

NOTIFICATION AND LEVEL I APPROVAL MEMORANDUM

DATE: February 10, 2016

TO: Chief Academic Officers, Montana University System

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

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 2015 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 17, 2016.

1. Notifications

A. Terminations and Placement into/Withdraw from Moratorium

Great Falls College Montana State University:

- Notification of the placement of Healthcare Informatics Technician Certificate Program into Moratorium
[Item #170-2909-R0316 | Academic Proposal Request Form](#)

The University of Montana-Western:

- Notification of request to terminate Mathematical Biology, Mathematical Ecology and Mathematical Geology
[Item #170-1606-R0316 | Academic Proposal Request Form | Termination Checklist](#)

B. Campus Certificates and Programs of Study

Flathead Valley Community College:

- Notification of implementation of an Industrial Maintenance Technician Tier II Certificate
[Item #170-301-R0316 | Academic Proposal Request Form](#)

Dawson Community College:

- Notification of establishment of a Certificate in Public Service
[Item #170-201-R0316 | Academic Proposal Request Form | Attachment #1](#)

Montana State University Billings:

- Notification of establishment of a Certificate in Nonprofit Administration & Leadership
[Item #170-2703-R0316 | Academic Proposal Request Form](#)

Montana State University Bozeman:

- Notification of Montana State University Jake Jobs College of Business and Entrepreneurship intent to offer an Entrepreneurship Certificate
[Item #170-2014-R0316 | Academic Proposal Request Form](#)

NOTIFICATION AND LEVEL I APPROVAL MEMORANDUM

Great Falls College Montana State University:

- Notification of the establishment of Electronics Technician Tier I Certificate via Course Sharing with FVCC
[Item #170-2902-R0316 | Academic Proposal Request Form | Attachment #1](#)
- Notification of the establishment of a Electronics Technician Tier II Certificate via Course Sharing with FVCC
[Item #170-2903-R0316 | Academic Proposal Request Form | Attachment #1](#)
- Notification of the establishment of an Industrial Maintenance Tier I Certificate via Course Sharing with FVCC
[Item #170-2904-R0316 | Academic Proposal Request Form | Attachment #1](#)
- Notification of establishment of a Machinist Technician Tier I Certificate via Course Sharing with FVCC
[Item #170-2905-R0316 | Academic Proposal Request Form | Attachment #1](#)
- Notification of establishment of a Machinist Technician Tier II Certificate via Course Sharing with FVCC
[Item #170-2906-R0316 | Academic Proposal Request Form | Attachment #1](#)
- Notification of establishment of a Welding and Fabrication Tier III
[Item #170-2907-R0316 | Academic Proposal Request Form | Attachment #1](#)

Montana State University Northern:

- Notification of intent to offer a Business Technology area of study within the BAS degree
[Item #170-2804-R0316 | Academic Proposal Request Form](#)
- Notification of intent to offer a Trades Management area of study within the BAS degree
[Item #170-2805-R0316 | Academic Proposal Request Form](#)

The University of Montana Missoula:

- Notification of establishment of Certificate in Bioinformatics
[Item #170-1001-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of Certificate in Computer Programming
[Item #170-1002-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of Global Leadership Initiative Certificate
[Item #170-1003-R0316 | Academic Proposal Request Form | Attachment #1](#)
- Notification of establishment of a Certificate in Health Behavior Coaching
[Item #170-1004-R0316 | Academic Proposal Request Form](#)
- Notification of establishment a Graduate Certificate in Early Childhood Education
[Item #170-1005-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of a Graduate Certificate in Gifted Education
[Item #170-1006-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of a Graduate Certificate in Health-Focused Lifestyle Intervention
[Item #170-1007-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of a Graduate Certificate in K-12 Principal Leadership
[Item #170-1008-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of a Graduate Certificate in Superintendent Leadership
[Item #170-1009-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of a Certificate in Computed Tomography – Missoula College
[Item #170-1017-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of a Certificate in Sustainable Construction – Missoula College
[Item #170-1018-R0316 | Academic Proposal Request Form](#)

NOTIFICATION AND LEVEL I APPROVAL MEMORANDUM

- Notification of establishment of a Certificate of Technical Skills in Precision Machine Technology – Missoula College
[Item #170-1025-R0316 | Academic Proposal Request Form](#)
- Notification of establishment of a HVAC Certificate – Missoula College
[Item #170-1027-R0316 | Academic Proposal Request Form](#)

Helena College University of Montana:

- Notification of Advance Certificate for Environmental Design Studies
[Item #170-1901-R0316 | Academic Proposal Request Form](#)

A. Level I Items-Other

Montana State University Bozeman:

- Request for authorization to rename Agricultural Relations Option to Agricultural Communications, Leadership and Extension
[Item # 170-2011+R0316 | Academic Proposal Request Form](#)
- Request for authorization to change title of Master of Education, School Counseling Option to Master of Education in School Counseling
[Item # 170-2015+R0316 | Academic Proposal Request Form](#)

Montana State University Northern:

- Request for authorization to offer Traffic Education Minor (K-12) Online
[Item #170-2803+R0316 | Academic Proposal Request Form](#)

The University of Montana Missoula:

- Request for authorization to offer a Minor in Communicative Sciences & Disorders
[Item #170-1010+R0316 | Academic Proposal Form | Curriculum Proposal Form](#)
- Request for authorization to re-title the Ecological Restoration Program to Ecological Sciences & Restoration
[Item #170-1011+R0316 | Academic Proposal Form](#)
- Request for authorization to re-title the Education B.A. to Elementary Education
[Item #170-1012+R0316 | Academic Proposal Form](#)
- Request for authorization to consolidate the Journalism and Radio-TV Bachelor Degrees
[Item #170-1013+R0316 | Academic Proposal Form | Curriculum Proposal Form](#)
- Request for authorization to re-title the Medical Technology B.S. to Medical Laboratory Science
[Item #170-1014+R0316 | Academic Proposal Form](#)
- Request for authorization to re-title the Library Media Program to Teacher Librarian
[Item #170-1015+R0316 | Academic Proposal Form](#)
- Request for authorization to re-title the Biomedical Sciences Ph.D. and Pharmaceutical Sciences M.S. to Pharmaceutical Sciences & Drug Design
[Item #170-1016+R0316 | Academic Proposal Form](#)
- Request for authorization to offer a C.A.S in Business Media Design – Missoula College
[Item #170-1019+R0316 | Academic Proposal Form | Curriculum Proposal Form](#)
- Request for authorization to re-title the Computer Support Specialist C.A.S. to Computer Support – Missoula College
[Item #170-1020+R0316 | Academic Proposal Form](#)
- Request for authorization to re-title the Network and Information Security Certificate to Cybersecurity – Missoula College
[Item #170-1021+R0316 | Academic Proposal Form](#)

NOTIFICATION AND LEVEL I APPROVAL MEMORANDUM

- Request for authorization to re-title the Building Maintenance C.A.S. to Facility Management – Missoula College
[Item #170-1022+R0316 | Academic Proposal Form](#)
- Request for authorization to re-title the Network Management Option in the Information Technology A.A.S. to Network Administration and Security – Missoula College
[Item #170-1023+R0316 | Academic Proposal Form](#)
- Request for authorization to offer a C.A.S. in Precision Machine Technology – Missoula College
[Item #170-1024+R0316 | Academic Proposal Form | Curriculum Proposal Form | Attachment #1](#)
- Request for authorization to re-title Information Systems Management Option in the Information Technology A.A.S. to Programming and App Development – Missoula College
[Item #170-1026+R0316 | Academic Proposal Form](#)

The University of Montana Western:

- Request for authorization to deliver Early Childhood Education Coursework at the Lewistown Higher Education Center
[Item #170-1601+R0316 | Academic Proposal Request Form | Attachment #1](#)
- Request for authorization to revise B.S. in Mathematics
[Item #170-1602+R0316 | Academic Proposal Request Form | Curriculum Proposal Form | Attachment #1 | Attachment #2 | Attachment #3](#)

March 3-4, 2016

ITEM 170-2909-R0316

Notification of the placement of Healthcare Informatics Technician Certificate Program into Moratorium

THAT

Great Falls College Montana State University notifies the Board of Regents of the placement of the Healthcare Informatics Technician Certificate Program into Moratorium.

EXPLANATION

The Healthcare Informatics Technician Certificate of Technical Studies program offered at Great Falls College MSU was designed and built in 2010 as part of a federal grant program geared toward providing "training" to the existing workforce on selection, implementation, and challenges associated with the electronic health record. This program did not attract the number of students fiscally necessary for continued operation. The bulk of the courses in the program are shared or required in other Health Science programs at Great Falls College MSU. However, there are two courses that are specific only to the Health Informatics program. Because of low enrollment in the program, these two classes have also exhibited low enrollment numbers and are only offered once per academic year. That being said, a "full" class of students has not been more than three or four students since 2012, and most times it has been less. No new applications to the program or transfers into the program are currently being processed.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2909-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Great Falls College Montana State University**

CIP Code: **51.2706**

Program Title: **Healthcare Informatics Tech CTS 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 Affairs Handbook](#).

X A. Notifications:

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

X 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- 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. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)**

___ **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, except when eliminating or consolidating)

___ **5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit**

Specify Request:

The Healthcare Informatics Tech Certificate of Technical Studies (Health Informatics) program offered at Great Falls College MSU was designed and built in 2010 as part of a federal grant program that was geared toward providing "training" to the existing workforce on selection, implementation, and challenges associated with the electronic health record. This program has never attracted the number of students fiscally necessary for continued operation. The bulk of the courses in this program are shared or required in other Health Science programs at Great Falls College MSU. However, there are two course that are specific only to the Health Informatics program. Because of low enrollment in the program, these two classes have also exhibited low enrollment numbers. These two courses are only offered once per academic year because of the low enrollment. That being said, a "full" class of students has not been more than 3 or 4 students since 2012 and most times it has been less. No new applications to the program or transfers into the program are currently being processed.

March 3-4, 2016

ITEM 170-1606-R0316

Notification of request to Terminate Mathematical Biology, Mathematical Ecology and Mathematical Geology

THAT

The University of Montana Western requests authorization to terminate three options in the B.S. Mathematics Major. The three options are: Mathematical Biology, Mathematical Ecology and Mathematical Geology.

EXPLANATION

There are no students currently pursuing the three math options - Mathematical Biology, Mathematical Ecology and Mathematical Geology.

ATTACHMENTS

Academic Proposal Request Form
Termination Checklist

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1606-R0316 Meeting Date: March 3-4, 2016
Institution: University of Montana Western CIP Code: 27.0101
Program Title: B.S. Mathematics – Intent to terminate three math options - Mathematical Biology, Mathematical Ecology and Mathematical Geology

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 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**
- X **2. Intent to terminate an existing major, minor, option or certificate – Step 1** (Phase I Program Termination Checklist)
- 3. Campus Certificates- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

 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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Request to terminate three options in the B.S. Mathematics Major. The three options are: Mathematical Biology, Mathematical Ecology and Mathematical Geology. There are no students currently pursuing the three math options.

Montana University System
PROGRAM TERMINATION CHECKLIST
MATHEMATICAL BIOLOGY, MATHEMATICAL ECOLOGY, MATHEMATICAL GEOLOGY

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: No students currently are pursuing the three math options – Mathematical Biology, Mathematical Ecology, and Mathematical Geology.

- 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 layoffs will occur.

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

Comments: N/A No students are pursuing the options

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

Comments: All departments and faculty senate were notified in fall 2015 through the standard UM western curricular review process.

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

Comments: Union leadership has been notified.

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

Comments: N/A

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

Comments: Concurrent with this checklist.

Montana University System
PROGRAM TERMINATION CHECKLIST
MATHEMATICAL BIOLOGY, MATHEMATICAL ECOLOGY, MATHEMATICAL GEOLOGY

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

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

Comments: Communications managed through admissions, the office of student success, and the printed and electronic catalog.

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: The registrar manages our curricular change processes and will make necessary changes in the catalog. No students will be adversely affected.

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

Comments: Concurrent with this proposal.

March 3-4, 2016

ITEM 170-301-R0316

Notification of implementation of an Industrial Maintenance Technician Tier II Certificate – Flathead Valley Community College

THAT

Flathead Valley Community College notifies the Board of Regents that the FVCC Board of Trustees has approved the implementation of a 16-credit Industrial Maintenance Technician Tier II Certificate.

EXPLANATION

Industrial maintenance refers to the career path of providing repair and construction support to manufacturing and other industries that include mechanical processes as part of daily operations.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-301-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Flathead Valley Community College**

CIP Code: **47.0303**

Program Title: **Industrial Maintenance Tier II 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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)**

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

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- 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, except when eliminating or consolidating)

- 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit**

Specify Request:

The Flathead Valley Community College Board of Trustees has approved a certificate program in Industrial Maintenance Technician Level II. This 16-credit certificate prepares students for a career path of providing repair and construction support to manufacturing and other industries that include mechanical processes as part of daily operations.

March 3-4, 2016

ITEM 170-201-R0316

Notification of the Establishment of a Certificate of Public Service – Dawson Community College

THAT

Dawson Community College notifies the Montana Board of Regents of the establishment of a Certificate of Public Service.

EXPLANATION

The State Professional Development Center (SPDC) has proposed to collaborate with Dawson Community College to deliver the Certificate of Public Service. The main idea is to provide state employees the opportunity to gain college credit through SPDC courses as a means to enhance their credentials and advance their career in state government.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – Certificate of Public Service Proposal

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-201-R0316

Meeting Date: March 3-4, 2016

Institution: Dawson Community College

CIP Code: 44.0401

Program Title: Certificate of Public Service

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 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)

 X **3. Campus Certificates- Adding, re-titling, terminating or revising a campus certificate of 29 credits or less**

 4. BAS/AA/AS Area of Study

 B. Level I:

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

 3. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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.

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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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Dawson Community College notifies the Montana Board of Regents of establishment of a Certificate of Public Service. The State Professional Development Center (SPDC) has proposed to collaborate with Dawson Community College to deliver the Certificate of Public Service. The purpose is to provide state employees the opportunity to earn college credit through SPDC courses as a means to enhance their credentials and advance their career in state government, and to provide the State of Montana with a better-prepared, skilled workforce ready to assume leadership roles throughout Montana. This Certificate of Public Service will be a 27-credit certificate with the option for 1-credit independent study.

Proposal

Certificate of Public Service

A Collaboration between Dawson Community College and the State
Professional Development Center of the Department of
Administration



Proposal for a Collaborative Program between the State Professional Development Center and Dawson Community College

The State Professional Development Center (SPDC) proposes to collaborate with Dawson Community College (DCC) to deliver the Certificate of Public Service. The main idea is to provide state public employees the opportunity to gain college credit through SPDC courses as a means to enhance their credentials and advance their career in state government.

Overview

- The program will be a 27-credit certificate consistent with the requirements of the Board of Regents.
- Employees who wish to pursue the certificate will enroll in SPDC courses as usual. Then they will contact Dawson Community College.
- Participants will apply for admission to Dawson Community College the same as any student.
- The series already offered by the SPDC will serve as courses. Students who enroll for credit will have additional online course requirements.
- Students will pay \$_____ per credit plus the \$_____ online fee. Students are responsible for their own tuition and fees and may be eligible for financial aid.
- All courses, except the writing and math General Education requirements, will be delivered by SPDC instructors.
- SPDC staff will serve as advisors for the program and will be considered adjunct faculty for DCC.

Justification

- The certificate program will serve as an additional opportunity for state public workers' professional development.
- Employees will be able to pursue the certificate as part of their job as they have with SPDC classes and not have to take classes in the evenings or weekends.
- It will contribute to the concept of the State of Montana as an employer of choice.
- This will provide an opportunity for those with credentials in areas other than management to prepare for leadership roles.
- It will contribute to succession planning by affording employees with leadership potential a chance to learn the needed skills.
- It will strengthen the relationship between state government and the University System.
- It is consistent with two of the governor's initiatives of strengthening education and good governance.
- Course work will be specifically focused on leadership in government rather than generic leadership classes.

Background

The Professional Development Center (PDC) began operation in October 1983, based on budget authorization from the 48th Legislature. The impetus for creating the center stemmed from the Governor's Council on Management and the Personnel and Labor Relations Study Commission. These two groups, appointed by then-Governor Schwinden, saw the need for a centralized management training program for state personnel.

Under the guidance of a Management Training Advisory Panel appointed by Gov. Schwinden, the PDC developed a core curriculum — the Management Development Program. Now called Managing Montana, the program contained four series:

- The Basics of Management,
- The Essentials of Management,
- The Essentials of Leadership
- The Principles of Upper Management.

The advisory council disbanded in 1991. The name of the center was changed to the State Professional Development Center in 2013.

While Managing Montana remains the foundation of SPDC's training services, the Center has developed and delivered dozens of other workshops and seminars. These cover specific topics related to management, communications, and personal effectiveness. In addition, the PDC provides other services related to its mission, including meetings facilitation, mediation, curriculum development, consulting, and needs assessment.

The SPDC operates on a proprietary budget. The Legislature authorizes FTE and spending levels for the program, but appropriates no general funds. The SPDC charges reasonable fees for its services, using the proceeds to cover all its costs.

Beginning in 2013, the PDC, now the State Professional Development Center (SPDC), began an ambitious process of revising and updating the entire curriculum. The series listed above were combined into one series, Effective Management, since the material was largely redundant. New series were developed in their place:

- Transformational Leadership
- The Excellent Public Manager
- Leadership Challenge
- Excellent Assistant

The mission of the SPDC was also revised to reflect the new direction of the center:

Mission

The mission of the State Professional Development Center, a proprietary government entity for the State of Montana, is to deliver high-quality professional development through relevant curricula and instruction, participant performance, instructor knowledge, and scholarship.

We provide pertinent and challenging education in leadership, management, communications, self-management, and administrative issues. The State Professional Development Center plays an integral role in the pursuit of productive and engaged employees for the 21st century.

“Developing a generation of leaders”

The State Professional Development Center will continue to explore opportunities to enhance management and leadership practices in state and local governments. One area that needs further attention is to develop the leadership talent pool for the 21st Century. This includes those currently in leadership roles and those who are or might be on a leadership career track. In order to carry out this purpose, the SPDC proposes to develop a continuum of professional development opportunities in cooperation with Dawson Community College and the University of Montana. After implementing the overhaul of the courses offered by the SPDC itself, the

next step is to offer a Certificate of Public Service through Dawson Community College, using SPDC staff and facilities.

Plan of Action

The SPDC and Dawson Community College have initiated discussions on the details of the proposed certificate program, resulting in the following strategy. The courses for the certificate program will be mainly those currently offered by the SPDC. The series that already exist will be used as the foundation of each of the courses for the program. State and local employees already take these classes for their professional development. However, there are cases in which employees need more structure and recognized credentials in order to advance in their careers, especially to move into leadership roles. We have also found that there are many instances in which those who are considered for leadership roles have credentials in areas other than management/leadership and require considerable instruction to be prepared to advance. For these individuals, the opportunity to take credit courses leading to a certificate is essential. In such cases, the employee/student will indicate that they wish to take the classes for credit.

Once an individual indicates they wish to pursue the certificate program, they are directed to Dawson Community College, where they will apply for admission. Once they are admitted, they will register for the course through DCC, in addition to their registration for the SPDC class through the Department of Administration. The students enrolled in the class for credit will have additional requirements beyond those for students simply taking an SPDC class for training. Using the Moodle learning management system of Dawson Community College, these students will complete required reading, submit assignments, and engage in discussion groups. Each series will count as one course as shown below in the proposed courses for review. The SPDC instructors who are approved by Dawson Community College will evaluate the student's progress and submit final grades to Dawson Community College. The SPDC instructors will also serve as the advisors for the students in the Certificate of Public Service program.

