politics into moratorium as of May 1, 2015.

EXPLANATION

The Department of History, Philosophy and Social Science has experienced a drop in enrollment in these programs as well as a reduction in the number of faculty. It is therefore seeking to place these programs into moratorium while they discuss possibilities for reinstatement.

ATTACHMENTS

Academic Proposal Request Item

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1602-R0315

Meeting Date: March 5-6, 2015

Institution: The University of Montana Western

CIP Code: 45.1001

Program Title: Global Politics B.A. Major and Minor

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

 B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request: The University of Montana Western seeks permission to place its Bachelor of Arts Major and Minor in Global Politics into moratorium due to currently inadequate faculty staffing and insufficient student interest.

March 5-6, 2015

ITEM 166-2702-R0315

Notification of the establishment of a Welding and Fabrication 1 Certificate of Technical Study

THAT

Montana State University Billings notifies the Montana Board of Regents of the establishment of a Welding and Fabrication 1 Certificate of Technical Study Program. The program involves an 18-credit curriculum that will allow MSUB to participate as a consortium member in the SWAMMEI grant initiative in Welding.

EXPLANATION

The current Welding and Metal Fabrication Technology Certificate of Applied Science (CAS) program is comprised of discrete courses taught over two academic semesters. To fulfill City College at Montana State University's responsibility as a SWAMMEI grant consortium member, and provide students an addition exit point within the curriculum, a one semester Professional Certificate is being developed. Great Falls College MSU is the lead campus on the Strengthening Workforce Alignment in Montana's Manufacturing and Energy Industries (SWAMMEI) initiative, which supports the creation of vocational pathways and portable stackable credentials for students building a portfolio of skills for the workplace. City College as one of the partner consortium members is designing multiple tiers, each representing a complete credential, but can also build upon one another for those students hoping to obtain a higher level of training.

The proposed program of Welding and Fabrication 1 Certificate of Technical Study will include the technical coursework within the first semester of the Welding and Metal Fabrication Certificate of Applied Science degree. This coursework already exists and is being offered to students declaring the Welding and Metal Fabrication Technology Certificate of Applied Science degree. This new degree will provide students an exit point earlier in the program and present the opportunity for students to enter the workforce with an academic credential after one semester of coursework. If the student decides to continue with coursework, they are already on the academic plan of study to complete the Welding and Metal Fabrication Technology Certificate of Applied Science degree.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-2702-R0315

Meeting Date: March 5-6, 2015

Institution: MSU Billings

CIP Code: 48.0511

Program Title: Welding and Fabrication 1 Certificate of Technical Study

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

 1. Adding an option within an existing major or degree (Curriculum Proposal Form)

 2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

 D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

 1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

 2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

 3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

 4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

 5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The City College Department of Construction, Welding, Drafting-Design Technology Montana State University Billings does hereby report the establishment of a Welding and Fabrication 1 Certificate of Technical Study and requests that it be listed on the Montana University System's official degree and program inventory.

The current Welding and Metal Fabrication Technology Certificate of Applied Science (CAS) program is comprised of discrete courses taught over two academic semesters. To fulfill City College at Montana State University's responsibility as a SWAMMEI grant consortium member, and provide students an additional exit point within the curriculum, a one semester Professional Certificate is being developed. Great Falls College MSU is the lead campus on the Strengthening Workforce Alignment in Montana's Manufacturing and Energy Industries (SWAMMEI) initiative, which supports the creation of vocational pathways and portable stackable credentials for students building a portfolio of skills for the workplace. City College, as one of the partner consortium members, is designing multiple tiers; each representing a complete credential, but can also build upon one another for those students hoping to obtain a higher level of training.

The proposed program of Welding and Fabrication 1 Certificate of Technical Study will include the technical coursework within the first semester of the Welding and Metal Fabrication Certificate of Applied Science degree. This coursework already exists and is being offered to students declaring the Welding and Metal Fabrication Technology Certificate of Applied Science degree. This new degree will provide students an exit point earlier in the program and present the opportunity for students to enter the workforce with an academic credential after one semester of coursework. If the student decides to continue with coursework, they are already on the academic plan of study to complete the Welding and Metal Fabrication Technology Certificate of Applied Science degree.

March 5-6, 2015

ITEM 166-2704-R0315

Notification of the establishment of an Energy Technician Certificate of Technical Studies

THAT

Montana State University Billings notifies the Montana Board of Regents of the establishment of an Energy Technician Certificate of Technical Studies. The program involves an 18-credit curriculum that will allow students to add an early exit point while resulting in industry recognized stackable credentials designed to prepare a sufficient number of technicians for an ever-expanding workforce.

EXPLANATION

Strengthening Workforce Alignment in Montana's Manufacturing and Energy Industries (SWAMMEI) grant coordinators have identified a need for students to have viable exit strategies that provide industry-recognized credentials. This will also allow for a seamless return to academics at a later date. The Energy Technician CTS provides those choices to students. SWAMMEI grant coordinators have also noted that employers have requested City College offer shorter industry specific programs designed for students to gain targeted entry-level employment skills, with the option to continue training as needed. The Energy Technician Certificate of Technical Studies provides an avenue for employers to meet their needs.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-2704-R0315

Meeting Date: March 5-6, 2015

Institution: MSU Billings

CIP Code: 15.0503

Program Title: Energy Technician Certificate of Technical Studies

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The City College Department of Transportation and Industry at Montana State University Billings does hereby report the establishment of an 18-credit Energy Technician Certificate of Technical Studies and requests that it be listed on the Montana University System's official degree and program inventory.

Strengthening Workforce Alignment in Montana's Manufacturing and Energy Industries (SWAMMEI) grant coordinators have identified a need for students to have viable exit strategies that provide industry-recognized credentials. This will also allow for a seamless return to academics at a later date. The Energy Technician Certificate of Technical Studies provides those choices to students. SWAMMEI grant coordinators have also identified that employers have requested City College offer shorter industry specific programs designed for students to gain targeted entry-level employment skills, with the option to continue training as needed. The Energy Technician Certificate of Technical Studies provides an avenue for employers to meet their needs.

March 5-6, 2015

ITEM 166-2903-R0315

Notification of the retitling of Professional Certificates to Certificate of Technical Studies

THAT

Great Falls College MSU notifies the Board of Regents of the retitling of the Professional Certificate Programs to Certificate of Technical Studies.

EXPLANATION

The retitling of the Professional Certificates to Certificates of Technical Studies (CTS) brings Great Falls College MSU in compliance with OCHE Award Categories.

- EMT/Pre-Paramedic Professional Certificate retitled to EMT/Pre-Paramedic Certificate of Technical Studies (CTS)
 - Healthcare Informatics Tech Professional Certificate retitled to Healthcare Informatics Tech Certificate of Technical Studies (CTS)
 - Healthcare Office Professional Certificate retitled to Healthcare Office Certificate of Technical Studies (CTS)
 - Pharmacy Technician Professional Certificate retitled to Pharmacy Technician Certificate of Technical Studies (CTS)
 - Phlebotomy/Pre-Medical Assistant Professional Certificate retitled to Phlebotomy/Pre-Medical Assistant Certificate of Technical Studies (CTS)
-

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-2903-R0315

Meeting Date: March 5-6, 2015

Institution: Great Falls College MSU

CIP Code: Various (See Below)

Program Title: EMT/Pre-Paramedic, Healthcare Informatics Tech, Healthcare Office, Pharmacy Technician, Phlebotomy/Pre-Medical Assistant

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

Great Falls College MSU wishes to notify the BOR of its intent to retitle the following programs. All the programs are being retitled to bring them into compliance with the new OCHE Certificate of Technical Studies (CTS) naming convention.

- EMT/Pre-Paramedic Professional Certificate retitled to EMT/Pre-Paramedic Certificate of Technical Studies (CTS) CIP Code: 51.0904
- Healthcare Informatics Tech Professional Certificate retitled to Healthcare Informatics Tech Certificate of Technical Studies (CTS) CIP Code: 51.0707
- Healthcare Office Professional Certificate retitled to Healthcare Office Certificate of Technical Studies (CTS) CIP Code: 51.0710
- Pharmacy Technician Professional Certificate retitled to Pharmacy Technician Certificate of Technical Studies (CTS) CIP Code: 51.0805
- Phlebotomy/Pre-Medical Assistant Professional Certificate retitled to Phlebotomy/Pre-Medical Assistant Certificate of Technical Studies (CTS) CIP Code: 51.1009

March 5-6, 2015

ITEM 166-1004-R0315

Notice of Intent to Establish a Certificate in Allied Health Administration – University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of Higher Education of the creation of a certificate in Allied Health Administration.

EXPLANATION

There is a need for allied health providers to gain knowledge in management and administration. The intent of the Allied Health Administration certificate curriculum is to provide an affordable, practical, and career-enhancing plan of study that prepares allied health and rehabilitation professionals to become future managers within healthcare provider organizations and consulting firms who are committed to improving the delivery of health services.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **166-1004-R0315**

Meeting Date: **March 5-6**

Institution: **University of Montana**

CIP Code: **51.0701**

Program Title: **Allied Health Administration Certificate**

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

There is a need for allied health providers to gain knowledge in management and administration. The intent of the Allied Health Administration certificate curriculum is to provide an affordable, practical, and career-enhancing plan of study that prepares allied health and rehabilitation professionals to become future managers within healthcare provider organizations and consulting firms who are committed to improving the delivery of health services.

March 5-6, 2015

ITEM 166-1007-R0315

Notification of the establishment of a Big Data Analytics Certificate – University of Montana-Missoula

THAT

The University of Montana notifies the Board of Regents of Higher Education of the creation of a certificate in Big Data Analytics.

EXPLANATION

Traditional methods of capturing, analyzing, and storing data have become inadequate for processing the massive amounts of data produced by today's global businesses and organizations. Stock markets, social media, software logs, web transactions, GIS sensors, and similar applications can produce data sets that have outpaced the capacity of ordinary statistical packages and relational databases. Many organizations warehouse a wealth of data that they simply cannot process fast enough in order to use the information as a basis for timely business decisions.

Big Data tools, on the other hand, have the capability of processing zettabytes (a trillion gigabytes) of data, which might be at rest or in motion, and may be structured or unstructured data. Big Data tools give a variety of organization types the capacity to analyze huge quantities of data, arriving in high volume, and to make decisions based on that data in real time.

This 12-credit certificate is designed to provide students with the tools necessary to compete in the Big Data space. Students will use currently available big data tools to capture, analyze, and present big data. They will explore a variety of applications where Big Data tools can be applied, and they will complete a Big Data project.

ATTACHMENTS

Academic Proposal Request Form

Attachment #1-Summary of Certificate in Big Data Analytics

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1007-R0315

Meeting Date: March 5-6, 2015

Institution: University of Montana

CIP Code: 11.0401

Program Title: Big Data Analytics Certificate

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

Traditional methods of capturing, analyzing, and storing data have become inadequate for processing the massive amounts of data produced by today's global businesses and organizations. Stock markets, social media, software logs, web transactions, GIS sensors, and similar applications can produce data sets that have outpaced the capacity of ordinary statistical packages and relational databases. Many organizations warehouse a wealth of data that they simply cannot process fast enough in order to use the information as a basis for timely business decisions.

Big Data tools, on the other hand, have the capability of processing zettabytes (a trillion gigabytes) of data, which might be at rest or in motion, and may be structured or unstructured data. Big Data tools give a variety of organization types the capacity to analyze huge quantities of data, arriving in high volume, and to make decisions based on that data in real time.

This 12-credit certificate is designed to provide students with the tools necessary to compete in the Big Data space. Students will use currently available big data tools to capture, analyze, and present big data. They will explore a variety of applications where Big Data tools can be applied, and they will complete a Big Data project.

Summary of Certificate in Big Data Analytics

Required Courses (6 credits)

BMIS 326 Introduction to Data Analytics 3 cr. This course introduces the terminology and application of big data and data analytics. Students will complete cases in a variety of disciplines as they become acquainted with some of the software, tools and techniques of data analytics, including introductions to Python, R, Hadoop, and Tableau.

AND EITHER

BMIS 482 Big Data Project 3 cr. Students will work in cross-disciplinary teams to complete big data projects from several different disciplines. Lectures will provide background on appropriate methods where needed. In addition to big data topics, students will explore the topic of project management.

OR

MATH 467 Data Analytics Projects 3 cr. This is a practicum course aimed at developing skills needed to solve big data problems facing industry and academics. Problems are brought to the class by local technology-oriented businesses and university researchers. Lecture topics include project management, interacting with clients, and written and oral presentation of results. Additional lecture topics will be selected to address the specific problems brought to the class and may cover data reduction methods, algorithm design and predictive analytics. Prerequisites are two mathematics classes at the 200 level or above and two courses that earn credit toward The University of Montana Big Data Certificate.

Elective Courses (6 credits required)

Existing Courses to Serve as Electives

CSCI 444 Data Visualization 3 cr. Offered intermittently. Prereq., M 171; programming experience; and junior, senior, or graduate status; or consent of instr. Visualization fundamentals and applications using special visualization software; formulation of 3-D empirical models; translation of 3-D models into graphical displays; time sequences and pseudo-animation; interactive versus presentation techniques; special techniques for video, CD and other media.

CSCI 447 - Machine Learning 3 cr. Offered intermittently. Prereq., CSCI 232 or consent of instr. Introduction to the framework of learning from examples, various learning algorithms such as neural networks, and generic learning principles such as inductive bias, Occam's Razor, and data mining. Credit not allowed for both CSCI 447 and CSCI 547. Course Attributes: Co-Convened Course

CSCI 448 - Pattern Recognition 3 cr. Offered intermittently. Prereq., Junior or Senior status. Introduction to the framework of unsupervised learning techniques such as clustering (agglomerative, fuzzy, graph theory based, etc.), multivariate analysis approaches (PCA, MDS, LDA, etc.), image analysis (edge detection, etc.), as well as feature selection and generation. Emphasis will be on the underlying algorithms and their implementation. Credit not allowed for both CSCI 448 and CSCI 548. Course Attributes: Co-Convened Course

BMIS 465 Real-Time Data Analytics 3 cr. Students will use IBM Infosphere Streams software to extract relevant data from data sources in motion, and they will analyze the data using appropriate statistical and mathematical techniques. Applications include cybersecurity, finance, social media, marketing, and others.

BMKT 440 Marketing Analytics 3 cr. Students will understand the application of advanced digital marketing practices to identify valuable business opportunities from the data. They will be introduced to analytical methods such as forecasting, predictive analytics, data mining, decision tree models, and web analytics. They will analyze and apply data to generate marketing strategies. They will also learn how to communicate results-focused marketing strategies to clients.

2014 Proposed Courses to Serve as Electives – All new courses submitted through e-curr.

U CSCI 448 Applications of Mining Big Data 3 cr. Offered intermittently. Prereq., upper division or consent of instr. Co-convenes with CSCI 564. Introduction to existing data mining software systems and their use, with focus on practical exercises. Topics include data acquisition, data cleansing, feature selection, and data analysis. Credit not allowed for both CSCI 464 and CSCI 564.

CSCI 480/580 Applied Parallel Computing Techniques 3 cr. Offered intermittently. Prereq., CSCI 205 and 232, of instructor consent. Co-convenes with CSCI 580. This course is an introduction to parallelism and parallel programming. Topics include the various forms of parallelism on modern computer hardware (e.g. SIMD vector instructions, GPUs, multiple cores, and networked clusters), with coverage of locality and latency, shared vs non-shared memory, and synchronization mechanisms (locking, atomicity, etc). Assignments will include significant parallel programming projects. Credit not allowed for both CSCI 480 and CSCI 580

MATH 461 Practical Big Data Analysis 3 cr. M 461 is a methods course supporting the Big Data Certificate Program. The course provides the students with the essential tools for the analysis of big data. The content consists of map reduce and canonical information methods for analyzing massively large data sets, windowing methods for the analysis of streaming data, an introduction to predictive analytics, and an introduction to data visualization methods. Prerequisites are 1. two mathematics classes at the 200 level or above, and 2. one course in probability or statistics at the 300 level or above.

M 462 Theoretical Big Data Analysis 3 cr. Prerequisites: consent of instructor; or M221 Introduction to Linear Algebra and two other Mathematics / Statistics

classes at 200-level or above. The main goal of this course is to provide students with a unique opportunity to acquire conceptual knowledge and theoretical background behind mathematical tools applicable to Big Data Analytics and Real Time Computations. Specific challenges of Big Data Analytics, e.g., problems of extracting, unifying, updating, and merging information, and processing of highly parallel and distributed data, will be reviewed. The tools for Big Data Analytics, such as regression analysis, linear estimation, calibration problems, real time processing of incoming (potentially infinite) data, will be studied in more detail. It will be shown how these approaches can be transformed to conform to the Big Data demands.

Other Courses: These courses have either been taught or will be taught but are not slated for permanent numbering yet.

MATH 491	Cognitive Computing
MATH 491	Data Science Theory and Practice
Law 591	eDiscovery Law and Practice

March 5-6, 2015

ITEM 166-1009-R0315

Notification of the establishment of an Energy Auditor/Commissioning Agent Certificate of Technical Skills – University of Montana-Missoula

THAT

Missoula College of the University of Montana notifies the Board of Regents of Higher Education of the addition of a Certificate of Technical Skills of Energy Auditor/Commissioning Agent.

EXPLANATION

We are requesting to add an Energy Auditor/Commissioning Agent Certificate of Technical Skills (CTS) to accommodate a growing industry demand for individuals qualified to perform energy audits and to serve as commissioning agents for building commissioners. Part of the DOL TAACCCT SWAMMEI project planning and industry consulting, this is one of the target careers that is likely to be in high demand as building codes tighten to demand greater energy efficiency.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1009-R0315

Meeting Date: March 5-6, 2015

Institution: Missoula College UM

CIP Code: 15.0503

Program Title: Energy Auditor/Commissioning Agent Certificate of Technical Skills

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

We are requesting to add an Energy Auditor/Commissioning Agent Certificate of Technical Skills (CTS) to accommodate a growing industry demand for individuals qualified to perform energy audits and to serve as commissioning agents for building commissioners. Part of the DOL TAACCCT SWAMMEI project planning and industry consulting, this is one of the target careers that is likely to be in high demand as building codes tighten to demand greater energy efficiency.

Montana Board of Regents CURRICULUM PROPOSALS

1. Overview

SWAMMEI is a \$25 million dollar grant project funded by the US Department of Education that helps 13 Montana Colleges augment and enhance occupational training in eight distinct occupational areas. The grant specifies that colleges will adopt “stacked credentials” to serve students in these specific occupational training programs. Stacked credential programs are comprised of industry-driven tiers of training (typically aligning with a semester’s worth of training). Each tier is designed to be commensurate with developing a complete set of skills, considered to add value to potential employees. When possible, tiers have also been aligned with completion of industry-recognized credentials (e.g. NCCER Level I for Electrician Helper). Students completing tiers can choose to enter the workforce upon completion of a tier or continue their education by continuing into additional training tiers. After completion of each tier students will earn a professional certificate from participating colleges and will have had the opportunity to earn industry-recognized credentials as well. The overall intent is to enhance labor market payoffs for students by reducing the amount of time in training and increasing documentation of student’s competencies prior to completion of a two-year degree.

Colleges engaged in SWAMMEI have agreed to identify common learning outcomes that students will gain in order to complete each tier. Upon completion of articulation agreements, students will gain an opportunity to seamlessly transfer between consortium member colleges into subsequent training tiers.

In some cases, adoption of the stacked credential model is possible with small modifications to existing CAS and AAS curricula – in essence, providing more “off-ramps and on-ramps” for these programs. All Energy Technology courses are being offered in online and face-to-face formats to allow students in remote areas of the state to participate, while maintaining a high level of contact for local students.

The SWAMMEI Energy Auditor / Commissioning Agent Tier within the Energy Technology Program serves as mid-level training for students pursuing an occupation in building energy efficiency. Missoula College serves as the lead institution for SWAMMEI’s sustainable energy technology strategy. The strategy also includes the following 2-year colleges within the MUS: Bitterroot College, City College, Flathead Valley Community College, Gallatin College, Highlands College and Little Big Horn College.

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

Colleges participating in SWAMMEI Energy Technology have agreed to teach to a common set of learning outcomes. These learning outcomes are well aligned with the RESNET HERS exam, an industry-recognized credential, providing students an opportunity to earn these credentials as part of their course of study. Students that complete a SWAMMEI Energy Technology Certificate of Technical Skills in Building Energy Efficiency/Commissioning Agent will be awarded a CTS. If they achieve a passing grade on the HERS exam, they will also be awarded this certificate. Passing the HERS rater exam is not required to pass NRGY 235 Building Energy Efficiency, which will serve as the cornerstone course for this CTS.

Montana Board of Regents
CURRICULUM PROPOSALS

3. Need

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

The SWAMMEI grant is aimed at enhancing labor market payoffs for students by reducing the amount of time they spend in training in order to become qualified for jobs in industry. The Consortium is responding by creating additional off-ramps and on-ramps into existing sustainable energy technology programs by adopting a stacked credential model. The stacked credential model provides students a certificate/professional certificate upon successful completion of each Tier of training which prepares them for entry-level positions that require post-secondary training.

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

All SWAMMEI partners have and will continue to work closely with business partners to ensure that training programs align with workforce demands. This outreach is expected to more accurately align the skills of our graduates with the needs of local, regional and national industries. This has been designed to be an efficient curriculum programs that employers have participated in creating and condoning. With this tiered model, students gain the benefit having the option of continuing their education by completing successive tiers or electing to join the workforce as opportunities arise.

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

Overall, it is anticipated that approximately 20 students will enroll in the Energy Auditor/Commissioning Agent CTS prior to fall semester of 2017. These numbers were derived during development of the SWAMMEI project with each colleges providing best-guess estimates based upon historical enrollment data. Missoula College anticipates serving 10 students per year based upon historical demand in our programs.

4. Institutional and System Fit

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

The SWAMMEI stacked credential approach essentially breaks our existing AAS program into four certificate components. By completing multiple tiers a student will be completing very similar curricular work and expectations as in existing programs.

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

No. It provides students additional opportunities but does not change or limit existing opportunities.

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

This program creates a shorter term training program that prepares students for entry-level jobs in the industry (i.e. Commissioning Agent). Existing programs train students for higher paying wages in that same industry but with no current off ramp prior to completion of the degree program.

Montana Board of Regents
CURRICULUM PROPOSALS

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

1. This certificate will strengthen our ties with local building contractors as we “Partner for Student Success,” by preparing them for internships, apprenticeships, and careers in the building trades.
2. This certificate will also provide a pathway towards “Education for the Global Century” which will see building energy efficiency as a necessity for both developed and developing countries.
3. As there will be many hands-on learning experiences, building tours, and employer interactions for students pursuing this certificate, we will create a “Dynamic Learning Environment.”
4. By providing this one-semester opportunity for students, it will allow us to fine-tune the Energy Technology Program as part of its “Planning-Assessment Continuum.”

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 SWAMMEI program intentionally creates parallel program at participating institutions, based around a set of commonly-agreed-upon learning outcomes for each tier. This will allow seamless student transfer between colleges within the tiered system. Articulation agreements are still being developed within the grant’s short implementation timeline, but there a common understanding among consortium members about the benefit for students of articulation between tiers.

5. 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.

Attached is the Missoula College Energy Technology CTS in Energy Auditing / Commissioning Agent curriculum document.

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

With approval from the Board of Regents, and pursuant to USDOL grant guidelines, implementation of the SWAMMEI Tier I Energy Technology programs will begin Spring Semester of 2015. It is estimated that 5-10 students will enter the training program in Sp15. Subsequent tiers of the SWAMMEI program will be brought to the Board of Regents in time to allow students to continue seamlessly into subsequent tiers. Overall it is estimated that at least 20 students in the MUS will enter energy technology training associated with the SWAMMEI project prior to Fall of 2015. Missoula College anticipates serving 10 students per year based upon historical demand in our programs.

Montana Board of Regents
CURRICULUM PROPOSALS

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.

In most cases, SWAMMEI Tiers create an additional training option for students within current programs; and therefore, additional faculty resources are occasionally required. In circumstances where SWAMMEI has catalyzed creation of new programs or where significant additional time and energy was anticipated by colleges, funds were included in the approved SWAMMEI budget for new (initially) grant-funded positions. To agree to common learning outcomes related to the SWAMMEI tiers, faculty have been asked to contribute time and travel (in some cases) to face-to-face meetings with other faculty. Travel has been reimbursed, to this point, through SWAMMEI grant funds.

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.

Integration of industry recognized credentials into programs typically requires an institution and/or faculty to become accredited by the national association governing the credentials in this case the RESNET HERS. Our two faculty members who will teach NRGY 235 Building Energy Efficiency are being compensated for both professional development and for course development. This expense is being covered by Missoula College's SWAMMEI funds.

7. Assessment

How will the success of the program be measured?

As part of the SWAMMEI project, grant staff will track the following outcome measures for each program: annual graduation rate for all students by program; employment rate of program completers by program; employment retention rate of completers, one year following program completion, by program; average earnings of completers, one to three years following program completion, by program; transfer rate for program that have facilitating transfers as a substantial part of their mission; total number of participants employed at enrollment who receive a wage increase post-enrollment; total number of participants retained in employment after grant-funded program of study completion; total number of participants employed after grant-funded program of study completion; total number of participants enrolled in further education after grant-funded program of study completion; total number of participants earning credential; total number of participants completing credit hours; total number of participants still retained in their program of study or another TAACCCT-funded program; total number of participants who have completed a TAACCCT funded program, and; total unique participants served.

Success for grant purposes will be based upon the number of students enrolling in, completing, obtaining employment and retained in employment as per the outcome estimates included in our approved grant application.

For purposes of long-term success, the newer certificate program data will be compared to previous CAS/AAS completion-rate, placement-rate, wage-rate, employment-retention to assess if the new mechanism is leading to improved labor market outcomes for students.

Montana Board of Regents
CURRICULUM PROPOSALS

8. Process Leading to Submission

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

During development of the SWAMMEI grant, significant work was done to engage local businesses across the state in conversations about their workforce needs and specific training that would help meet those workforce needs. Their input helped the state-wide SWAMMEI partners identify target occupations and training programs to include in the project. During development of the project, in the time available, the project's steering committee engaged faculty and administrators to identify college needs in order to deliver targeted training programs. College CEOs/Deans/Presidents were frequently involved in the project's direction.

After the grant's award was announced by USDOL, faculty at participating colleges from around the state met to discuss common learning outcomes. Outreach to business partners and other related businesses has continued with an intention to increase that engagement radically in the coming months through grant-funded workforce navigators that will conduct more specific outreach.

These navigators also work very intimately with Montana Department of Labor One-Stop Centers in their local community. The navigators help identify and recruit individuals that would be well-served by grant-funded programs.

The USDOL grant mandates that grant-funded programs begin by fall of 2014. This timeline dictates a very aggressive approval process that frankly falls out of sync with MUS typical approval processes. In order to meet the \$25 million USDOL grant timeline the Missoula College Energy Technology Program must submit Level I approval with Level II documentation requests to UM Provost Office in Autumn 2014 to allow Regents to consider the requests prior to our proposed Spring 2015 roll-out. Colleges in Montana have worked through a fast-track approval process on their own campuses to accommodate USDOL's timeline. Subsequent to Board of Regents approval, approval requests will be forwarded to Northwest Commission on Colleges and Universities (NWCCU). NWCCU has been apprised of the grant, the potential influx of program approval requests and has expressed that they are prepared to assess these requests quickly. New certificate programs will then be forwarded to US Department of Education to consider each program's eligibility for financial aid status.

The Missoula College Energy Technology Program will not substantively change, but will have a more "mottled" advising checklist (see attached).

March 5-6, 2015

ITEM 166-1010-R0315

Notification of the establishment of an Environmental Health Certificate – University of Montana-Missoula

THAT

The University of Montana notifies the Board of Regents of the establishment of a certificate in Environmental Health.

EXPLANATION

Teachers requested that the professional development offered by the Center for Environmental Health Sciences provide formal credit for their accomplishments. In response to requests from our current network of teachers, this certificate program was developed in which Clean Air and Health Homes Program (CAHHP) teachers interested in pursuing graduate work can receive a Certificate in Environmental Health Sciences (12 credit hours total). Our goal is to provide a sequential series of online professional development components that will enhance teachers' understanding of major science concepts and pedagogy. This certificate can then be applied toward a MS degree in a future Environmental Health Sciences graduate program directed towards Middle School and High School teachers to further aid in their professional development. This certificate would be available to undergraduate students as well as high school teachers.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1010-R0315

Meeting Date: March 5-6, 2015

Institution: University of Montana

CIP Code: 51.2202

Program Title: Environmental Health Certificate

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The Center for Environmental Health Sciences (CEHS) previously provided professional development through a five-year Science Education Partnership Award (SEPA) from NIH through a series of multiday summer sessions and/or Saturday workshops. The feedback from the teachers was always positive with requests for additional training if possible. Therefore, as part of the CEHS's second SEPA grant we included a teacher development program. This was also strongly recommended from CEHS's NIH program officer and supported by their personal experience working with middle school and high school teachers for almost 10 years.

Teachers requested that the professional development provide formal credit for their accomplishments. In response to these requests from our current network of teachers, this certificate program was developed in which Clean Air and Health Homes Program (CAHHP) teachers interested in pursuing graduate work can receive a Certificate in Environmental Health Sciences (12 credit hours total). Our goal is to provide a sequential series of online professional development components that will enhance teachers' understanding of major science concepts and pedagogy. This

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

certificate can then be applied towards a Master of Science degree in a future Environmental Health Sciences graduate program directed towards Middle School and High School teachers to further aid in their professional development. This certificate would be available to undergraduate students as well as high school teachers.

School reformers are paying considerable attention to the role that effective professional development can play in improving the teaching of science. Professional development provides teachers with opportunities to develop their knowledge and skills and broaden their teaching approaches. Teachers need deep, thorough knowledge of the disciplines they intend to teach so they can create better learning opportunities for students (Loucks-Horsley et al., 2010). Our experience with our original SEPA grant demonstrated that strengthening teachers' understanding of key science concepts is vital to the effectiveness of the learning experiences they provide for students.

Time	Course	Credits (12.0)
Summer 1	Two-Day Workshop I	1.5
Summer 1	Online Course: Introduction to Toxicology	3.0
Fall 1	Online Course: Environmental and Rural Public Health	3.0
Spring 1	Online Course: Epidemiology and Clinical/Translational Research	3.0
Summer 2	Two-Day Workshop II	1.5

Environmental Health Certificate Required Coursework

Each teacher participating in CAHHP will be expected to attend at least one annual workshop prior to implementing the program within their school. Some teachers may be interested in taking further advantage of our professional development offerings. Our goal is to provide a sequential series of online professional development components that will enhance teachers’ understanding of major science concepts and pedagogy. We will offer a Certificate in Environmental Health Science Education (12 hours total) to those teachers that participate in CAHHP throughout Montana, Idaho, and Alaska. This certificate can then be applied towards a Masters of Environmental Health Sciences degree from the University of Montana. The graduate program will accept the 12 credits towards a non-thesis masters that will require 18 additional credits (approximately six additional courses). Options for graduate level courses will include independent study, toxicology, biological sciences, public health, and chemistry. The table below provides an outline of the one-year format for the certificate program, which will be offered at no cost to participating teachers. Enrollment will be limited to 10 teachers each year to ensure effective personal contact.

Certificate in Environmental Health Sciences

Time	Course	Credits (12.0)
Summer 1	Two-Day Workshop I	1.5
Summer 1	Online Course: Introduction to Toxicology	3.0
Fall 1	Online Course: Environmental and Rural Public Health	3.0
Spring 1	Online Course: Epidemiology and Clinical/Translational Research	3.0
Summer 2	Two-Day Workshop II	1.5

Teacher Professional Development - Description of Courses

Two-Day Workshop I (Instructors: SEPA team) This summer workshop will provide an intensive preparation for the teachers to apply the curriculum in their classrooms, offer hands-on preparation and use of learning materials, and discuss the use of evaluation tools. The format will include lectures presented by university personnel and health professionals, hands-on experience with module materials and an introduction to interdisciplinary strategies/materials. Workshops will be held during the summer, so teacher release time will not have to be requested. We have used these summer workshops as part of the Air Toxics Under the Big Sky program for the past several years, bringing together participating teachers prior to the beginning of the school year. It has especially been successful when our “veteran” teachers provided peer-mentoring to the new teachers entering our program.

Course Objectives: At the end of the workshop the teacher should be able to:

- Apply curriculum in their classrooms
- Train their students in the utilization of all equipment and data analysis
- Help their students develop research projects

Introduction to Toxicology (PHAR 491, Instructor Andrij Holian) This course will provide the participants with a general background that would prepare them to understand and interpret toxicology mechanisms, effects of toxic compounds on cells and organ systems and role of genetics and epigenetics in human health. This course will cover history, principles of toxicology, general mechanisms, major organ systems and pathological outcomes, and effects of important classes of toxic compounds. The course will also include a primer in genetics, examples of different epigenetic DNA modifications, and how they are measured.

Course Objectives: At the end of the course the teacher should be able to:

- Have a good familiarity with the basic principles of toxicology
- Understand adverse impacts of toxic compounds on cells and organ systems

- Understand genetics and how genetic susceptibility is important in human health
- Understand what different epigenetic marks are on DNA, and that environment can cause those changes affecting disease susceptibility
- Design a toxicological study

Environmental and Rural Health (PUBH 560, Instructor Tony Ward) This course will provide participants with a comprehensive introduction to environmental health. This includes an overview of the methods and paradigms used in the field, ranging from ecology to epidemiology, from toxicology to environmental psychology, and from genetics to ethics.

Course Objectives: At the end of the course the teacher should be able to:

- Have a good familiarity with environmental factors including biological, physical and chemical factors that affect the health of a community
- Understand health policy and management
- Conduct program planning – the ability to plan for the design, development, implementation, and evaluation of strategies to improve individual and community health

Epidemiology and Clinical Translational Research (BMED 4XX, Instructor Curtis Noonan): This course will introduce principles and methods of epidemiologic investigation, relevant biostatistical applications, and the ethical and regulatory factors associated with clinical translational research. Students will be provided with the basics in interpreting epidemiologic studies and conducting research in human populations. Measures of disease frequency and quantitative measures to determine risk association will be described. Several types of study designs will be introduced, including randomized trials, case-control and cohort studies, and outbreak investigations, and the use of biomarkers in epidemiological research. Approaches for assessing validity and causality will also be described.

Course Objectives: At the end of the course the student should be able to:

- Describe what epidemiology is and how it relates to other public health disciplines
- Provide examples of translating bench research to clinical application
- Compare and contrast analytical epidemiology study designs
- Understand the methods for assessing risk, study precision, validity and causality
- Design an epidemiological study

Format for the three online courses: The courses will be delivered online using an e-learning software platform (Moodle) with support from UOnline. Readings and assignments designed to develop applied skills will form the basis for review and discussion during the weekly class postings on the discussion board. A self-study format (e.g., reading assignments, PowerPoint presentations, and web links) will be used to present key points, but the emphasis will be on discussion and application of the course material in assignments and in a semester paper. The semester paper will allow students to design a study for a hypothesis-driven investigation.

Two-Day Workshop II (Instructors: SEPA team): Teachers completing the certificate program will be required to attend a second, culminating workshop. This workshop will be held at the same time as the “kickoff” workshop for the new teachers, and will allow for teachers that have been in the program to serve as mentors, and to share their experiences with the incoming teachers.

Course Objectives: At the end of the workshop the teacher should be able to:

- Serve as peer mentors for new teachers joining the program
- Help their students to develop more advanced research projects
- Implement additional environmental / health curriculum in their classrooms

At the completion of the second workshop, teachers will be awarded a Certificate in Environmental Health Sciences.

March 5-6, 2015

ITEM 166-1901+R0315

Request for termination of A.A.S. in Water Resources – Helena College University of Montana

THAT

Helena College University of Montana is filing Termination of the A.A.S. in Water Resources.

EXPLANATION

Our Program Review of 2011 revealed a number of reasons for continuing decline in enrollment. Among those, the poor economy was cited as a major cause. However, improving economic conditions and renewed hiring in the water resources industry have NOT resulted in concomitant rebound of enrollment. Rather, enrollment in the program has continued to erode. College leadership believes a substantial rethinking of educational practices to serve the water resources industry is needed, and plans to work with industry leaders, high school program faculty, and other stakeholders to develop a new model to replace the current A.A.S.

Water Resources was placed in Moratorium in November 2013 (165-1901+R1114). Discussions with industry and business indicate that they prefer a Bachelor's degree and the graduates are having difficulties finding employment in this field with this A.A.S degree. Additionally, the College offers a Geosciences transfer advising option that includes many of the same courses and provides students a clear pathway to the Bachelor's degree.

ATTACHMENTS

Academic Proposal Request Form
Termination Checklist

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1901+R0315

Meeting Date: March 5-6, 2015

Institution: Helena College

CIP Code: 14.0805

Program Title: A.A.S. Water Resources

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 X B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 X 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

___ C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

___ 1. Adding an option within an existing major or degree (Curriculum Proposal Form)

___ 2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

___ D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

___ 1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

___ 2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

___ 3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

___ 4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

___ 5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

Our Program Review of 2011 revealed a number of reasons for continuing decline in enrollment. Among those, the poor economy was cited as a major cause. However, improving economic conditions and renewed hiring in the water resources industry have NOT resulted in concomitant rebound of enrollment. Rather, enrollment in the program has continued to erode. College leadership believes a substantial rethinking of educational practices to serve the water resources industry is needed, and plans to work with industry leaders, high school program faculty, and other stakeholders to develop a new model to replace the current A.A.S.

Water Resources was placed in Moratorium in November 2013 (165-1901+R1114). Discussions with industry and business indicate that they prefer a Bachelor's degree and the graduates are having difficulties finding employment in this field with this A.A.S degree. Additionally, the College offers a Geosciences transfer advising option that includes many of the same courses and provides students a clear pathway to the Bachelor's degree.

Montana University System
PROGRAM TERMINATION CHECKLIST

Phase I- Complete with Step I of the Program Termination Process

- X 1. **Research the programs of study for all students currently enrolled in program and define a reasonable deadline for degree completion for all current students. Plan course offerings accordingly.**

Comments:

Faculty worked with students to either complete or switch to a related program.

- X 2. **Notify affected program faculty of impending layoff and timing based on reasonable program completion for existing students (both verbally and in writing).**

Comments:

Faculty member resigned in December 2013; all other courses were taught by adjuncts who were notified in November 2013.

- X 3. **Meet with students to discuss program completion deadlines, course scheduling and options.**

Comments:

Faculty member met with each student individually.

- X 4. **Notify all internal curriculum committees and Faculty Senate of impending program closure.**

Comments:

Curriculum committee notified in October 2013; Faculty Senate notified in November 2013.

- X 5. **Notify Faculty Union (where applicable).**

Comments:

Union notified in October 2013.

- X 6. **Notify public advisory committee for program (where applicable).**

Comments:

Advisory committee members notified individually by faculty member in December 2013.

- X 7. **File Notice of Intent to Terminate/Withdraw via Level I Request Form for Board of Regents agenda to ensure adequate public notice.**

Comments:

See Board of Regents meeting materials for November 2014.

Montana University System
PROGRAM TERMINATION CHECKLIST

Phase II- Complete with Step 2 of the Program Termination Process

X 8. **Notify high school counselors, feeder colleges, and other constituents.**

Comments:

Admissions and recruitment staff have communicated to all affected schools and other constituents.

X 9. **Revise hardcopy and electronic catalog to remove the program or indicate planned program closure. Work with current students to ensure they will be able to complete their program within a reasonable deadline.**

Comments:

Program not included in current year (2014-2015) Catalog. (Link to Helena College 2014-2015 Program Offerings page: <http://www.umhelena.edu/catalog/programofferings.aspx>).

X 10. **File Level I request for Program Termination and documented checklist with Office of Commissioner of Higher Education.**

Comments:

Included with this submission

X 11. **Level I Memo published to the Board of Regents and Montana University System.**

Comments:

March 5-6, 2015

ITEM 166-2703+R0315

Request for authorization to change the Sustainable Energy Technician Certificate of Applied Science to the Energy Technician Certificate of Applied Science

THAT

The Montana Board of Regents of Higher Education authorizes Montana State University Billings to change the Sustainable Energy Technician Certificate of Applied Science to the Energy Technician Certificate of Applied Science.

EXPLANATION

Revisions to the Sustainable Energy Technician Certificate of Applied Science are in direct response to a SWAMMEI initiative. City College (CC) was tasked to participate in the Energy Technician Tier 1 and Tier 2 strategies, and after review the CC has determined that the Energy Technician strategy closely matched the Sustainable Energy Technician Certificate of Applied Science. To meet the Energy Technician curriculum requirements developed by the Energy Technician team, two new courses needed to be developed and added to the existing Certificate of Applied Science plan of study, the math requirement needed to be changed, and the name of the certificate needed to be changed from Sustainable Energy Technician Certificate of Applied Science to the Energy Technician Certificate of Applied Science.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-2703+R0315

Meeting Date: March 5-6, 2015

Institution: MSU Billings

CIP Code: 15.0503

Program Title: Energy Technician Certificate of Applied Science

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

- 1a. Placing a program into moratorium** (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)
- 1b. Withdrawing a program from moratorium**
- 2. Intent to terminate an existing major, minor, option or certificate – Step 1** (Phase I Program Termination Checklist)
- 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less**
- 4. BAS/AA/AS Area of Study**

 X B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

- X 1. Re-titling an existing major, minor, option or certificate**
- 2. Adding a new minor or certificate where there is a major or an option in a major** (Curriculum Proposal Form)
- 3. Merging or re-titling a department**
- 4. Revising a program** (Curriculum Proposal Form)
- 5. Distance or online delivery of an existing degree or certificate program**
- 6. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

Revisions to the Sustainable Energy Technician Certificate of Applied Science are in direct response to a SWAMMEI initiative. City College (CC) was tasked to participate in the Energy Technician Tier 1 and Tier 2 strategies and after review, the CC has determined that the Energy Technician strategy closely matched the Sustainable Energy Technician Certificate of Applied Science. To meet the Energy Technician curriculum requirements developed by the Energy Technician team, two new courses needed to be developed and added to the existing Certificate of Applied Science plan of study, the math requirement needed to be changed, and the name of the certificate needed to be changed from Sustainable Energy Technician Certificate of Applied Science to the Energy Technician Certificate of Applied Science.

March 5-6, 2015

ITEM 166-2802+R0315

**Request for authorization to alter the curriculum of the Masters of Science in Education,
Instruction and Learning**

THAT

The Montana Board of Regents authorizes Montana State University Northern (MSUN) to add two new courses and delete two courses from the existing program.

EXPLANATION

MSUN would like to add the following two courses: Change Theory & Practice and Motivation & Learning to the program. These courses will support the continuous improvement to meet the needs of the students' professional learning environment.

MSUN would like to drop from the program these two courses: Multiple Intelligences and Cooperative Learning.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-2802+R0315 Meeting Date: March 5-6, 2015
Institution: Montana State University Northern CIP Code: 42.0101
Program Title: Masters of Science Education, Instruction and Learning

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

- 1a. Placing a program into moratorium** (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)
- 1b. Withdrawing a program from moratorium**
- 2. Intent to terminate an existing major, minor, option or certificate – Step 1** (Phase I Program Termination Checklist)
- 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less**
- 4. BAS/AA/AS Area of Study**

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

- 1. Re-titling an existing major, minor, option or certificate**
- 2. Adding a new minor or certificate where there is a major or an option in a major** (Curriculum Proposal Form)
- 3. Merging or re-titling a department**
- 4. Revising a program** (Curriculum Proposal Form)
- 5. Distance or online delivery of an existing degree or certificate program**
- 6. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

Addition of two new courses in the program; Change Theory and Practice and Motivation and Learning. Two courses will also be dropped. They are EDUC 577 Multiple Intelligences and Cooperative Learning and will have the important components embedded in an existing course.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

MSUN would like to add two courses to the Masters of Science in Education, Instruction and Learning Program. The two courses to be dropped are Multiple Intelligences EDUC 577 and Cooperative Learning EDUC 575. The two courses to be added are Change Theory and Practice EDUC 5XX and Motivation and Learning EDUC 5XX. No other changes are occurring. Course descriptions and course outcomes for the two new courses are outlined below:

EDUC 5XX – Change Theory and Practice: This course is designed for master's degree students who are enrolled in the Instruction and Learning program. It is designed to investigate change theory and practice in learning environments that are critical to effective instruction and learning. Models will be reviewed and analyzed to support initiatives that increase the learning of all students.

Course Outcome Objectives:

Analyze the factors, perspective and entities that influence educational change and reform.

Examine local context related the access and equity as well as own role as change agent within the context.

Review and examine personal experiences with educational change and reform.

Develop a plan for improvement and change in local context.

EDUC 5XX – Motivation and Learning: This course is designed for master's degree students who are enrolled in the Instruction and Learning program. It is designed to investigate the theory, development and application of motivation in the learning environment. Major focus is place on motivation models and strategies for enhancing motivation in individuals and groups. It will also analyze variables affecting motivation and environmental influences.

Course Outcome Objectives:

Compare important constructs in behavioral, social cognitive, cognitive, and affective approaches to motivation in education.

Identify underlying assumptions of motivational theories and analyze implications for educational research, practice and implementation.

Evaluate current research paradigms in motivation.

Analyze the relationships between motivation, learning, teaching, and performance.

Analyze motivational theories regarding instructional expectations, motives, and goals for learners.

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

NA

3. Need

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

NA

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

NA

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

NA

Montana Board of Regents
CURRICULUM PROPOSAL FORM

4. Institutional and System Fit

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

NA

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

NA

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

NA

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

NA

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.

NA

5. 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.

NA

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

NA

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.

NA

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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.

NA

7. Assessment

How will the success of the program be measured?

NA

8. Process Leading to Submission

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

NA

March 5-6, 2015

ITEM 166-1011+R0315

**Request for Authorization to Offer an Electronics Technology Certificate of Applied Science –
University of Montana-Missoula**

THAT

The Board of Regents of Higher Education authorizes Missoula College of the University of Montana to offer a Certificate of Applied Science in Electronics Technology.