The student is responsible for the payment of tuition/fees to Dawson Community College and complying with all of the admission requirements and application for graduation. All of the standards of academic integrity of DCC are included in the courses and noted in the syllabus of each course.

Benefit of Program for Students

The Certificate of Public Service is specifically designed to improve the career prospects of public employees. The target groups are generally of two categories. The first category is composed of the employees with little or no college at all. In order for them to be placed on a career path that will likely include supervision, it is essential that they receive appropriate leadership development courses. The certificate program provides all the crucial elements to ensure that they have the knowledge needed to be an effective supervisor. It also carries with it an accredited program that should be recognized by all agencies. Thus it goes beyond simply providing training. It also opens up opportunities to both continue the education of the employee and assures public employers that they have received training that is specifically designed for public sector management.

The second targeted group is those who have a degree in another subject area that does not include management instruction. Some examples are those with degrees in biology, engineering, or computer science. The certificate program will offer them the opportunity to learn leadership skills prior to being advanced to a supervisory position. As an accredited program, these individuals will also benefit by having management courses as a part of their transcripts. This is important if they wish to advance to a supervisory role in a different agency or level of government. It is also important that employers are confident that the education received is pertinent to public management.

In both cases, the participants should expect an improved career path in the public sector. An accelerated advancement path will increase their career earnings substantially. The program will further open up opportunities to advanced degrees as it will provide the basic courses that

are typically prerequisites in many graduate programs. The most important outcome will be more satisfying experiences in supervisory positions. This improves retention and better management practices will enhance the climate of public sector employment.

Proposed Courses for Review

Certificate of Public Service

Effective Management (60 hours) 4 cr. (3 cr. BMGT 235 – Management + 1 cr BGEN 292 Independent Study)

This eight class series covers essential ingredients for effective organizational management. The series is designed for experienced supervisors wanting a refresher, new supervisors, individuals interested in becoming a future supervisor and employees new to the public sector. If participants elect to take a pre and post assessment, the series will be recognized by the State of Montana as 6 months to 1 year of supervisory experience. The series is taught as a cohort, and will include the following classes:

- Approaching Supervision
- Myers-Briggs Type Indicator: Exploring Personality & Communication
- Strategic Planning
- Managing Conflict
- Performance Management
- Disciplinary Action and Documentation
- Diversity Management
- Synthesis

Transformational (Everyday) Leadership (45 hours) 3 cr.

This six class series covers essential ingredients for effective organizational leadership. It is designed for productive team members, individuals interested in becoming a future supervisor, new supervisors, a review for experienced supervisors, and employees new to the public sector. The series is taught as a cohort, and will include the following classes:

Leadership in Action
Vision and Change
Creating a Motivating Environment
Teambuilding
From Me to We: Effective Collaboration (2 days)

Customer Service Strategies (45 hours) 3 cr. (TASK 150 – Customer Service Strategies)

This six-course series is an introduction to the many aspects of customer service in the public sector. Topics covered include defining excellent customer service, addressing the needs of the internal and external customers, responding to requests through a decision making process, and accountability.

Customer Service
Customer Service in the Public Sector
Improving Employee Accountability
Effective Communication
Creating a Motivating Environment
Synthesis

Office Success Strategies (45 hours) 3 credits (TASK 210 – Office Success Strategies)

This course is an introduction to the many aspects of an office environment. Topics covered include teamwork and office relationships, prioritizing and calendaring, meetings and travel arrangements, working on a team, and office etiquette

Managing Multiple Priorities
Writing Clearly and Concisely

Grammatically Correct Writing
Punctuation for Clarity
Working on a Team
The Respectful Workplace
Effective Meetings

Public Service Leadership (45 hours) 3 cr. (The Excellent Public Manager)

This six class series emphasizes the shift in thinking about how we should work in government and non-profit organizations. Part of this is a return to the concept of public service as a vocation. It involves a mindset that recommits to serving citizens first. The New Public Service also promotes the ideals of engagement of employees and citizens alike. This series focuses on some of the key skills needed to become a true public service force in the 21st Century.

Performance Driven Leadership
Leading Innovation
Governance Web 2.0
Evidence Based Management
Decision Making
Engaging Citizens in the 21st Century

Writing 3 cr. (WRIT 101 College Writing or WRIT 121 Introduction to Technical Writing)

WRIT 101 Prerequisite: Successful completion of WRIT095, a score of 62 or above on the COMPASS Placement Exam, or consent of instructor. Composition I is a course in college-level writing. Students will learn basic research skills, including information retrieval and documentation. Short essays will demonstrate critical thinking as a basis for clear, concise writing. A final research project will provide students with a model that may be used in academic and vocational settings. Formerly EN101 Composition I

WRIT 121 Prerequisite: WRIT 101. This course covers the principles of creating and developing professional documents such as descriptions, instructions, reports, and proposals. Correct sentence structure, grammar, and usage are reviewed.

Ethics 3 cr

This course will develop the unique features of ethical challenges in the public and non-profit sectors. It will include the following classes:

- Rhetorical roots of ethics
- Persuasion
- Critical thinking
- Ethical Issues in Public Service
- Montana Ethics Law
- Privacy and the Right to Know

Math 3cr (Mathematics for the Liberal Arts)

Prerequisite: "C-" or better in M95 or equivalent, Math Placement Test or consent of instructor. This course applies mathematics to a variety of disciplines. It is designed for non-math/science majors. It includes matrices and applications to systems of linear equations, applications to the natural sciences, social sciences, and games. There is an introduction to financial mathematics, sets, counting theorems, elementary probability, and statistics.

Capstone 3 cr.

This will be a project that is agreed to with the instructor that uses the material learned in the program as a practical application. In most cases, this will be developed with a cooperating agency in state or local government. The end product will be presented to the agency that requested it.

Total Certificate Credits = 27

March 3-4, 2016

ITEM 170-2703-R0316

Request for Authorization to Establish a Certificate in Nonprofit Administration & Leadership

THAT

The Montana Board of Regents recognizes the establishment of a Certificate in Nonprofit Administration & Leadership at Montana State University Billings. The program involves a 12-credit curriculum that will allow students to add a certificate to their professional credentials upon graduation.

EXPLANATION

The Certificate in Nonprofit Administration is a professional graduate level certificate. This certificate is intended for students interested in working in the non-profit industry or mid-career professional seeking to advance their career. Students will learn nonprofit management, leadership ethics, financial operations, and specific laws and regulations pertaining to nonprofit governance.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-2703-R0316

Meeting Date: March 3-4, 2016

Institution: Montana State University Billings

CIP Code: 52.0206

Program Title: Certificate in Nonprofit Administration & Leadership

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

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

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 Certificate in Nonprofit Administration is a professional graduate level certificate. This certificate is intended for students interested in working in the non-profit industry or mid-career professional seeking to advance their career. Students will learn nonprofit management, leadership ethics, financial operations, and specific laws and regulations pertaining to nonprofit governance.

March 3-4, 2016

ITEM 170-2014-R0316

Notification of Montana State University Jake Jabs College of Business and Entrepreneurship intent to Offer an Entrepreneurship Certificate

THAT

The Montana State University Jake Jabs College of Business and Entrepreneurship requests approval of a 15-credit Certificate in Entrepreneurship for non-business majors.

EXPLANATION

The proposed 15-credit Entrepreneurship Certificate will provide non-business majors with the basic knowledge and skills necessary to prepare them to launch a new venture. It is related to existing business programs at MSU-Bozeman but differs from these programs in terms of both target market and number of credits required.

The certificate is part of a deliberate effort by the Jake Jabs College of Business & Entrepreneurship to expand its offerings to non-business students who seek to apply their disciplinary knowledge to launch a new business or non-profit but who lack the basic business and entrepreneurial skills necessary for start-up success. The certificate will be available only to students at MSU-Bozeman who are pursuing a 4-year degree in a discipline other than business.

There are many students at MSU-Bozeman pursuing a major in a discipline other than business who wish also to learn entrepreneurship concepts in order to prepare them for starting and running a business or non-profit. The proposed Entrepreneurship Certificate enables non-business students to gain the basic knowledge and skills needed to start a business or non-profit. Examples include engineering and computer science students seeking to start a business based on their own invention.

The fact that over 50 students are currently enrolled in the College's Entrepreneurship and Small Business Management minor suggests that there is strong interest among MSU students in entrepreneurship. The fact that the vast majority of these students are business majors, however, also suggests that the current minor is not attractive to non-business majors, probably because of the number of credits required (30). The Entrepreneurship Certificate targets non-business majors and provides a lower impact option for gaining basic entrepreneurship knowledge and skills.

The Certificate consists of existing courses – no new courses are created for this program.

While all of the courses listed in the proposed certificate already exist, it is likely that additional sections of BGEN 194, BGEN 210 and BMGT 448 may need to be added over time to accommodate demand generated by the certificate. It is not expected that additional sections of the elective courses will be needed because students will disperse across these courses.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2014-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Montana State University**

CIP Code: **52.0701**

Program Title: **Certificate in Entrepreneurship**

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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)**

- 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, except when eliminating or consolidating)

- 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit**

Specify Request:

We are requesting the addition of a 15 credit Certificate in Entrepreneurship, consisting entirely of existing courses, intended to provide non-business majors with an overview of the business startup process in order to prepare them to start their own businesses or non-profit organizations. The certificate is part of a deliberate effort by the Jake Jobs College of Business & Entrepreneurship to expand its offerings to non-business students who seek to apply their disciplinary knowledge to launch a new business or non-profit but who lack the basic business and entrepreneurial skills necessary for start-up success. The certificate will be available only to students at MSU-Bozeman who are pursuing a 4-year degree in a discipline other than business.

March 3-4, 2016

ITEM 170-2902-R0316

**Notification of the establishment of Electronics Technician Tier I Certificate via Course Sharing with
FVCC**

THAT

Great Falls College MSU notifies the Board of Regents of Higher Education of the establishment of a certificate in Electronics Technician Tier I via course sharing with FVCC.

EXPLANATION

This is a stackable credential that leads either to placement in the workforce or continuation to a Certificate of Applied Science or Associate of Applied Science degree in Electronics Technology. The Certificate was developed in connection with the RevUp grant.

Program Fees

Great Falls College MSU notifies the Board of Regents of the intent to offer Electronics Technician Tier I with approximate fees of \$750.00.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – Fee Request

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2902-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Great Falls College Montana State University**

CIP Code: **47.0105**

Program Title: **Electronics Technician Tier I 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Great Falls College MSU notifies the Board of Regents of the intent to offer Flathead Valley Community College's Tier I Electronics Technician Certificate in Fall, 2016. This is a stackable credential that leads either to placement in the workforce or continuation to a Certificate of Applied Science or Associate of Applied Science degree in Electronics Technology. The Certificate was developed in connection with the RevUp grant.

THE MONTANA UNIVERSITY SYSTEM
 Inventory and Validation of Fees -- New Programs
New Non-Mandatory Fees -- Rates per Semester

Unit Name: Great Falls College Montana State University

NAME OF FEE	RUBRIC	BOR		%		%		FUND	DESCRIPTION
		AUTHORIZATION		FY 17 FEE	CHANGE	FY 18 FEE	CHANGE		
Program Fees									
Electronics Technician, Tier I		NEW		\$750	100%	\$750	0%	331009	Purchase consumable electronic components

March 3-4, 2016

ITEM 170-2903-R0316

Notification of the establishment of a Electronics Technician Tier II Certificate via Course Sharing with FVCC

THAT

Great Falls College Montana State University notifies the Board of Regents of Higher Education of the establishment of a certificate in Electronics Technician Tier I via course sharing with FVCC.

EXPLANATION

This is a stackable credential that leads either to placement in the workforce or continuation to a Certificate of Applied Science or Associate of Applied Science degree in Electronics Technology. The Certificate was developed in connection with the RevUp grant.

Program Fees

Great Falls College MSU notifies the Board of Regents of the intent to offer Electronics Technician Tier II with approximate fees of \$600.00.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – Fee Request

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2903-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Great Falls College Montana State University**

CIP Code: **47.0105**

Program Title: **Electronics Technician Tier II 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Great Falls College MSU notifies the Board of Regents of the intent to offer Flathead Valley Community College's Electronics Technician Tier II Certificate in Spring, 2017. This is a stackable credential that leads either to placement in the workforce or to a Certificate of Applied Science or Associate of Applied Science degree in Electronics Technology. The Certificate was developed in connection with the RevUp grant.

THE MONTANA UNIVERSITY SYSTEM
 Inventory and Validation of Fees -- New Programs
New Non-Mandatory Fees -- Rates per Semester

Unit Name: Great Falls College Montana State University

NAME OF FEE	RUBRIC	BOR		%		%		FUND	DESCRIPTION
		AUTHORIZATION		FY 17 FEE	CHANGE	FY 18 FEE	CHANGE		
Program Fees									
Electronics Technician, Tier II		NEW		\$600	100%	\$600	0%	331009	Purchase consumable electronic components

March 3-4, 2016

ITEM 170-2904-R0316

Notification of the establishment of an Industrial Maintenance Tier I Certificate via Course Sharing with FVCC

THAT

Great Falls College Montana State University notifies the Board of Regents of Higher Education of the establishment of a certificate in Industrial Maintenance Tier I via course sharing with FVCC.

EXPLANATION

This is a stackable credential that leads either to placement in the workforce or continuation to a Certificate of Applied Science degree in Industrial Maintenance. The Certificate was developed in connection with the RevUp grant.

Program Fees

Great Falls College MSU notifies the Board of Regents of the intent to offer Industrial Maintenance Tier I with approximate fees of \$850.00.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – Fee Request

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2904-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Great Falls College Montana State University**

CIP Code: **47.0303**

Program Title: **Industrial Maintenance Tier I 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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Great Falls College MSU notifies the Board of Regents of the intent to offer Flathead Valley Community College's Industrial Maintenance Tier I Certificate in Fall, 2016. This is a stackable credential that leads either to placement in the workforce or continuation to a Certificate of Applied Science in Industrial Maintenance. The Certificate was developed in connection with the RevUp grant.

THE MONTANA UNIVERSITY SYSTEM
 Inventory and Validation of Fees -- New Programs
New Non-Mandatory Fees -- Rates per Semester

Unit Name: Great Falls College Montana State University

NAME OF FEE	RUBRIC	BOR		% FY 17 FEE		% FY 18 FEE		FUND	DESCRIPTION
		AUTHORIZATION		CHANGE	CHANGE				
Program Fees									
Industrial Maintenance, Tier I		NEW		\$850	100%	\$850	0%	331009	Purchase materials and consumables for laboratory projects

March 3-4, 2016

ITEM 170-2905-R0316

Notification of establishment of a Machinist Technician Tier I Certificate via Course Sharing with FVCC

THAT

Great Falls College Montana State University notifies the Board of Regents of Higher Education of the establishment of a certificate in Machinist Technician Tier I via course sharing with FVCC.

EXPLANATION

This is a stackable credential that leads either to placement in the workforce or continuation to a Certificate of Applied Science or Associate of Applied Science degree in Machining Technology. The Certificate was developed in connection with the RevUp grant.

Program Fees

Great Falls College MSU notifies the Board of Regents of the intent to offer Machinist Technician Tier I with approximate fees of \$900.00.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – Fee Request

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2905-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Great Falls College Montana State University**

CIP Code: **48.0510**

Program Title: **Machinist Technician Tier I 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Great Falls College MSU notifies the Board of Regents of the intent to offer Flathead Valley Community College's Machinist Technician Tier I Certificate in Fall, 2016. This is a stackable credential that leads either to placement in the workforce or continuation to a Certificate of Applied Science or Associate of Applied Science degree in Electronics Technology. The Certificate was developed in connection with the RevUp grant.

THE MONTANA UNIVERSITY SYSTEM
 Inventory and Validation of Fees -- New Programs
New Non-Mandatory Fees -- Rates per Semester

Unit Name: Great Falls College Montana State University

NAME OF FEE	RUBRIC	BOR		%		%		FUND	DESCRIPTION
		AUTHORIZATION		FY 17 FEE	CHANGE	FY 18 FEE	CHANGE		
Program Fees									
Machinist Technician, Tier I			NEW	\$900	100%	\$900	0%	331009	Purchase materials and consumables for laboratory projects

March 3-4, 2016

ITEM 170-2906-R0316

Notification of establishment of a Machinist Technician Tier II Certificate via Course Sharing with FVCC

THAT

Great Falls College Montana State University notifies the Board of Regents of Higher Education of the establishment of a certificate in Machinist Technician Tier I via course sharing with FVCC.

EXPLANATION

This is a stackable credential that leads either to placement in the workforce or continuation to a Certificate of Applied Science or Associate of Applied Science degree in Machining Technology. The Certificate was developed in connection with the RevUp grant.

Program Fees

Great Falls College MSU notifies the Board of Regents of the intent to offer Machinist Technician Tier II with approximate fees of \$850.00.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – Fee Request

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2906-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Great Falls College Montana State University**

CIP Code: **48.0510**

Program Title: **Machinist Technician Tier II 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Great Falls College MSU notifies the Board of Regents of the intent to offer Flathead Valley Community College's Machinist Technician Tier II Certificate in Spring, 2017. This is a stackable credential that leads either to placement in the workforce or to a Certificate of Applied Science or Associate of Applied Science degree in Electronics Technology. The Certificate was developed in connection with the RevUp grant.

THE MONTANA UNIVERSITY SYSTEM
 Inventory and Validation of Fees -- New Programs
New Non-Mandatory Fees -- Rates per Semester

Unit Name: Great Falls College Montana State University

NAME OF FEE	RUBRIC	BOR		%		%		FUND	DESCRIPTION	
		AUTHORIZATION		FY 17 FEE	CHANGE	FY 18 FEE	CHANGE			
Program Fees										
Machinist Technician, Tier II			NEW		\$850	100%	\$850	0%	331009	Purchase materials and consumables for laboratory projects

March 3-4, 2016

ITEM 170-2907-R0316

Notification of establishment of a Welding and Fabrication Tier III

THAT

Great Falls College Montana State University notifies the Board of Regents of Higher Education of the establishment of a certificate in Welding and Fabrication Tier III.

EXPLANATION

This is a stackable credential that leads to placement in the workforce. The Certificate was developed in connection with the RevUp grant.

Program Fees

Great Falls College MSU notifies the Board of Regents of the intent to offer Welding and Fabrication Tier III with associated fees of \$650.00.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – Fee Request

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2907-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Great Falls College Montana State University**

CIP Code: **48.0508**

Program Title: **Welding and Fabrication Tier III 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Great Falls College MSU notifies the Board of Regents of the intent to offer Welding and Fabrication Tier III. This is an industry recognized stackable credential that leads to placement in the workforce. The Certificate was developed in connection with the RevUp grant.

THE MONTANA UNIVERSITY SYSTEM
 Inventory and Validation of Fees -- New Programs
New Non-Mandatory Fees -- Rates per Semester

Unit Name: Great Falls College Montana State University

NAME OF FEE	RUBRIC	BOR		%		%		FUND	DESCRIPTION	
		AUTHORIZATION		FY 17 FEE	CHANGE	FY 18 FEE	CHANGE			
Program Fees										
Welding Tier III			135-107-R0507		\$650	0%	\$650	0%	331005	Costs of program specific consumables including, but not limited to welding gases, rods, wire, metal sheets and fragments, welding hood visors, pliers, antispatter, and student protective wear.