EXPLANATION

This proposal is to create a Certificate of Applied Science (CAS) in addition to the existing Associate of Applied Science (AAS) degree in the Electronics Technology Program. The certificate will enhance the program and provide more flexibility for the students.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1011+R0315

Meeting Date: March 5-6

Institution: Missoula College UM

CIP Code: 15.0399

Program Title: Electronics Technology CAS

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 X B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 X 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

This proposal is to create a Certificate of Applied Science (CAS) in the Electronics Technology program

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

The Certificate of Applied Science (CAS) is a one-year study in the Electronics Technology program.

3. Need

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

To better meet the needs of the students by providing more options and flexibilities to the program.

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

Students can complete the CAS in Electronics Technology in the first year of study with the completion of technical and general educational courses along with the hands-on training.

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

Certificate of Applied Science is highly recommended by industries and professional organizations. This addition of the CAS to the Electronics program will enhance the program with more flexibilities for the students. There are strong demands for the engineering technology technicians with certificate in electronics technology, according to the US-DOL Occupation Handbook, such as:

- Electrical and Electronics Installers and Repairers: <http://www.bls.gov/ooh/Installation-Maintenance-and-Repair/Electrical-and-electronics-installers-and-repairers.htm>
- Engineering Technology: <http://www.bls.gov/ooh/Architecture-and-Engineering/home.htm>
- Precision Instrument and Equipment Repairers: <http://www.bls.gov/oes/current/oes499069.htm>

4. Institutional and System Fit

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

The CAS is based on the first year study and it can be completed before the students move to the second year study for the AAS degree.

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

No.

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

The AAS degree is the continuation of the CAS.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Upon the completion of the CAS the students can either proceed to pursue the AAS degree or be ready work in the field as a technician. The creation of the CAS can better meet the needs of the students.

- 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 CAS is a unique program.

5. 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 attachment.

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

The curriculum has been fully developed. Students in Electronics Technology can receive the CAS in their first year study.

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.

- 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.

7. Assessment

How will the success of the program be measured?

Yes. Please see the program outline attached to this proposal.

8. Process Leading to Submission

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 CAS is initiated by the faculty and students, and is going through the approval process.

March 5-6, 2015

ITEM 166-1012+R0315

Request for Authorization to Add an Ecocriticism Option in M.A., English – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to add an option in Ecocriticism to the English M.A.

EXPLANATION

The University of Montana-Missoula requests approval to add an option in Ecocriticism to the M.A. in English. Since the 1990s, the study of literature through the lens of environmental and social justice has been a steadily growing branch of scholarship, and coursework in this field is now offered in most English departments. Given the strength of faculty research in this area within UM's English department, we seek to create an option so that students will have formal recognition on their transcripts that they have pursued concentrated study in this area. We believe such recognition will not only help students to be placed in Ph.D. programs with a similar focus, but will also help to boost recruitment to the English MA program at UM. Moreover, the option will also serve other departments at UM that recognize the vital role of the humanities in environmental inquiry.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1012+R0315

Meeting Date: March 5-6

Institution: The University of Montana-Missoula

CIP Code: 23.1499

Program Title: Ecocriticism option, MA English

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

X C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

X 1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The University of Montana-Missoula requests approval to add an option in Ecocriticism to the M.A. in English. Since the 1990s, the study of literature through the lens of environmental and social justice has been a steadily growing branch of scholarship, and coursework in this field is now offered in most English departments. Given the strength of faculty research in this area within UM's English department, we seek to create an option so that students will have formal recognition on their transcripts that they have pursued concentrated study in this area. We believe such recognition will not only help students to be placed in Ph.D. programs with a similar focus, but will also help to boost recruitment to the English MA program at UM. Moreover, the option will also serve other departments at UM that recognize the vital role of the humanities in environmental inquiry.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

The Department of English is motivated to offer an ecocriticism option in the M.A. English degree for four key reasons: 1) it would provide formal recognition of concentrated study in an area of research and teaching which is currently a departmental strength 2) it would contribute to the University of Montana's profile as a leader in the field of environmental studies 3) it would enable us to compete more effectively with other English departments that offer literature and environment programs, serving as a recruitment tool for new students 4) it would help us meet existing student demand for coursework in literature and the environment.

The humanities, including literary studies, have an essential role to play in environmental inquiry. Our goal is to create a structured course of study focusing upon the ways in which literary texts influence our understanding of the natural world, often through the lens of categories such as gender, race, class, sexuality and species identity. Given the inherently interdisciplinary nature of ecocriticism, the option requires students to take at least one course from a program outside the English department.

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

An option in ecocriticism will be added to the M.A. degree program in English. It will provide a track within the M.A. program for students to study literature within the context of ecological concerns. In addition to required courses for the M.A. in English, students who pursue the ecocriticism option will take three upper-division courses: one in "Ecocritical Theory and Practice"(LENV 422), one in "Literature, Nature and Politics" (LIT 524) and a third "Special Topics in ecocriticism" (LIT 502) course. They will also be able to choose from a rich variety of upper-division electives, including courses focusing on literature within the context of place (LIT 402), those addressing ecological issues in British and American literature (LIT 520/521) and those exploring Literature and Ecology through the lens of Non-Western Literary Traditions (LIT 402, "Buddhism and Ecology"; LIT 521: "Ecology of Native American Literature").

3. Need

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

Over the past four decades, there has been a growing understanding in different fields that a new "ecological" awareness is needed in order to meet the challenges associated with environmental pollution, reduced biodiversity and global climate change. Literary study can promote such consciousness and can suggest creative solutions to environmental problems. Literature can shed light on important intersections between nature's exploitation and the domination of marginalized human beings and non-human animals. It can also illuminate ways in which art has always been responsive to particular places and landscapes. Many English departments now offer specializations in ecocriticism to meet the growing needs of students interested in pursuing study in this area. While our department offers coursework in ecocriticism, a structured program would help us to compete with other regional programs already offering formal options in this area and would be a tool for recruiting new graduate students.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

The option would help existing and future graduate students to place in competitive Ph.D. programs that offer concentrated study in ecocriticism (such as the University of Oregon, UC Davis and UCLA, and Texas Tech). It would also be useful for students who plan to teach after MA insofar as it reflects a pedagogical commitment to engaging with relevant and pressing issues in the Global Century. All of the English faculty who teach the option would model (in different ways) what a politically engaged pedagogy might entail, one that underscores the importance of humanities perspectives in negotiating our global ecological crisis.

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

The proposed option responds to a high demand among graduate students for courses in ecocriticism, as evidenced by robust past enrollments in seminars focusing on such topics. Faculty teaching courses in this area regularly have waiting lists for their courses and sometimes have to turn away students in order to observe enrollment caps. Furthermore, applicants to the MA English program increasingly specify ecocriticism as an area of study they wish to pursue at UM. Finally, the overwhelmingly positive feedback of students in their reviews of already existing offerings in ecocriticism indicates that such courses are well-received and will continue to be so.

4. Institutional and System Fit

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

One of the option's primary goals is to capitalize upon opportunities for UM graduate students to pursue environmental study in departments beyond English. Ecocriticism necessarily includes an interdisciplinary component, drawing upon fields beyond English such as Biology, Geography, Environmental Studies, History, Philosophy and Psychology. The option requires students to take one graduate level (400 or 500) "elective" course from a department outside of English. Literature students could take such courses in complementary humanities programs housed outside English, such as those required for the Environmental Philosophy emphasis, those included in Environmental Studies' focus areas (Environmental Justice, Environmental Knowledge of Native Peoples and Environmental Writing) and courses in Comparative Cultural Studies offered by MCLL (such as MCLL 522: "Nature and Technology"). Literature students would also be encouraged to take courses within the sciences relevant to environmental study, such as those within the Systems Ecology program. Historically, MA students have taken courses in other departments without a barrier being posed by prerequisites. For example, English students have taken courses such as PHIL 504 and PHIL 591 (formerly PHIL 427) in the Philosophy Department, ENST 487, 505, 530 and 573 in EVST, MCLL522 in the MCLL Department and BIOB 513, 519 and 575 in Biological Sciences.

Similarly, students from these programs could be encouraged to take graduate level courses in the ecocriticism option. Indeed, past enrollments of students from other departments in literature courses with an ecocritical focus (including those that could now be applied towards meeting option requirements) indicate that prerequisites would not pose a barrier to such extra-departmental enrollment. For example, Cook's LIT 521 seminars such as "The Elemental West" regularly include graduate students from EVST and Geography. Likewise, Moore's 521 seminars such as "The Ecology of Native American Literature" have drawn students from EVST, Philosophy and History, as well as

Montana Board of Regents
CURRICULUM PROPOSAL FORM

visiting international graduate scholars. Moreover, Economides's LIT 520 and LIT 524 seminars regularly include Philosophy graduate students.

Finally, the ecocriticism option will likely strengthen synergies that already exist between programs within the English Department. Typically, a high number of MFA and MA students enroll in seminars offered by faculty who would be teaching courses in the graduate option. This indicates that the option would be very attractive to students in these programs and would help to strengthen a revival of the dual MA/MFA degree within the English Department in recent years.

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

Implementation of the new option will not require changes to any existing program at the institution.

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

There are no other closely related programs at the institution. No other program on campus focuses upon ecocriticism as a body of knowledge and as a critical methodology developed specifically for the study of literature.

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

The educational opportunities entailed in the ecocriticism option advance four out of five of the stated goals in the University of Montana's strategic plan.

1. Partnering for Student Success: Given widespread concern regarding environmental issues among humanities students today, the option will meet the goal of "engaging and retaining" students who enter the MA English program. Historically, there has been a high completion rate among MA students pursuing research in ecocriticism. Students mentored by faculty in this area have gone on to pursue Ph.D. work at institutions with prestigious programs in ecocriticism (the University of Oregon, Texas Tech, and the University of Victoria). Our goal is that the option will help even more graduates secure places at such institutions and/or will be useful to those seeking teaching opportunities.
2. Education for the Global Century: Many of the greatest challenges in the 21st century will be environmental, and our option encourages students to "think globally and act locally" in formulating their responses to green issues. Most of the courses offered in the option ask students to either engage with scholarship focusing both on global models of environmental politics or local, place-based accounts; and some ask students to negotiate both levels of advocacy. For example, courses focusing on "Posthumanism(s)" typically address the environmental implications of emerging global biotechnologies, whereas courses on "Theories and Literatures of Place" investigate regional green politics and advocacy. Furthermore, courses such as "Rethinking the American West as Region: The Urban, The Rural and Quotidian Wests in a Global World" ask students to think about the region in which they live within the context of wider global concerns. On the whole, the option fully meets the strategic goal of responding to "local, regional, national and global needs."
3. Discovery and Creativity to Serve Montana and the World: Faculty and students working within the ecocriticism option would be pursuing cutting-edge research in a growing field. English faculty

Montana Board of Regents
CURRICULUM PROPOSAL FORM

scholarship within the field has been very well-received (as evidenced by book publications at Palgrave-McMillan, The University of Nebraska Press and The University of Nevada Press, as well as articles in *The Journal of Ecocriticism* and *Cultural Critique*), contributing to a sense that UM is becoming a hub for research in this area. Current faculty members have also taught and presented their research at European universities, creating important links that will benefit students and UM. In addition to “enhancing contributions by faculty and students through research,” the option would promote applications of ecological thinking that go beyond the sphere of academia. Graduate students who study Literature and the Environment often go on to pursue valuable work both regionally and internationally. For example, alumni have gone on to conduct research at Glacier National Park, to serve as tour guides in Alaska, to work in the North Dakota Oil Fields, and to teach English/ environmental studies abroad in countries such as South Korea and Japan.

4. Dynamic Learning Environment: Many of the courses taught in the option would meet the goal of “build[ing] upon a ‘sense of place’ in the Central Rockies . . . where natural surroundings are integrated into the curriculum.” Courses on regional literatures of the west draw upon the work of local authors and Montana history to give students a sense of the important impact place can have upon literature. Moreover, many instructors teaching within the option encourage students to incorporate active engagement with the campus and/or local environment in their learning experience and pedagogy.

- 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.**

Several factors distinguish the ecocriticism option from other programs at UM with an environmental focus. First, our option would be the only one whose curriculum focuses *primarily* on intersections between literature and ecology. While specific courses are offered in other departments that explore intersections between these fields (such as those on Thoreau offered in the Philosophy Department, or on environmental writing in EVST), no other department offers an entire course of study that focuses exclusively upon literature’s aesthetic, ethical and political mediations of the environment. Moreover, ecocriticism (the option’s methodological focus) is a branch of theory that has been developed specifically to study literature within the context of environmental concerns. No other option on campus employs ecocriticism as its primary methodology.

No other graduate-level ecocriticism program exists in the Montana University System. No ecocriticism focus is offered in the M.A. English program at Montana State University, nor is there any existent program at Montana-Western. As the flagship humanities institution in the Montana University System, we believe UM should offer such a program.

Other departments at UM offering courses that complement those in the ecocriticism option have been consulted regarding our plans to create a formal course of study. Faculty in Philosophy, Environmental Studies and Modern and Classical Languages and Literatures have expressed enthusiasm for the proposed option. These departments look forward to the prospect of collaborating with English by encouraging students to take upper-division coursework in multiple departments as part of their graduate degrees and by co-sponsoring guest lectures from prominent scholars in the field of Environmental Studies.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

5. 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 proposed language for the English Department website (MA Programs – new link):

The M.A in English: Ecocriticism Option

The Ecocriticism option is for students interested in how literature shapes our understanding of the environment and vice-versa. In addition to courses required for all MA English students, those who pursue the Ecocriticism option will take core upper-division coursework in Ecocritical Theory and Practice, along with seminars in Literature, Nature and Politics and Special Topics in Ecocriticism. A rich variety of upper-division electives in the Literature(s) of Place, Nature Writing in British and American Literature, and Ecology in Non-Western Literary Traditions will also be available to students pursuing the Ecocriticism option. The option is designed to prepare students who intend to pursue Ph.D. work in Literature and the Environment and/or to assist those who wish to incorporate a concern for ecological and social justice issues within their pedagogy.

A minimum of 36 total credits is required. Please see requirements for M.A. English degree for areas of overlap. Requirements for the option include:

Three upper-division core courses in the Literature and the Environment (LENV 422, LIT 524, LIT 502).

Three additional 500-level seminars (LIT 500, 520, 521 or 522).

At least four additional upper-division courses (another seminar, 400-level UG LIT classes, WRIT 540, Independent Study coursework, coursework in other programs). One of these courses *must* be taken from a department outside of English.

Also required: up to six Thesis credits (LIT 599)

The proposed language for the Graduate School website (English Program):

The M.A. in English: Ecocriticism Option

The Ecocriticism option is for students interested in how literature shapes our understanding of the environment and vice-versa. The option is designed to prepare students who intend to pursue Ph.D. work in ecocriticism and/or to assist those who wish to incorporate a concern for ecological and social justice issues within their pedagogy. For information regarding faculty, requirements, applications and teaching assistantships, visit the M.A. English Program website at: http://www.cas.umt.edu/english/literature/MA_program.cfm.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

The two new courses required to implement the option (LENV 422 and LIT 502) will be under review by the Faculty Senate/ASCRC/ BOR in the Fall semester 2014. To date, the option has been approved by the Literature faculty and Departmental approval is expected at the start of the Fall 2014 semester. Should the option receive approval at all levels, new coursework can be offered in the Fall of 2015 and the entering class of 2014-15 can also use already existing coursework offered this academic year towards the option, grandfathering in such credits. Enrollments of students in LENV 422 are expected to be approximately 25-30 per course. Enrollments in LIT 522 must be capped at 15 as this will be a seminar.

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 needed. The English Department currently has four faculty who regularly teach graduate and upper-division courses in ecocriticism (Cook, Gilcrest, Economides and Moore). Existing faculty can cover all required coursework for the option. Moreover, other English Department faculty (beyond the four who would teach required courses) already teach classes that could be counted as “electives” within the option. Courses focusing on ecologically important genres (such as the Pastoral) and/or upon important ideas associated with natural philosophy (such as Darwinian evolution) are frequently offered by English Department faculty other than Cook, Gilcrest, Economides or Moore.

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 to successfully implement the new Ecocriticism option.

7. Assessment

How will the success of the program be measured?

The option’s success will be measured by increases in the number of new applicants to the MA English program, both those who wish to pursue the option and those who, while not wishing to concentrate in this area, may have an interest in taking selective courses within the option as part of their MA English degree. Another gauge of success would be robust numbers of existing students who decide to pursue the option. One further gauge would be the number of ecocriticism option students who are accepted into Ph.D. programs in English, particularly those with a focus in literature and the environment. Students taking the option will also be surveyed at the end of their degree to assess the effectiveness of the program and to make improvements where necessary.

8. Process Leading to Submission

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

The genesis of the proposed option can be traced to ongoing, long-term discussions among faculty in the English Department who teach courses in ecocriticism. There are two key factors currently contributing to our sense that an Ecocriticism option needs to be established: 1) the rapid expansion of ecocriticism within academic programs over the past decade 2) the need to create a clear and competitive program within the English Department that makes use of UM's distinctive regional presence. Ecocriticism has been a steadily expanding area of scholarship, as evidenced by the proliferation of journals and monographs focusing upon research in this field. As UM is an institution noteworthy for its innovative ecological programs (EVST, Environmental Philosophy, the Global Climate Change Institute, the Wilderness and Civilization program), it is incongruous that the English department currently lacks a structured course of study in ecocriticism. Faculty doing research in this area have long been teaching courses with an ecocritical focus and there is a sense that there would be strong student interest in an ecocriticism option. Recently, our department came to a consensus that it makes sense, at a time when applications to the MA English program have been declining, to foreground ecocriticism as an area of strength in order to boost recruitment. An option would allow us to advertise a structured curriculum in ecocriticism and would be a means of providing students with formal recognition on their transcripts that they have successfully completed concentrated study in this area.

March 5-6, 2015

ITEM 166-1013+R0315

Request for Authorization to Retitle the Department of Applied Computing to the Department of Applied Computing and Engineering Technology – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana-Missoula to retitle the department of Applied Computing and Electronics to the Department of Applied Computing and Engineering Technology.

EXPLANATION

The Department of Applied Computing and Electronics was established nine years ago as a reorganizational effort to combine departments. As the name implies, the Information Technology Department/Program and Electronics Department/Program were merged into one department with both programs as part of the new department name, Applied Computing and Electronics.

Since that time, the department has expanded its program offerings to also include certificates in Computer Support, Cybersecurity, Energy Technology, Computer-Aided Design, and Health Informatics. In addition, there is an AAS degree in Energy Technology. The current department name is no longer inclusive of all our degree offerings, nor will it be inclusive of ongoing enhancements to existing programs. Therefore, we could like to change the name to: Applied Computing and Engineering Technology (ACET)

The 11.x and 15.x CIP codes currently in use for all our programs of study fall within the Computer and Information Sciences and Support Services (Applied Computing) and Engineering Technologies and Engineering-related fields (Engineering Technology) rubrics, and are appropriately assigned to reflect the nature of our coursework. The department name should also reflect the options available for students in these fields of study, and allow the development of new areas of study in these fields as industry demands change.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1013+R0315

Meeting Date: March 5-6, 2015

Institution: University of Montana

CIP Code: N/A

Program Title: Retitle the department of Applied Computing and Electronics

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 X **B. Level I:**

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 X **3. Merging or re-titling a department**

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The Department of Applied Computing and Electronics was established nine years ago as a reorganizational effort to combine departments. As the name implies, the Information Technology Department/Program and Electronics Department/Program were merged into one department with both programs as part of the new department name, Applied Computing and Electronics.

Since that time, the department has expanded its program offerings to also include certificates in Computer Support, Cybersecurity, Energy Technology, Computer-Aided Design, and Health Informatics. In addition, there is an AAS degree in Energy Technology. The current department name is no longer inclusive of all our degree offerings, nor will it be inclusive of ongoing enhancements to existing programs. Therefore, we could like to change the name to: Applied Computing and Engineering Technology (ACET)

The 11.x and 15.x CIP codes currently in use for all our programs of study fall within the Computer and Information Sciences and Support Services (Applied Computing) and Engineering Technologies and Engineering-related fields (Engineering Technology) rubrics, and are appropriately assigned to reflect the nature of our coursework. The

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

department name should also reflect the options available for students in these fields of study, and allow the development of new areas of study in these fields as industry demands change.

March 5-6, 2015

ITEM 166-1014+R0315

Request for Authorization to Offer a Literature and Environment Option, English B.A. – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to offer a Literature and Environment option within the English BA degree.

EXPLANATION

The English Department at the University of Montana-Missoula requests approval to add an option in Literature and the Environment to the B.A. in English. Since the 1990s, the study of literature through the lens of environmental and social justice has been a steadily growing branch of scholarship and coursework in this field is now offered in many English departments (particularly at institutions in the western United States). Given the strength of faculty research in this area within UM's English department, we seek to create an option so that students will have formal recognition on their transcripts that they have pursued concentrated study in this area.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1014+R0315

Meeting Date: March 5-6, 2015

Institution: University of Montana-Missoula

CIP Code: 23.1499

Program Title: Literature and Environment Option, English BA

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

X C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

X 1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The English Department at the University of Montana-Missoula requests approval to add an option in Literature and the Environment to the B.A. in English. Since the 1990's, the study of literature through the lens of environmental and social justice has been a steadily growing branch of scholarship and coursework in this field is now offered in many English departments (particularly at institutions in the western United States). Given the strength of faculty research in this area within UM's English department, we seek to create an option so that students will have formal recognition on their transcripts that they have pursued concentrated study in this area.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

The Department of English is motivated to offer an option in Literature and Environment for four key reasons:

- 1) It would provide formal recognition of concentrated study in an area of research and teaching that reflects Departmental strengths.
- 2) It would contribute to the University of Montana's leadership position in the field of environmental studies.
- 3) It would enable the English Department to compete more effectively with other institutions that offer literature and environment programs by serving as a recruitment tool for new students.
- 4) It would help us meet increasing student demand for comprehensive coursework in literature and environment.

This option reflects both the traditional role that the discipline of literary studies has played in environmental inquiry as well as the field's productive engagement with contemporary social and environmental challenges. Our goal is to create a defined course of study focusing on the ways in which literary texts structure our understanding of nature and the vital relationships that sustain us. Given the interdisciplinary nature of scholarship in literature and the environment, the option requires students take at least one course outside the English department.

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

An option in Literature and Environment will be added to the B.A. degree program in English. The new option preserves much of the breadth and depth of the traditional Literature option even as it defines a course of study focused on literary texts that reflect the human preoccupation with our more-than-human environments. The new option thus includes existing courses that address literary traditions especially concerned with the human relationship to nature (e.g. surveys that include British Romanticism and American Transcendentalism). And it also includes the Department's existing environmental courses, LENV 373 (previously offered as LIT 373 Literature and Environment) and LENV 422 Ecocritical Theory and Practice (previously offered as LIT 420 Ecocriticism). Two new Literature and Environment [LENV] courses will be added to round out the option: LENV 202 The Environmental Imagination and LENV 402 Literature in Place.

3. Need

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

Over the past four decades, there has been a growing awareness across diverse disciplines that the human social and environmental challenges we face require a better understanding of their origins and the possibilities for their amelioration. The humanities, including the discipline of literary studies, have an essential role to play in environmental inquiry, a fact underscored by the explicitly interdisciplinary nature of endeavors such as the Global Leadership Initiative and Climate Change Studies at the University of Montana.