March 3-4, 2016

ITEM 170-2804-R0316

Notification of intent to offer Business Technology area of study within the BAS degree

THAT

Montana State University Northern notifies the Board of Regents of the intent to offer a Business Technology area of study within the BAS degree.

EXPLANATION

There are 8 colleges offering feeder AAS degrees in the Montana University System, and 4 tribal colleges with similar AAS degrees. This BAS area of study would provide an avenue for graduates with those AAS degrees to pursue a related bachelor degree. A student entering this program will have completed an AAS degree in Business, Business Administration, Business Management, or Business Technology from any member of the MUS or from those Montana tribal colleges with which we have articulated. This would be a workforce development initiative that moves our Montana students toward meeting the Governor's development goals.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2804-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Montana State University Northern**

CIP Code: **52.0299**

Program Title: **Bachelor of Applied Science – Business Technology**

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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Montana State University Northern notifies the Board of Regents of intent to offer a Business Technology area of study within the BAS degree.

There are 8 colleges offering feeder AAS degrees in the Montana University System, and 4 tribal colleges with similar AAS degrees. This updated Business Technology BAS area of study would provide an avenue for graduates with those AAS degrees to pursue a related bachelor degree.

A student entering this program will have completed an AAS degree in Business, Business Administration, Business Management, or Business Technology from any member of the MUS or from those Montana tribal colleges with which we have articulated.

We believe this to be a workforce development initiative that moves our Montana students toward meeting the Governor's development goals.

March 3-4, 2016

ITEM 170-2805-R0316

Notification of intent to offer a Trades Management area of study within the BAS degree

THAT

Montana State University Northern notifies the Board of Regents of intent to offer a Trades Management area of study within the BAS degree.

EXPLANATION

There are approximately 25 trades-related AAS degrees offered by institutions of the Montana University System and an additional 3 degrees offered by tribal colleges in the state. This BAS area of study would provide an avenue for graduates with those degrees to pursue a related bachelor degree. A student entering this program will have completed an AAS degree in plumbing, electrical, construction trades, building trades, carpentry, construction technology, culinary arts, electronics technology, energy technology, industrial machine technology, machine tool technology, metals technology, sheet metal technology, surveying, sustainable energy technology, or welding technology from any member of the Montana University System or from those Montana tribal colleges with which we have articulated. This would be a workforce development initiative that moves our Montana students toward meeting the Governor's development goals.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2805-R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Montana State University Northern**

CIP Code: **52.0205**

Program Title: **Bachelor of Applied Science – Trades Management**

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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Montana State University Northern notifies the Board of Regents of intent to offer a Trades Management area of study within the BAS degree.

There are approximately 25 trades-related AAS degrees offered by institutions of the Montana University System and an additional 3 degrees offered by tribal colleges in the state. This updated Trades Management BAS area of study would provide an avenue for graduates with those degrees to pursue a related bachelor degree. A student entering this program will have completed an AAS degree in plumbing, electrical, construction trades, building trades, carpentry, construction technology, culinary arts, electronics technology, energy technology, industrial machine technology, machine tool technology, metals technology, sheet metal technology, surveying, sustainable energy technology, or welding technology from any member of the Montana University System or from those Montana tribal colleges with which we have articulated.

This would be a workforce development initiative that moves our Montana students toward meeting the Governor's development goals.

March 3-4, 2016

ITEM 170-1001-R0316

Notification of the establishment of a Certificate in Bioinformatics – University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of the establishment of a Certificate in Bioinformatics.

EXPLANATION

The biological sciences have become inundated with data. Many experiments, such as sequencing, expression experiments, NMR, Mass Spec, and so on, generate gigs and even terabytes of data. This 12 credit certificate introduces the student to computational techniques useful in analyzing and manipulating such large quantities of data.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1001-0316

Meeting Date: March 3-4, 2016

Institution: University of Montana-Missoula

CIP Code: 26.1103

Program Title: Bioinformatics 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)**

- 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, except when eliminating or consolidating)

- 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit**

Specify Request:

The biological sciences have become inundated with data. Many experiments, such as sequencing, expression experiments, NMR, Mass Spec, and so on, generate gigs and even terabytes of data. This 12 credit certificate introduces the student to computational techniques useful in analyzing and manipulating such large quantities of data.

Certificate in Bioinformatics Requirements (12 credits)

Required Courses (6 credits)

CSCI 135 Fundamentals of Computer Science I or CSCI 250 Computer Modeling/Science Majors or BIOB 488 Programming for Biology
CSCI 451 Computational Biology

Elective courses (6 credits) student must complete one of the following courses:

BIOB 486 Genomics
BIOB 488 Programming for Biology (if not taken as core)
BCH 480 Adv Biochem
CSCI 448 Pattern Recognition
CSCI 444 Data visualization

March 3-4, 2016

ITEM 170-1002-R0316

Notification of the Establishment of a Certificate in Computer Programming – University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of the establishment of a Certificate in Computer Programming, University of Montana-Missoula.

EXPLANATION

Computer software is ubiquitous in our digital world. The ability to write programs and to think computationally is useful for a student in any major. This 12 credit certificate encourages non-computer-science students to learn to program.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1002-R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana-UM

CIP Code: 11.02

Program Title: Computer Programming 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Computer software is ubiquitous in our digital world. The ability to write programs and to think computationally is useful for a student in any major. This 12 credit certificate encourages non-computer-science students to learn to program.

Programming is an essential skill for solving problems in many fields. Programming gives maximum flexibility in processing and understanding data, constructing computational models, and building user friendly applications. Programming skills are in high demand in the marketplace. Completing this certificate could be the first step towards a career that involves software development.

Students will apply object-oriented principles to develop software systems. Students will learn to apply and program data structures like lists, trees, and hash tables. The elective course allows to student to learn about software engineering, web programming, mobile device programming, or user interface design.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Certificate in Computer Programming Requirements (12 credits)

Required Courses (9 credits)

CSCI 135 Fundamentals of Computer Science I or CSCI 250 Computer Modeling/Science Majors
CSCI 136 Fundamentals of Computer Science II
CSCI 231 Data Structures

Elective course (3 credits) student must complete one of the following courses

CSCI 205 Programming Languages
CSCI 323 Software Science
CSCI 340 Database Design
CSCI 411 Advanced Web Programming
CSCI 412 Game and Mobile App
CSCI 443 User Interface Design

March 3-4, 2016

ITEM 170-1003-R0316

Notification of the Establishment of a Global Leadership Initiative Certificate – University of Montana-Missoula

THAT

University of Montana-Missoula notifies the Montana Board of Regents of Higher Education of the establishment of a Global Leadership Initiative Certificate.

EXPLANATION

The challenges that our students will confront at graduation are increasingly global concerns, such as economic viability, population and environmental changes, effects of technological advances, ethical dilemmas, and the generation of wealth and resources. Our global society needs leaders and entrepreneurs to shape progress toward innovation, new technologies, and civic and cultural engagement.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – Letters of Support

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1003-R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana-Missoula

CIP Code: 30.00

Program Title: Global Leadership 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 Affairs Handbook](#).

A. Notifications:

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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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The challenges that our students will confront at graduation are increasingly global concerns, such as economic viability, population and environmental changes, effects of technological advances, ethical dilemmas, and the generation of wealth and resources. Our global society needs leaders and entrepreneurs to shape progress toward innovation, new technologies, and civic and cultural engagement.

The [Global Leadership Initiative](#) (GLI) is a signature educational program at the University of Montana that prepares interdisciplinary problem solvers and leaders to work collaboratively with diverse groups in an interconnected world. The GLI provides students an opportunity to expand their thinking about global issues and develop their leadership skills. The program enriches an already strong university experience composed of major and general education coursework. By providing students with interdisciplinary coursework, out-of-classroom experiences, advising and support, the GLI fosters skills that enable students to critically examine global challenges and achieve genuine confidence in their knowledge and abilities.

Students completing the four-year, 12-credit program will earn the Global Leadership Certificate. The program is a cohort program open to all incoming freshmen pursuing a four-year degree, regardless of major, space permitting. There are no academic requirements to join the program other than to complete an application form. The certificate program is designed to engage GLI students in each of their four years. Students begin by exploring themes through a seminar and course aligned with the GLI global themes. They then develop their leadership skills, which are then applied in an out-of-classroom experience aligned with their chosen global theme. The program culminates with a capstone project

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

completed in teams of students studying the same global theme. The 12 credits are earned through these courses and experiences, outlined below:

Freshman Year

- GBLD 194 Freshman GLI Seminar** (3cr)
- GBLD 110 Global Challenges & Leadership** (1cr)

Sophomore Year

- GBLD 220 Models of Leadership** (2cr)

Junior Year

- (choose one) Internship, research, study abroad, service learning (3 cr)

Senior Year

- GBLD 499 GLI Capstone Development** (2cr)
- GBLD 499 GLI Capstone Project** (1cr)

Total Credits: 12

**Open only to Global Leadership Certificate Students

September 29, 2015

Tim Manuel
Chair, ASCRC

Dear Tim,

The Global Leadership Initiative just began its fifth year of programming and the first GLI cohort graduated last year. The GLI Task Force has closely worked with the GLI Director, Jeanne Loftus, to solicit feedback and develop the program with the desire to continually improve. The GLI Task Force believes now is the time to formalize the program for students, offering a 12-credit certificate of completion in Global Leadership. The Level I form outlines improvements we have made to the program over time.

I wanted to highlight a few important things for ASCRC as you consider this proposal:

- This is, and always has been, an academic program delivered by faculty from many departments. The form of the program has slightly changed over time to enhance its effectiveness, but at its core, it is a set of academic courses and experiences around global themes and leadership. The move to make it a certificate is only a slight change in the programming and in how GLI students receive transcript recognition of the program completion.
- It is an enrichment program meant to supplement – not replace – a student’s major and general education experience. Students are more frequently wanting to craft their elective credits in a more meaningful way, and the GLI provides that opportunity.
- It is open to any incoming freshman pursuing a 4-year degree, regardless of academic ability. This distinguishes it from the DHC, which is an alternative, merit-based enrichment program.
- It is a cohort program, making it somewhat unique compared to other certificates of completion on campus. We think this is a major strength of the program, allowing each year’s coursework to build on the last and students to build an academic community that spans disciplines.
- It is an interdisciplinary program. This requires us to step outside of our departmental “box” when thinking about how it is delivered and administered. There are other such programs on campus, and if we are going to move forward with interdisciplinary programs, the faculty governance is going to have to trust the oversight boards that govern these interdisciplinary programs in lieu of a single departmental oversight. I can assure you that the GLI Task Force takes its oversight role very seriously.
- This program is funded by private donations. This pays for the staffing, student scholarships, faculty stipends, and other operational expenses of the entire program.

- We expect to be included in the program review cycle just like any other academic program, and assume the earliest such a review would take place would be after we complete seven years of programming, or the 2018-2019 year (our 8th year of existence).

The GLI Task Force requests that this proposed certificate and related course proposals be considered by the full ASCRC rather than placing it in a discipline-specific subcommittee. This seems most appropriate for an interdisciplinary certificate.

Finally, we trust ASCRC will evaluate this proposal on its merits, without personal opinion or politics clouding the evaluation. The GLI Task Force has taken great care to create a small, innovative, cohesive, academic program that will benefit the students who complete it and help UM distinguish itself from other institutions. For tracking purposes, I have detailed the various pieces that are being sent to ASCRC at the bottom of this page. If you have any questions, please contact me or Jeanne Loftus.

Best,



Terri Herron

GLI Task Force Chair

Proposals Submitted for Review

Level I – Global Leadership Certificate (12 cr)

eCurr – GBLD 110 Global Challenges and Leadership (1 cr), new course to be offered in 16-17

eCurr – GBLD 220 Models of Leadership (2 cr), new course currently experimentally offered

eCurr – GBLD 499 GLI Capstone Development (2 cr), new course currently experimentally offered,

change in number of credits

eCurr – GBLD 499 GLI Capstone Project (1 cr), new course currently experimentally offered

September 24, 2015

Faculty Senate:

Over the past four years, I have had the privilege of seeing the University of Montana through the eyes of a student, a Resident Assistant, a member of the Davidson Honors College, and an active participant in the Global Leadership Initiative. Upon arriving as a Wildlife Biology student, my classes were all over one hundred people and often more. I did not know any other students on campus, but luckily I had my GLI seminar class. My freshman seminar experience was the beginning of one of my favorite parts of my UM experience. GLI has been an incredible addition to my undergraduate education. It has provided me with opportunities to meet new faculty mentors and other students, take unique classes, study abroad, become a Student Officer, be a Resident Assistant for the GLI Living Learning Community, and now sit as the Student Representative for the GLI Taskforce.

GLI offers students a guided path to achieving many of their leadership goals throughout college. However, through my experience there is a disconnect after freshman year. Although the program has changed and improved since I was a freshman, there could be more cohesion between your freshman seminar and senior capstone. For me, the requirements within my sophomore and junior years were more independent, though now having the leadership course sophomore year is a great addition for those students. The certificate is a step to keep you from losing the "GLI Cohort." Some students remain in touch with other GLI students through different activities, but many feel they would benefit from more support in the freshman year and a more substantive sophomore year class.

The GLI 12 credit certificate seems like an excellent way to continue moving GLI forward. It will allow for more consistency and contact hours within the freshman and sophomore years. It will also increase students' desire to not only push their leadership goals, but also their academics. The GLI certificate will offer students more recognition for their hard work throughout the program and hopefully will increase students' desire to complete the full four years.

GLI has been a great experience for me and I hope that the experience will continue to be even greater for the students that follow. The program encourages you to grow in so many ways on top of your academics. It provides connections with people you would otherwise never meet and helps you to become a well-rounded student and leader. I would be very excited to see this certificate passed and am in full support of GLI moving forward.

Thank you for your time and consideration,



Nikki Parker



Department of Sociology
Social Science Building, Room 333
The University of Montana
Missoula, MT 59812

Phone Number (406) 243-5281
Fax Number: (406) 243-5951

Tim Manuel, Chair
ASCRC

October 1, 2015

Dear Tim,

I'm writing to express my support for the proposed Global Leadership Certificate.

I have been involved with the GLI program in several different capacities over the years. I served as a member of the GLI Task Force for the first three years of its existence; during part of that time I was Chair of the Task Force. I have also taught GLI seminars two times. As an Associate Professor in the Sociology department, I have watched several of our majors work their way through the GLI program.

Having read the proposal for the Global Leadership Certificate, I am convinced that the certificate will enhance, and in some ways even improve, the existing GLI program.

I believe that the proposed Global Leadership Certificate will formalize fellows' learning about leadership, which currently happens in their sophomore year. In previous years, GLI fellows' learning about leadership has tended to be piecemeal or informal. The proposed certificate, specifically the courses proposed for freshman and sophomore years, will make this learning more rigorous and more explicit. For students who are serious about leadership, which many GLI fellows are, this change will benefit them tremendously.

The proposed Global Leadership Certificate will also increase GLI fellows' opportunities to learn from each other in credit-bearing settings. Currently, GLI fellows learn from each other in two academic settings; their freshman seminars and then again during their senior capstone experience. They do not have formal opportunities to interact with each other in academic settings during their sophomore or junior years. The two courses that are part of the proposed certificate will provide GLI fellows with additional opportunities to learn from each other, and interact with each other, in formal academic settings. I think that this will be very positive for the students.

Finally, the proposed Global Leadership Certificate will provide students with more adequate preparation for their capstone experiences. My conversations with students, faculty mentors, and GLI staffers have convinced me that GLI fellows need earlier, and more in-depth, instruction about leadership and group dynamics in order to get the most out of their capstone experiences. I am confident that the new classes that are part of the proposed certificate will accomplish this.

While the proposed Global Leadership Certificate will certainly enhance the GLI program, it will do so without altering any of the best (in my opinion) aspects of the current program. The proposed certificate will preserve the GLI's status as an academic program delivered by faculty from different departments across campus. It will also uphold the GLI's status as a supplement to fellows' major and GE requirements. Finally, the proposed certificate will maintain access to the program for all students, not just those with certain GPAs or academic interests. This latter feature of the program is incredibly important to me personally.

For all of these reasons, I enthusiastically support the proposed Global Leadership Certificate. I am confident that it will both improve the overall program and enhance fellows' experiences in the GLI.

Please do not hesitate to contact me if you have any questions, or need further clarification about anything in this letter.

Sincerely,

A handwritten signature in black ink, consisting of a stylized 'D' followed by a wavy line and a large 'R' followed by a wavy line.

Daisy Rooks

March 3-4, 2016

ITEM 170-1004-R0316

Notification of the Establishment of a Certificate in Health Behavior Coaching – University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of the establishment of a Certificate in Health Behavior Coaching.

EXPLANATION

The Community Health and Prevention Science (CHPS) program will offer a 25 credit Certificate Program in Health Behavior Coaching. The courses, practicum and internship experiences necessary to establish this certificate program already exist within the department of Health and Human Performance (HHP). The HHP department has worked closely with the Wellness Program of Curry Health Center to provide training in Health Behavior Coaching and create onsite coaching opportunities in a medical setting. This unique collaboration between academics and student affairs provides students with specialized training in Health Behavior Coaching and also the opportunity to practice their new skills in a real world setting. The onsite coaching program has developed and grown over the past three years; pre and post intervention evaluations have shown the effectiveness of the coaching strategies. Offering a certificate in Health Behavior Coaching will meet the needs of a quickly evolving health care system towards prevention practices and provide further recognition of specialized training as essential in the health care disciplines.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1004-R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana-Missoula

CIP Code: 51.1504

Program Title: Health Behavior Coaching 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 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- Adding, re-titling, terminating or revising a campus certificate of 29 credits or less**
- 4. BAS/AA/AS Area of Study**

B. Level I:

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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Community Health and Prevention Science program will offer a 25 credit Certificate Program in Health Behavior Coaching. The courses, practicum and internship experiences necessary to establish this certificate program already exist within the department of Health and Human Performance (HHP). The HHP department has worked closely with the Wellness Program of Curry Health Center to provide training in Health Behavior Coaching and create onsite coaching opportunities in a medical setting. This unique collaboration between academics and student affairs provides students with specialized training in Health Behavior Coaching and also the opportunity to practice their new skills in a real world setting. The onsite coaching program has developed and grown over the past three years; pre and post intervention evaluations have shown the effectiveness of the coaching strategies. Offering a certificate in Health Behavior Coaching will meet the needs of a quickly evolving health care system towards prevention practices and provide further recognition of specialized training as essential in the health care disciplines.

Health care in America is in the midst of a paradigm shift from a system focused almost entirely on treatment to a system focused on both prevention and treatment. This transition came about, in part, as a result of the Affordable Care Act (ACA) that emphasizes a focus on wellness and prevention as the key to improving the health of Americans. Specifically, the Prevention and Public Health Fund (PPHF) of the ACA contains a profusion of new provisions designed to address 4 key prevention areas: 1) community prevention, 2) clinical prevention, 3) public health infrastructure and training, and 4) research and surveillance focused on workforce wellness (The Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 2010).

Governmental organizations are not the only entities whose focus has turned to prevention. Hospitals, primary care centers, insurance companies, non-profit organizations and corporate employers also are recognizing the value of prevention. As a

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

result, the Federal Bureau of Labor Statistics (2014) recently made this prediction, “Employment of health educators and community health workers is projected to grow 21 percent from 2012 to 2022, *faster than the average for all occupations*. Growth will be driven by efforts to improve health outcomes and to reduce healthcare costs by teaching people about healthy habits and behaviors and utilization of available health care services.”

The Community Health and Prevention Science (CHPS) program at UM has been training young professionals in the art and science of prevention for nearly two decades. It is this long-standing focus on prevention that led to a series of meetings between leaders in Montana’s medical community, faculty in CHPS, and staff at Curry Health Center’s Wellness Program. In these meetings, medical care providers in Montana embraced the health care paradigm shift toward prevention and expressed a specific need and interest in hiring Health Behavior Coaches. Health Behavior Coaches promote lifestyle adaptations that have been shown to reduce health care costs through prevention or delayed progression of chronic disease. The prime outcome of these series of meetings was a request by the Montana medical community to educational institutions to standardize the academic preparation and training of Health Behavior Coaches.

The current template created by Montana’s medical providers in regard to desired training and skills for Health Behavior Coaches corresponds nearly seamlessly with the curriculum currently offered by the University of Montana CHPS program. CHPS offers a degree that is a blend of the natural and social/behavioral sciences and includes training and practicum experiences in health coaching through Curry Health Center’s Optimal Bear Health Coaching program. In fact, the University of Montana is the only institution in the state that trains bachelor’s level community health educators in the science of prevention while providing hands on training in Health Behavior Coaching. Professionals in the health care community in Montana are looking to the University of Montana to lead the way in standardizing training for these entry-level prevention specialists. Our program is perfectly situated to do just that by providing an academically based Health Behavior Coaching certificate for the state of Montana and beyond.

Certificate Program in Health Behavior Coaching:

+	Course	Credits
+	Kin 201 – Basic Exercise Prescription	3
+	NUTR 221N – Basic Human Nutrition	3
+	HTH 370 – Peer Health Education	3
+	HTH 395 – Peer Health Practicum (specific to health coaching)	2
+	HTH 430 – Health and the Mind/Body/Spirit Relationship	3
+	KIN 483/84 – Exercise Disease and Aging	4
+	CHTH 485 – Theories of Health Behavior and Counseling	3
+	CHTH 495 – Internship (specific to health coaching)	4
<i>Minimum Required Grade: B-</i>		25 Total

March 3-4, 2016

ITEM 170-1005-R0316

Notification of the Establishment of a Graduate Certificate in Early Childhood Education – University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of the establishment of a Graduate Certificate in Early Childhood Education.

EXPLANATION

This 21-credit graduate certificate in Early Childhood Education is specifically developed for professionals who have earned an undergraduate degree in elementary education and are seeking specialized skills and knowledge required to add an endorsement in Early Childhood Education in Preschool – Grade 3 (P-3). More specifically, this option targets education professionals who already hold a Master’s degree as well as graduates who desire the P-3 endorsement without completion of a full M.Ed. program.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1005-R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana

CIP Code: 13.1210

Program Title: Certificate in Early Childhood Education

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 Affairs Handbook](#).

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- 3. Campus Certificates- Adding, re-titling, terminating or revising a campus certificate of 29 credits or less**
- 4. BAS/AA/AS Area of Study**

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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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.

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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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

This 21-credit graduate certificate in Early Childhood Education was specifically developed for professionals who have earned an undergraduate degree in elementary education and are seeking specialized skills and knowledge required to add an endorsement in Early Childhood Education in Preschool – Grade 3 (P-3). More specifically, this option targets education professionals who already hold a Master’s degree as well as graduates who desire the P-3 endorsement without completion of a full M.Ed. program.

The curriculum is comprised of existing courses that are designed to meet national and state early childhood education standards. Each course embeds a required lab experience so professionals are engaged in the application of knowledge and skills in their current classroom setting and/or other early childhood programs in their area.

The Certificate program will be delivered in an online format to create a readily accessible option for current teachers seeking certification in Montana’s new P-3 teaching endorsement. At the time of this proposal, there are no other programs offering a graduate Certificate in Early Childhood Education (P-3) in the state.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Certificate in Early Childhood Education

+	Course	Credits
+	EDEC 508 - EC Principles & Practices	3
+	EDEC 510 - Families, Community, Cultures	3
+	EDEC 520 - Meet Standards Play Env	3
+	EDEC 530 - SocEmot Dvlpmnt in Yng Child	3
+	EDEC 540 - Neuroscience Impact Chld Dev	3
+	EDEC 550 - EC Curric Anlys, Dsgn, & Assess	3
+	EDEC 595 - EC Fieldwork/Practicum	3
Minimum Required Grade B-		21 Total Credits Required

March 3-4, 2016

ITEM 170-1006-R0316

Notification of the Establishment of a Graduate Certificate in Gifted Education – University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of the establishment of a graduate Certificate in Gifted Education

EXPLANATION

The 12-credit Certificate in Gifted and Talented Education includes a series of four graduate level courses in the Department of Curriculum and Instruction (Teaching & Learning). Collectively, the courses required for the Certificate Program in Gifted and Talented Education are designed to reflect the practical knowledge, skills, and competencies that classroom teachers and administrators should apply to meet the academic and psychosocial needs of gifted learners. To reach the widest audience of teachers in Montana and the Northwestern Rockies, all courses will be delivered online. Each of the four proposed courses aligns with the National Association for Gifted Education Standards for University Teacher Preparation Programs. At the time of the proposal, there are no other programs offering a Certificate in Gifted and Talented Education in Montana.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1006-R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana

CIP Code: 13.1004

Program Title: Gifted & Talented Education Graduate 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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The 12-credit Certificate in Gifted and Talented Education includes a series of four graduate level courses in the Department of Curriculum and Instruction (Teaching & Learning). The courses offered in this Certificate in Gifted and Talented Education series could also be taken to fulfill elective course requirements of the *Master of Education* in Curriculum Studies, General Curriculum Studies option as well as the Master of Arts in Education proposal under review. In addition, the first two courses in the certificate program series (C&I 561 and C&I 562) would be offered as co-convening courses in the undergraduate teacher education program (EDU 461 and EDU 462) as elective courses. These two co-convening courses could be applied to the Certificate.

Collectively, the courses required for the Certificate Program in Gifted and Talented Education are designed to reflect the practical knowledge, skills, and competencies that classroom teachers and administrators should apply to meet the academic and psychosocial needs of gifted learners. To reach the widest audience of teachers in Montana and the Northwestern Rockies, all courses will be delivered online. Each of the four proposed courses aligns with the National Association for Gifted Education Standards for University Teacher Preparation Programs. At the time of the proposal, there are no other programs offering a Certificate in Gifted and Talented Education in Montana.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

+	Course	Credits
+	C&I 561: Introduction to Gifted/Talented Education <u>OR</u> EDU 461: Introduction to Gifted/Talented Education	3
+	C&I 562: Social and Emotional Development of Gifted and Talented Learners <u>OR</u> EDU 462: Social and Emotional Development of Gifted and Talented Learners	3
+	C&I 563: Methods and Curriculum for the Gifted and Talented	3
+	C&I 564: Planning Programs for the Gifted and Talented	3
	Minimum Required Grade B-	12 Total Credits Required

March 3-4, 2016

ITEM 170-1007-R0316

Notification of the Establishment of a Graduate Certificate in Health-Focused Lifestyle Intervention – University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of the establishment of a Graduate Certificate in Health-Focused Lifestyle Intervention.

EXPLANATION

This certificate will be offered by the School of Physical Therapy to practicing clinicians. A growing body of scientific evidence has demonstrated that lifestyle intervention is an essential component in the treatment of chronic disease that can be as effective as medication, but without the risks and unwanted side effects. The field of lifestyle medicine has grown significantly over the last two decades, but there are very few programs that train providers in the clinical application of lifestyle intervention, including defining a structured framework, identifying and building integrated intervention teams, assessing best clinical pathways, and measuring outcomes.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1007-R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana-Missoula

CIP Code: 34.0103

Program Title: Health-Focused Lifestyle Intervention Graduate 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

This certificate will be offered by the School of Physical Therapy to practicing clinicians. A growing body of scientific evidence has demonstrated that lifestyle intervention is an essential component in the treatment of chronic disease that can be as effective as medication, but without the risks and unwanted side effects. The field of lifestyle medicine has grown significantly over the last two decades, but there are very few programs that train providers in the clinical application of lifestyle intervention, including defining a structured framework, identifying and building integrated intervention teams, assessing best clinical pathways, and measuring outcomes

The mission of this program is to:

1. To give physical therapists and physical-therapist led teams a practical, evidence-based framework for delivering well-coordinated, value- and outcomes-driven, health-focused lifestyle interventions
2. To provide a model for developing health-focused lifestyle intervention clinics and/or clinical delivery systems in a variety of settings that provide preventive as well as first line treatment services for chronic disease.
3. To define the role and competencies required to develop physical therapist-led multidisciplinary teams that can be held accountable for defining and adhering to best clinical pathways and specific outcomes.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

The Certification Program Health-Focused Lifestyle Intervention (HFLI) is made up of six courses, 2 credits each. The first five courses are on-line. The sixth course is on-site for three days. The six courses are as follows:

- Course One: Introduction to Health-focused Lifestyle Intervention [HFLI]
- Course Two: Defining Framework for Delivering Health-focused Lifestyle Intervention
- Course Three: Principles of Interpersonal and Organizational Health Coaching
- Course Four: Clinical KSA's for Health-Focused Lifestyle Intervention [HFLI] Teams
- Course Five: Developing a Health-focused Lifestyle Intervention Business Plan
- Course Six: Health-Focused Lifestyle Intervention Capstone Experience

March 3-4, 2016

ITEM 170-1008-R0316

Notification of the Establishment of a Graduate Certificate in K-12 Principal Leadership – University of Montana-Missoula

THAT

The University of Montana notifies the Montana Board of Regents of the establishment of a Graduate Certificate in K-12 Principal Leadership.

EXPLANATION

The graduate Certificate in K-12 Principal Leadership will be administered in the Department of Educational Leadership of the Phyllis J. Washington College of Education and Human Sciences. This 24-credit graduate-level certificate program is developed for professionals who have earned a Master's Degree in an education related field and are seeking licensure as a Principal. The target population is individuals with successful teaching experience who are considering moving into a building level leadership position in a school district.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1008-R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana

CIP Code: 13.0401

Program Title: Certificate in K-12 Principal Leadership

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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The graduate Certificate in K-12 Principal Leadership will be administered in the Department of Educational Leadership of the Phyllis J. Washington College of Education and Human Sciences. This 24-credit graduate-level certificate program is developed for professionals who have earned a Master's Degree in an education related field and are seeking licensure as a Principal. The target population is individuals with successful teaching experience who are considering moving into a building level leadership position in a school district.

The curriculum is comprised of existing courses that meet national and state standards for Principal preparation. In addition to the coursework, each successful candidate must complete 216 hours of field experience with a minimum of 20 hours addressing each of the Professional Educators Preparation Program Standards (PEPPS). The Certificate program can be attended in an online format or face-to-face to create a readily accessible option for current teachers. In addition, face-to-face courses can be attended through robotic telepresence.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Certificate in K-12 Principal Leadership

+	Course	Credits
+	EDLD 550 -Foundations of Educational Leadership	3
+	EDLD 551 – Foundations of Curriculum Leadership	3
+	EDLD 552 – Supervision and Evaluation of Public School Educators	3
+	EDLD 554 – School Law	3
+	EDLD 556 – The Finance of Public Education	3
+	EDLD 559 – School Public Relations for the Principal	3
+	EDLD 568 – K-12 Curriculum	3
+	EDLD 567 – K-12 Leadership	3
Minimum Required Grade B-		24 Total Credits Required

March 3-4, 2016

ITEM 170-1009-R0316

**Notification of the Establishment of a Graduate Certificate in Superintendent Leadership –
University of Montana-Missoula**

THAT

The University of Montana notifies the Montana Board of Regents of the establishment of a Graduate Certificate in Superintendent Leadership.

EXPLANATION

The graduate Certificate in K-12 Superintendent Leadership will be administered in the Department of Educational Leadership of the Phyllis J. Washington College of Education and Human Sciences. This 18-credit graduate-level certificate program is developed for professionals who currently hold a K-12 principal license. The target population is individuals with successful principal experience who are considering moving into a district level leadership position in a school district.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1009-R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana

CIP Code: 13.0411

Program Title: Superintendent Leadership Certificate (Graduate)

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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

 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, except when eliminating or consolidating)

 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The graduate Certificate in K-12 Superintendent Leadership will be administered in the Department of Educational Leadership of the Phyllis J. Washington College of Education and Human Sciences. This 18-credit graduate-level certificate program is developed for professionals who currently hold a K-12 principal license. The target population is individuals with successful principal experience who are considering moving into a district level leadership position in a school district.

The curriculum is comprised of existing courses that meet national and state standards for administrator preparation. In addition to the coursework, each successful candidate must complete 27 hours of field experience per course taken. The certificate program can be attended in an online format to create a readily accessible option for current administrators.

Certificate in K-12 Superintendent Leadership

+	Course	Credits
+	EDLD 656 – Economics of Education	3
+	EDLD 657 – School Facilities Planning	3
+	EDLD 658 – Public Relations for Superintendents	3
+	EDLD 554 – School Law	3
+	EDLD 556 – The Finance of Public Education	3
+	EDLD 653 – School Personnel Administration	3
Minimum Required Grade B-		18 Total Credits Required

March 3-4, 2016

ITEM 170-1017-R0316

Notification of the Establishment of a Certificate in Computed Tomography – Missoula College University of Montana

THAT

Missoula College-UM notifies the Montana Board of Regents of the Establishment of a certificate in Computed Tomography.

EXPLANATION

As of January 2016, national requirements for Certification in Computed Tomography require a didactic education component. No such education has been offered in Montana. This will increase the need for properly educated, trained and certified CT Technologists at health care facilities across the state, especially in rural areas. This certificate will be the first in the state to provide an educational certificate path to meet the national requirements.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1017-R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 51.0911

Program Title: Computed Tomography 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

As of January 2016, national requirements for Certification in Computed Tomography require a didactic education component—no such education has been offered in Montana. This will increase the need for properly educated, trained and certified CT Technologists at health care facilities across the state, especially in rural areas. This certificate will be the first in the state to provide an educational certificate path to meet the national requirements. This certificate will be a post primary certificate in Radiology. Clinical competencies are also required for national certification and applicants to the program will be required to arrange their own clinical training through an appropriate health care facility. This clinical training can potentially be set up as an apprenticeship using the apprenticeship model currently being discussed in the state of Montana.

The certificate consists of two courses for a total of 5 credits. Students must be a Montana licensed and registered technologist in good standing or a graduating student from an accredited program that has passed the registry by the first day of class.

Required courses:

AHXR: 274: Cross Sectional Anatomy (3cr)

AHXR 275: CT Physics and Instrumentation (2cr)

March 3-4, 2016

ITEM 170-1018-R0316

**Notification of the Establishment of a Certificate in Sustainable Construction – Missoula College
University of Montana**

THAT

Missoula College-UM notifies the Montana Board of Regents of the Establishment of a Certificate in Sustainable Construction.

EXPLANATION

The Certificate in Sustainable Construction, housed within the Construction Trades program, will provide a course of study highlighting sustainability issues and their relationship to our built environment. Students successfully completing the program will understand theories and concepts of sustainability, sustainable building practices, development strategies, green rating systems and related practices and materials within the construction industry. They will possess highly marketable skills and have the ability to apply principles of sustainability across a broad range of career paths.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1018-R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 46.99

Program Title: Certificate in Sustainable Construction

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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

 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, except when eliminating or consolidating)

 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Certificate in Sustainable Construction, housed within the Construction Trades program, will provide a course of study highlighting sustainability issues and their relationship to our built environment. Students successfully completing the program will understand theories and concepts of sustainability, sustainable building practices, development strategies, green rating systems and related practices and materials within the construction industry. They will possess highly marketable skills and have the ability to apply principles of sustainability across a broad range of career paths.

Course	Credits
CAPP 120 Introduction to Computers	3
CSTN 282 Green Building & Design I	3
CSTN 261 Building Management	4
M111 Technical Mathematics	3
CSTN 288 Green Building Practicum (30 hours)	1
Fall Semester Credits	14
BMGT 242 Frontline Supervision	3
CSTN 286 Advanced Wood Buildings	3
CSTN 283/NRG 235 Green Building & Design II	3
BGEN 160S Issues in Sustainability	3
WRIT 121 College Writing	3
Spring Semester Credits	15
Total Certificate Credits	29

March 3-4, 2016

ITEM 170-1025-R0316

Notification of the Establishment of a Certificate of Technical Skills in Precision Machine Technology – Missoula College University of Montana

THAT

Missoula College-UM notifies the Montana Board of Regents of the establishment of a Certificate in Precision Machine Technology.

EXPLANATION

The CTS in Precision Machine Technology is the first tier of stackable credentials, designed with input from community manufacturers to enhance the local workforce market. Tier I focuses on introductory skills and knowledge, pre-employment and the cooperation, communication and critical thinking skills needed for dynamic team interactions.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1025-R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 48.0503

Program Title: Certificate of Technical Studies in Precision Machine Technology

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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

This proposal requests approval of a Certificate of Technical Studies in Precision Machining Technology. The program provides instruction in the theory and operation of manual mills and lathes, precision measurements, blueprint reading, and the use of other tools related to the machinist trade. Students can earn NIMS credentials in all phases of the training. Upon completion of this program, students will enter the workforce at entry level, pursue apprenticeship, or continue their training to achieve a higher academic degree.

The CTS in Precision Machining Technology is the first tier of stackable credentials, designed with input from community manufacturers to enhance the local workforce market. Tier I focuses on introductory skills and knowledge, pre-employment and the cooperation, communication and critical thinking skills needed for dynamic team interactions.

Community manufacturers will continue to provide input into these programs by participating in roundtable discussions with students regarding local workforce and internship opportunities. The manufacturers also will partner with FVCC instructors by serving on skills panels to help determine the types and levels of skills that will be required for graduates to succeed in the advanced manufacturing workforce. The stackable credentials will allow students to achieve an entry level of competency and NIMS credentials.

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Fall Semester (Tier I) Courses:

<u>Course</u>	<u>Credits</u>
MCH 101	1
MCH 120	3*
MCH 129	3
MCH 132	4+
MCH 134	4+
TOTAL	15

*Prerequisite: ALEKS math placement score Level 3, M 111, or consent of instructor

+Corequisites: MCH 120 (Blueprint Reading) & MCH 129 (QC & Precision Measurements)

March 3-4, 2016

ITEM 170-1027-R0316

Notification of the Establishment of a HVAC Certificate – Missoula College University of Montana

THAT

Missoula College-UM notifies the Montana Board of Regents of Higher Education of the establishment of a certificate in Heating, Ventilation and Air Conditioning (HVAC).

EXPLANATION

The Building Maintenance/Facilities Management program provides students with the skills and certifications necessary to manage facilities and direct those that perform the duties associated with it. Two courses within the program pertain to Air Conditioning and Refrigeration. One is the HVAC course (BME 130T, 6 cr) and the other is Electricity (BME122T, 6 cr) which teaches codes and skills associated with circuit installation and troubleshooting. These two courses will be required to complete the 12-credit certificate in Heating Ventilation Air Conditioning and Refrigeration (HVAC).

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1027-R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 47.02

Program Title: HVAC (Heating Ventilating Air Conditioning and Refrigeration) 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Building Maintenance/Facilities Management program provides students with the skills and certifications necessary to manage facilities and direct those that perform the duties associated with it. Two courses within the program pertain to Air Conditioning and Refrigeration. One is the HVAC course (BME 130T, 6 cr) and the other is Electricity (BME122T, 6 cr) which teaches codes and skills associated with circuit installation and troubleshooting. These two courses will be required to complete the 12-credit certificate in Heating Ventilation Air Conditioning and Refrigeration (HVAC).