The human relationship to our more-than-human world has long been a central preoccupation of human literary expression. The body of work encompassed by Literature and Environment includes oral and written "texts" spanning diverse cultural traditions through millennia of human experience. Though

Montana Board of Regents
CURRICULUM PROPOSAL FORM

differing greatly in the kinds of rhetorical strategies they deploy, these “texts” share a common interest in fundamental ontological and ethical questions and the social and environmental implication of our answers to them.

Many English departments now offer specializations in Literature and Environment in order to meet the growing needs of students interested in pursuing study in this area. While our Department currently offers some coursework in environmental literature, a structured option would help us to compete with other regional and national programs and would be a tool for recruiting new students to the English program.

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

Most importantly, students who choose the option in Literature and Environment will develop perspectives and tools that will help them negotiate the most pressing and relevant issues of the 21st century (while maintaining the traditional strengths of majoring in the humanities—the ability to read carefully, think critically, and communicate effectively). Further, the option in Literature and Environment will foster an understanding of the inherently interdisciplinary nature of environmental inquiry, thus situating a student’s work in the major within broader academic and social contexts. Finally, the option in Literature and Environment will prepare students for graduate work and careers in this burgeoning field.

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

The proposed option responds to high demand among students for courses in Literature and Environment, as evidenced by robust enrollments and long wait lists in the few courses we currently offer in the field (and relevant special topics courses we are occasionally able to teach). Student evaluations of these courses attest to the level of student interest and the very high quality of instruction in these classes. Further, the creation of similar programs at other institutions, particularly those situated in the American West, speaks to the level of demand both regionally and, arguably, nationally.

4. Institutional and System Fit

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

The proposed option in Literature and Environment, as one component of the Environmental Humanities, complements environmental inquiry in other disciplines. Through this option, literary studies participate in ongoing conversations which include disciplines and programs such as the biological and physical sciences, psychology, philosophy, Native American studies, and environmental studies, the Global Leadership Initiative, and studies in climate change, to name but a few.

In order to reinforce the inherently interdisciplinary nature of environmental inquiry, students who choose the Literature and Environment option are required to take at least one relevant course from a department outside of English. For example, students can take courses in Philosophy such as PHL 429 (Philosophy and Literature), in EVST such as ENST 230 (Nature and Society) and in the Global Climate Change Minor, such as CCS 103X (Intro to Climate Change) and NRSM449E (Climate Change Ethics and Policy). The history of undergraduate English majors who have enrolled in these courses indicates that pre-requisite requirements do not pose a barrier to students taking these courses.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

Implementation of the new option will not require changes to any existing program at the institution.

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

The option in Literature and Environment is grounded in the disciplinary perspectives and approaches specific to literary scholarship. These perspectives draw on the traditional tools of literary scholarship (e.g. poetics, rhetorical theory, narratology, literary historicisms, etc.) as well as the full complement of critical approaches available to contemporary scholars and teachers. The latter includes especially the critical approaches associated with ecocriticism, a diverse and growing body of theoretical and applied criticism that encompasses issues of environmental ethics and justice, feminisms, race theory, gender theory, class issues, species rights, extinction, climate change, humanism and transhumanism, etc.

No other institution in the MUS currently offers programming in Literature and Environment or ecocriticism.

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

The proposed Literature and Environment option will contribute to the fulfillment of the University's overall mission to "educate students to become ethical persons of character and values, engaged citizens, competent professionals, and informed members of a global and technological society." The development of character and values, and any adequate model of informed and engaged citizenship, necessarily depend on fostering a sense of community that acknowledges the human dependence on sustaining and sustainable environments, vital relationships reflected in the University's historical roots as well as in recent disciplinary and interdisciplinary campus initiatives. These recent initiatives include especially the Global Leadership Initiative and the University's leadership in Climate Change Studies, both of which stress interdisciplinary approaches to environmental ethics and policy.

The proposed option in Literature and Environment will advance four of the specific goals in the University of Montana's strategic plan:

1. Partnering for Student Success: Given widespread concern regarding environmental issues among humanities students today, the option will meet the goal of "engaging and retaining" students who enter the English B.A. program. The option will also prepare students for graduate work at regional and national institutions that offer specific programs in Literature and Environment and Ecocriticism—and will make such students more competitive. The option will also serve as excellent preparation for students who choose to pursue careers working with a variety of governmental, NGO, and private corporations intimately involved in environmental issues.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

2. Education for the Global Century: Many of the greatest social challenges in the 21st century will be environmental in nature, and our option encourages students to “think globally and act locally” in formulating their responses to the most pressing issues of the day. A comprehensive course of study in Literature and Environment necessarily engages students in fundamental questions regarding race and ethnicity, gender, class, environmental rights and environmental justice, and the social and environmental implications of politics and policy. Further, the study of Literature and Environment foregrounds the ways in which we are immersed in specific, interanimating and interdependent environmental contexts; as a discipline, the study of Literature and Environment addresses both the ways in which we become aware of, and responsive to, these particular places, as well as the ways in which we become estranged from, and perhaps oblivious to, our home places. Given its inherent scope, this option fully meets the strategic goal of responding to “local, regional, national and global needs.”

3. Discovery and Creativity to Serve Montana and the World: Faculty and students working within the Literature and Environment option will be pursuing cutting-edge research in a growing and increasingly relevant field. Faculty scholarship within the field has been very well-received and has contributed to a general sense that UM is becoming a hub for research in this area. In addition to “enhancing contributions by faculty and students through research,” the option would promote applications of ecological thinking that go beyond the academic realm. The option in Literature and Environment will help students develop a sense of citizenship in sustainable communities in Montana and elsewhere. And as noted previously, students who choose the option in Literature and Environment will be well-positioned for any number of environmentally-minded careers in Montana and elsewhere.

4. Dynamic Learning Environment: Given its focus on the human relationship to place, the option in Literature and Environment will provide exceptional opportunities to “build upon a ‘sense of place’ in the Central Rockies . . . where natural surroundings are integrated into the curriculum.” Indeed, one of the core courses in the option, LENV 402 Literature in Place, is specifically designed to explore the strategies by which literature connects us to places like Montana. More generally, the field of Literature and Environment is premised on literature’s capacity to evoke not just imaginative places but also, and perhaps more importantly, the places we actually inhabit, the specific environments that underwrite all human endeavors. Moreover, many courses within the option require students to incorporate active engagement with the campus and/or local environment in their learning experience.

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.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Because the option in Literature and Environment is grounded in the discipline of literary study, informed by the burgeoning field of Ecocriticism, it will not duplicate efforts in other programs at the University of Montana. And given that no other campuses in the MUS offer programs in Literature and Environment or Ecocriticism, the option in Literature and Environment will not duplicate efforts at other campuses within the MUS.

5. 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.

A. The proposed language for the English Department website is:

1. For the Home page:

Option in Literature and Environment

The option in Literature and Environment is for students interested in literary expression that addresses the human relationship to our more-than-human world. The body of work encompassed by Literature and Environment includes oral and written “texts” spanning diverse cultural traditions through millennia of human experience. Though differing greatly in the kinds of rhetorical strategies they deploy, these “texts” share a common interest in fundamental ontological and ethical questions and the social and environmental implications of our answers to them. The many approaches to this body of literature, under the rubric of Ecocriticism, engage students in vital inquiry, an exploration of sustaining and sustainable aesthetic and environmental relationships.

2. For the undergraduate Major page:

Literature and Environment (LENV)

Students who choose the Literature and Environment option focus on the ways in which literary expression shapes our understanding of ourselves and our environments in sustainable and unsustainable ways. Grounded in the disciplinary skills of literary studies (careful reading, critical thinking, effective communication), students in this option supplement breadth of traditional literary scholarship with special emphasis on literature that is responsive to both human and more-than-human contexts.

3. For the Advising page:

B.A. in English—Literature & Environment Option

1. Core Courses: Ten Courses (30 Credits) are required:

A. Required Courses

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- LIT 201 Introduction to Literary Studies
- LIT 210 American Literature I: Beginnings to 1865
- LIT 221 British Literature: Enlightenment through Romanticism
- LENV 202 The Environmental Imagination
- LIT 300 Literary Criticism
- LIT 327 Shakespeare
- LENV 373 Literature and the Environment
- LENV 402 Literature in Place
- LENV 422 Ecocritical Theory and Practice

B. Additional Survey: Choose One

- LIT 220 British Literature: Medieval through Early Modern
- LIT 222 British Literature: Victorian through Contemporary
- LIT 211 American Literature II: 1865 to the Present

2. Upper-Division English Elective Courses: In addition to core courses, students must take three 300- or 400-level English courses (9 Credits):

*Students must elect nine (9) credits, one course from each of the following designations: **A** (Medieval through early modern British Literature); **B** (Enlightenment through Romantic British Literature, or Pre-1865 American Literature); **D** (diversity).*

3. An approved complementary course from a discipline other than English (3 Credits).

4. Seminar Course: LIT 494—Senior Seminar (3 Credits).

LIT 494 Senior Seminar

5. Foreign Language: Two years of a SINGLE modern or classical language or the equivalent (200+ level) score on a competency exam is required.

B. The proposed language for the Catalog is:

- 1. General English Department Copy

Current Copy:

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Now, more than a century old, this department offers a B.A. with options in Literature, Creative Writing, Teaching, Film Studies, and Linguistics, and graduate degrees in Creative Writing (M.F.A.), Literature (M.A.), and Teaching (M.A.).

New Copy (text added is in bold):

Now, more than a century old, this department offers a B.A. with options in Literature, **Literature and Environment**, Creative Writing, Teaching, Film Studies, and Linguistics, and graduate degrees in Creative Writing (M.F.A.), Literature (M.A.), and Teaching (M.A.).

2. Add to list of Options

Subject	Type	Option
English	Bachelor of Arts	Literature and Environment

3. Add to list of courses

Literature and Environment

LENV 202	The Environmental Imagination
LENV 373	Literature and the Environment
LENV 402	Literature in Place
LENV 422	Ecocritical Theory and Practice

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

The three new courses required to implement the option (LENV 202 The Environmental Imagination and LENV 402 Literature in Place, as well as LENV 422 Ecocritical Theory and Practice, formerly offered as LIT 420 Ecocriticism) will be under review by the Faculty Senate/ASCRC/BOR beginning Fall semester 2014. To date, the option has been approved by the Literature faculty and Departmental approval is expected in the Fall of 2014. Should the option receive approval at all levels, new coursework can be offered in the Fall of 2015 and the entering class of 2014-15 can also use already existing coursework offered this academic year towards the option, grandfathering in such credits. Given the current demand for existing environmental classes, enrollment in the options courses is reasonably predicted to be at or near the caps for these undergraduate classes.

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 needed. The English Department currently has four faculty who regularly teach a range of undergraduate (and graduate) environmental literature courses (Cook, Gilcrest,

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Economides and Moore). Existing faculty can cover all required coursework for the option. Moreover, English Department faculty beyond the four who would teach required courses regularly offer classes that could be counted as “electives” within the option. Courses focusing on ecologically important genres (such as the Pastoral) and/or upon important ideas associated with natural philosophy (such as Darwinian evolution) are frequently offered by English Department faculty other than Cook, Gilcrest, Economides or Moore. Additional faculty colleagues are considering how courses not typically taught with an environmental focus might be reconceived within the ambitions of the new option.

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 to implement successfully the option in Literature and Environment.

7. Assessment

How will the success of the program be measured?

The option’s success will be measured by increases in the number of new applicants to the B.A Literature program, both those who wish to pursue the option and those who, while not wishing to concentrate in this area, may have an interest in taking selective courses within the option as part of their B.A. Literature degree. Another measure of success will be the number of current English students who decide to take the option. One further measure will be the number of Literature and Environment option students who are accepted into graduate programs in English, particularly those with a focus in Literature and the Environment and Ecocriticism. Students taking the option will also be surveyed at the end of their degree to assess the effectiveness of the program and to make improvements where necessary.

8. Process Leading to Submission

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 genesis of the proposed option can be traced to ongoing, long-term discussions among faculty in the English Department who teach courses in Literature and Environment and Ecocriticism. There are two key factors that are currently contributing to our sense that a Literature and Environment option needs to be established: 1. the rapid expansion of Literature and Environment within academic programs over the past decade 2. the need to create a clear and competitive profile for the English B.A. program that makes use of UM’s distinctive regional situation and environmental concerns. Literature and Environment has been a steadily expanding area of scholarship, as evidenced by the proliferation of journals and monographs focusing upon research in this field. As UM is an institution noteworthy for its innovative ecological programs (EVST, Environmental Philosophy, the Global Climate Change Institute, the Wilderness and Civilization program), it is incongruous that the English department currently lacks a structured course of study in Literature and Environment. Faculty doing research in this area have long been teaching courses focusing on environmental relationships, and there is a sense that there would be strong student interest in a formalized Literature and Environment option. Recently, our department came to a consensus that it makes sense, at a time when student enrollment has been in flux, to foreground Literature and Environment as an area of strength in order to boost recruitment. An option would allow us to advertise a structured curriculum in Literature and

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Environment and would be a means of providing students with formal recognition on their transcripts that they have successfully completed concentrated study in this area.

March 5-6, 2015

ITEM 166-1015+R0315

Request for Authorization to Offer a Minor in Business Administration – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to offer a minor in Business Administration.

EXPLANATION

The minor in Business Administration is a collection of courses that are a subset of the existing courses that all business majors take. The minor requires nine courses, totaling 27-28 credits, completed over three or more semesters. This course set will ground non-business majors in the fundamental theories and practices of accounting, economics, statistics, and information systems (lower division “indicator” courses) and management, finance, marketing, and law (upper division “core” courses). Students will apply for admission to the minor after completing the indicator courses with grades of C or better. After acceptance into the minor, they will complete the upper minor core courses. Non-business students who complete the minor will have a multi-disciplinary perspective, be more marketable in the workforce, and be better positioned to enter a graduate program in business.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1015+R0315

Meeting Date: March 5-6

Institution: University of Montana

CIP Code: 52.0201

Program Title: Minor in Business Administration

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 X B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 X 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The minor in Business Administration is a collection of courses that are a subset of the existing courses that all business majors take. The minor requires nine courses, totaling 27-28 credits, completed over three or more semesters. This course set will ground non-business majors in the fundamental theories and practices of accounting, economics, statistics, and information systems (lower division "indicator" courses) and management, finance, marketing, and law (upper division "core" courses). Students will apply for admission to the minor after completing the indicator courses with grades of C or better. After acceptance into the minor, they will complete the upper minor core courses. Non-business students who complete the minor will have a multi-disciplinary perspective, be more marketable in the workforce, and be better positioned to enter a graduate program in business.

Montana Board of Regents
CURRICULUM PROPOSALS

1. Overview

The School of Business Administration (SoBA) currently offers a Bachelor of Science in Business Administration (BSBA) degree with six majors. SoBA proposes adding a minor in Business Administration, which would be available to any non-business, degree-seeking undergraduate student.

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

The minor in Business Administration is a collection of courses that are a subset of the existing courses that all business majors take. The minor requires nine courses, totaling 27-28 credits, completed over three or more semesters. This course set will ground non-business majors in the fundamental theories and practices of accounting, economics, statistics, and information systems (lower division “indicator” courses) and management, finance, marketing, and law (upper division “core” courses). Students will apply for admission to the minor after completing the indicator courses with grades of C or better. After acceptance into the minor, they will complete the upper minor core courses. Non-business students who complete the minor will have a multi-disciplinary perspective, be more marketable in the workforce, and be better positioned to enter a graduate program in business.

3. Need

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

The University of Montana (UM) provides undergraduate education grounded in the liberal arts and has many successful professional programs. Other departments have expressed an interest in having a business minor available for their students to supplement their non-business major. The minor fills this need.

Dean Jim McKusick, Davidson Honors College, expressed support similar to what we heard from all corners of campus [see Appendix A]:

“Yes, I would strongly encourage SoBA to explore the possibility of a business minor. We advisors in the DHC often get inquiries about a business minor from students in many different majors. They tend to see it as the perfect complement to a major in which they may end up as the sole proprietor of a business or professional practice, or if they might wish to climb the ‘corporate ladder’ at some future date. So we see strong interest in entry-level business courses, and potentially a business minor, from students in pre-medical, pre-veterinary, pre-pharmacy, and other pre-health care tracks, along with pre-law, Communication Studies, Journalism, and many other pre-professional fields, including some you might not expect like Media Arts, Theatre, Political Science, English, and History.”

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

Students, regardless of major, become employed in various organizations. All organizations, including government agencies and nonprofits, involve finances, people, and operations that are central subjects of business courses. It is hard to identify a career that would not benefit from some basic business knowledge. Physical therapists, pharmacists, freelance artists, journalists, archeologists, scientists, politicians, educators, ecologists, psychologists, computer programmers – all will be responsible for managing finances, people, and operations as they progress in their careers. In addition, learning the foundational theories and practice of business will create better, more knowledgeable consumers of goods, services, and information.

Montana Board of Regents
CURRICULUM PROPOSALS

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

We expect strong demand for the business minor. Sandi Nelson, SoBA Advising Coordinator, sent a request for feedback to members of an advising listserv on campus. She received 20 responses, including two from deans and a number from departmental advisors, Admissions, Athletics, Undergraduate Advising, TRiO, and Career Services. These responses are summarized in Appendix A.

4. Institutional and System Fit

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

The minor will be housed in the School of Business Administration, which also offers six different undergraduate majors in the BSBA degree. Each of these majors requires math, WRIT 101, and a common group of 14 core classes and two capstone classes, which is then supplemented by courses in the major. Of these 14 core classes, nine will be in the minor.

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

Though not required to offer the minor curriculum, SoBA faculty has proposed making two changes to the BSBA so that minors could seamlessly convert to a BSBA major, if they so choose: (1) move BGEN 320E Business Ethics & Social Responsibility to the sophomore level, and (2) adjust prerequisites in several existing core business courses required for the major. These two changes will put minors and BSBA students on the same course sequencing track.

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

There are no other closely related programs at the institution, other than the BSBA discussed in 4.A.

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

The minor in Business Administration will serve to advance at least three of the five strategic initiatives detailed in the UM Strategic Plan.

Education for the Global Century:

- Strengthen Foundational and nationally distinctive academic programs
- Enhance discovery and innovation through two-year, baccalaureate, and graduate education

The minor is a foundational program that will foster innovation by adding business skills to skills students acquire in the liberal arts, sciences, and professional programs.

Discovery and Creativity to Serve Montana and the World:

- Advance today's discoveries to create tomorrow's products

The minor can better equip students in taking their scientific/creative discoveries to the marketplace.

Dynamic Learning Environment

- People – Lead in recruiting, retaining, and developing the highest quality students, faculty, administrators and staff

UM Admissions staff have expressed great excitement over the potential the minor has to recruit students to UM. It can also serve as a resource for staff on campus who are interested in furthering their own professional development by acquiring foundational business knowledge and skills. Most

Montana Board of Regents

CURRICULUM PROPOSALS

of the courses required for the minor are offered each summer, which should allow flexibility for completing the minor and increase summer enrollments in those courses.

- 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 minor in Business Administration is not a stand-alone, degree-seeking program. Four out of the six other four-year institutions in the MUS system offer a minor in business to their non-business students. UM-Western and UM-Missoula are currently the only two that do not.

5. 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.**

Students earning a Minor in Business Administration will:

1. Complete five indicator courses with grades of C or better in each course.
2. Apply to the Minor in Business Administration in the semester in which 60 credits, including indicator coursework, will be completed. A 2.0 overall GPA is required for admission.
3. After admission to the Minor in Business Administration, complete four upper minor core courses with grades of C- or better in each course.

Indicator Courses (C or better), 15-16 cr.:

ACTG 201 Principles of Financial Accounting
ACTG 202 Principles of Managerial Accounting
BMIS 270 MIS Foundations for Business
ECNS 201S Principles of Microeconomics
Statistics [STAT 216 or PSYX 222 or SOC 202 or FORS 201]

Upper Minor Core (C- or better), 12 cr.

BGEN 361 Principles of Business Law
BFIN 322 Business Finance
BMGT 340 Management and Organizational Behavior
BMKT 325 Principles of Marketing

Students must take 9 of the 12 upper minor core credits in residence at UM-Missoula. Students who intend to Minor in Business Administration but who have not yet met the above requirements in 1) and 2) may enroll in 100- and 200-level business courses only, assuming prerequisites are met. Students must be fully admitted as a minor in Business Administration to enroll in the upper minor core courses. Note that most other 300- and 400-level business courses are restricted to business

Montana Board of Regents
CURRICULUM PROPOSALS

majors only and not open to business minors. Prerequisites and major restrictions are strictly enforced in all business courses.

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

All courses in the minor in Business Administration are currently offered because they are also required for all current BSBA majors. Any student at UM can currently enroll in the indicator courses, if they meet the prerequisites. If approved for the 2015-2016 catalog, the minor will begin accepting applications immediately, and accepted students can begin the upper minor core courses. Completion of the minor can be accomplished in 1-3 semesters after admission, depending on the student's major course schedule.

Conservative projections of students completing the minor in Business Administration are as follows:

- 30 in 2015-2016
- 45 in 2016-2017
- 60 in 2017-beyond

(estimated using the proportion of business minors to majors awarded at MSU-Bozeman in AY13, extrapolated to UM's School of Business Administration degrees awarded in AY13)

Because the minor will require at least three semesters to complete (due to various course prerequisites), we expect the total number of students actively working towards a minor to reach 180 per year after the minor is fully implemented.

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.

Seven of the courses in the minor in Business Administration are currently offered regularly by the School of Business Administration. The remaining two (statistics and ECNS 201) are offered by the College of Humanities and Sciences or the College of Forestry and Conservation. Because many majors already require a statistics course, the four acceptable statistics courses should see less impact. Using the above projections, the impact of adding one section for each course should be minimal. However, if the minor exceeds enrollment expectations, additional resources will be needed to meet the increased demand.

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.

Students applying to the minor in Business Administration will likely seek advising from SoBA advising staff. In addition, these students will be participating in the SoBA's Career Development curriculum that is embedded in select core classes. Both Advising and Career Development activities are currently staffed with part-time SoBA employees. SoBA will plan to meet the increased demand for these services at the projection levels. If the minor exceeds enrollment expectations, additional resources will be needed to meet the increased demand.

7. Assessment

How will the success of the program be measured?

Broadly, success of the program will be measured by the number of students opting to complete the minor in Business Administration. SoBA has a comprehensive assessment program for its BSBA degree.

Montana Board of Regents

CURRICULUM PROPOSALS

Students pursuing the minor will be taking some of the classes where SoBA conducts program assessments for the BSBA, giving us the opportunity to evaluate how minors in Business Administration are performing.