This proposed Certificate of Technical Skills in HVAC will be available to those that are presently working in the field and/or require further skills to advance in their positions. This would also accommodate high school and other students that may want to start their own business in the field.

Local contractors and suppliers often ask if Missoula College offers any programs for an HVAC Technician. It seems that no such courses exist in the state or surrounding areas since MSU-Billings closed their program (FVCC offers something online). The interest seems to be for the Technical skills only because and when the entire program course requirements are explained, potential attendees state they simply do not have the time to attend the classes for the entire program and still work.

March 3-4, 2016

ITEM 170-1901-R0316

Notification of Advance Certificate for Environmental Design Studies – Helena College University of Montana

THAT

Helena College notifies the Montana Board of Regents of Higher Education of an Advanced Certificate for Environmental Design Studies.

EXPLANATION

At Helena College University of Montana students may earn an Associate of Arts degree with the option of study in Interior Space Planning and Design (22 credits). In order for students to have a competitive and 21st century design portfolio, Helena College offers the Advanced Certificate in Environmental Design Studies which is designed to support the Associate of Arts. The Advanced Certificate focuses on environmental design materials, building products, specifications, and knowledge of the LEED process (Leadership in Energy and Environmental Design). Students are able to prepare a design portfolio complete with advanced studio work relevant to the environment. In addition, the Advanced Certificate offers studies in history relating to materials and design, construction documents, codes and regulations, professional practices, and portfolio. After the completion of the Associate of Arts and the Advanced Certificate in Environmental Design Studies, a graduate will be prepared to compete successfully for jobs in interior design, environmental design and related fields.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-1901-R0316**

Meeting Date: **March 3-4, 2015**

Institution: **Helena College**

CIP Code: **50.0408**

Program Title: **Advanced Certificate for Environmental Design 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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

At Helena College University of Montana students may earn an Associate of Arts degree with the option of study in Interior Space Planning and Design (ISPD). This "advising option" includes 22 credits in ISPD. In order for students to have a competitive and 21st century design portfolio, Helena College offers the Advanced Certificate in Environmental Design Studies which is designed to complement the Associate of Arts. The Advanced Certificate focuses on environmental design materials, building products, specifications, and knowledge of the LEED process (Leadership in Energy and Environmental Design). Students are able to prepare a design portfolio complete with advanced studio work relevant to the environment. In addition, the Advanced Certificate offers studies in history relating to materials and design, construction documents, codes and regulations, professional practices, and portfolio. After completion of the Associate of Arts and the Advanced Certificate in Environmental Design Studies, a graduate will be prepared to compete successfully for jobs in interior design, environmental design and related fields. This Advanced Certificate is composed of 25 semester-credits. This certificate was approved by the Helena College Curriculum committee during the Fall semester of 2010 and the Board of Regents was notified via the Campus Report in November of 2010. At the time it was believed that notification of the Board of Regents was sufficient. However, Helena College is now seeking more formal approval by the Board of Regents. This certificate has been offered since the Fall of 2011.

March 3-4, 2016

ITEM 170-2011+R0316

Request for Authorization to Rename Agricultural Relations Option to Agricultural Communications, Leadership and Extension

THAT

The Board of Regents approve the title change of Agricultural Relations option in Agricultural Education to Agricultural Communications, Leadership, and Extension

EXPLANATION

Montana State University stands alone in the nation with a program, degree, or option named 'Agricultural Relations'. Across the US, degrees, programs, or options of a similar nature carry variations on the Communications, Leadership, and Extension name. The current Agricultural Relations name is confusing to students seeking a communications, leadership, or extension curriculum. Furthermore, 'agricultural relations' is a narrower term that refers only to a piece of our option.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2011+R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Montana State University**

CIP Code: **13.1301**

Program Title: **Agricultural Education**

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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Division of Agricultural Education requests a change of the name of the Agricultural Relations option to Agricultural Communications, Leadership, and Extension

March 3-4, 2016

ITEM 170-2015+R0316

Request Authorization to Change Title of Master of Education, School Counseling Option to Master of Education in School Counseling

THAT

The Montana State University College of Education, Health and Human Development requests approval to change the title of the Master of Education major with a School Counseling Option to Master of Education in School Counseling.

EXPLANATION

The Department of Health and Human Development currently offers a Master of Education degree with a major in Education and with an option in School Counseling. The department proposes to retitle the M.Ed. in option in School Counseling to:

- Master of Education in School Counseling

The reason we are requesting this retitling is to diminish confusion for the students and hiring authorities. Once students graduate and seek employment, their diploma simply states Master of Education. This creates confusion and lack of specificity for school administrators and especially human resources departments in larger school districts. Retitling the degree to Master of Education in School Counseling would be clear and much more understandable. It will allow us to more clearly market the degree/major to potential applicants.

This request seeks to simply change the title of the major from Education to School Counseling. There are no changes in curriculum, faculty resources, and the major will remain in the Department of Health and Human Development. Nothing will change other than the title of the major. A recent accreditation reviewer (Council for Accreditation of Counseling and Related Educational Programs – CACREP) questioned why our degree is configured in such a way that school counseling is not indicated on the diploma.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-2015+R0316

Meeting Date: March 3-4, 2016

Institution: Montana State University

CIP Code: 131101

Program Title: Master of Education: School Counseling Major

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 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- 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. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Department of Health and Human Development currently offers a Master of Education degree with a major in Education and with an option in School Counseling. The department proposes to retitle the M.Ed. in option in School Counseling to:

- Master of Education in School Counseling

The reason we are requesting this retitling is to diminish confusion for the students and hiring authorities. Once students graduate and seek employment, their diploma simply states Master of Education. This creates confusion and lack of specificity for school administrators and especially human resources departments in larger school districts. Retitling the degree to Master of Education in School Counseling would be clear and much more understandable. It will allow us to more clearly market the degree/major to potential applicants.

This request seeks to simply change the title of the major from Education to School Counseling. There are no changes in curriculum, faculty resources, and the major will remain in the Department of Health and Human Development. Nothing will change other than the title of the major. A recent accreditation reviewer (Council for Accreditation of Counseling and Related Educational Programs – CACREP) questioned why our degree is configured in such a way that school counseling is not indicated on the diploma.

Retitling will make our School Counseling program more visible to perspective students, thereby increasing our recruitment rates within the Department of Health and Human Development. We submit that this is as a Level I B1 retitling of an existing major.

March 3-4, 2016

ITEM 170-2803+R0316

Request for Authorization to Offer Traffic Education Minor (K-12) Online

THAT

Montana State University Northern requests permission to offer Traffic Education Minor online to address the needs of in-service teachers across the state of Montana needing to complete this course work for the Montana Office of Public Instruction endorsement.

EXPLANATION

Montana State University Northern currently has the only OPI approved traffic education program in the state. Historically in-service teachers have had to come to campus for extended periods of time in order to earn the credential. Making the majority of the program available online improves accessibility, helping increase enrollment, thus helping reduce the critical shortage of traffic education teachers.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-2803+R0316**

Meeting Date: **March 3-4, 2016**

Institution: **Montana State University Northern**

CIP Code: **13.1205**

Program Title: **Traffic Education Minor (K-12)**

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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)**

- 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, except when eliminating or consolidating)

- 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit**

Specify Request:

Northern requests permission to deliver Traffic Education Minor (K-12) online to better accommodate the needs of current in-service teachers working to complete coursework to meet Montana Office of Public Instruction requirements for the OPI Instruction endorsement. Since MSU Northern has the only OPI approved traffic education program in the state, historically in-service teachers have had to come to campus for extended periods of time in order to earn the credential. This requirement created a financial hardship and limited enrollment in the program at a time when Montana is experiencing a shortage of qualified traffic education teachers. Making the majority of the program available online improves accessibility and increases enrollment, thus helping reduce the critical shortage of traffic education teachers. All coursework, other than the Methods of Behind the Wheel Instruction course, will be available online. Behind the wheel instruction, with the necessity of hands-on instruction with highly experienced instructors and practical experience training actual high school novice drivers, will continue to require residency on campus. Even with the behind the wheel course being offered face-to-face only, the program still meets the Sloan definition of fully online program with 80% or more of the program being delivered online.

March 3-4, 2016

ITEM 170-1010+R0316

Request for Authorization to Offer a Minor in Communicative Sciences & Disorders – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to offer a minor in Communicative Sciences and Disorders.

EXPLANATION

The Communicative Sciences and Disorders (CSD) Department housed in the Phyllis J. Washington College of Education and Human Sciences at the University of Montana is requesting to add a CSD minor. A CSD major is currently offered at UM.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1010+R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana

CIP Code: 51.0201

Program Title: Communicative Sciences and Disorders 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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Communicative Sciences and Disorders (CSD) Department housed in the Phyllis J. Washington College of Education and Human Sciences at the University of Montana is requesting to add a CSD minor. A CSD major is currently offered at UM.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

The Communicative Sciences and Disorders (CSD) Department housed in the Phyllis J. Washington College of Education and Human Sciences at the University of Montana is requesting to add a CSD minor. A CSD major is a current offering at the U of M.

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

Communicative Sciences and Disorders (CSD) currently boasts bachelor and master degree programs. This proposal would increase the department offerings by including a minor. The curriculum is outlined below and describes the 12 credits of lower division core requirements and 4 course options to satisfy the 6 credit upper division electives resulting in an 18 credit minor. One of the core courses, Linguistics 270, is part of the Anthropology Department housed in the College of Humanities and Sciences. The CSD department feels strongly that understanding linguistics is integral to the comprehension of the various aspects of communication. The proposed CSD minor is commensurate with other minor offerings on the University of Montana campus.

3. Need

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

A minor in CSD is particularly beneficial to people pursuing degrees in related areas. With the understanding of communication based disorders comes the ability to appropriately refer people for communication and hearing services. Professionals in the areas of school psychology, education, special education, social work, counselor education, and the like will make informed professional decisions with knowledge acquired through this minor.

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

Students will have the option to further their understanding of communication based disorders while enhancing their academic portfolio. A minor in the field of CSD could be very attractive to future employers.

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

The anticipated demand is based on a) people who began their academic career in the area of CSD and changed their majors, therefore wanting to put their CSD classes toward a minor and b) people in related fields choosing CSD as their minor in the interest of professional development. The department cautiously estimates that 10-15 people will declare CSD as their minor each year with this number growing with awareness of the offering.

4. Institutional and System Fit

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

Many majors on campus have a complementary minor. The CSD minor would utilize classes already offered by the CSD major, constructing a broad understanding of communication and hearing development and treatment of disorders.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

No it would not.

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

CSD is a specialized program that is not reflected elsewhere on campus or in the state.

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

The CSD Department identified adding a minor as part of their strategic five year plan.

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.

CSD is a specialized program that is not reflected elsewhere on campus or in the state.

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.

College of Education and Human Sciences

Catalog Year: 2016-2017

Degree Specific Credits: 18

Required Minimum Cumulative GPA: 2.0

Lower Division Core Requirements

Rule: Must complete the following courses

Minimum Required Grade: C-

<p>CSD 110 - The Field of CSD Offered autumn. Introduction to the scientific study of human communication and its disorders and to the professions of Speech-Language Pathology and Audiology. Overview of biological systems of speech, language, and hearing and the nature and treatment of communication disorders.</p>	<p>3 Credits</p>
<p>CSD 210 - Speech & Lang Devel Offered autumn. Sophomore standing or greater. Topics include typical speech and language development, phonology, semantic, morphological, syntax, and pragmatics, along with individual differences, second language acquisition and literacy.</p>	<p>3 Credits</p>
<p>CSD 222 - Intro to Audiology Offered autumn. Introduction to principles of acoustics as a basis for understanding hearing assessment. Development of ability to interpret audiograms as well as the results from a</p>	<p>3 Credits</p>

Montana Board of Regents
CURRICULUM PROPOSAL FORM

hearing evaluation. Includes pure tone and speech audiometry, acoustic immittance and reflex testing. Hearing screening procedures are also included.	
LING 270S - Intro to Ling Offered autumn and spring. An introduction to the field of modern linguistics and to the nature of language. Emphasis on the ways different cultures develop symbol systems for representing meaning.	3 Credits
Total Credits	12

Minor Electives

Rule: Choose at least 6 upper division credits from this list

Minimum Required Grade: C-

6 Total Credits Required

CSD 320 - Phono Devel & Phonetics (Prerequisite for the following classes) Offered autumn. Prereq., CSD 210. Exploration of the sounds and sound structure of American English and some of its dialects. Introduction to the theory and practice of phonetic and phonological analysis and trained in the transcription of speech into the International Phonetic Alphabet.	3 Credits
CSD 345 Developmental Speech and Language Disorders Offered spring. Prereq., CSD 210, CSD 320. This course is designed to familiarize you with the identification, assessment, and intervention for a variety of developmental speech and language disorders in children.	3 Credits
CSD 365 Acquired Speech and Language Disorders Offered spring. Prereq., CSD 210, CSD 320. This course will provide an introduction to the nature of various acquired speech and language disorders and a basic understanding of the principles underlying the assessment and treatment of these conditions.	3 Credits
CSD 491 Special Topics Credits: 1 TO 3. (R-6) Offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.	1-3 Credits
Total Credits	6

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

The implementation of the minor would involve minimal work. All classes proposed are already in existence in the department or on campus, as in the case of Linguistics 270. Administrative needs are eminent but anticipated to be absorbed by the current faculty and staff. Students who meet the criteria would be invited to participate in the minor with no anticipated cap in enrollment.

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.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

No.

7. Assessment

How will the success of the program be measured?

Success will be measured by tracking enrollment in the minor and conducting graduate surveys.

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 Department of Communicative Sciences and Disorders is a relatively new program. As the program has grown and established itself on campus, the need for a minor has become more apparent. The concept of a minor first found its place on the CSD five year strategic plan. This past year, one of the faculty members met with the Phyllis J. Washington College of Education and Health Sciences' Undergraduate Advisory Board and learned of an interest in having a CSD minor. The board was comprised of students representing each of the departments within the college. The students felt that this minor would enhance their pre-service learning while building their academic portfolio. After discussion, the CSD department decided that they would proceed with developing a minor for CSD.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Communicative Sciences and Disorders Minor Proposal

College of Education and Human Sciences

Catalog Year: 2016-2017

Degree Specific Credits: 18

Required Minimum Cumulative GPA: 2.0

Lower Division Core Requirements

Rule: Must complete the following courses

Minimum Required Grade: C-

CSD 110 - The Field of CSD Offered autumn. Introduction to the scientific study of human communication and its disorders and to the professions of Speech-Language Pathology and Audiology. Overview of biological systems of speech, language, and hearing and the nature and treatment of communication disorders.	3 Credits
CSD 210 - Speech & Lang Devel Offered autumn. Sophomore standing or greater. Topics include typical speech and language development, phonology, semantic, morphological, syntax, and pragmatics, along with individual differences, second language acquisition and literacy.	3 Credits
CSD 222 - Intro to Audiology Offered autumn. Introduction to principles of acoustics as a basis for understanding hearing assessment. Development of ability to interpret audiograms as well as the results from a hearing evaluation. Includes pure tone and speech audiometry, acoustic immittance and reflex testing. Hearing screening procedures are also included.	3 Credits
LING 270S - Intro to Ling Offered autumn and spring. An introduction to the field of modern linguistics and to the nature of language. Emphasis on the ways different cultures develop symbol systems for representing meaning.	3 Credits
Total Credits	12

Minor Electives

Rule: Choose at least 6 upper division credits from this list

Minimum Required Grade: C-

6 Total Credits Required

Montana Board of Regents
CURRICULUM PROPOSAL FORM

<p>CSD 320 - Phono Devel & Phonetics (Prerequisite for the following classes) Offered autumn. Prereq., CSD 210. Exploration of the sounds and sound structure of American English and some of its dialects. Introduction to the theory and practice of phonetic and phonological analysis and trained in the transcription of speech into the International Phonetic Alphabet.</p>	3 Credits
<p>CSD 345 Developmental Speech and Language Disorders Offered spring. Prereq., CSD 210, CSD 320. This course is designed to familiarize you with the identification, assessment, and intervention for a variety of developmental speech and language disorders in children.</p>	3 Credits
<p>CSD 365 Acquired Speech and Language Disorders Offered spring. Prereq., CSD 210, CSD 320. This course will provide an introduction to the nature of various acquired speech and language disorders and a basic understanding of the principles underlying the assessment and treatment of these conditions.</p>	3 Credits
<p>CSD 491 Special Topics Credits: 1 TO 3. (R-6) Offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.</p>	1-3 Credits
Total Credits	6

March 3-4, 2016

ITEM 170-1011+R0316

Request for Authorization to Re-title the Ecological Restoration Program to Ecological Sciences & Restoration – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to retitle the Ecological Restoration BS and minor to Ecological Sciences & Restoration.

EXPLANATION

The Ecological Restoration program (BS and minor) requests to change its title to Ecological Sciences & Restoration. The new title more accurately reflects the curriculum's emphasis on science and management, is more marketable to students, will help students applying to graduate school or professional positions, and better reflects the expertise of the faculty.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1011+R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana-Missoula

CIP Code: 03.0104

Program Title: Ecosystem Science and Restoration program retitle

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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Ecological Restoration program is requesting to change its title to Ecosystem Science and Restoration (ESR) for the following reasons. This would change the title of the BS degree as well as the minor.

1. The proposed name better reflects the curriculum's emphasis on both science and management. Students in the program take at least 43 credits in ecology and other biological sciences, chemistry, and math.
2. By including "ecosystem science" in the title, the program will be able to market itself more effectively to students interested in this area. In particular, College of Forestry & Conservation students interested in graduate school in ecosystem science and ecology will be attracted to the program. Currently, students interested in ecosystem science may not be seeking out this major.
3. Students will benefit from having a more accurate degree title on their transcripts; graduate schools and future employers will have an easier time understanding their training and credential.
4. The program has leading faculty in ecology and ecosystem science research. Including "ecosystem science" in the title helps build the UM ecology brand.
5. The proposed title better reflects the interests and expertise of the faculty who teach in the program. The proposed name will assist with building community among faculty in the program, and will allow the program to align more closely with the Department of Ecosystem and Conservation Sciences.

March 3-4, 2016

ITEM 170-1012+R0316

Request for Authorization to Re-title the Education B.A. to Elementary Education – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to retitle the BA in Education to Elementary Education.

EXPLANATION

The Department of Curriculum and Instruction of the Phyllis J. Washington College of Education and Human Sciences currently offers a Bachelor of Arts degree in Education with an option in Elementary Education. This request is seeking to eliminate the option in Elementary Education and change the name of the degree to a Bachelor of Arts in Elementary Education.

Curriculum and Instruction historically offered three different formal options within the BA in Education. The Business Education option was eliminated in 2005 and the Secondary Education option was eliminated many years prior, leaving only the Elementary Education option remaining. Therefore, the department is proposing to change the name of the degree from Education to Elementary Education to better reflect the program students complete and the degree awarded.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1012+R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana

CIP Code: 13.1202

Program Title: Elementary Education BA retitled from Education

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 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- 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. Revising a program (Curriculum Proposal Form)

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

 X **5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

 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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Department of Curriculum and Instruction of the Phyllis J. Washington College of Education and Human Sciences currently offers a Bachelor of Arts degree in Education with an option in Elementary Education. This request is seeking to eliminate the option in Elementary Education and change the name of the degree to a Bachelor of Arts in Elementary Education.