8. Process Leading to Submission

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 response to sustained requests from other departments and students on campus, we considered the minor in Business Administration while updating the SoBA's Strategic Plan. The first draft of the updated Strategic Plan was created in January 2014 after a series of meetings with faculty and staff over the last two years, and it included exploring a minor in Business Administration. The SoBA Undergraduate Curriculum Committee (UCC) researched possible forms of the curriculum in Spring 2014. As part of this process, the UCC reached out for feedback from academic advisors and departments outside of SoBA (see Appendix A). We also asked some junior/senior students seeking both a BSBA and a non-business degree what they would have done had there been a business minor, to gauge whether we would lose many majors by offering the minor (very few indicated they would have opted for a minor *instead of* a major in a business field). SoBA Faculty overwhelmingly approved the minor in Business Administration on March 26, 2014. On April 28, 2014, 33 academic advisors and other UM staff attended an information session, where we presented the draft curriculum. Feedback was overwhelmingly positive. We also discussed the potential Minor with student peer advisors in the SoBA advising office and with the Dean's Business Advisory Council, again with overwhelmingly positive responses. Finally, we communicated with affected departments, inviting feedback. No suggested revisions or protests were received.

Montana Board of Regents

CURRICULUM PROPOSALS

APPENDIX A

Drye, Karissa	Admissions	Hi Sandi, I know that in the world of recruitment this would be a great asset. We certainly have a lot of prospective students who voice an interest in a business minor. I feel that it would be a benefit to our recruitment efforts. ~Karissa
Howard, Beth	OSS, UAC	This would be a terrific option. At Rutgers we used to have a "Business Certificate" program. It was basically a lower-core plus a few upper division courses, many of which were offered over the summer. By using the summer courses, it reduced the strain on the Business School already stretched too thin resources and ramped up summer enrollment.
Pengelly Drake, Laure	DHC	Sandi, I think students would be interested, depending on the content, of course. I have many students who are eager for part but not all of the curriculum or who don't have time for another major.
Zellmer, Cuaresma, Jennifer	Athletics	Hey lady, good morning. J We get about 4 a year who want to add a business minor, not realizing that we currently don't have one, and multiple recruits that ask about it from our end. Just a little info. for ya even our numbers are smaller. J Have a great day. Thanks, Jen~
Berg, Robyn	CS	In response to your Business minor question, I have had inquiries from students about that before. Not a huge number but a few.
O'Connor, Jana	History, LS	Hi Sandi, I've had several students over the last few years show interest in minoring in Business. Possibly more would be...

Montana Board of Regents

CURRICULUM PROPOSALS

McKusick, James	DHC	<p>Dear Sandi,</p> <p>Yes, I would strongly encourage SoBA to explore the possibility of a business minor. We advisors in the DHC often get inquiries about a business minor from students in many different majors. They tend to see it as the perfect complement to a major in which they may end up as the sole proprietor of a business or professional practice, or if they might wish to climb the “corporate ladder” at some future date. So we see strong interest in entry-level business courses, and potentially a business minor, from students in pre-medical, pre-veterinary, pre-pharmacy and other pre-health care tracks, along with pre-law, Communication Studies, Journalism, and many other pre-professional fields, including some you might not expect, like Media Arts, Theatre, Political Science, English, and History.</p> <p>About 35% of our 700 DHC students are pursuing a minor program (or second major) and thus I anticipate there could be strong demand from this exceptionally talented and motivated population of Honors College students. If you build it, they will come!</p> <p>I would be glad to meet and consult with the group that is exploring a possible business minor, if that would be helpful. To arrange a meeting with me, or to invite me to attend a meeting, please call the DHC at 243-2541.</p>
Terpe, Brandie	Missoula College	<p>Sandi,</p> <p>I’ve definitely had students express an interest in a business minor, both as a Missoula College advisor and when I advised in Sociology. I think it would be fantastic if SoBA is able to add a minor!</p>
Dowling, Denise	Journalism	<p>Sandi,</p> <p>Journalism students are VERY interested in a business minor and so is the faculty! Explore away!</p>
Szalda-Petree, Allen	Psych	<p>Sandi, I think a minor in business would be very attractive to a subset of Psychology majors. I can’t really say how many but a handful of students each year ask about how to meld Psychology and Business. In particular, we have students interested in coupling their Psychology degree with human resources, advertising, marketing, etc. I think this would also be very attractive for our majors that are thinking of graduate studies in Industrial/Organizational Psychology. If you have any other questions you can reach me at this email or X2091.</p>

Montana Board of Regents

CURRICULUM PROPOSALS

Hoell, Melanie	Humanities	<p>Hello Sandi,</p> <p>I could sell a ton of business minors across the 23 departments/programs in the College of Humanities and Sciences. I also see a fair number of former business students who didn't like/didn't do well in the more quantitative courses in the Business lower core who switch into Communication Studies and I bet they'd love to be able to put those courses they took to work in a Business minor!</p> <p>I've been telling students since I first heard a rumor about this minor (5-10 years ago?) to "hang on, we'll get there!"</p>
Hibbard, Heather	TRiO	<p>Hi Beth,</p> <p>YES. Many of the students I work with just assume there's an option for a business minor, and want to declare that as their minor. They're always disappointed when I tell them it's not an option.</p>
Minnick, Cheryl	Career Services	<p>Sandi:</p> <p>Every day I am asked about business minors from majors across campus, including one this morning in Wildlife Biology! This is one of the best supplementary minors you could add to your programs in SoBA, but you may need to hire more advisors to handle the additional student population! I could, if you want, survey each student in my office the next few days and let you know.</p>
Samson, Darlene	TRiO	<p>HI Sandi,</p> <p>Beth forwarded your message about exploring the idea of a business minor and I wanted to tell you I get that question all the time! Many of my advisees say they want a fundamental business foundation that may be helpful with another major. I think a minor with the possibility of a couple credits in a "track" (ie accounting, management, finance, etc.) would be a great addition to the school of business!</p>
Sillars, Alan	Psych	<p>Sandi,</p> <p>I've often had students in Communication Studies ask about a Business minor. We encourage students to consider minors and double majors as a way to add versatility and get the most of their degree. Many of our students who now pursue an Option in Organizational Communication (or certificate in Entertainment Management, etc.) would likely expand Business coursework into minor. The minor might provide a way for students in various majors to balance applied and liberal arts education.</p>
Harris, Grace	Athletic	<p>Hi Sandi,</p> <p>Yes, I have students ask me every semester, "Can I minor in business?". Not only that, but recruits and parents always ask the same thing. Glad you guys are in the exploratory phase- how exciting.</p>

Montana Board of Regents

CURRICULUM PROPOSALS

Fiore, Christine	Psych Chair	Sandi, would echo Allen's comments. I have had many students over the years express an interest in a business minor and regret that it wasn't a possibility. Thanks for exploring this.
Bosak, Keith	PTRM	Hi Sandi, Shonna Trowbridge in CFC forwarded me your email about getting feedback on a possible business minor. I am the Program Director for the PTRM program in CFC and I think a business minor would be a great offering for our students. PTRM majors already take a number of business courses and our faculty think a minor in business would compliment the PTRM major very well. In fact, every year we have several students ask us about a business minor. I also spoke with Beth Dodson, the Forestry Program Director and she thinks some of her students would be interested.
Watson, Vicki	EVST	Hi Sandi – concerning a Business minor. Env Studies students & faculty are very interested. We are often asked about a business minor, and it would be good to see that happen. Note that we have a Sustainable Business emphasis area in EVST (see below). So our sustainability emphasis students would likely do a minor in Business. Sustainable Business: Students focus on creating and maintaining enterprises that meet social needs sustainably. Students should take ENST 291 (EVST 210) or TASK 160S (BUS 160S); ACTG 201 & 202 (ACCT 201 & 202); MIS 257 (IS 257); ENST 476 or 487 (EVST 485 or 487); COMM 379; MGMT 457. Students should also intern with a local sustainable business or the Sustainable Business Council. Students interested in this focus area are encouraged to double major in Business Management and in addition to the core Business courses take some of these courses: MGMT 348, 430, 445, 446, 458.
Dalenberg, Douglas	Econ	Dear Sandi, I believe that a fair number of economics majors would be interested in a business minor. Our program is not huge and it is hard to judge how many would actually complete the minor, but if I were just going to take a wild guess, I would guess 5-10 per year.

March 5-6, 2015

ITEM 166-1016+R0315

Request for Authorization to Retitle the Community Health options in the HHP B.S. and M.S. to Community Health and Prevention Science – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to retitle the Community Health options in the HHP BS and MS to Community Health and Prevention Science.

EXPLANATION

Changing the name of the Community Health options in the HHP BS and MS degrees to Community Health and Prevention Sciences would mirror the nation's growing interest in prevention and more accurately reflect the strong focus our curricula and experiential learning approaches place on prevention and wellness. We would also be able to better distinguish our program from others, enhance marketing strategies for our undergraduate and graduate programs and attract more students to these degree options.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1016+R0315

Meeting Date: March 5-6, 2015

Institution: University of Montana

CIP Code: 51.2208

Program Title: Community Health and Prevention Science Options (in HHP BS and MS)

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 X B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 X 1. Re-titling an existing major, minor, option or certificate

 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The central focus of our Community Health program is primary prevention. Unlike other health-related professions that have some familiarity with the science of prevention, our community health students are singularly trained in the art and science of prevention. Graduates of our community health program recognize the interrelationship among all aspects of health and wellness (social, emotional, mental, spiritual and physical) and possess a solid background in the social and behavioral sciences. Success in this field requires the ability to apply scientific and evidence-based knowledge and theory to strategies focused on preventing disease and improving wellness at individual, community, and global levels.

Skyrocketing health care costs in the United States have brought the value of prevention to the forefront of national policy. The first ever National Prevention and Health Promotion Strategy (Office of the Surgeon General, 2011) is focused on moving Americans from a system of sick care to one based on prevention and wellness. In addition, the Affordable Care Act recognizes that focusing on prevention and wellness is key to improving the health of Americans (National Prevention Council, 2013). Corporations, insurance companies, hospitals and other non-profit organizations are increasingly turning to prevention with the hope of reducing health care costs and improving quality of life.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Changing the name of the Community Health options in the HHP BS and MS degrees to Community Health and Prevention Sciences would mirror the nation's growing interest in prevention and more accurately reflect the strong focus our curricula and experiential learning approaches place on prevention and wellness. We would also be able to better distinguish our program from others, enhance marketing strategies for our undergraduate and graduate programs and attract more students to this degree option.

March 5-6, 2015

ITEM 166-1017+R0315

Request for Authorization to Retitle Women's and Gender Studies Program and Minor to Women's, Gender, and Sexuality Studies Program – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to retitle its program and minor in Women's and Gender Studies to Women's, Gender, and Sexuality Studies.

EXPLANATION

The Women's and Gender Studies Program (WGSS) at the University of Montana requests to change its name to the Women's, Gender, and Sexuality Studies Program to better reflect the existing curriculum; to better serve student and faculty research and interest; and to follow national trends in interdisciplinary programs connected to the study of gender and sexuality. This name change is a result of consultation with an outside evaluator along with student and WGSS faculty input. We also request to retitle the minor in Women's and Gender Studies.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1017+R0315

Meeting Date: March 5-6, 2015

Institution: University of Montana-Missoula

CIP Code: 05.0299

Program Title: Women's, Gender, and Sexuality Studies Program and Minor retitled

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 X B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 X 1. Re-titling an existing major, minor, option or certificate

 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 X 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The Women's and Gender Studies Program (WGSS) at the University of Montana requests to change its name to the Women's, Gender, and Sexuality Studies Program to better reflect the existing curriculum; to better serve student and faculty research and interest; and to follow national trends in interdisciplinary programs connected to the study of gender and sexuality. This name change is a result of consultation with an outside evaluator along with student and WGSS faculty input. We also request to retitle the minor in Women's and Gender Studies.

March 5-6, 2015

ITEM 166-1018+R0315

Request for Authorization to Create a Biochemistry Minor – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana-Missoula to create a minor in Biochemistry.

EXPLANATION

The biochemistry program at the University of Montana-Missoula requests approval to add a minor in biochemistry to complement the BS in biochemistry currently offered by the program. The minor will be an important addition to the curricula of the University of Montana allowing students in related fields – biology, chemistry, computer science, geosciences, neuroscience and pre-medical – to develop competence in biochemistry to augment their primary field of study.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1018+R0315

Meeting Date: March 5-6

Institution: University of Montana-Missoula

CIP Code: 26.02

Program Title: Biochemistry minor

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 X B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 X 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The Biochemistry Program at the University of Montana-Missoula requests approval to add a minor in Biochemistry to complement the BS in Biochemistry currently offered by the program. The minor will be an important addition to the curriculum of the University of Montana-Missoula allowing students in related fields to develop competence in biochemistry to augment their primary field of study. Besides the benefit to students in the closely related majors of chemistry and biology, the minor would be an important augmentation to the curriculum of Computer Science majors interested in the burgeoning field of bioinformatics, to Geoscience majors interested in metabolic processes associated with energy and fuel production, to pre-medical students, particularly those pursuing majors in the humanities or social sciences and to students pursuing the proposed BS degree in Neuroscience to deepen their understanding of the biochemistry of neural processes.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

A biochemistry minor will provide a conduit for non-majors in related fields to develop a basic competence in biochemistry that will augment their expertise in their primary field of study, allowing them to work at the interface of biochemistry and their primary field of study. The scientific endeavor has become increasingly interdisciplinary. The biochemistry minor will prepare these students to work in a cross-disciplinary team-oriented research environment. The minor will also provide more rigorous training in biochemistry for pre-health professions students majoring in the social sciences and humanities.

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

The biochemistry minor provides a 29 credit track that will allow students to become conversant in biochemistry. The minor requires foundational training in chemistry, biology from a biochemical standpoint, and upper division coursework in biochemistry, including an upper level laboratory course. The minor provides the tools necessary for students in other science specialties to work in a multidisciplinary environment with scientists who are specialists in biochemistry. It will also be an important curricular option for pre-professional students planning careers in health and medicine.

3. Need

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

Science has become an increasingly interdisciplinary endeavor. Scientists working in teams must be able to communicate across disciplinary boundaries. The biochemistry minor will provide students whose primary expertise is in another discipline with a sufficient knowledge of biochemistry to excel as part of a cross-disciplinary research team.

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

Increasingly biology has become a more molecular discipline requiring an understanding of biochemistry to work at the frontier. Similarly, biochemical applications of chemistry have become increasingly important as evidenced by the upsurge of the hybrid chemical subspecialties of bioorganic, bioinorganic, bioanalytical and biophysical chemistry. A firm foundation in biochemistry is essential in all of these hybrid sub-disciplines of chemistry. Biochemistry is also essential to computer scientists who plan to work in the increasingly important field of bioinformatics. The proposed minor will provide sufficient training for students developing expertise in chemistry, biology or computer science to work at the interface with biochemistry. For pre-professional students in medicine or other healthcare fields, this minor will better prepare them for and increase their competitiveness for acceptance into the professional school of their choice.

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

The Biochemistry Program was approved by the BOR five years ago. The number of BS in Biochemistry majors has grown rapidly from approximately 5 majors in the first year to about 55

Montana Board of Regents
CURRICULUM PROPOSAL FORM

majors at the end of the 2013-2014 academic year. The demand for the BS degree has been robust and we expect a similar demand for the minor.

4. Institutional and System Fit

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

Biochemistry is by its nature an interdisciplinary endeavor. Faculty members from the Department of Computer Science, the Department of Chemistry & Biochemistry and the Division of Biological Sciences contribute to the biochemistry curriculum. Thus, it is natural for the Biochemistry Program to develop a minor that will enhance the ability of young scientists to work at the interface of multiple disciplines.

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

No, it would not require changes to any existing programs at the University of Montana-Missoula.

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

There are no closely related minors at the University of Montana-Missoula.

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

Partnering for Student Success: The biochemistry minor provides an integrated early approach that emphasizes training at the interface of several scientific disciplines. The minor will increase student engagement by introducing students to the excitement of an interdisciplinary approach to science.

Education for the Global Century: Preparing students to work in 21st science requires the ability to work in interdisciplinary teams where communication across disciplinary boundaries is essential. These are the type of graduates who can become leaders and make a difference for the economic fabric of Montana. The biochemistry minor will provide students from other scientific disciplines the ability to be leaders in interdisciplinary research teams.

Discovery and Creativity to Serve Montana and the World: Today's scientific problems are complex and multidisciplinary. The ability to be conversant in multiple disciplines is essential for modern interdisciplinary research. The biochemistry minor will help to foster interdisciplinary research among our graduates.

Dynamic Learning Environment: The faculty of the Biochemistry Program as a group is actively engaged in externally funded research related to human disease, cancer and the intricate processes that regulate life at the molecular level. They bring their excitement for working at the forefront of science into the classroom, creating a dynamic learning environment.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

A biochemistry minor is also offered at Montana State University-Bozeman. However, all courses are in place to provide this offering at the University of Montana-Missoula and the constituency for this minor is adequate at both institutions to justify offering a biochemistry minor at both institutions.

5. 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.**

Proposed language for the website:

The minor in biochemistry will give students in other scientific disciplines a firm grounding in biochemistry providing them with the tools to work at the interface of their core discipline and biochemistry. Students will be well prepared to contribute to multi-disciplinary research teams working on problems related to human disease, mining large databases such as the human genome, development of biosensors, biochemical approaches to renewable energy production, among others. The biochemistry minor will also provide essential training for students interested in medical school or other health-related professions who choose to major in other science or non-science disciplines, enhancing their competitiveness for the professional program of their choice.

Proposed language for the catalog:

The biochemistry minor provides students with foundational training in chemistry and biology from a biochemical perspective. A full year of upper division biochemistry will provide students with depth in chemical processes that are the foundation of life. A full semester upper level laboratory course provides training in modern biochemical methods.

Requirements for the Biochemistry Minor (total credits: 29)

Biochemistry (all these courses are required: 4 credits)

BCH 110 Introductory Biology for Biochemists 3 cr

BCH 111 Introductory Biology for Biochemists Laboratory 1 cr

Chemistry (all these courses are required: 16 credits)

CHMY 141 College Chemistry I 5 cr

CHMY 143 College Chemistry II 5 cr

Montana Board of Regents
CURRICULUM PROPOSAL FORM

CHMY 221 Organic Chemistry I 3 cr

CHMY 223 Organic Chemistry II 3 cr

Upper Division Biochemistry (all these courses are required: 6 credits)

BCH 480 Advanced Biochemistry I 3 cr

BCH 482 Advanced Biochemistry II 3 cr

BCH 486 Biochemistry Research Laboratory 3 cr

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

All courses are currently in place to implement the biochemistry minor. We will advertise the new minor on our website and in first year classes required by other science majors. Material will be provided to faculty in other scientific disciplines and to pre-medical advising so that they can alert their students to the new minor and also discuss it with prospective students interested in attending the University of Montana. We expect that growth in the minor will be similar to that for the major – reaching about 50 minors over the course of five years.

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 members are necessary to implement the biochemistry minor. All required courses are currently offered by existing 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.

None are necessary. All required courses are presently in place and are offered annually.

7. Assessment

How will the success of the program be measured?

The success of the program will be assessed based on growth in numbers of minors. We will seek feedback from students and faculty in other disciplines to adjust the minor as needed.

8. Process Leading to Submission

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

The genesis of this program was a self-evaluation conducted by the faculty of the Biochemistry Program during the 2013-2014 academic year. The program evaluated the progress of both its undergraduate degrees, the BS in Biochemistry and the BS in Biochemistry, Health Professions option and its graduate degrees, MS and PhD in Biochemistry & Biophysics. After seeking feedback from the chair of the Department of Chemistry & Biochemistry, Dr. Chris Palmer, and the Associate Dean of Biological Sciences, Dr. Charles Janson, a written report was presented to the Dean of Humanities & Sciences, Dr. Chris Comer. These discussions identified a need for a minor in biochemistry. The faculty of the Biochemistry Program then discussed the optimal course configuration for a minor and approved the proposed set of requirements.

March 5-6, 2015

ITEM 166-1027+R0315

Request for Authorization to Create an UM-Missoula and FVCC Partnership in Elementary Education – University of Montana-Missoula

THAT

The Board of Regents of Higher Education grants approval for the University of Montana (UM) to provide a cohort distance delivery of the existing B.A. in Elementary Education in collaboration with Flathead Valley Community College (FVCC).

EXPLANATION

This is a joint agreement to deliver UM's Bachelor of Arts in Elementary Education via distance techniques at Flathead Valley Community College (FVCC). Students in the program would be admitted to UM's undergraduate program but would be able to stay in Kalispell and learn with faculty from UM for each course in the two-year professional education program during the junior and senior years. Given a sufficient annual cohort of eight students in the Flathead Valley, UM faculty would travel twice per semester to teach at FVCC face-to-face and beam back to cohort students in Missoula.

ATTACHMENTS

Academic Proposal Request Form

Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1027+R0315

Meeting Date: March 5-6, 2015

Institution: University of Montana

CIP Code: 13.1202

Program Title: UM-Missoula—FVCC Partnership in Elementary Education BA

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

X C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

X 1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

This is a joint agreement to deliver UM's Bachelor of Arts in Elementary Education via distance techniques at Flathead Valley Community College (FVCC). Students in the program would be admitted to UM's undergraduate program but would be able to stay in Kalispell and learn with faculty from UM for each course in the two-year professional education program during the junior and senior years. Given a sufficient annual cohort of eight students in the Flathead Valley, UM faculty would travel twice per semester to teach at FVCC face-to-face and beam back to cohort students in Missoula.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

The University of Montana-Missoula has a four-year 120-credit Bachelor of Arts in Elementary Education. That approved degree program includes a two-year 60-credit Teacher Education Program. This proposal for a UM-Missoula–FVCC Partnership in Elementary Education would allow UM-Missoula to deliver this 60-credit Teacher Education Program in the Flathead Valley at Flathead Valley Community College via distance techniques including interactive television, Learning Management System software (UMOnline.umt.edu), and face-to-face learning opportunities.

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

UM-Missoula will collaborate with FVCC to deliver the existing BA in Elementary Education via distance technologies. Twice each semester, UM-Missoula faculty will travel to FVCC and beam back instruction to UM-Missoula students. The remainder of the instructional time will be beamed from the UM-Missoula campus to our remote students, residents of the Flathead Valley. This benefits both UM-Missoula and Flathead Valley residents as this allows for increased opportunities for residents of the Flathead Valley to become elementary teachers and increases UM-Missoula enrollments in the elementary education program.

3. Need

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

UM-Missoula is responding to an RFP from FVCC to deliver a highly effective elementary education bachelor's degree to a remote part of the state without an existing elementary education degree program.

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

Students attending UM's Mountain Campus will interact with students from the Flathead Valley. These interactions are intended to strengthen the program, allowing students to share diverse experiences via the 60-credit, four-semester professional education program. Students residing in the Flathead Valley will participate in a field experience each semester in the program. These experiences will broaden the base of schools we currently work with beyond the 50-mile radius of Missoula.

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

This program will require a minimum of eight students per year in order for Curriculum and Instruction faculty to travel to the Flathead Valley twice per semester. This was calculated as part of the fees charged to deliver the program.

4. Institutional and System Fit

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

We fully intend to make this one program with students from multiple regions. The existing UM-Missoula program will be delivered via distance technologies.

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

No.

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

This is the existing program at UM-Missoula delivered via distance technologies.

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

This program will specifically address the following strategic issues in the Strategic Plan UM 2020: Building a University for the Global Century: Partnering for Student Success, Education for the Global Century, and Dynamic Learning Environment.

Our program addresses the strategic issue of Partnering for Student Success through the preparation of highly effective K-8 classroom teachers. These teachers will be well-prepared for a career in the profession of teaching, and most importantly, encouraging K-8 students to learn and continue to learn beyond the 8th grade, beyond high school graduation, and through a college education.