Curriculum and Instruction historically offered three different formal options within the BA in Education. The Business Education option was eliminated in 2005 and the Secondary Education option was eliminated many years prior, leaving only the Elementary Education option remaining. Therefore, the department is proposing to change the name of the degree from Education to Elementary Education to better reflect the program students complete and the degree awarded.

March 3-4, 2016

ITEM 170-1013+R0316

**Request for Authorization to Consolidate the Journalism and Radio-TV Bachelor Degrees –
University of Montana-Missoula**

THAT

The Board of Regents of Higher Education authorizes the University of Montana to consolidate the Journalism and Radio-TV Bachelor degrees.

EXPLANATION

The School of Journalism proposes to absorb the current R-TV major into our existing Journalism BA degree. Once this change is effective, all students will receive a journalism degree, regardless of whether they focus in radio-television studies or not. This change reflects changes in our industry, which increasingly demands that students have broad-based journalism degrees to succeed. The separation of the R-TV and Print/Photo majors is a relic of a time when these fields were very distinct. Today, there is a great deal of overlap between the two. In addition, this change reflects increasing integration of the R-TV department into the Journalism School. Our faculty work closely together across these genre lines, and this change will recognize that reality.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1013+R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana

CIP Code: 09.0401

Program Title: School of Journalism Bachelor Degree Programs Consolidation

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 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- 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. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The School of Journalism proposes to absorb the current R-TV major into our existing Journalism degree. Once this change is effective, all students will receive a BA-Journalism degree, regardless of whether they focus in radio-television studies or not.

This change reflects changes in our industry, which increasingly demands that students have broad-based journalism degrees to succeed. The separation of the R-TV and Print/Photo majors is a relic of a time when these fields were very distinct. Today, there is a great deal of overlap between the two.

In addition, this change reflects increasing integration of the R-TV department into the Journalism School. Our faculty work closely together across these genre lines, and this change will recognize that reality.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

The School of Journalism proposes to merge our current Journalism and R-TV degrees into one single Journalism Degree program.

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

The School of Journalism proposes to merge our current Journalism and R-TV degrees into one single Journalism Degree program. Students currently in the R-TV major would receive adequate notice so they can finish their program. No additional students would be accepted into the R-TV program. Instead, students would be advised to develop their R-TV skills as part of the general journalism major.

3. Need

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

This is a response to the needs of the marketplace, and the internal needs of our school. Students are increasingly entering an industry that values a wide variety of skills. This shift in our program will enhance students' ability to find employment. It also recognizes the fact that our R-TV and Print/Photo faculty now work seamlessly together across disciplines with one another, and that several of our faculty teach both video and print/photo and related courses.

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

Students should notice very little difference, as they will be able to take the same courses and emerge with a general Journalism BA, which is highly valued in the workplace.

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

Since this is not really a new program, the anticipated demand should remain the same.

4. Institutional and System Fit

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

The connection between the general Journalism degree and other schools will remain unchanged.

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

The proposed program will not require any changes to existing programs at the institution.

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

The general Journalism degree is unique, and is not similar to any other program in the MUS system.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

The Journalism program already serves the strategic goals of MUS in many ways. We are a student-focused school that delivers intense personal attention as part of our commitment to Partnering for Student Success. We contribute to Education for the Global Century by teaching students about global affairs, and by hosting overseas travel opportunities. We add Discovery and Creativity to serve Montana and the World by interacting with Montana communities all over the state, and by fostering communication between UM researchers and their constituencies.

- 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.**

Our program is unique and has no overlap with any other MUS 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.**

The curriculum for the BA in Journalism will not change.

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

As of fall semester 2014, our enrollment for undergraduates was 299. We are constantly recruiting in an effort to draw more students.

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.

- 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 are needed.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

7. Assessment

How will the success of the program be measured?

The success of the Journalism degree program will be measured using the School's existing strategic plan and unit standards.

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.

This change will require no additional approvals and will not require any special recognition from our accreditors.

March 3-4, 2016

ITEM 170-1014+R0316

Request for Authorization to Re-title the Medical Technology B.S. to Medical Laboratory Science – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to retitle the Medical Technology BS to Medical Laboratory Science.

EXPLANATION

We request to change the title of the BS in Medical Technology to Medial Laboratory Science to modernize and conform to titles used for analogous programs at other universities. The National Accrediting Agency for Clinical Laboratory Sciences uses the term Medical Laboratory Scientist rather than the out-of-date term Medical Technologist when referring to programs and professionals in the field.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-1014+R0316**

Meeting Date: **November 2015**

Institution: **University of Montana-Missoula**

CIP Code: **51.005**

Program Title: **Medical Laboratory Science BS retitled from Medical Technology**

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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

We request to change the title of the BS in Medical Technology to Medical Laboratory Science to modernize and conform to titles used for analogous programs at other universities.

The National Accrediting Agency for Clinical Laboratory Sciences uses the term Medical Laboratory Scientist rather than the out-of-date term Medical Technologist when referring to programs and professionals in the field.

Most University programs describe their Medical Technology degree as Medical Laboratory Science or Medical Laboratory Sciences (e.g. University of Washington, George Washington University, University of Utah).

March 3-4, 2016

ITEM 170-1015+R0316

Request for Authorization to Re-title the Library Media Program to Teacher Librarian – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to retitle the Library Media option in the Curriculum & Instruction M.Ed. to Teacher Librarian.

EXPLANATION

The Library Media Program is offered jointly with UM-Missoula and UM-Western. In the process of program review, it was determined that a program name change from Library Media Program to the Teacher Librarian Program was warranted to better reflect the role of K-12 school librarians who must also be licensed as classroom teachers. The changes reflect the shifting roles of teacher librarians in the schools aligning with Common Core Standards in information and technology literacy and increasing emphasis on shared accountability for K-12 student outcomes. The proposed name change would change the name of both the program and the M.Ed. option in Curriculum and Instruction. Library program faculty at both campuses have agreed to the proposed change.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: **170-1015+R0316**

Meeting Date: **March 3-4, 2016**

Institution: **University of Montana – Missoula**

CIP Code: **13.0301**

Program Title: **Teacher Librarian option retitled from Library Media (Curriculum & Instruction M.Ed. option)**

Please mark the appropriate type of request and submit with an Item Template and any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit the [Academic 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

The Library Media Program is offered jointly with UM-Missoula and UM-Western. In the process of program review, it was determined that a program name change from Library Media Program to the Teacher Librarian Program was warranted to better reflect the role of K-12 school librarians who must also be licensed as classroom teachers. The changes reflect the shifting roles of teacher librarians in the schools aligning with Common Core Standards in information and technology literacy and increasing emphasis on shared accountability for K-12 student outcomes. The proposed name change would change the name of both the program and the M.Ed. option in Curriculum and Instruction. Library program faculty at both campuses have agreed to the proposed change.

March 3-4, 2016

ITEM 170-1016+R0316

Request for Authorization to Re-title the Biomedical Sciences Ph.D. and Pharmaceutical Sciences M.S. to Pharmaceutical Sciences & Drug Design – University of Montana-Missoula

THAT

The Board of Regents of Higher Education authorizes the University of Montana to retitle the Biomedical Sciences PhD and Pharmaceutical Sciences MS to Pharmaceutical Sciences and Drug Design.

EXPLANATION

Within the Department of Biomedical and Pharmaceutical Sciences, the Graduate Program in Biomedical and Pharmaceutical Sciences is currently split into two degrees: Ph.D. in Biomedical Sciences and M.S. in Pharmaceutical Sciences. This proposal is to retitle the two programs under one cohesive and descriptive name: Pharmaceutical Sciences and Drug Design (Ph.D. and M.S.). Retitling the graduate program under a cohesive, descriptive name will address recruiting and retention issues, resources, faculty attrition, course coverage, current/potential course overlaps with the professional Pharmacy Curriculum, and the need to enhance training in pharmacology, pharmacokinetics, and drug design.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1016+R0316

Meeting Date: March 3-4, 2016

Institution: University of Montana

CIP Code: 26.10

Program Title: Ph.D. and M.S. in Pharmaceutical Sciences and Drug Design – retitled from Biomedical Sciences (Ph.D.) and Pharmaceutical Sciences (M.S.)

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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

 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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Within the Department of Biomedical and Pharmaceutical Sciences, the Graduate Program in Biomedical and Pharmaceutical Sciences is currently split into two degrees: Ph.D. in Biomedical Sciences and M.S. in Pharmaceutical Sciences.

This proposal is to retitle the two programs under one cohesive and descriptive name: Pharmaceutical Sciences and Drug Design (Ph.D. and M.S.).

The purpose of the rebranding is to improve efficiency, recruiting, and program integrity. Currently, having two different names for the Ph.D. and M.S. degrees within the same program has contributed to confusion when prospective students are applying for admission. Additionally, rebranding of the Biomedical Sciences (Ph.D.) and Pharmaceutical Sciences (M.S.) graduate programs into a more serviceable and modernized program (Pharmaceutical Sciences and Drug Design) will be attractive to applicants due to the desire for job opportunities in the pharmaceutical and biotechnology industries. Training in pharmaceutical sciences provides a unique set of skills that are highly valued in these arenas.

Retitling the graduate program under a cohesive, descriptive name will address recruiting and retention issues, resources, faculty attrition, course coverage, current/potential course overlaps with the professional Pharmacy Curriculum, and the need to enhance training in pharmacology, pharmacokinetics, and drug design.

March 3-4, 2016

ITEM 170-1019+R0316

Request for Authorization to Offer a C.A.S in Business Media Design – Missoula College University of Montana

THAT

The Board of Regents of Higher Education authorizes Missoula College-UM to offer a CAS in Business Media Design

EXPLANATION

This CAS provides students with a foundation in digital and information technologies, the nature of business enterprise, media history, typography, art, and artistic aesthetics and expression. Courses are project-based where students use artistic business media applications to create and develop a story, select and edit photographs, and create and edit audio/visual work in both still and time based mediums. Successful projects demonstrate artistic digital expression, effective visual communication, and attractive composition. Students use Adobe applications, such as Photoshop, After Effects, Final Cut, Dreamweaver, Flash, InDesign, Bridge, Acrobat, and more. Successful graduates are prepared for entry level jobs in media design for business, education or non-profit organizations.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1019+R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 50.0401

Program Title: Business Media Design, Certificate of Applied Science (Administrative Management 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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

This CAS provides students with a foundation in digital and information technologies, the nature of business enterprise, media history, typography, art, and artistic aesthetics and expression. Courses are project-based where students use artistic business media applications to create and develop a story, select and edit photographs, and create and edit audio/visual work in both still and time based mediums. Successful projects demonstrate artistic digital expression, effective visual communication, and attractive composition. Students use Adobe applications, such as Photoshop, After Effects, Final Cut, Dreamweaver, Flash, InDesign, Bridge, Acrobat, and more. Successful graduates are prepared for entry level jobs in media design for business, education or non-profit organizations. In addition, graduates meet the prerequisite requirements for entry into the undergraduate programs, B.A in Media Arts or B.F.A in Media Arts.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

This is a proposal to create a new Certificate of Applied Science in Business Media Design within the Administrative Management program, Business Technology Department at Missoula College.

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

This CAS will provide students with a foundation in digital and information technologies, the nature of business enterprise, media history, typography, art, and artistic aesthetics and expression. Courses are project-based where students use artistic business media applications to create and develop a story, select and edit photographs, and create and edit audio/visual work in both still and time based mediums. Successful projects demonstrate artistic digital expression, effective visual communication, and attractive composition. Students use Adobe applications, such as Photoshop, After Effects, Final Cut, Dreamweaver, Flash, InDesign, Bridge, Acrobat, and more. Successful graduates are prepared for entry level jobs in media design for business, education or non-profit organizations. In addition, graduates meet the prerequisite requirements for entry into the undergraduate programs, B.A in Media Arts or B.F.A in Media Arts.

3. Need

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

Students will have the opportunity to earn a certificate credential toward a professional career in one year. Successful high school students will enjoy a shortened pathway to continued college education, which could save in the cost of a college degree. All students will have convenient learning opportunities with almost 75% of the curriculum available online.

At a fall 2015 meeting, President Engstrom and Provost Brown stressed the importance of flexible enrollment opportunities. This CAS provides abundant flexibility, especially for high school dual credit students. The State of Montana and Governor Bullock desire growth in Pathways and dual credit opportunities. This would be a perfect opportunity to create an approved Pathway with Sentinel High School. If the CAS is approved, this Pathway will be pursued immediately. Missoula College is currently a leader in the state in dual credit enrollment with the desire to continue to grow dual credit opportunities. Missoula College dual enrollment grew 10% last year.

There is also flexibility to grow academically, to layer credentials, whether through already existing curriculum or branch off to other specialties such as web design or web development – depending upon additional coursework a student desires to undertake. Successful graduates will be well-prepared to pursue a Media Arts Bachelor's degree with entry prerequisites completed.

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

For high school students, it is possible to graduate with just 2-3 courses needed to complete this certificate of applied science degree and/or meet the prerequisites needed to enter Media Arts as an undergraduate at UM.

The large number of online courses offers distance students greater opportunity to work toward a certificate from home.

The Bureau of Labor Statistics outlook for growth is somewhat favorable. Even though several areas related to

Montana Board of Regents
CURRICULUM PROPOSAL FORM

this field are expected to grow slower than average, web development is growing faster than average. In addition, online media, online marketing, and public relations is growing. Public Relations Specialists is expecting average growth and marketing analytics expects much faster than average growth at 32%.

Effectively designed digital communications enhance readability, legibility, visual communication, and global understanding needed for wayfinding signage, technical schematics, business stationary, reference manuals, logo development, color, packaging, organizational websites, online branding and advertising, interactive public relations, video news releases, online business video or documentation needs, decoration, event planning, and more. Rather than graduates working specifically in the design/art/film industry, they likely will be part of a team of design professionals working toward an organizational goal.

Media design can shape favorable or not so favorable business outcomes. Business media design needs are strong and will continue to shape organizational success with the outdated job titles re-tooled to reflect current demand for digital artistic expertise.

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

Strong demand may initially come through high school dual credit opportunities. Sentinel High School has already expressed great interest and their faculty are currently active partners in this certificate proposal. Sentinel dual credit class sizes are approximately 12-15 students.

4. Institutional and System Fit

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

The UM-Missoula School of Media Arts has been very willing to collaborate with Missoula College and Sentinel High School to create this new learning opportunity. There may be some additional enrollment to Media Arts courses at the mountain campus.

Cindy Schultz at Sentinel High School is already a dual credit faculty for MART101L, MART102, and MART214. She plans to pursue an agreement to teach MART111A and MART112A. There is also a dual credit faculty agreement with Sentinel for MART232. Sentinel also has dual credit faculty for CSCI105, CAPP120 and BGEN105S. In addition, high school students can take the following courses online: BGEN105S, CSCI105, CAPP120, M115 (or in high school), and WRIT101.

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

No changes to any existing programs will be necessary. No new courses are requested with this proposal. High School Dual Credit Faculty are already in place. Missoula College, at this point in time, has room within current classes to absorb more students if needed.

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

There is no similar program at the two year level at Missoula College. UM-Missoula offers some similar coursework through their Media Arts degree, but this program is a one year certificate.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Partnering with K12! Growth in dual enrollment, *Transfer!* Increased transferability between Missoula College and UM-Missoula, *Cultivate Learning & Discovery in Undergraduate Education!* Certificate and laying credential opportunity, *Outreach!* Increase student opportunity for flexible enrollment, decrease cost of education for students, enrollment outside the traditional college day, online opportunity, *Embrace Diversity and Global Participation!* Opportunity for global 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.**

As stated above, UM-Missoula offers a Media Arts degree. MSU offers a Graphic Design degree. Great Falls and FVCC have a few 100-200 level design courses. FVCC has a CAS and AAS in Graphic Design. The FVCC CAS scope and sequence does not include any time based work (animations) and experience using Final Cut and After Effects. Coursework emphasis is on “still” projects. The UM-Missoula Media Arts program already has rigorous time based courses. There is very little to no duplication. This curriculum best utilizes existing courses and opportunities within the university system and flexible learning environments. FVCC has some similar individual courses, but not the entire CAS as proposed here.

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 CAS provides students with a foundation in digital and information technologies, the nature of business enterprise, media history, typography, art, and artistic aesthetics and expression. Courses are project-based where students use artistic business media applications to create and develop a story, select and edit photographs, and create and edit audio/visual work in both still and time based mediums. Successful projects demonstrate artistic digital expression, effective visual communication, and attractive composition. Students use Adobe applications, such as Photoshop, After Effects, Final Cut, Dreamweaver, Flash, InDesign, Bridge, Acrobat, and more. Successful graduates are prepared for entry level jobs in media design for business, education or non-profit organizations. In addition, graduates meet the prerequisite requirements for entry into the undergraduate programs, B.A in Media Arts or B.F.A in Media Arts.

Business Media Design Certificate - Academic Scope and Sequence

		Autumn	Spring
CAPP 120 or CSCI 105	Introduction to Computers or Computer Literacy	3	
BGEN 105S	Introduction to Business	3	
MART 101L	Introduction to Media Arts	3	
MART 102	Digital Technology in the Arts	3	
WRIT 101**	College Writing I	3	
M 115**	Probability & Linear Math	3	
COMX 140L	Introduction to Visual Rhetoric		3

Montana Board of Regents
CURRICULUM PROPOSAL FORM

MART 111A	Integrated Digital Art		3
MART 112A	Introduction to Introduction to Film Editing		3
MART 214*	Digital Publishing & Design		3
MART 232*	Interactive Web II		3
Total		18	15

Total: 33 credits

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

Implementation could begin immediately upon approval. The program will coordinate with Sentinel High School to admit students into the certificate program, and advise Sentinel faculty and advise interested and enrolled students. The entire class (12-15 students), could begin immediately with little to no effect on current class offerings. Sentinel is a perfect partner, but other state schools may wish to participate. As with all dual credit faculty, appropriate screening and preparation would take approximately a semester if qualified to teach.

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.

This CAS uses all existing courses, with no new cost to UM or MC. No new courses or additional sections are needed at this time.

7. Assessment

How will the success of the program be measured?

The program director will measure certificate enrollment, graduation, transfer, and employment to assess areas of strength and those needing improvement.

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 creation of this certificate of applied science grew from a conversation with Cindy Schultz, a dual credit teacher at Sentinel High School. She indicated high school students have a very strong interest in visual and digital arts and technology. After consultation and planning, the program director envisioned a focused curriculum where students have many options upon completion, including the possibility of layering credentials. The Administrative Management Advisory Committee was consulted at the fall 2014 meeting regarding the business media certificate concept. The Advisory Committee was told of the basis and goal of the curriculum, as well as a possible future Pathway and/or degree opportunity. Response from the Advisory Committee was positive to this proposal. UM's Faculty Senate has approved as well.

March 3-4, 2016

ITEM 170-1020+R0316

Request for Authorization to Re-title the Computer Support Specialist C.A.S. to Computer Support – Missoula College University of Montana

THAT

The Board of Regents of Higher Education authorizes Missoula College-UM to retitle the Computer Support Specialist CAS to Computer Support.

EXPLANATION

The current title of Computer Support “Specialist” refers more to an individual rather than the program of study. This proposal requests authorization to retitle the Computer Support Specialist CAS to simply Computer Support.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1020+R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 11.1006

Program Title: Computer Support CAS retitled from Computer Support Specialist

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 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- 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. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

During a recent program review, the program identified that its current title could be more accurate. The current title of Computer Support "Specialist" refers more to an individual rather than the program of study. This proposal requests authorization to retitle the Computer Support Specialist CAS to simply Computer Support.

March 3-4, 2016

ITEM 170-1021+R0316

Request for Authorization to Re-title the Network and Information Security Certificate to Cybersecurity – Missoula College University of Montana

THAT

The Board of Regents of Higher Education authorizes Missoula College-UM to retitle the Network and Information Security Certificate to Cybersecurity.

EXPLANATION

We request retitling this certificate program to Cybersecurity as it has become accepted as a general term widely associated with information security.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1021+R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College

CIP Code: 11.

Program Title: Cybersecurity Certificate Retitled from Network and Information Security

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 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- 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. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

We request retitling this certificate program to Cybersecurity as it has become accepted as a general term widely associated with information security.

March 3-4, 2016

ITEM 170-1022+R0316

**Request for Authorization to Retitle the Building Maintenance CAS to Facility Management,
Missoula College-UM**

THAT

The Board of Regents of Higher Education authorizes Missoula College-UM to retitle the Building Maintenance CAS to Facility Management.

EXPLANATION

This program certifies and educates students to manage an entire facility rather than simply maintain a structure or building. The title Facility Management is a much better reflection of what potential students are looking for and what potential employers require.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1022+R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 46.0499

Program Title: Facilities Management CAS Retitled from Building Maintenance

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 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- 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. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

This program certifies and educates students to manage an entire facility rather than simply maintain a structure or building. The title Facility Management is a much better reflection of what potential students are looking for and what potential employers require.

Students in this program are trained as working professionals who maintain and manage commercial facilities. Subject matter includes plumbing, electricity, basic carpentry, project management, blueprint reading, occupational safety and health and heating/air conditioner. Students learn physical and electrical theories that enable them to understand building systems. In addition, they study landscape maintenance, pool care, computer software, and boiler operation. The program introduces current environmental and energy problems that can be reduced through efficient facility operation. It encourages resource development, teamwork and interpersonal skills required on the job.

March 3-4, 2016

ITEM 170-1023+R0316

Request for Authorization to Re-title the Network Management Option in the Information Technology A.A.S. to Network Administration and Security – Missoula College University of Montana

THAT

The Board of Regents of Higher Education authorizes Missoula College-UM to retitle the Network Management option in the Information Technology AAS to Network Administration and Security.

EXPLANATION

We continue to see a strong demand for Information Technology professionals in the local, regional and national workforce. Our program advisory committee recently affirmed the need for individuals educated in networking technologies and system administration in the Western Montana region. The prevalence of information system security breaches continues to occur at alarmingly high rates. As these attacks are publicized, it is critical to identify academic programs of study focused on securing information technologies. Therefore we request to rename the Network Management option of the Information Technology degree to Network Administration and Security to 1) more accurately portray the curriculum of the program and its emphasis on security topics, and 2) as update in terminology reflective of job descriptions commonly identified with the program's educational outcomes. This option name has not been updated or revised for the nearly 20 years it has existed.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1023+R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 11.1002

Program Title: Network Administration & Security Option in Information Technology AAS retitled from Network Management

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 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- 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. Revising a program** (Curriculum Proposal Form)
- 4. Distance or online delivery of an existing degree or certificate program**
- 5. Terminating an existing major, minor, option or certificate – Step 2** (Completed Program Termination Checklist)

 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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

We continue to see a strong demand for Information Technology professionals in the local, regional and national workforce. Our program advisory committee recently affirmed the need for individuals educated in networking technologies and system administration in the Western Montana region. The prevalence of information system security breaches continues to occur at alarmingly high rates. As these attacks are publicized, it is critical to identify academic programs of study focused on securing information technologies. Therefore we request to rename the Network Management option of the Information Technology degree to Network Administration and Security to 1) more accurately portray the curriculum of the program and its emphasis on security topics, and 2) as update in terminology reflective of job descriptions commonly identified with the program's educational outcomes. This option name has not been updated or revised for the nearly 20 years it has existed.

March 3-4, 2016

ITEM 170-1024+R0316

Request for Authorization to Offer a C.A.S. in Precision Machine Technology – Missoula College University of Montana

THAT

The Board of Regents of Higher Education authorizes Missoula College-UM to offer a CAS in Precision Machine Technology.

EXPLANATION

This proposal requests approval of a Certificate of Applied Science in Precision Machining Technology as part of the existing Welding Technology program. The training provides instruction in the theory and operation of mills and lathes -- both manual and CNC -- other tools related to the machinist trade, and associated programming. Students can earn NIMS credentials in all phases of the training. Upon completion of this program, students will enter employment in the machining industry, pursue apprenticeship in machining, or further their education toward higher academic degrees. The certificate will be an excellent add-on to the welding technology curriculum and provides opportunities for incumbent workers to increase their skills and productivity.

The credentials begin with Tier I (15 credits), which focuses on introductory knowledge and skills, pre-employment, and the cooperation, communication and critical thinking skills needed for dynamic team interactions. Tier II (19 credits) is the further development of the knowledge and technical skills for industrial machining.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form
Attachment 1: Letters of Support

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1024+R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 48.0510

Program Title: Certificate of Applied Science in Precision Machine Technology (Welding Technology)

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 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- 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. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

This proposal requests approval of a Certificate of Applied Science in Precision Machining Technology as part of the existing Welding Technology program. The training provides instruction in the theory and operation of mills and lathes -- both manual and CNC -- other tools related to the machinist trade, and associated programming. Students can earn NIMS credentials in all phases of the training. Upon completion of this program, students will enter employment in the machining industry, pursue apprenticeship in machining, or further their education toward higher academic degrees. The certificate will be an excellent add-on to the welding technology curriculum and provides opportunities for incumbent workers to increase their skills and productivity.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

Precision Machining Technology will offer stackable credentials in a curriculum designed with extensive input from community manufacturers to enhance the local workforce. Industry recognized credentials from NIMS (National Institute for Metalworking Skills) will be embedded in all Tiers.

The credentials begin with Tier I (15 credits), which focuses on introductory knowledge and skills, pre-employment, and the cooperation, communication and critical thinking skills needed for dynamic team interactions. Tier II (19 credits) is the further development of the knowledge and technical skills for industrial machining.

Community manufacturers will continue to provide input into these programs by participating, along with secondary and post-secondary faculty and students, as members of a machining advisory board to address topics regarding local workforce development and internship opportunities. Industry experts will partner with Missoula College by serving on skills panels to help determine the knowledge and skills required for graduates to succeed in the advanced manufacturing workforce. The stackable credentials will allow students to achieve some level of competency within one semester depending on their skills and academic direction.

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

This proposal requests approval of a Certificate of Applied Science in Precision Machining Technology as part of the existing Welding Technology program. The training provides instruction in the theory and operation of mills and lathes -- both manual and CNC -- other tools related to the machinist trade, and associated programming. Students can earn NIMS credentials in all phases of the training. Upon completion of this program, students will enter employment in the machining industry, pursue apprenticeship in machining, or further their education toward higher academic degrees. The certificate will be an excellent add-on to the welding technology curriculum and provides opportunities for incumbent workers to increase their skills and productivity.

3. Need

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

Growth in the manufacturing industry and the need to replace an aging workforce is expected to provide opportunities for graduates. According to Montana Department of Labor and Industry, Research and Analysis Bureau employment of CNC machinists in Montana is projected to increase by 18% between 2012 and 2022. Projected annual job openings approach 30. Both state and national projected CNC machinist employment growth exceeds the rate of overall projected employment growth. Local industry demand for trained workers has been confirmed by discussions with Missoula Job Service staff, Missoula Economic Partnership staff, and owners/managers of local machining endeavors.

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

Manual and CNC machinists work in machinery and machine tool manufacturing, small arms manufacturing, and machine shops. Entry level machinists in Missoula, Montana can earn as much as \$16.00 per hour, according to Bureau of Labor Statistics, Occupational Employment Statistics Program. Industry representatives state that with a larger trained workforce, they could drastically increase their output and ability to serve industries that rely on their products, including the oil and gas industry, aerospace, and others. Machining skills are useful in other endeavors where metals and plastics are fabricated.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

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

According to Montana Department of Labor and Industry, Research and Analysis Bureau employment of CNC machinists in Montana is projected to increase by 18% between 2012 and 2022. Both state and national projected employment growth exceeds the rate of overall projected employment growth.

4. Institutional and System Fit

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

Missoula College Industrial Technology currently trains welders, diesel technicians, and small engine service technologies. Machining is an allied technology, especially as it relates to metalworking and welding. Increasing training opportunities in advanced manufacturing for students in existing programs will enhance increase employability and wages. This program may share shop space, tools, and instructors with the allied programs.

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

The approval of this program will require Missoula College to increase storage space for equipment utilized by Recreational Power Equipment program. Arrangements for this increased storage space have been made. Adjustments to classroom space have also been made.

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

As a metalworking program, Precision Machine Technology complements Welding Technology, but provides different knowledge and skill sets specific to shaping and fabrication. Missoula College teaches machining courses relevant to welding and diesel technology, but we do not offer any stand-alone machining courses that train workers for machine work specifically.

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

The Mission of Missoula College is to create a comprehensive, accessible, student-centered learning environment that . . . facilitates workforce development. . . . In light of the demand for trained machinists locally, regionally, and nationally, the goal of providing a trained pool employees meets this goal.

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.

Missoula College's proposed Precision Machine Technology program is patterned after Flathead Valley Community College's successful program. With assistance from the Department of Labor TAACCCT 3 RevUp grant, FVCC and Missoula College have collaborated on the creation of this curriculum. In fact, students may well engage in a portion of their curriculum by taking online instruction from FVCC using consortium agreements. Course sharing discussions currently underway at OCHE will enhance students' ability to do so. Though the distance between Kalispell and Missoula is relatively short (by Montana standards), industry in Missoula reports that they have been unsuccessful in recruiting workers from the graduates of either FVCC or

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Helena College's programs. They find that after a few months, those workers return to their homes in the Flathead or Helena Valleys and pursue employment opportunities there. It is expensive for industry to train workers only to have them move on. We are responding to their encouragement to offer training to local people who wish to remain in the Missoula area for employment.

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 Precision Machine Technology program provides instruction in the theory and operation of mills and lathes, both manual and CNC, other tools related to the machinist trade, and associated programming. Upon completion of this program, students will:

- Apply quantitative skills in conjunction with trade handbook information to solve problems;
- Effectively communicate during the problem solving process;
- Use tools and equipment to form and machine various materials in a manufacturing laboratory environment;
- Describe precision measurement and quality control procedures;
- Use various precision measuring tools including a coordinate measuring machine;
- Demonstrate introductory level machining operations that are performed on CNC machines;
- Demonstrate the use of CAD/CAM software for practical application of concepts to 3D solid modeling; and
- Earn NIMS credentials

The Precision Machining Technology program includes stackable credentials, designed with input from community manufacturers to enhance the local workforce market. Tier I focuses on introductory skills and knowledge, pre-employment and the cooperation, communication and critical thinking skills needed for dynamic team interactions. Tier II is advancement in the technical skills for machining.

Manufacturers will continue to provide input into these programs by participating in roundtable discussions with students regarding local workforce and internship opportunities. The manufacturers also will partner with FVCC instructors by serving on skills panels to help determine the knowledge and skills required for graduates to succeed in the advanced manufacturing workforce. The stackable credentials will allow students to achieve some level of competency within each semester depending on their skill levels and academic direction.

Fall Semester (Tier I) Courses:

MCH 101	1
MCH 120	3*
MCH 129	3
MCH 132	4+
MCH 134	4+
TOTAL	15

*Prerequisite: ALEKS math placement score Level 3, M 111, or consent of instructor

+Co-requisites: MCH 120 (Blueprint Reading) & MCH 129 (QC & Precision Measurements)

Spring Semester (Tier II) Courses:

Montana Board of Regents
CURRICULUM PROPOSAL FORM

DDSN 135 2**
MCH 102 2
MCH 122 3**
MCH 125 3++
MCH 127 3#
MCH 130 3
WRIT 121 3
TOTAL 19

++Prerequisite: MCH 132

**Prerequisites: CAPP 120 or basic computer experience and consent of instructor

#Prerequisite: MCH 134

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

The program rolls out Fall 2016 with Tier I, and initial cohort will be 10 students. This number is determined by the intensity of 1:1 instructor-student interaction and necessity to provide adequate machine time for each student. Tier II will be offered Spring 2017. Tier I courses are prerequisite for Tier II.

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.

One additional adjunct faculty will be needed to teach the new machining program courses and/or machining courses associated with the welding and diesel tech programs. During the pilot phase, TAACCCT 3 will support training and salary for the instructors in the Precision Machine Technology CAS. Enrollment in the CAS should be sufficient to support the increase in faculty once approvals are in place and promotion of the training can be initiated in the community and regionally.

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.

Industry has welcomed the opportunity to provide internships for students. This hands-on shop experience will help prepare students for the realities of work in machining industry. A committee outside the institution is required to assess the students' completed projects. Contact has been made and agreement received for local machining experts to provide this assessment. A group of industry experts will serve as an advisory board. Missoula College has already received donations of training equipment that will allow us to provide experiences for students. More offers are pending. Course fees will be requested to support the consumables required for student skills practice

Montana Board of Regents
CURRICULUM PROPOSAL FORM

7. Assessment

How will the success of the program be measured?

Student pass rate and success at earning NIMS credentials will be measures success of our program. We will rely on feedback from employers who hire our graduates as to the ability of our students to fulfill their need for trained, qualified employees. Recruitment of sufficient students to fill the annual cohort will be critical to the success of the program and confirmation that employment opportunities exist in sufficient numbers to warrant continuation of the training.

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.

Local industries, including CM Manufacturing, Diversified Plastics, Aqua Creek, Sun Mountain Sports, and others, have long desired a local training program for machine technology. Missoula Job Service Director Wolf Ametsbichler has repeatedly voice a need, based on his relationship with local industry, for Missoula College to institute a training program that could be a pipeline for a trained workforce into local manufacturing. The financial requirements of starting a machining program coupled with recent budget cuts at state institutions precluded program planning and implementation. When TAACCCT 3, RevUp Montana, made funds available to the college to increase manufacturing and energy technology training programs, the window of opportunity opened. With RevUp funding support, Missoula College administration, faculty, and RevUp staff immediately began to plan for this training program. We located space, provided funding for instructor to pursue NIMS credentialing, purchased machines, collaborated with existing programs in the state, and pursued donations from local industry – as well as curriculum advising, internship opportunities, and technical assessment. We partnered with FVCC to offer courses this fall – combining three hands-on courses with two of their online courses – to five students. We joined with Welding Technology to submit for approval two semesters (CTS and CAS) in this request.

NIMS credentialing is made available free to all students for the duration of the RevUp Montana grant. We also have an opportunity to have our program NIMS accredited while the grant is in force.



3721 Grant Creek Road
Missoula, MT 59802
(406) 543-6653
(800) 321-0084
Fax: 728-4074

September 25, 2015

Dean Shannon O'Brien
Missoula College
909 South Avenue West
Missoula, MT 59801

Dear Dr. O'Brien,

Please accept this letter as evidence of our support for the Missoula College application for approval of the Precision Machine Technology program.

Diversified Plastics, Inc. is a custom manufacturer of plastic industrial components. We serve several industries, including timber, food processing, wood products, mining, wastewater, and more. We currently have 48 employees and 17 of them have machining skills. We find it extremely difficult to find skilled staff. We are currently launching a new marketing initiative with bold growth targets over the next five years. We will only be able to achieve this if we have employees with skills to do the work.

We are very excited about this new opportunity for our community and our company. Please feel free to contact me with any questions.

Sincerely,

Wendy Koster
General Manager

09/30/2015

Dean Shannon O'Brien
Missoula College
909 South Avenue West
Missoula, MT 59801

Dear Dr. O'Brien,

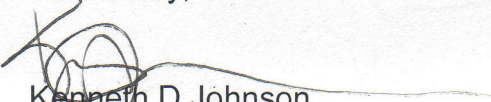
Please accept this letter as evidence of my support for the Missoula College application for approval of the Precision Machine Technology program.

The machining industry in Western Montana has been wishing for some time to have a formal training program at Missoula College, and we see this as an excellent opportunity to acquire a trained local workforce. Machinists will find well-paying jobs and an excellent work environment in our industry.

CM has a vested interest in this program by recently donating a Vertical Milling Center valued around \$40,000.00 to the Machine Technology program.

If I may be of further service in this endeavor, do not hesitate to contact me.

Yours truly,


Kenneth D Johnson
President
CM Manufacturing



10/1/15

Dean Shannon O'Brien
Missoula College
909 South Avenue West
Missoula, MT 59801

Dear Dr. O'Brien,

Please accept this letter as evidence of my support for the Missoula College application for approval of the Precision Machine Technology program.

The machining industry in Western Montana has been wishing for some time to have a formal training program at Missoula College, and we see this as an excellent opportunity to acquire a trained local workforce. Machinists will find well-paying jobs and an excellent work environment in our industry.

If I may be of further service in this endeavor, do not hesitate to contact me.

Yours truly,

Jason Rigby
Montana Machine Works
9889 Garrymore LN
Missoula MT
59808

March 3-4, 2016

ITEM 170-1026+R0316

Request for Authorization to Re-title Information Systems Management Option in the Information Technology A.A.S. to Programming and App Development – Missoula College University of Montana

THAT

The Board of Regents of Higher Education authorizes Missoula College-UM to retitle the Information Systems Management option in the Information Technology AAS to Programming and App Development.

EXPLANATION

This is a request to retitle the Information Systems Management option in the Information Technology AAS to Programming and App Development. This new name will 1) more accurately portray the curriculum of the program and its emphasis on programming and coding topics and 2) update terminology reflective of job descriptions commonly identified with the program's educational outcomes.

ATTACHMENTS

Academic Proposal Request Form

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1026+R0316

Meeting Date: March 3-4, 2016

Institution: Missoula College-UM

CIP Code: 11.0201

Program Title: Programming and App Development Option, Information Technology AAS 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 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- 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. Revising a program (Curriculum Proposal Form)

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

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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)

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, except when eliminating or consolidating)

5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

This is a request to retitle the Information Systems Management option in the Information Technology AAS to Programming and App Development. This new name will 1) more accurately portray the curriculum of the program and its emphasis on programming and coding topics and 2) update terminology reflective of job descriptions commonly identified with the program's educational outcomes.

The Missoula Economic Partnership identified a high concentration of technology workers as a critical characteristic in strengthening the Missoula economy and attracting new businesses to the region. It is an important component of Missoula College's mission to respond to building the workforce and there is a need to educate more individuals in programming, coding, application development, and computational thinking.

March 3-4, 2016

ITEM 170-1601+R0316

Request for Authorization to Deliver Early Childhood Education Coursework at the Lewistown Higher Education Center – The University of Montana Western

THAT

UM Western requests authorization to offer early childhood coursework at the Lewistown Higher Education Center.

EXPLANATION

Authorization to provide early childhood coursework in Lewistown will allow UM Western to respond to a regional need for face-to-face instruction in early childhood education. UM Western's ECE certificate, associate and baccalaureate programs have already been approved by the Board of Regents. This request responds to a statewide effort to increase access to quality childcare in rural Montana by increasing access to postsecondary degree programs.