We address the strategic issue of Education for the Global Century through a degree program that specifically addresses the interconnectedness of our world, preparing elementary teachers able to prepare students for this changing world. Additionally, we developed a 2+2 MOU with FVCC so as to seamlessly allow transition of FVCC students into our two-year, junior/senior year professional education degree program as delivered at FVCC through distance techniques, the future of our shrinking world.

Furthermore, we address the strategic issue Dynamic Learning Environment through the delivery of a degree program at a remote site to the Missoula Mountain Campus. Our existing students are passionate about learning, graduate to teach in elementary schools throughout the state and region, and prepare future college students also interested in continued discovery and growth.

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 in our part of the state. An Interagency Agreement between UM-Missoula and FVCC is included (see Appendix A).

5. Program Details

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- 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.**

Because this professional teacher education program is already in existence, just not delivered via distance, the following is from the existing catalog. It reflects the two-year professional education program that will be delivered via distance techniques to residents of the Flathead Valley.

Teacher Education Program Professional Licensure Courses

Rule: All courses are required.

Minimum Required Grade: C-

60 Total Credits Required

Level 1

Rule: All courses must be completed concurrently.

Note: Students are required to complete EDU 397 Methods: Early Numeracy PK-4 (3 credits) and EDU 397 Methods: PK-3 Early Reading (3 credits).

<u>Show All Course Descriptions</u>	Course	Credits
<u>Show Description</u>	EDU 222 - Educational Psych Child Dev	3 Credits
<u>Show Description</u>	EDU 338 - Academic Interventions	3 Credits
<u>Show Description</u>	EDU 395 - Clinical Experience:	1 Credits
<u>Show Description</u>	EDU 397 - Methods: Early Numeracy PK-4	3 Credits
	EDU 397 – Methods: PK-3 Early Reading	3 Credits
Minimum Required Grade: C-		13 Total Credits Required

Level 2

Rule: All courses must be completed concurrently.

Note: Students are required to complete EDU 397 Methods: PK-8 Language Arts (3 credits).

Montana Board of Regents
CURRICULUM PROPOSAL FORM

<u>Show All Course Descriptions</u>	Course	Credits
<u>Show Description</u>	EDU 346 - Exceptionalities	3 Credits
<u>Show Description</u>	EDU 370 - IntegTech into Educ	3 Credits
<u>Show Description</u>	EDU 395 - Clinical Experience:	1 Credits
<u>Show Description</u>	EDU 397 - Methods: Teaching & Assessing	3 Credits
<u>Show Description</u>	EDU 407E - Ethics & Policy Issues	3 Credits
<u>Show Description</u>	ENST 472 - Gen Sci: Conserv Ed	3 Credits
Minimum Required Grade: C-		16 Total Credits Required

Level 3

Rule: All courses must be completed concurrently.

Note: Students must complete EDU 495 Clinical Experience: Level 3 (1 credit).
Students must complete four EDU 497 methods courses, including 5-8 Mathematics (3 credits), K-8 Social Studies (3 credits), K-8 Science (3 credits), 4-8 Reading (3 credits).

<u>Show All Course Descriptions</u>	Course	Credits
<u>Show Description</u>	EDU 340 - Classroom Management	3 Credits
	EDU 497 – Methods: 5-8 Math	3 Credits
	EDU 497 – Methods: K-8 Social Sci	3 Credits
	EDU 497 – Methods: K-8 Science	3 Credits
<u>Show Description</u>	EDU 497 – Methods: 4-8 Reading	3 Credits
	EDU 495 —Clinical Experience: Level 3	1 Credit
Minimum Required Grade: C-		16 Total Credits Required

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Level 4

Rule: All courses must be completed concurrently.

Note: EDU 494 is completed for 1 credit and EDU 495 is completed for 14 credits.

<u>Show All Course Descriptions</u>	Course	Credits
<u>Show Description</u>	EDU 494 - Seminar:Refl Pract & App Rsrch	1 Credits
<u>Show Description</u>	EDU 495 - Student Teaching	14 Credits
Minimum Required Grade: C-		15 Total Credits Required

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

The four-semester program above is implemented as a cohort. Students must have completed all the pre-requisites for the program before beginning in the Fall 2015. A minimum of eight students from the Flathead Valley is required for UM faculty to make the two face-to-face visits for each course per semester. Our existing program has a minimum of 15 students and the new Flathead Valley residents would become part of our existing program. The program requires a minimum of six students from the Flathead Valley in order to have any students from the region participating in the distance only components.

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.

Yes. Faculty will be compensated for travel and time to deliver the program at FVCC. The cost of this is born by the students through an increased fee of approximately \$165 per semester.

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.

FVCC will charge a fee for use of a classroom each semester. The cost of this is included in the above-mentioned fee per student. Interactive television, UOnline.umt.edu learning management system, online library resources, and faculty computers are all required and already provided for through funding for the existing program.

7. Assessment

How will the success of the program be measured?

Montana Board of Regents
CURRICULUM PROPOSAL FORM

As we implement any new program in Curriculum and Instruction, we evaluate its effectiveness. We will use a plan-act-reflect/revise cycle to collect data from all students on their perceptions and satisfaction with the cohort model, the distance delivery model, and the professional teacher education model. Additionally, we will collect data from each of the faculty teaching in the program. We will also seek out suggestions for how to improve the program and build those revisions into the program after careful discussion with the faculty. This information will be collected each semester using surveys and interviews by faculty and staff not teaching in the program, thus removed from the day-to-day delivery of the program. Information from this assessment cycle will be reported annually to the faculty of the Department of Curriculum and Instruction and the Dean of the Phyllis J. Washington College of Education and Human Sciences.

8. Process Leading to Submission

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

Flathead Valley Community College recently sent out a request for proposals to provide a Bachelor's Degree in Elementary Education on site in Kalispell. The University of Great Falls had previously provided this program at FVCC, however, that program had become too costly for Flathead Valley residents and was ending. Our response was to use distance technologies to decrease costs and still provide our nationally recognized professional teacher education program in elementary education to those residents of the Flathead Valley who are place-bound or unable to move to Missoula for a two-year program. Our goal was not to sell our program short, but rather, to provide Montana residents of the Flathead Valley with an alternative to earning the elementary education degree.

A team of Curriculum and Instruction faculty who teach in the elementary education program cohort initially developed the proposed distance program. This program was developed in consultation with the Dean of the Phyllis J. Washington College of Education and Human Sciences, the Dean of the School of Extended and Lifelong Learning, the Director of Field Experiences, the PJW College of Education and Human Sciences Academic Advisor, the Director of Instructional Design and Development Support of the UOnline program, doctoral students in Curriculum and Instruction, and conference calls with FVCC students, staff, and administrators. A memorandum of understanding, a 2+2 MOU (see Appendix B) was signed in March 2014 between FVCC and UM-Missoula and paved the way towards this agreement, however, it is not a requirement that students earn the first two years of the degree program at FVCC, nor that all those students remain in Kalispell for the bachelor's degree, as our on-campus program welcomes those that prefer to learn in a face-to-face environment. Presidents of both FVCC and UM-Missoula signed an Interagency Agreement (see Appendix A). Curriculum and Instruction faculty discussed the proposal electronically and face-to-face over the summer and voted on September 26, 2014 to move forward with this proposed distance delivery of our program.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix A

Interagency Agreement

INTERAGENCY AGREEMENT

This agreement, made and entered into between: The University of Montana hereinafter called "UM" and Flathead Valley Community College, hereinafter called "FVCC"

WITNESSETH:

WHEREAS, UM desires to offer an upper division undergraduate program in Elementary Educations in the Flathead Valley; and

WHEREAS, FVCC wishes to facilitate opportunities which allow Flathead Valley residents to complete upper division undergraduate program in Elementary Education without having to leave the area; and

WHEREAS, a joint effort by the parties hereto will make it possible to accomplish their objectives.

IT IS AGREED BY THE PARTIES AS FOLLOWS:

1. FVCC will provide sufficient Interactive Television (ITV) enabled classroom space for UM upper division elementary education classes.
2. FVCC will seek to provide sufficient office space for UM faculty and staff, based on space availability, at FVCC's discretion.
3. FVCC will provide access to media services and equipment to UM as described in Attachment A.
4. FVCC Bookstore will order and sell books for UM classes upon request from UM.
5. FVCC will provide access to photocopy and mail service for UM instructors. UM will be billed quarterly for any usage of these services.
6. UM will provide informational materials on their programs to FVCC for distribution to students.
7. UM will have access to Library services and computer labs
FVCC will charge UM \$30 per student per credit to cover facilities costs including classroom and office use and student access to Library services and computer labs which includes printing. UM students who are taking 4 or more credits in a semester may opt-in to the FVCC Student Health Clinic by paying the semester fee within the first 5 class days of each semester (currently the fee is \$45 per semester). The clinic provides primary and urgent medical care.
8. FVCC and UM agree to jointly promote the program through news releases and other promotional activities.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

9. UM students who are taking 4 or more credits in a semester may opt-in to the FVCC Student Health Clinic by paying the semester fee within the first 5 class days of each semester (currently the fee is \$45 per semester). The clinic provides primary and urgent medical care.
10. UM will be responsible for any legally mandated costs associated with its offering educational opportunities at FVCC.
11. INDEMNIFICATION: UM and FVCC shall be responsible for claims and damages to persons or property resulting from acts or omissions on the part of itself, its employees, or its officers. Neither party assumes any responsibility to the other party for the consequences of any act or omission of any person, firm or corporation not a party to this agreement. Neither party to this Agreement shall be considered the agent of the other party.
12. INSURANCE: UM maintains liability and property insurance coverage in the coverage prescribed in Title 2, Chapter 9, M.C.A. for state government entities. UM will provide FVCC with a Certificate of Insurance upon request.
13. TERM OF AGREEMENT: The term of this Agreement shall be August 1, 2014 – July 30, 2014. Upon mutual agreement, UM and FVCC may extend this Agreement for up to six (6) additional yearly terms; or execute another Agreement.



Royce C. Engstrom
President
University of Montana

9/29/14
Date



Jane A. Karas, Ph.D
President
Flathead Valley Community College

July 25, 2014
Date

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Attachment A

The Media Center's hours of operation are as follows:

Fall and Spring Semesters

Monday – Thursday, 8am to 8pm

Fridays, 8am to 4:30pm

Summer Semester (typically)

Tuesday – Thursday, 8am to 2pm

Closed weekends, school breaks, and holidays.

The cost to be billed for extending the Media Center's hours of operation beyond their normal hours of operation will be at a rate of \$20 per hour.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Attachment B

Effective per term of agreement listed above, and until further notice, Flathead Valley Community College's normal hours of operation are as follows:

Monday through Thursday, college doors open at 7am and close at 10pm.
On Fridays, college doors open at 7am and close at 7:45pm.
On Saturdays, college doors open at 8am and close at 4:45pm.

The college will be closed on the following holidays for the fiscal years _____:

July 4 for Independence Day
September 5 for Labor Day
November 27, 28 for Thanksgiving
December 23, 24, 26, 27 for Christmas
December 28 instead of October 11 for Columbus Day
December 29 instead of November 11 for Veteran's Day
December 30, 31 for New Year's Day
January 16 for Martin Luther King Day
February 20 for President's Day
May 29 for Memorial Day

The cost to be billed for extending the college's hours of operation beyond the above mentioned days and hours may be billed \$40/hour in addition to all other charges described herein.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix B

Memorandum of Understanding

Flathead Valley Community College & The Phyllis J. Washington College of
Education and Human Sciences – University of Montana



Phyllis J. Washington
College of Education and Human Sciences
Office of the Dean
The University of Montana
32 Campus Drive
Missoula, Montana 59812-6336

MEMORANDUM OF UNDERSTANDING (MOU)

FLATHEAD VALLEY COMMUNITY COLLEGE & THE PHYLLIS J. WASHINGTON COLLEGE
OF EDUCATION AND HUMAN SCIENCES - UNIVERSITY OF MONTANA

MARCH 20, 2014

In the interest of increasing the number of Montanans possessing college degrees, faculty and staff members from Flathead Valley Community College and the Phyllis J. Washington College of Education & Human Sciences at the University of Montana have created a 2 + 2 plan of study for students interested in studying elementary education and matriculating from an Associate of Arts (AA) program at Flathead Valley Community College to the Phyllis J. Washington College of Education and Human Sciences, to obtain a Bachelor of Arts (BA) in Elementary Education (ELED).

The plan of study requires the student to:

1. Complete the Associate of Arts degree program with an emphasis in Elementary Education
2. Complete the ELED "Lower Core" requirements with grades of "C-" or higher
3. Attain 60 or more credits
4. Maintain a cumulative GPA of 2.75 or higher
5. By September 15 if completing the AA during the fall semester or by February 15 if completing the AA during the spring semester:
 - a) Contact the ELED Advising Office and
 - i. Apply for admission to the ELED major, at which time the ELED Advising Office will verify the above admission requirements have been met; and
 - ii. Attend a group or individual advising session for that chosen major, where the student will receive an advising PIN.
 - b) Complete application paperwork to become a University of Montana student (required for pre-registration of UM campus classes)

Upon completion of these requirements the student will be accepted into the Teacher Education Program in Elementary Education with junior standing.

This MOU is intended to be a "transfer" plan for students seeking two levels of degree – an AA followed by a BA in Elementary Education – and does not apply to other associate degrees. Students who do not adhere to the plan will likely delay their attaining the AA and/or BA in ELED.

To ensure ongoing communication and to refine the agreement and advising documents, representatives from Flathead Valley Community College and the Phyllis J. Washington College of Education and Human Sciences at the University of Montana will meet annually, on a mutually agreeable date, to review and refine the agreement and attendant advising plan. Such review may include review of course syllabi, changes to courses required in the plan, sequencing of courses in the plan, or other changes to align the 2 + 2 with the BA ELED requirements.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

This MOU may be discontinued by either unit by written notice provided by September 1 in the academic year prior to termination of the agreement. Notification of this memorandum will be provided to all relevant faculty and campus committees.



Jane A. Karas
President
Flathead Valley Community College



Kristen Jones
VP of Instruction and Student Services
Flathead Valley Community College



Perry J. Brown
Provost and VP for Academic Affairs
University of Montana



Roberta D. Evans
Dean
Phyllis J. Washington College of Education
and Human Sciences
University of Montana

March 5-6, 2015

ITEM 166-1501+R0315

Request for Authorization to Establish a Bachelor of Science Degree in Nursing – Montana Tech of the University of Montana

THAT

In accordance with Montana University System Policy, the Board of Regents of Higher Education authorizes Montana Tech of The University of Montana to establish a four-year Bachelor of Science Degree in Nursing.

EXPLANATION

The nursing department at Montana Tech of The University of Montana (Montana Tech) is seeking approval to offer a pre-licensure registered nurse program leading to the Bachelor of Science degree in nursing in lieu of the existing associate of science degree pre-licensure program. The department will continue to offer the existing post-licensure baccalaureate program for registered nurses (RN-BSN program).

The Institute of Medicine's (2010) landmark report, *The Future of Nursing*, calls for increasing the number of baccalaureate prepared nurses to 80% by 2020. Currently only 55% of registered nurses are prepared at the baccalaureate or graduate degree level. The need for more baccalaureate-prepared nurses is based on several factors: the increasing complexity of health care and patient care, research that has linked an increased educational level of nurses with improved patient outcomes (Aiken, 2003) and the changing hiring practices of employers of registered nurses (RWJF, 2013). Further, students coming to Montana Tech are increasingly seeking a baccalaureate program in nursing, rather than an associate degree program. Conversion of the current ASN program to a four year baccalaureate program will give our graduates the competitive advantage they need to meet their career goals.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **166-1501+R0315**

Meeting Date: **March 5-6, 2015**

Institution: **Montana Tech**

CIP Code: **51.38**

Program Title: **Bachelor of Science Degree in Nursing**

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 the [Academic, Research and Student Affairs Handbook](#).

A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

1b. Withdrawing a program from moratorium

2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

4. BAS/AA/AS Area of Study

B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

1. Re-titling an existing major, minor, option or certificate

2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

3. Merging or re-titling a department

4. Revising a program (Curriculum Proposal Form)

5. Distance or online delivery of an existing degree or certificate program

6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

 C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

 1. Adding an option within an existing major or degree (Curriculum Proposal Form)

 X **2. Consolidating existing programs and/or degrees** (Curriculum Proposal Form)

 D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. **Re-titling a degree (ex. From B.A. to B.F.A)** (Curriculum Proposal Form)

2. **Adding a new minor or certificate where there is no major or option in a major** (Curriculum Proposal Form)

3. **Establishing a new degree or adding a major or option to an existing degree** (Curriculum Proposal Form)

4. **Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit** (Curriculum Proposal Form or Center Proposal Form)

5. **Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit** (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

Montana Tech requests authority to grant a four-year, Bachelor of Science Degree in Nursing.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

The nursing department at Montana Tech of The University of Montana (Montana Tech) is seeking approval to offer a pre-licensure registered nurse program leading to the Bachelor of Science degree in nursing in lieu of the existing associate of science degree pre-licensure program. The department will continue to offer the existing post-licensure baccalaureate program for registered nurses (RN-BSN program). The change is in response to demands for baccalaureate preparation for nurses within the local, state, and national community; demands from current and future students for registered nursing education at the baccalaureate degree; and reports by the Institute of Medicine calling for an increase in the number of baccalaureate nursing graduates. The establishment of an entry-level baccalaureate nursing program at Montana Tech is further supported by the academic goals of our students, employment opportunities, and recent clinical affiliates' hiring policies. As health care becomes more complex and the need for nurses with higher levels of education increases, so does the need for more baccalaureate programs. The goal is to ultimately improve the quality of healthcare in Montana and improve the health of our Montana citizens.

The curriculum will be a 120 credit program that meets the graduation requirements of Montana Tech and meets standards of the Commission on Collegiate Nursing Education (CCNE), the agency that currently accredits the RN-BSN program at MT Tech. The proposal has the support of the campus, the other nursing programs in the state, and has Level 1 approval from the MT Board of Nursing. Nursing courses will begin the second semester of the sophomore year and build on a base of arts and sciences offered on the Montana Tech campus. Prerequisite courses taken at other institutions will be accepted according to MUS transfer policies. The first students will be admitted Spring Semester, 2016. Graduates of the program will be eligible to sit for the NCLEX-RN, the licensing examination for registered nurses.

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

The curriculum will require 120 credit hours of study. The first three semesters of the program will contain general education courses that meet the university graduation requirements and the pre-requisites for the nursing program. The 45 hours of pre-requisite non-nursing courses will include 6 credits of communication, 18 credits of physical sciences, 9 credits of social science, 6 credits of humanities, and 6 credits of mathematics/statistics. A two credit course introducing students to the profession of nursing will complete the pre-requisites. The final five semesters of the program will focus on baccalaureate level nursing theory and clinical practice. Seventy-three credits of nursing courses will prepare students for entry into nursing practice in a range of health care settings with populations that cover the life span. A total of 1013 hours of clinical practice will be included in the curriculum. Graduates will be eligible to sit for the NCLEX-RN, the licensing examination for registered nurses as well as be prepared for entry to graduate nursing programs at other institutions. The curriculum is consistent with professional and accreditation standards.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

3. Need

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

The Institute of Medicine's (2010) landmark report, *The Future of Nursing*, calls for increasing the number of baccalaureate prepared nurses to 80% by 2020. Currently only 55% of registered nurses are prepared at the baccalaureate or graduate degree level. The need for more baccalaureate-prepared nurses is based on several factors: the increasing complexity of health care and patient care, research that has linked an increased educational level of nurses with improved patient outcomes (Aiken, 2003) and the changing hiring practices of employers of registered nurses (RWJF, 2013). Further, students coming to Montana Tech are increasingly seeking a baccalaureate program in nursing, rather than an associate degree program. Conversion of the current ASN program to a four year baccalaureate program will give our graduates the competitive advantage they need to meet their career goals.

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

All new and prospective nursing students have been notified during campus visits or advising about the proposed conversion of the 72-credit Associate of Science Degree to a 120-credit direct entry Bachelor of Science Degree during the 2014-2015 academic year. Any student who has been accepted into the ASN degree program will have the opportunity to graduate. Individual academic plans will be developed for a student who fails a course or who, for personal reasons, needs to re-enter the degree program. This may involve taking in more students in one or two semesters of the ASN program if necessary.

Nursing is the largest healthcare profession in the United States with more than 2.6 million registered nurses. Despite the large numbers, more qualified nurses must be prepared in order to meet the growing demand for health care and to replace the large number of current nurses who are reaching retirement age (AACN, 2009). According to the Bureau of Labor Statistics (2014), employment of registered nurses is expected to grow 19% in the next ten years due an aging population, need for management of chronic conditions, and increased access to healthcare. Generally, a registered nurse with at least a bachelor's degree in nursing will have better job prospects than those without a bachelor's degree.

Graduates of the Montana Tech nursing program, the third largest program on campus, currently enjoy a 100% placement rate upon graduation. The graduates help to meet the healthcare needs of the citizens of Montana and beyond. Specifically in the Butte/SilverBow area, St. James Healthcare is the number one employer of Montana Tech graduates regardless of discipline. Due to the acuity of patients in today's complex healthcare environment, this hospital (as do Barrett Hospital and Healthcare in Dillon and Deer Lodge Medical Center) now requires all new nurses to either have a baccalaureate degree or be actively enrolled in a BSN-completion program. In addition to these facilities, a host of community organizations have expressed support for an entry level baccalaureate nursing program to help better serve the healthcare needs of the citizens of Southwest Montana. These organizations include: Butte Head Start, National Center for Health Care Informatics, Public Housing Authority of Butte, Montana, Southwest Montana Community Health Center, and Belmont Senior Center. (See: Appendix C for letters of support.) Therefore, the conversion of the current associate degree to an entry level baccalaureate degree not only helps with increasing the supply of baccalaureate prepared nurses in Montana, but it will also result in nurses educated at Montana Tech graduating with the educational requirements of our regional employers.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

The State of Montana currently has only two pre-licensure nursing programs at the baccalaureate level: Montana State University in Bozeman that has five instructional sites, and Carroll College in Helena. Both of these programs have significantly more qualified applicants than they can accept, thus there is definitely demand for an additional baccalaureate entry program. Specific to demand in the Montana Tech recruitment area, a survey was conducted in fall 2013 with all pre-nursing, Associate of Science, and Bachelor of Science Degree (RN-BSN) nursing students with a 73.5% return rate. The majority of these students (79%) reported that they came to Montana Tech to receive both the ASN and the BSN degrees in nursing. 81% reported they would choose Montana Tech if only a bachelor's degree in nursing was offered. The results of this survey were presented to campus administrators, faculty, area health care professionals, clinical partners and the current nursing program's advisory board. All supported seeking approval to convert the current ASN program to an entry level baccalaureate program.

4. Institutional and System Fit

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

The proposed entry-level nursing baccalaureate degree will replace the current associate degree in nursing program. It will have the same 120-credit and general education requirements as do Montana Tech's other non-engineering bachelor's degrees thus retaining its position and consistency with other Montana Tech and MUS programs and policies. The proposed change supports the Mission and Vision of Montana Tech, promotes employment of the graduates, and helps meet the healthcare demands of Montana. The current on-line RN-BSN degree will continue to be available to graduates from ASN programs in Montana or other states.

This degree change does not require alterations in any Montana Tech programs, thus no programmatic impacts are anticipated at the institution. All pre-requisite courses have been discussed with the appropriate departments and are supported by the College of Letters, Sciences, and Professional Studies and the Montana Tech Curriculum Review Committee. The generation of additional student credit hours is viewed as positive for the department and institution as a whole.

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

The proposal involves the conversion of the current 72-credit Associate of Science Degree into a 120-credit direct entry Bachelor's Degree, thus resulting in the discontinuation of the Associate of Science Degree offering. Montana Tech will continue to offer the current on-line RN-BSN Degree.

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

No other department at Montana Tech offers a nursing program. The proposed curriculum will be the first entry-level four year bachelor of science in nursing degree awarded by Montana Tech.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

The Nursing Department's mission statement incorporates aspects of Montana Tech's mission statement. Montana Tech "through exemplary undergraduate education, workforce development, research, and service builds on a strong heritage in engineering, science, and technology blending theory with practice in meeting the changing needs of society and the responsible development and use of natural resources." The mission, goals, and expected nursing student outcomes are congruent with the mission of Montana Tech and they reflect the relevant professional nursing standards and guidelines for preparing professional nurses. Montana Tech's Nursing Department is dedicated to preparing generalist nurses by exposing them to diverse nursing roles through a variety of community settings. The Nursing Department stresses the importance of being both an intellectual leader and a role model in the nursing profession. The Nursing Department's goals are congruent with Montana Tech's core themes and with the various internal objectives that are fundamental aspects of the mission. The programmatic change is consistent with Montana Tech's overall objective to create and sustain strong graduate, baccalaureate, associate and certificate programs, to facilitate student learning through diverse delivery and educational experiences, to prepare students for employment, graduate school, or professional school, and to provide a gateway for transfer education and a solid general education foundation.

In addition to advancing the strategic goals of Montana Tech, the proposed degree program will also help to advance the three goals contained in the MUS Strategic Plan (Access & Affordability, Workforce & Economic Development, and Efficiency & Effectiveness).

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.

Montana State University is the only state supported school that offers baccalaureate entry level nursing education. In a letter of support written by Dean Helen Melland, she states "there are more than enough students interested in enrolling in a baccalaureate entry program to go around. The MSU College of Nursing accepts 196 students as upper division (junior level) baccalaureate students each year. Additionally, we receive about twice that many applicants. Last year, for example, we had 414 applicants for 196 slots for the traditional program and another 150 applications for the 32 accelerated program slots. By establishing a second state supported baccalaureate entry nursing program in the state, you will be responding to a demand by prospective students".

Montana Tech will continue to offer the on-line RN-BSN Degree and partner with Montana's associate of science degree programs. The continuation of the on-line RN-BSN Degree is part of Montana Tech's commitment to support Round Four of the TAAACT grant in the State of Montana.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

5. Program Details

The proposed 120 credit Bachelor of Science degree program will require four years (full-time) of academic course work. Students who successfully complete the 120 credit curriculum will be eligible to take the NCLEX-RN exam required for licensure as a registered nurse.

- 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.**

Montana Board of Regents
CURRICULUM PROPOSAL FORM

BACHELOR OF SCIENCE IN NURSING (120 CREDITS)				
Update 12/15/14				
<i>Pre Nursing Courses</i>				
Semester One				
Semester Planned	Course When Completed	Title	Credits	Semester Completed And Grade
	BIOH 201	Anatomy and Physiology I-Lecture	3 ⁺	
	BIOH 202	Anatomy and Physiology I-Lab	1 ⁺	
	WRIT 121	Introduction to Technical Writing	3	
	MATH 121	College Algebra	3 ⁺	
	NUTR 258	Fundamentals of Nutrition	2 ⁺	
	PSYX 100	Introduction to Psychology	3	
		Semester Credits	15	
Semester Two				
	BIOH 211	Anatomy and Physiology II Lecture	3 ⁺	
	BIOH 212	Anatomy and Physiology II Lab	1 ⁺	
	SOCI 101	Introduction to Sociology	3	
	CHMY 121	Intro to General Chemistry	3 ⁺	
	CHMY 122	Intro to General Chemistry Lab	1 ⁺	
	PSYX 230	Developmental Psychology	3 ⁺	
	NRS105	Perspectives in Professional Nursing	2	
		Semester Credits	16	
Semester Three				
	BIOM 250	Microbiology for Health Science Lecture	3 ⁺	
	BIOM251	Microbiology Lab	1 ⁺	
	STAT 216	Intro to Statistics or Biostatistics	3	
	HCI 316	Healthcare Ethics	3	
	ANTY 122	Minorities/Humanities	3	
	WRIT322W	Advanced Business Writing	3 ⁺	
		Semester Credits	16	
45 Credits Non-Nursing courses General Education Requirements				
	Communication:	Introduction to Technical Writing	3	
		Advanced Business Writing	3	
	Physical Science	Anatomy and Physiology I	4	
		Anatomy and Physiology II	4	
		Intro To General Chemistry	4	
		Microbiology for Health Science	4	
		Fundamentals of Nutrition	2	
	Social Science:	Sociology	3	
		Lifespan Developmental Psychology	3	
		Psychology	3	
	Humanities:	Healthcare Ethics	3	
		Minorities	3	
	Math:	Algebra	3	
		Biostatistics	3	

Montana Board of Regents
CURRICULUM PROPOSAL FORM

75 Credits Nursing Courses				
NOTE: Admission in Nursing Program required before taking Semester Four Coursework				
		<i>Nursing Courses</i>		
		<i>Semester Four</i>		
	NRSG 205	Nursing Pharmacology	3	
	NRSG 210	Foundations of Professional Nursing	4	2 lecture, 2 clinical/lab
	NRSG 215	Assessment & Health Promotion	3	2 lecture, 1 lab
	NRSG 220	Pathophysiology	4	
		Semester Credits	14	
		<i>Semester Five</i>		
	NRSG 305	Nursing for Healthy Aging	3	2 lecture, 1 clinical
	NRSG 310	Management of Adults with Common Health Alterat	7	4 lecture, 3 lab/clinical
	NRSG 315	Evidence Based Practice	3	
	NRSG 320	Nursing Informatics	3	
		Semester Credits	16	
		<i>Semester Six</i>		
	NRSG 330	Mental Health Nursing	4	2.5 lecture, 1.5 clinical
	NRSG 335	Management of Adults with Complex Health Alterat	4	2 lecture, 2 clinical
	NRSG 340	Transitional Care	3	
	NRSG 345	Advanced Nursing Concepts and Clinical Reasoning	3	2 lecture, 1 SIM
		Semester Credits	14	
		<i>Semester Seven</i>		
	NRSG 405	Pediatric Nursing	4	2.5 lecture, 1.5 clinical/S
	NRSG 415	Nursing care of the Child-bearing Family	4	2.5 lecture, 1.5 clinical
	NRSG 425	Concepts of Family Nursing	3	2 lecture, 1 clinical
	NRSG 430	Healthcare from the Patient's Perspective	3	2 lecture, 1 clinical
		Semester Credits	14	
		<i>Semester Eight</i>		
	NRSG 435	Community Nursing: A Population Perspective	4	2 lecture, 2 clinical
	NRSG 440	Current Trends in Healthcare	2	
	NRSG 445W	Global Health, Healthcare Policy and Finance	3	
	NRSG 450	Leading and Managing: A Capstone Experience	6	2 lecture, 4 clinical
		Semester Credits	15	
		Total credits for curriculum is 120		
Estimated Clinical Hours :		Semester Four~~	135	
		Semester Five~~	180	
		Semester Six~~	202.5	
		Semester Seven~~	225	
		Semester Eight~~	270	
		TOTAL~~~	1013	

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

ASN Workload Hours

264.96

ASN FTE

8.83

	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021
ASN																		
New Students	18	18	18	18	18	18	18	0	0	0	0	0	0	0	0	0	0	0
Returning Students	54	54	54	54	54	54	54	54	36	18	0	0	0	0	0	0	0	0
Total Students	72	72	72	72	72	72	72	54	36	18	0	0	0	0	0	0	0	0
ASN Workload Hours	264.96	264.96	264.96	264.96	264.96	264.96	257.14	104.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASN FTE	8.83	8.83	8.83	8.83	8.83	8.83	8.57	3.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BSN Additional Workload Hours

33

BSN Additional FTE

1.10

BSN (4 year)																		
New Students	0	0	0	0	0	0	0	20	20	20	20	20	20	20	20	20	20	20
Returning Students	0	0	0	0	0	0	0	0	20	40	60	80	100	100	100	100	100	100
Total Students	0	0	0	0	0	0	0	20	40	60	80	100	120	120	120	120	120	120
BSN Workload Hours	0.00	0.00	0.00	0.00	0.00	0.00	40.82	193.48	297.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96
BSN FTE	0.00	0.00	0.00	0.00	0.00	0.00	1.36	6.45	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93

TOTAL (ASN & BSN)																		
New Students	18	18	18	18	18	18	18	20	20	20	20	20	20	20	20	20	20	20
Returning Students	54	54	54	54	54	54	54	54	56	58	60	80	100	100	100	100	100	100
Total Students	72	72	72	72	72	72	72	74	76	78	80	100	120	120	120	120	120	120
ASN & BSN Workload Hours	264.96	264.96	264.96	264.96	264.96	264.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96	297.96
ASN & BSN FTE	8.83	8.83	8.83	8.83	8.83	8.83	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93

BSN Completion (1 Semester)																		
Total Students	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
BSN Completion Workload Hours	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00
BSN Completion FTE	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10

Department Total (ASN, BSN, BSN Completion)																		
Total Students	112	112	112	112	112	112	112	114	116	118	120	140	160	160	160	160	160	160
Workload Hours	297.96	297.96	297.96	297.96	297.96	297.96	330.96	330.96	330.96	330.96	330.96	330.96	330.96	330.96	330.96	330.96	330.96	330.96
FTE	9.93	9.93	9.93	9.93	9.93	9.93	11.03	11.03	11.03	11.03	11.03	11.03	11.03	11.03	11.03	11.03	11.03	11.03

Montana Board of Regents
CURRICULUM PROPOSAL 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.

The conversion of the existing ASN program into an entry level baccalaureate degree program will not require additional faculty, classes, or library resources.

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.

There are adequate clinical facilities in the area to support the baccalaureate program. The Nursing Department has excellent classroom and laboratory space, including a simulation lab.

7. Assessment

How will the success of the program be measured?

Processes are in place for regular collection of aggregate student outcome data. A comprehensive evaluation plan is required for specialty accreditation. At a minimum, NCLEX-RN pass-rates for first time takers, graduation rates, employment rates, and satisfaction data obtained from students, alumni, and employers are tracked. The following table identifies Montana Tech’s evaluation plan.

Program Evaluation Plan

Item for evaluation	Data Collection and participants	Time Frame	Benchmark	Responsible Party
1.Student learning outcomes	Faculty, students, preceptors evaluations of students completing capstone course	End of senior II semester	70% of students rated as meeting goals	Faculty, Department Head
2.Aggregate program outcomes to include:	Faculty, Department head	Annually	100% of goals relating to NCLEX-RN pass rates, completion, and employment rates met.	Department Head
a. NCLEX-RN pass rates	MT BON reports	Annual and 5-year trends	80% pass rate	Department Head

Montana Board of Regents
CURRICULUM PROPOSAL FORM

b. Student attrition/ completion rates	MT Tech records	Annually	70% of students will complete the program within 8 semesters of admission to nursing courses.	Registrar Department Head
c. Employment rates	Career Services survey	Annually	At least 70% employed within 6 months of graduation	Career Services
3.Student satisfaction	Student course evaluations	End of each course	70% of students will be satisfied with the nursing courses and program .goals	Faculty Department Head
	Graduation survey	Annual, Prior to graduation		
4.Employer satisfaction with graduates	Advisory council meetings	Semi-annually	70% of employers will be satisfied with graduates	Department Head Faculty
5.Alumni satisfaction	Alumni survey	1 &5 yrs. Post graduation	70% of alumni will report satisfaction with the program at 1 and 5 years	Department Head Faculty
6.Adequacy of the physical and fiscal resources	Faculty, department head. Review of programmatic needs.	Annually	80% of all fiscal and physical requests are met with the current budget	Department Head Faculty

Montana Board of Regents
CURRICULUM PROPOSAL FORM

			and capital equipment	
--	--	--	-----------------------	--

8. Process Leading to Submission

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

ACTIVITY	DATE	STATUS
1) Conduct an advisory board meeting	April 2014	Completed
2) Submit letter of intent to Montana Board of Nursing (MBON)	September 2014	Completed
3) Gather Data for the feasibility study which includes: <ul style="list-style-type: none"> a. Population data from the last three years; Workforce supply and demand data from last year addressing total state resources and nursing education needs within the state b. Purpose and classification of program c. Availability of qualified faculty d. Budgeted faculty positions e. Availability of adequate clinical and academic facilities f. Evidence of financial resources g. Anticipated student population h. Tentative time table for planning and initiating the program 	May/Sept 2014	Completed

Montana Board of Regents
CURRICULUM PROPOSAL FORM

<p>i. Consideration of how proposed program may affect other nursing programs in the state; and indication that plans and the feasibility study regarding the proposed program have been shared with the directors of existing programs in the state.</p>		
<p>4) Submit feasibility study to Montana Board of Nursing</p>	<p>September 2014</p>	<p>Completed</p>
<p>5) Receive approval of feasibility study by MBON</p>	<p>October 2014</p>	<p>Approved October 2014</p>
<p>6) Hire consultant to assist with development of the BSN curriculum</p>	<p>June 2014</p>	<p>On-going</p>
<p>7) Present curriculum to Montana Tech Curriculum Review Committee</p>	<p>December 2014</p>	<p>Approved December 2014</p>
<p>8) Submit Level II to University of Montana administration</p>	<p>January 2015</p>	
<p>9) Submit request for program change to MBOR</p>	<p>January 2015</p>	
<p>10) Develop curriculum for BSN</p>	<p>August 2014- April 2015</p>	
<p>11) Submit Phase II to MBON for approval</p>	<p>December 2014</p>	
<p>12) Final approval of Phase II from MSBON</p>	<p>January 2015</p>	
<p>13) Final approval from MBON and MBOR</p>	<p>March 2015</p>	
<p>14) Site visit from Board of Nursing</p>	<p>Fall 2015</p>	
<p>15) Students begin generic BSN program</p>	<p>January 2016</p>	

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Letters of Support

1. Montana Tech of the University of Montana
2. Butte Head Start
3. Deer Lodge Medical Center
4. Helena College, University of Montana
5. Missoula College, University of Montana
6. Montana State University
7. National Center for Health Care Informatics
8. Public Housing Authority of Butte Montana
9. Salish Kootenai College
10. St. James Healthcare
11. Southwest Montana Community Health Center

Montana Board of Regents
CURRICULUM PROPOSAL FORM



Office of the Chancellor

September 23, 2014

Cynthia Gustafson
Executive Director
Montana State Board of Nursing
301 South Park
Helena, Montana 59602

Dear Ms. Gustafson,

Montana Tech is seeking to convert its 72 credit Associate of Science in Nursing (ASN) degree to a four year entry level Bachelors of Science in Nursing (BSN) degree. This change is motivated in part by an Institute of Medicine Report (IOM), *The Future of Nursing: Leading Change, Advancing Health (2011)*, which recommended that 80% of nurses be prepared at the baccalaureate level by 2020. This IOM 80/20 goal was endorsed by nurse administrators and educators, who gathered together to form the Montana Center to Advance Health through Nursing (MT-CAHN) in 2013. In response to the IOM recommendation, St. James Healthcare in Butte is now requiring that all new nursing hires either possess a BSN or be actively enrolled in a program leading to a BSN. As St. James Healthcare put it in their letter of support for the proposed conversion:

Because it is so important that our nurses provide our patients with the clinical skills and education attained during the completion of a bachelor's degree program, we strongly support the development of programs that prepare student nurses to practice in today's complex healthcare environment. We appreciate your consideration of Montana Tech's goal to provide such a program.

Currently students completing the ASN program can continue in a BSN completion program, which is accredited by the Commission on Collegiate Nursing Education (CCNE). The BSN completion program will continue to be available for ASN students graduating from other Montana programs.

Montana Tech currently employs 10 full-time nursing faculty members. The Director of the Nursing Program, Karen Vandaveer, has 25 years of experience in nursing education and is well qualified to lead the program. Five of the faculty members are tenured and five are tenure track. All of the faculty hold Master's degrees and are licensed registered nurses in the State of Montana. Four of these faculty members are currently pursuing doctoral degrees and are split evenly between the associate and assistant professor ranks. Additionally the program annually employs one visiting faculty member. **Other than possibly converting the visiting assistant professor to a tenure track assistant professor, no additional faculty members are required to support the proposed conversion.**

The nursing program currently is housed in the Health Sciences Building on the north campus of Montana Tech. This building underwent extensive renovation in 2013 and has five classrooms, three laboratories, and a computer laboratory, all of which are dedicated to nursing education. Two of the laboratories support state of the art nursing simulation that is integrated into the curriculum. The simulation laboratories have also recently attracted several gifts including in 2013 a \$60,000 gift from St. James Healthcare and more recently this past summer receiving a \$125,000 gift with the majority placed in an endowment for maintaining the simulation space and equipment. **Current physical facilities are adequate to support the proposed conversion.**

MontanaTech

1300 West Park Street | Butte, Montana 59701 | (406) 496-4129 | Fax (406) 496-4387 | chancellor@mtech.edu | www.mtech.edu

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Ms. Cynthia Gustafson
September 23, 2014
Page 2

In conclusion Montana Tech fully and enthusiastically supports the proposed conversion of the Associate of Science in Nursing (ASN) degree to a four year entry level Bachelors of Science in Nursing (BSN) degree.

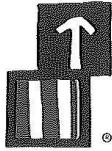
Best regards,



Donald M. Blacketter
Chancellor

cc: Doug Abbott, Doug Coe, Karen Vandaveer

Montana Board of Regents
CURRICULUM PROPOSAL FORM



HRC XII
496-4975

BUTTE HEAD START

HUMAN RESOURCES COUNCIL, DISTRICT XII
P.O. BOX 608 • BUTTE, MONTANA 59703

BUTTE HS
723-4078
1-800-560-3734
FAX 406-723-5620

September 23, 2014

To Whom It May Concern:

I am writing this letter in support of Montana Tech of the University of Montana to establish an entry level baccalaureate nursing program.

The Head Start Program has been partnering with the Montana Tech Nursing Program for the past several years to provide screening and education to our children and families. Through this partnership – Head Start has been able to provide information to refer families for additional needed services in the community in order for their children to be successful in school.

The baccalaureate program at Montana Tech would provide the health care profession with well trained nurses that will benefit the entire community.

Sincerely,


Barb Brophy
Program Director
Butte Head Start

“CELEBRATING CHILDHOOD”

Montana Board of Regents
CURRICULUM PROPOSAL FORM



Hospital: 406-846-2212 · Clinic 406-846-1722

1100 Hollenback Lane · Deer Lodge, MT 59722

September 22, 2014

Karen Vandaveer, Director
Montana Tech of the University of Montana – Butte
1300 West Park
Butte, MT 59701

Dear Karen,

I am delighted to write this letter in support of Montana Tech School of Nursing's proposal to establish an entry level baccalaureate nursing program. For an entry level RN position we prefer to hire BSN nurses whenever possible.

Deer Lodge Medical Center is a critical access hospital and we expect much from our registered nurse staff members and we have found that BSN prepared nursing are better able to meet the needs of our patients and the complex work environment a small hospital provides. All RNs are expected to provide direct patient care in multiple departments, manage and lead other licensed and unlicensed staff, work collaboratively with our medical staff, and oversee the care plan for multiple patients. We have found BSN nurses are best prepared to meet the complexities of rural nursing.

We are delighted to host your student for their clinical rotation and look forward to participating in the education of your BSN student.

Please do not hesitate to contact me if I can be of any assistance as you move forward.

Best wishes,

A handwritten signature in cursive script that reads "Cathleen Pfaff".

Cathleen Pfaff, RN
CNO

Montana Board of Regents
CURRICULUM PROPOSAL FORM



Department of Nursing Education
1115 N. Roberts St. • Helena, MT 59601
406.447.6985 • www.umhelena.edu

Sept. 16, 2014

To Whom It May Concern:

The purpose of this letter is to offer support for Montana Tech Nursing to provide a four year bachelor degree nursing program. I believe this program is needed in Montana to address the nursing shortage as well as increase the level of education for nurses in Montana.

Montana Tech Nursing has proven itself to be an outstanding program in providing competent nurses for their community. Their NCLEX pass rates are a good indication of the quality of the current program being offered, and reflect their ability to develop a new bachelor's degree program.

As a nursing program director in Montana, my concern always relates back to the availability of clinical sites and faculty. The new program will use current clinical sites and has the ability to maintain current faculty. I am confident that this program will prove to be a win-win situation for students as well as Montana nurses and patients.

Sincerely,



Sandy Sacry MSN, RN
Nursing Program Director
Helena College

Montana Board of Regents
CURRICULUM PROPOSAL FORM

MISSOULA COLLEGE
UNIVERSITY OF MONTANA

Health Professions – Nursing
909 South Avenue West
Missoula, MT 59801
Phone: (406) 243-7846
Fax: (406) 243-7899
Web: <http://www.mc.umt.edu/health/nursing>

September 2, 2014

Dear Colleagues of Montana Tech Nursing Program:

Missoula College University of Montana is pleased to submit to you a letter of support for Montana Tech University of Montana's establishing a new Bachelor of Science Nursing Program. More nurses with baccalaureate and higher degrees are needed in health care across the State of Montana and Nationally. This program will provide nurses with credentials needed to fill nursing shortage positions in direct patient care and nursing management.

This program will also assist Montana in meeting the National goal of the Center to Advance Health Through Nursing (CAHN) of 80% of nurses obtaining a baccalaureate or higher degree in nursing by the year 2020. It will also facilitate the movement for hospitals to obtain magnet status. More importantly, this new program will provide another avenue in the State of Montana for nursing education.

Missoula College Nursing Program has worked closely with Montana Tech's Nursing Program and has experienced its history of excellence in nursing education. We have for the past three years shared a partnership where Missoula College Associate Degree Nursing graduates can transfer to Montana Tech's Registered Nurse to Baccalaureate Program.

We are pleased to provide this letter of support and look forward to hearing that the program becomes available in Montana. There are many students who are interested in attending a Bachelor of Science Nursing Program and it will meet a tremendous need.

If we can be of assistance, please do not hesitate to contact us.


Sincerely,

Mary Nielsen



Nursing Program Director

Lynn Stocking



Associate Dean

Barry Good



Dean

Montana Board of Regents
CURRICULUM PROPOSAL FORM



September 10, 2014

Karen Vandaveer, Director
Montana Tech of the University of Montana - Butte
1300 West Park
Butte, MT 59701

Dear Karen:

I am delighted that you are proposing to establish an entry level baccalaureate nursing program and happy to provide this letter of support. As health care becomes more complex and the need for nurses with higher levels of education increases, the need for programs like you are proposing increases.

The Institute of Medicine (IOM) report *The Future of Nursing: Leading Change, Advancing Health* (2011) established a goal that eighty percent of nurses be prepared at the baccalaureate level by the year 2020. This national report was endorsed by nurse administrators and educators in Montana as we formed the Montana Center to Advance Health through Nursing (MT-CAHN). This group identified supporting that 80/20 recommendation of the IOM report as a priority. By establishing another baccalaureate entry program in Montana, you will be advancing our efforts to achieve that goal.

Main Campus

Sherrick Hall
P.O. Box 173560
Bozeman, MT 59717-3560

Tel (406) 994-3783
Fax (406) 994-6020

Billings Campus

1500 University Drive
MSU-Billings Campus, Box 574
Billings, MT 59101

Tel (406) 657-2912
Fax (406) 657-1715

Great Falls Campus

400 15th Ave. South, Suite 106
Great Falls, MT 59405

Tel (406) 771-4450
Fax (406) 771-4449

Missoula Campus

32 Campus Drive #7416
Missoula, MT 59812-7416

Tel (406) 243-6515
Fax (406) 243-5745

As dean of the College of Nursing at Montana State University, I can attest that there are more than enough students interested in enrolling in a baccalaureate entry program to go around. The MSU College of Nursing accepts 196 students as upper division (junior level) baccalaureate students each year. Additionally we admit another 32 students to our accelerated second degree program. We generally have about twice that many applications. Last year, for example, we had 414 applications for those 196 slots for the traditional program and another 150 applications for the 32 accelerated program slots. By establishing a second state supported baccalaureate entry nursing program in the state, you will be responding to a demand by prospective students.

Again, I enthusiastically support your plans. I believe programs such as you are proposing will ultimately improve the quality of the nursing workforce in Montana and thus positively impact the health of the citizens of Montana and beyond.

Please do not hesitate to contact me if I can be of any assistance as you move forward.

Best wishes,

A handwritten signature in blue ink that reads 'Helen Melland'.

Helen Melland, PhD, RN
Dean and Professor

Montana Board of Regents
CURRICULUM PROPOSAL FORM



**THE NATIONAL CENTER FOR
HEALTH CARE INFORMATICS**

September 22, 2014

Montana Board of Nursing
301 South Park
Suite 401
P.O. Box 200513
Helena, MT 59620-0513

Dear Board Member:

I am writing this letter to express my support of the efforts of the Montana Tech Nursing Program to establish a four year nursing bachelor degree.

It is important for you to be aware of the fact that I am drawing upon more than 30 years' experience in the healthcare arena as I make this recommendation. My career in healthcare began as a Medical Technologist, progressed to a Senior Hospital Administrator and has now evolved to my current position as the President of the National Center for Health Care Informatics.

As I have observed the evolution of healthcare demographics over the last three decades which now encompasses a surging population of elderly adults with increasingly complex levels of care, it is very evident to me that in order to meet these ever-evolving needs it is imperative that nurses, as Harvey Fineberg (President of the Institute of Medicine) states, "know more and be better trained to provide care in a transformed system." Practically speaking, this entails an educational migration towards the bachelor's prepared nurse.

As a career healthcare professional, and as a member of the Baby Boomer Generation which will be drawing heavily upon the resources and expertise of our nation's healthcare infrastructure of which the nurse plays an absolutely critical role, I urge you to give full and favorable consideration to the establishment of a four year nursing bachelor degree at Montana Tech. My first-hand experience with the excellent quality of the nurses produced through the current nursing program at Montana Tech lends strong evidence to my belief that the nurses produced through a four year bachelor's level program would be as equally well prepared and professionally competent to meet the ever increasing needs of the future healthcare public.

If you would desire additional information relative to this letter of support, please feel free to contact me.

Regards,

Pat Dudley
President
pdudley@mtech.edu

1300 W. Park Street ❖ Butte, MT 59701 ❖ (406) 496-4820 ❖ FAX (406) 496-4135

Montana Board of Regents
CURRICULUM PROPOSAL FORM



220 Curtis Street • Butte, MT 59701-1852
406-782-6461 • Fax 406-782-6473

Revonda Stordahl
Executive Director

Silverbow Homes 3-1
Rosalie Manor 3-2
Elm Street 3-3
Leggat Apts. 3-4

September 9, 2014

Karen VanDaveer
Director of Nursing
1300 W. Park St.
Butte, MT 59701

Dear Karen,

The Public Housing Authority of Butte supports the efforts of Montana Tech to expand its Nursing Program to include the four-year bachelor's degree option.

As a member of the Montana Tech Nursing Advisory Committee, I realize this program provides high quality academic and practical education that is strategically advantageous to both the students in the program and the residents that live in the Butte Community, including residents of public housing. Many of our public housing residents are senior citizens or disabled members of the community who don't have ready access to quality health care and have serious health issues as a result.

Student nurses from Montana Tech's Nursing Program come to one of our housing sites and hold weekly clinics that monitor the general health of our residents. Many of residents had improvements to their health care as a result of these visits. I see the positive effects on the senior citizens and disabled citizens who utilize both our facilities and the nursing visit program. The addition of the four-year bachelor's degree will help our community members have better access to high quality health care.

The Public Housing Authority of Butte is committed to providing the best possible living situation for our residents. With the involvement of the Montana Tech Nursing Program, this goal is accomplished. The Public Housing Authority has worked closely with Montana Tech for many years through the on-site Health Care Clinics the nursing students provide and feels confident in expressing full support for the four-year bachelor's program expansion. If there are any questions, please feel free to contact me at 406-782-4436.

Sincerely

Clarisa Hogart
Property and Grants Manager

Montana Board of Regents
CURRICULUM PROPOSAL FORM



Salish Kootenai College

Nursing Department

58138 US Hwy 93, PO Box 70
Pablo, MT 59855

Phone: (406) 275-4909
Fax: (406) 275-4806

September 11, 2014

Karen VanDaveer MN, RN
Director Nursing Program
Montana Tech of the University of Montana – Butte
1300 West Park
Butte, MT 59701

Dear Karen,

I am writing this letter to support the transition of your Associate Degree Nursing Program, to that of a Baccalaureate Degree Nursing Program. The Institute of Medicine Report on the Future of Nursing published in 2010, reported the research that patients have better outcomes with baccalaureate prepared nurses. It was their recommendation that nursing education be elevated to a baccalaureate level. They have even gone so far as to recommend that ASN prepared nurses be required to complete BSN education within ten years of graduate. The transition of your program is one step in advancing that goal.

Not all programs in the state of Montana will be able to transition their programs. Additionally the need for Licensed Practical Nurses remains strong in the state. We fully support your decision and ability to make this transition.

Sincerely,

Katherine M. Willock PhD, RN
Director Nursing Department.

Montana Board of Regents
CURRICULUM PROPOSAL FORM



Administration

September 2, 2014

Montana Board of Nursing
P O Box 200513
Helena, MT 59620-0513

Dear Board of Nursing Members:

The School of Nursing at Montana Tech of the University of Montana has notified us of its hope to establish a four-year bachelor degree program in nursing.

In response to the Institute of Medicine's recommendations to increase the level of clinical nursing in hospitals to 80% at BSN or higher, St. James Healthcare has revised its education/degree requirements for hiring registered nurses. All new nurses hired by this facility must either have their BSN degree, or be actively enrolled in a BSN program.

Because it is so important that our nurses provide our patients with the clinical skills and education attained during the completion of a bachelor's degree program, we strongly support the development of programs that prepare student nurses to practice in today's complex healthcare environment. We appreciate your consideration of Montana Tech's goal to provide such a program.

Sincerely,

A handwritten signature in black ink, appearing to read "Shannon Holland".

Shannon Holland, RN, MSN, CENP
Vice President, Patient Care Services/CNO

Montana Board of Regents
CURRICULUM PROPOSAL FORM



Sept. 2, 2014

Montana Board of Nursing
301 S. Park St. Fourth floor
P.O. Box 200513
Helena, MT 59620-0513

Dear Montana Board of Nursing:

I am writing this letter on behalf of the Southwest Montana Community Health Center in support of the Montana Tech nursing program and its application to establish a four-year nursing bachelor degree program.

Tech's program is a well-respected one, graduating high-quality nurses who work both locally, regionally and across the nation. Several of our nursing staff at the Community Health Center, including myself and the chief operating officer of the CHC, are graduates of this rigorous, academically challenging program.

We believe that the change to a four-year bachelor program is a wise decision and urge the state board of nursing to consider and grant Tech's request to change its program to a four-year bachelor degree.

Sincerely,

Jessica Hoff, CEO
Southwest Montana Community Health Center
445 Centennial Ave.
Butte, MT 59701
(406) 723-4075

March 5-6, 2015

ITEM 166-1502+R0315

Request for Authorization to Establish a Natural Resource Management Option in the Business & Information Technology (BIT) Degree Program – Montana Tech of the University of Montana

THAT

In accordance with Montana University System Policy, the Board of Regents of Higher Education authorizes Montana Tech of The University of Montana to establish a Natural Resource Management Option in the Business & Information Technology (BIT) Degree Program.

EXPLANATION

The Business and Information Technology (BIT) Department at Montana Tech requests permission to add an option in Natural Resource Management to its Bachelor of Science Degree in Business and Information Technology. This option will be the first of its kind in the state and will strongly support Montana Tech's mission.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 166-1502+R0315

Meeting Date: March 5-6, 2015

Institution: Montana Tech

CIP Code: 52.00

Program Title: Natural Resource Management Option in the Business & Information Technology (BIT) Degree Program

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 the [Academic, Research and Student Affairs Handbook](#).

 A. Notifications:

Notifications are announcements conveyed to the Board of Regents at the next regular meeting.

 1a. Placing a program into moratorium (Document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)

 1b. Withdrawing a program from moratorium

 2. Intent to terminate an existing major, minor, option or certificate – Step 1 (Phase I Program Termination Checklist)

 3. Campus Certificates (CAS/AAS)-Adding, re-titling, terminating or revising a campus certificate of 29 credits or less

 4. BAS/AA/AS Area of Study

 B. Level I:

Level I proposals are those that may be approved by the Commissioner of Higher Education. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board.

 1. Re-titling an existing major, minor, option or certificate

 2. Adding a new minor or certificate where there is a major or an option in a major (Curriculum Proposal Form)

 3. Merging or re-titling a department

 4. Revising a program (Curriculum Proposal Form)

 5. Distance or online delivery of an existing degree or certificate program

 6. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist and updated catalog)

 Temporary Certificate or AAS Degree Program

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the proposal to go through the normal Level II Proposal approval process.

X C. Level I with Level II Documentation:

This type of proposal may go to the Board as a Level I item if all Chief Academic Officers are in agreement. If consensus among the Chief Academic Officers is not reached, however, the item will go to the Board as a Level II request.

X 1. Adding an option within an existing major or degree (Curriculum Proposal Form)

2. Consolidating existing programs and/or degrees (Curriculum Proposal Form)

D. Level II:

Level II proposals require approval of the Board of Regents. These requests will go to the Board in a two-meeting format, the first being as informational and the second as action.

1. Re-titling a degree (ex. From B.A. to B.F.A) (Curriculum Proposal Form)

2. Adding a new minor or certificate where there is no major or option in a major (Curriculum Proposal Form)

3. Establishing a new degree or adding a major or option to an existing degree (Curriculum Proposal Form)

4. Forming, eliminating or consolidating a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

5. Re-titling a college, division, school department, institute, bureau, center, station, laboratory or similar unit (Curriculum Proposal Form or Center Proposal Form)

Specify Request:

The Business and Information Technology (BIT) Department at Montana Tech requests permission to add an option in Natural Resource Management to its Bachelor of Science Degree in Business and Information Technology. This option will be the first of its kind in the state and will strongly support Montana Tech's mission.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

The Department of Business and Information Technology (BIT) of Montana Tech of The University of Montana (Tech) respectively submits the proposal to add a Natural Resource Management Option under its bachelor of science program. This option would be collaboration between the Department of BIT and other departments on campus (most notably the Department of Petroleum Engineering and the Department of Mining Engineering) and it would allow students a unique education alternative that does not currently exist in the Montana University System. The proposed new option would require few additional resources and provide students with the prospect of a high demand career. Conversations with a number of entities have led the campus to believe there is a demand for this kind of graduate and the unique engineering programs at Tech make this a good fit for the Montana Tech campus. In addition, the new courses developed for this program may be used as coursework in other programs on the Tech campus and they will lead to continuing and professional education opportunities for working professionals.

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

This proposal is to add an option under our current bachelor of science program in BIT titled *Natural Resource Management*. This option would complement Tech's existing business program, which currently has options in management, marketing, accounting, health information technology, and information technology, by providing our students, and potential employers, with another marketable degree opportunity. The proposed option would give interested students the opportunity to gain business-type employment with a number of engineering/natural resource employers visiting Tech every year. This option is also designed to allow students to specifically enter into a career as a petroleum land manager as well as generally into a business career with a natural resource or engineering firm.

3. Need

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

After conversations with a number of professionals involved in natural resources, and specifically the American Association of Professional Landmen (AAPL) and the Montana Association of Professional Landmen (MAPL), it is readily apparent that there is an opportunity for business students to enter into careers with companies involved in natural resources. Currently there are 9 schools accredited by the AAPL, with the University of Wyoming being the closest of the nine schools to Montana. This program is designed to allow interested students to become certified as Professional Landmen and it would be the first program of its kind in either Montana or North Dakota. In addition, this program would serve students who are not directly interested in becoming professional landmen by providing opportunities for employment as a business professional with other natural resource based companies.

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

The proposed program will work to further develop an already strong working relationship between the Departments of BIT, Petroleum Engineering, and Mining Engineering. Currently, the Department of BIT serves a number of Petroleum and Mining Engineering students as they work towards a business minor. Additionally, faculty from both the Departments of BIT and Petroleum Engineering have worked together to team teach a course (PET 446 Petroleum Project Evaluation) that will be required under the proposed program.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

We anticipate the initial demand for this program to be 15-20 new students per year. Given the incredibly strong demand for the petroleum engineering degree, we believe initial enrollment in this program will be comprised of BIT and Petroleum Engineering students. The proposed program will attract new students to Montana Tech who are interested in this unique program as well as retain students who may initially start out in a Tech engineering program.

This estimate comes from discussions with individuals involved with the AAPL and MAPL in the Bakken regions and well as the National Education Director of the AAPL. Additionally, industry representatives that visit our campus every year to recruit our students have expressed support for the program. We have introduced the idea of this program to approximately 90 students enrolled in our freshmen level introduction to business courses and roughly 25 percent stated an interest in this option.

4. Institutional and System Fit

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

The campus of Montana Tech is arguably the best location for a program of this type due to its unique engineering programs, many of which are focused on the extraction of resources. In addition, the collaboration between the engineering and business programs on campus is such that the required collaboration will work. Finally, by drawing on the expertise of the Departments of Petroleum Engineering, Mining Engineering, and BIT, this program can be started by using the existing resources of the participating Departments.

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

This proposal will require three additional course offerings that will be offered on a consistent basis. These new courses will be taught with existing faculty or with adjunct faculty from the petroleum industry thus requiring no additional full time faculty. The proposed three new courses include two courses in natural resource law and a course in natural resource accounting. It will be possible for students in other business options, and in the business minor, to enroll in and use the courses as a part of their graduation requirements. As such, the new courses will be adequately populated.

In addition, the Department of BIT believes the approval of the proposed option will serve to enhance student growth in the Department of BIT as it would be a unique business program in Montana.

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

This option would add specific coursework that is not required under our existing business options. In addition, this unique coursework and option title will provide a better match for Tech students and the types of employers who recruit on the Tech campus.

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

Montana Board of Regents CURRICULUM PROPOSAL FORM

This proposal fits into Theme 3 of the Campus' Strategic Plan. Theme 3 addresses the goal of our campus to *Respond to Industry, Community and State Needs*. This program specifically will support economic development with the production of graduates ready to help the natural resource in Montana and beyond. Additionally, the proposed program will provide opportunities for continuing and professional education for employees already working in industry.

This program will address flexibility in the development of programs to meet the needs of a changing workforce. For years we have discussed how to grant access for our business students to the large number of natural resource based employers who visit the campus regularly to recruit employees. The proposed option is specifically designed to combine the strengths of existing departments which should allow such access for our business based students.

The campus also addresses the concept of increasing enrollment and the Department of BIT aspires to be a part of Montana Tech's student growth strategy but only within the framework of providing quality undergraduate education. It is believed this program will help retain Tech students who initially come to Tech to study engineering but decide it is not their field of choice as well as bring additional first time freshmen to the campus interested in business careers with natural resource employers.

Currently, the student enrollment in the Department of BIT represents fewer than 10 percent of the total campus enrollment whereas the national average shows business majors comprising closer to 20 percent of total campus enrollment. This proposal is one step in the strategic plan of the Department to grow student enrollment and it can be achieved without a material change in resources.

In addition to advancing the strategic goals of Montana Tech, the proposed degree program will also help to advance the three goals contained in the MUS Strategic Plan (Access & Affordability, Workforce & Economic Development, and Efficiency & Effectiveness).

- 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 proposed program is unique when compared to the programs offered by other units in the Montana University System. No other unit in the system offers a business based curriculum specifically addressing the field of natural resources. Most importantly, Montana Tech is in the best position to offer such a program as it is able to leverage its existing natural resource offerings.

Also, it should be mentioned that this proposed program, as well as Montana Tech's existing business options will accept the transfer of business coursework from other units within the Montana University System. This will allow students to complete their degrees in a more timely manner as they could possibly enroll in summer courses, or on-line courses, at another MUS institution.

5. Program Details

Montana Board of Regents
CURRICULUM PROPOSAL FORM

- 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.**

See Appendix

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

The Natural Resource Management Option, as is the case with our current options, will need to be declared by business students upon completion of their sophomore academic year. This option will be applicable to all new and existing business majors beginning with the Fall 2015 semester. Based on our discussions with professionals in the field, it is estimated that initially 15 - 20 current students per class year will declare Natural Resource Management as their option of study. The Department of BIT estimates growth in the number of BIT students interested in the proposed option but at a level less than the growth recently experienced by the Department of Petroleum Engineering.

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 full time faculty will be needed to implement the proposed option. Most all of the courses required under this proposed option are currently offered on a regular basis on the campus. Any new students under this option would be able to be absorbed in the current course offerings.

The three new courses would be taught initially by current full-time and adjunct faculty under the guidance of the BIT Department Head. Again, it is planned that these courses will be able to serve students in other programs. Business students in other options, as well as students under the business minor, will be able to enroll in the new courses. Quite possibly, students under the master's program in Project and Engineering Management may be able to take the courses as program electives.

- 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.**

The Department of BIT has visited with various entities on campus, including the library and the Information Technology Services, and no additional financial resources would be required by any of the sponsoring departments for the successful implementation of the proposed option. In fact, it is believed that a material amount of growth in student numbers could be possible before additional faculty or financial resources would be required.

7. Assessment

How will the success of the program be measured?

This option will be subject to the same current assessment standards set by the Department of BIT for all of its existing options including student enrollment, job placement, and the surveying of recent graduates. In

Montana Board of Regents
CURRICULUM PROPOSAL FORM

In addition, the Department plans to implement a number of measures to aid in the assessment of the success of the proposed program. These assessment measures will include discussion with both its alumni and the employers of the graduates under this option. Also, all of the sponsoring departments (BIT, Petroleum and Mining) will engage in ongoing dialog regarding the proposed option.

8. Process Leading to Submission

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 process leading to this proposal started at the beginning of the last academic year as the Montana Tech Provost entered into general discussions regarding the possibility of such a program with a number of Tech alumni and prospective employers of Tech graduates. The BIT Department Head held additional discussions over the course of the last academic year between the departments on campus involved in the program and related professional agencies. The Department Head also investigated similar programs around the country and then prepared the coursework for the new option with the help of other faculty in the Departments of BIT, Petroleum Engineering, and Mining Engineering.

The idea of a specific option in Natural Resource Management has been presented to a number of potential employers of these graduates as well as the AAPL and MAPL to discuss the possibility of receiving program accreditation by the organization. The outlook from all of these sources was positive. One of our long term goals is to get this program accredited by AAPL.

The proposal has been approved by the Department of BIT and has the support of the Departments of Petroleum and Mining Engineering. The proposal has been reviewed and approved by both the Montana Tech Curriculum Review Committee and the Faculty Senate.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Appendix

Bachelor of Science in Business and Information Technology - Natural Resource Management Option
Suggested Schedule of Study AY 2015 - 16

Freshmen									
Fall Semester					Spring Semester				
Bgen	105	Introduction to Business	3	Comx	111	Principles of Speaking	3		
Writ	101	College Writing	3	M	142	Math for Business & Social Science II	3		
M	141	Math for Business & Social Science I	3	CSCI	110	Programming with Visual Basic I	3		
		Physical Science Elective	3	Geo	101	Introduction to Physical Geology	3		
Capp	156	MS Excel	3			General Elective	3		
		Total	15			Total	15		

Sophomore									
Fall Semester					Spring Semester				
Bgen	235	Business Law I	3	Ecns	202	Principles of Macroeconomics	3		
Stat	216	Introduction to Statistics	3	Actg	202	Principles of Managerial Accounting	3		
Actg	201	Principles of Financial Accounting	3			Humanities Elective	3		
Ecns	201	Principles of Microeconomics	3	PET	201	Elements of Petroleum Engineering	2		
Bgen	285	Critical Thinking and Decision Making	3			General Elective	4		
		Total	15			Total	15		

Junior									
Fall Semester					Spring Semester				
Writ	322	Advanced Business Writing	3	Bmkt	325	Principles of Marketing	3		
Bmgt	335	Management and Organization	3	Bgen	360	International Business	3		
Bmis	375	Business Modeling in Microsoft Excel	3	Bgen	363	Business Ethics and Decision Making	3		
GEO	291	Introduction to GIS (or Min 152)	3	Actg	3XX	Nat Res Acct, Financial Reporting , and Tax	3		
Min	215	Mining Methods	3			Concentration Elective	3		
		Total	15			Total	15		

Senior									
Fall Semester					Spring Semester				
		Natural Resource Law I	3	Bmkt	426	Strategic Management	3		
Bmis	311	Management Information Systems(or Actg 321)	3	Bfin	455	Money, Capital Markets, & Institutions	3		
Bfin	322	Business Finance	3			Natural Resource Law II	3		
Bmgt	322	Operations Management	3			Concentration Elective	3		
Pet	446	Petroleum Project Evaluation	3			Concentration Elective	3		
		Total	15			Total	15		

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Management of Natural Resources Option
Courses Approved as Concentration Electives - Three Courses are Required

Actg	410	Cost and Management Accounting I
Actg	420	Cost and Management Accounting II
Min	408	Economics of the Mineral industry
MEC	4000	Valuation of Mineral Properties
MPEM	5010	Entrepreneurship and Economic Feasibility
MPEM	5020	Project and Engineering Management
Bmgt	498	Internship*
Bmgt	4XX	Risk Management
GEO	204	Introduction to Mineralogy and Petrology (lab)
MIN	458	Mine Management
BMGT	4XX	Natural Resource Markets and Marketing

others as approved by the Department

* Internships used as a concentration elective must be approved by the Department Head. A maximum of 3 credits of internship can be used as a concentration elective