ATTACHMENTS

Academic Proposal Request Form
Attachment #1 – MOU with MSU Northern

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1601+R0316

Meeting Date: March 2016

Institution: University of Montana Western

CIP Code: 131210

Program Title: Early Childhood Education – Lewistown Site

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 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- 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. Revising a program (Curriculum Proposal Form)

 X 4. Distance or online delivery of an existing degree or certificate program (*add new instructional site*)

 5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

 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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Request to offer face-to-face coursework in early childhood education at the Lewistown Higher Education Center.

TheUniversityofMontanaWestern

January 13, 2016

Dr. William Rugg
Montana State University – Northern
300 13th Street West
Havre, MT 59501

Dear Dr. Rugg:

This letter serves as a memorandum of understanding between the University of Montana - Western and Montana State University - Northern regarding delivery of early childhood education (ECE) coursework in Lewistown, Montana. Montana Western's ECE program is unique because it meets the needs of working professionals. ECE courses are offered at night so students can continue to work at childcare facilities during the day. Students also are encouraged to take their general education coursework from the local/regional higher education provider.

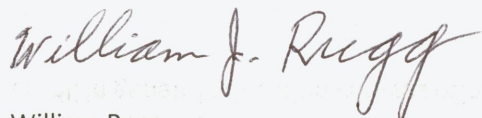
Montana Western hereby notifies your university of our intent to deliver face-to-face ECE instruction in Lewistown at the Head Start Facility. These courses will be scheduled during evening hours and on some weekends. Montana Western will limit its offerings to the content courses required for students to satisfy degree options in early childhood education. Montana Western also will advise students to enroll in general education courses offered by MSU-Northern at the Central Montana Education Center.

We appreciate the conversations and cooperation that we have had with your faculty and staff and look forward to working with you to provide additional learning opportunities in the Lewistown community. Your agreement and support of this memorandum may be indicated by signing below.

Regards,



Sylvia Moore
Interim Provost, UM-Western



William Rugg
Provost, MSU-Northern

710 South Atlantic Street | Dillon, Montana 59725 | 406.683.7011 | F: 406.683.7493 | www.umwestern.edu

March 3-4, 2016

ITEM 170-1602+R0316

Request to Revise B.S. in Mathematics – The University of Montana Western

THAT

UM Western requests authorization to revise the B.S. Mathematics major.

EXPLANATION

To meet student needs, streamline course offerings, and attempt to increase course enrollments, the department of mathematics at UM Western is revising its major to focus more on computational mathematics, including large data sets.

ATTACHMENTS

- Academic Proposal Request Form
- Curriculum Proposal Form
- Termination Checklist
- Attachment #1 – Catalog Descriptions
- Attachment #2 – Two-year Course Rotation
- Attachment #3 – Program Assessment Plan

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

Item Number: 170-1602+R0316

Meeting Date: March 2016

Institution: University of Montana Western

CIP Code: 27.0101

Program Title: B.S. Mathematics revision

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 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- 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. Revising a program (Curriculum Proposal Form)

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

5. Terminating an existing major, minor, option or certificate – Step 2 (Completed Program Termination Checklist)

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. 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)

___ 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, except when eliminating or consolidating)

___ 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Request to revise the Bachelor of Science in Mathematics to allow an increased focus on undergraduate research and more experience with computational mathematics, including data analysis and modeling.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

The department of mathematics is proposing a set of program requirement revisions to its existing B.S. Mathematics major (and the B.S. Mathematics and B.S. Secondary Education double major). These changes will refocus the major in a way that emphasizes and supports undergraduate research at all levels. In addition to changes in program requirements, three options under the B.S. mathematics major that have been chronically undersubscribed will be eliminated - Mathematical Biology, Mathematical Ecology, and Mathematical Geology.

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

Under the proposed revision, students will participate in guided, comprehensive undergraduate research in data analysis and modeling. While the degree will continue to prepare students with the content needed to begin careers as secondary educators in mathematics, it also will give them the option to compete for job opportunities in the mathematical/scientific workforce immediately after graduation.

3. Need

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

After several cycles of program assessment, the department of mathematics has determined that the curriculum needed restructured to support activities that will allow our students to excel in mathematical/scientific communication and in undergraduate research in mathematics.

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

The proposed revision to the curricular structure fits well with experiential learning. The revisions will promote focused study in a field that will set it apart from other undergraduate mathematics programs.

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

The intent of the revision is to increase enrollment in mathematics. The revised degree will be marketed by admissions personnel and the department. The revision, especially with its emphasis on career opportunities in the scientific and mathematical workforce, should double the number of math majors.

4. Institutional and System Fit

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

This revised program will continue to serve as part of the double major in mathematics and secondary education and will support a mathematics endorsement for the elementary education degree. This revision will meet a need for Biology and possibly for other departments that want students to make use of large data sets.

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

As part of the revision, the mathematics secondary education minor will be eliminated.

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

Montana Board of Regents
CURRICULUM PROPOSAL FORM

Mathematics works to support education and science programs, but there is no closely related program.

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

A culture of experiential education is part of UM Western's Mission. One of our NWCCU Core themes is to improve undergraduate education and experiential learning. Our Priority One is to encourage academic excellence and innovation, and Goal 1E is to "deliver high-quality, innovative experiential education to the new generation of digital learners by anticipating and delivering the technology needs of the future."

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.

Since this is simply a structural revision to an existing B.S. Mathematics, there is no concern about duplication. As on most campuses, mathematics also is a support unit for general education and several degree programs.

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 detailed description is attached as Appendix A.

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

The two-year course rotation is attached as Appendix B. Mathematics intends to preserve numbers in the double major (average of 21 students/year over five years, 2011-15) and increase numbers in the mathematics major (average of 6 students/year over five years, 2011-15).

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.

Existing mathematics department faculty will teach the new courses. A two-year course rotation has been developed that shows no increase in faculty members' workloads, but some will see changes in the courses they have taught in recent years.

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 revisions to the program are computational in nature and will increase reliance on technological resources for both students and faculty. The faculty will continue to work with our IT department to expand resources and the services that support those resources.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

7. Assessment

How will the success of the program be measured?

Program success will be measured by enrollments, numbers of graduates, and post-graduation employment of graduates. Program Assessment and Learning Outcomes are detailed in Appendix C.

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 decision to revise the program was driven by systematic program assessment, including use of institutional data and feedback from students, faculty, community members, and potential employers. Curricular approval processes at Western are managed by the registrar and include review by all department chairs, the faculty senate, the provost, and the chancellor.

Attachment 1: Catalog Descriptions of Major and Double Major *Bachelor Of Science: Mathematics*

Program Mission Statement

The mission of the Department of Mathematics is to prepare students for professional work or postgraduate study in mathematical data analysis and modeling or in mathematics education by both developing their competencies with core mathematical concepts and providing them with the experience of engaging in mathematical research.

Graduate Outcomes

Successful program graduates will

- A. demonstrate competence in a variety of mathematical subfields, including calculus, linear algebra, probability & statistics, data analysis, modeling, and mathematical proof;
- B. read and understand primary mathematical and/or scientific literature;
- C. write mathematical and/or scientific research proposals and papers;
- D. give effective spoken presentations on mathematical and/or scientific research.

Experiential Learning

The Mathematics major embraces undergraduate research at all levels. Students will learn to read and develop an understanding of the connections between the research materials of others, begin to pose their own, relevant mathematical questions, develop techniques that systematically answer these questions, and finally, report authoritatively upon their work to others in their field. All of this will take place within the mathematical context of modeling and analyzing today's very large data sets. Through this realistic practice of mathematical research, graduates will be well prepared to continue their work in a professional/academic/industrial setting or to become secondary educators who can adeptly teach the value and purpose of their mathematical skills to their own students.

Assessment

The graduate outcomes for the BS: Mathematics major are assessed at various stages of the students' development within the program. In general, this means that the students' research and scientific communication skills will be assessed both near the beginning and end of their academic careers. In addition, all students pursuing a BS: Mathematics degree are assessed in their mastery of core skills drawing from calculus, linear algebra, probability & statistics, data analysis, modeling, and mathematical proof. The details of these assessment activities may be found in the program assessment plan, which may be obtained from the Department of Mathematics.

Note: In order to receive credit toward a BS: Mathematics Major, students must earn a B- or higher in STAT121 Probability and all courses listed in the Core Requirements.

Credit Requirements

General Education	31-32
STAT121 Probability	4
Core	48
M171 Calculus I	4
M172 Calculus II	4
Select one of the following two	4
STAT217 Intermediate Statistical Concepts	
STAT233 Biostatistics	
M210 Introduction to Mathematical Software	4
M221 Introduction to Linear Algebra	4

M3xx Methods of Data Analysis and Modeling	4
STAT3xx Multivariate Statistics	4
M343 Foundations of Mathematics	4
STAT3xx Data Mining	4
STAT433 Stochastic Modeling	4
STAT4xx Advanced Modeling Experience	4
M490 Undergraduate Research, M498 Internship/Cooperative Education, M499 Senior Project /Thesis	4
Electives	40cr
BS: Mathematics Total Credits	120cr

Recommended Four Year Course Sequence

This list includes the core classes as guidelines to complete the B.S. Mathematics major in four years. It is one example of how the program can be completed in four years; faculty advisors assist students in choosing among the options in a given semester to insure progress towards completion of the program and are equipped with a more detailed, block-by-block plan that you can use. Students should complete general education and elective requirements while working with these guidelines.

If you begin in the fall of an odd-numbered academic year, base your schedule on this plan:

Freshman Year Mathematics Courses

STAT121 Probability

M210 Introduction to Mathematical Software

STAT 217 Intermediate Statistical Concepts or STAT233 Biostatistics

M112 Trigonometry and Complex Numbers (if needed to enter M171)

M171 Calculus I

M172 Calculus II

Sophomore Year Mathematics Courses

M221 Introduction to Linear Algebra

M343 Foundations of Mathematics

STAT3xx Multivariate Statistics

Junior Year Mathematics Courses

M3xx Methods of Data Analysis and Modeling

STAT433 Stochastic Modeling

STAT3xx Data Mining

Senior Year Mathematics Courses

STAT4xx Advanced Modeling Experience

If you begin in the fall of an even-numbered academic year, base your schedule on this plan:

Freshman Year Mathematics Courses

STAT121 Probability

M210 Introduction to Mathematical Software

STAT 217 Intermediate Statistical Concepts or STAT233 Biostatistics

M221 Introduction to Linear Algebra

M112 Trigonometry and Complex Numbers (if needed to enter M171)

M171 Calculus I

M172 Calculus II

STAT3xx Multivariate Statistics

Sophomore Year Mathematics Courses

M3xx Methods of Data Analysis and Modeling
STAT433 Stochastic Modeling
STAT3xx Data Mining

Junior Year Mathematics Courses

M343 Foundations of Mathematics
STAT4xx Modeling Workshop

Note: Students are required to take 4 credits of 490, 498 or 499. These should be taken after successfully completing STAT433 (Stochastic Modeling) or (if possible) STAT4xx (Modeling Workshop).

Bachelor of Science: Mathematics and Secondary Education Double Major

Program Mission Statement

The mission of the Department of Mathematics is to prepare students for professional work or postgraduate study in mathematical data analysis and modeling or in mathematics education by both developing their competencies with core mathematical concepts and providing them with the experience of engaging in mathematical research.

Graduate Outcomes

Successful program graduates will

- A. demonstrate competence in a variety of mathematical subfields, including calculus, linear algebra, probability & statistics, data analysis, modeling, and mathematical proof;
- B. read and understand primary mathematical and/or scientific literature;
- C. write mathematical and/or scientific research proposals and papers;
- D. give effective spoken presentations on mathematical and/or scientific research.

Experiential Learning

The Mathematics major embraces undergraduate research at all levels. Students will learn to read and develop an understanding of the connections between the research materials of others, begin to pose their own, relevant mathematical questions, develop techniques that systematically answer these questions, and finally, report authoritatively upon their work to others in their field. All of this will take place within the mathematical context of modeling and analyzing today's very large data sets. Through this realistic practice of mathematical research, graduates will be well prepared to continue their work in a professional/academic/industrial setting or to become secondary educators who can adeptly teach the value and purpose of their mathematical skills to their own students.

Assessment

The graduate outcomes for the BS: Mathematics major are assessed at various stages of the students' development within the program. In general, this means that the students' research and scientific communication skills will be assessed both near the beginning and end of their academic careers. In addition, all students pursuing a BS: Mathematics degree are assessed in their mastery of core skills drawing from calculus, linear algebra, probability & statistics, data analysis, modeling, and mathematical proof. The details of these assessment activities may be found in the program assessment plan, which may be obtained from the Department of Mathematics.

Note: In order to receive credit toward a BS: Mathematics Major, students must earn a B- or higher in STAT 121 Probability and all courses listed in the Major Core. Refer to pages 123-129 for information on applying for admission to the Teacher Education Program and other program requirements. The UMW Department of Education strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one other teaching major or minor) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

Credit Requirements

General Education	31-32
STAT121 Probability	4
Core	48
M107 Geometry	4
M171 Calculus I	4
M172 Calculus II	4
Select one of the following two	4
STAT217 Intermediate Statistical Concepts	

STAT233 Biostatistics	
M210 Introduction to Mathematical Software	4
M221 Introduction to Linear Algebra	4
M3xx Methods of Data Analysis and Modeling	4
M343 Foundations of Mathematics	4
Select one of the following two	4
M3xx Topics in Discrete Mathematics M494 Seminar/Workshop	
STAT3xx Multivariate Statistics	4
STAT3xx Data Mining Workshop	4
STAT433 Stochastic Modeling	4
Total	48
Professional Education Core <i>See page 134 for recommended course sequence</i>	36
EDU 201 Intro to Education with Field Experience	4
EDU 222 Educational Psychology & Child Development	4
EDU 306 School Law & Advocacy for all K-12 Learners	4
EDU 311 Cultures, Diversity, & Ethics in Global Education	4
EDU 372 Assessment, Curriculum & Instruction	4
EDU 371 Foundation of Edu Technology for Secondary Schools	2
EDU 481 Content Area Literacy	2
EDU 444 Classroom Management in Secondary Schools	4
EDU 497M Methods: 5-12 Mathematics	4
Select 1 course/4 credits from the following	4
HEE 340 Methods of Health Education HTH 220 Human Sexuality	
Student Teaching	
EDU 495S Student Teaching: 5-12	4
Electives <i>Choose elective credits from any college-level catalog courses to bring degree total to 128</i>	4-5
Math and Secondary Education	128
Total Credits	

Recommended Four Year Course Sequence

This list includes the core classes as guidelines to complete the B.S. Mathematics major in four years. It is one example of how the program can be completed in four years; faculty advisors assist students in choosing among the options in a given semester to insure progress towards completion of the program and are equipped with a more detailed, block-by-block plan that you can use. Students should complete general education and elective requirements while working with these guidelines.

If you begin in the fall of an odd-numbered academic year, base your schedule on this plan:

Freshman Year Mathematics Courses

STAT121 Probability

M210 Introduction to Mathematical Software

STAT 217 Intermediate Statistical Concepts or STAT233 Biostatistics
M112 Trigonometry and Complex Numbers (if needed to enter M171)
M171 Calculus I
M172 Calculus II

Sophomore Year Mathematics Courses

M343 Foundations of Mathematics
M221 Introduction to Linear Algebra
M107 Introduction to Geometry
STAT3xx Multivariate Statistics (If you began in an odd numbered Fall year)

Junior Year Mathematics Courses

M3xx Methods of Data Analysis and Modeling
M3xx Discrete Mathematics
STAT433 Stochastic Modeling
STAT3xx Data Mining

If you begin in the fall of an even-numbered academic year, base your schedule on this plan:

Freshman Year Mathematics Courses

STAT121 Probability
M210 Introduction to Mathematical Software
STAT217 Intermediate Statistical Concepts or STAT233 Biostatistics
M221 Introduction to Linear Algebra
M112 Trigonometry and Complex Numbers (if needed to enter M171)
M171 Calculus I
M172 Calculus II
STAT3xx Multivariate Statistics

Sophomore Year Mathematics Courses

M3xx Methods of Data Analysis and Modeling
STAT433 Stochastic Modeling
M107 Introduction to Geometry
STAT3xx Data Mining

Junior Year Mathematics Courses

M343 Foundations of Mathematics

Senior Year Mathematics Courses

M3xx Discrete Mathematics

Note: Under both schedules outlined above, students are required to complete the Professional Education Core. Please refer to page 134 for a recommended course sequence.

Additional Mathematics and Secondary Education Degree Information

Students are strongly encouraged to take ANTY 220 as an elective prior to enrolling in EDU 311.

Students in an internship program (e.g. Class 5 teachers) will substitute EDU 498 Internship for EDU 495. Consult with the Director of Field Experiences to determine appropriate number of credits.

A recent certificate of first aid & safety (including child and adult CPR and ARD, & infant CPR) is required for all education majors prior to student teaching. ECP100 is recommended to fulfill this requirement

Attachment 2: Proposed two year course rotation plan

Two Year Course Rotation

Odd Fall / Even Spring								
	<i>Block 1</i>	<i>Block 2</i>	<i>Block 3</i>	<i>Block 4</i>	<i>Block 5</i>	<i>Block 6</i>	<i>Block 7</i>	<i>Block 8</i>
Eric Wright	STAT121	M210		Methods of Data Analysis and Modeling	STAT121	M107	M127	
Eric Dyreson		STAT217	STAT233	STAT121	STAT433		STAT217	Data Mining
Tyler Seacrest	M119		M343	M161	M161	M119		M127
Staff	STAT121	M095	M112	M095	M171	M172	STAT121	STAT121
Debbie Seacrest	M090	M121		M090	M095		M095	M127
Liz Vandree	M095	M090	M090	M095	M090	M095	M090	M095

Even Fall / Odd Spring								
	<i>Block 1</i>	<i>Block 2</i>	<i>Block 3</i>	<i>Block 4</i>	<i>Block 5</i>	<i>Block 6</i>	<i>Block 7</i>	<i>Block 8</i>
Eric Wright	STAT121	M210		M221	STAT121	M107	M127	
Eric Dyreson		STAT217	STAT233	STAT121	STAT4xx		STAT217	Multivariate Statistics
Tyler Seacrest	M119		Discrete Mathematics	M161	M161	M119		M121
Staff	STAT121	M095	M112	M095	M171	M172	STAT121	STAT121
Debbie Seacrest	M090	M121		M090	M095		M095	M127
Liz Vandree	M095	M090	M090	M095	M090	M095	M090	M095

Attachment 3: Program Assessment Plan (Draft)

Program Mission Statement

The mission of the Department of Mathematics is to prepare students for professional work or postgraduate study in mathematical data analysis and modeling or in mathematics education by both developing their competencies with core mathematical concepts and providing them with the experience of engaging in mathematical research.

Graduate Outcomes

Successful program graduates will

- A. demonstrate competence in a variety of mathematical subfields, including calculus, linear algebra, probability & statistics, data analysis, modeling, and mathematical proof;
- B. read and understand primary mathematical and/or scientific literature;
- C. write mathematical and/or scientific research proposals and papers;
- D. give effective spoken presentations on mathematical and/or scientific research.

Assessment

1. **Core Skills Assessment (Outcome A):** Mathematics majors will be given the opportunity to develop their core skills while taking two different tiers of courses. Tier 1 courses include STAT121 (Probability), STAT217/233 (Intermediate Statistical Concepts / Biostatistics), M171 (Calculus I), M172 (Calculus II), and M210 (Introduction to Mathematical Software). Tier 2 courses include M221 (Introduction to Linear Algebra), M3xx (Methods of Data Analysis and Modeling), STAT3xx (Multivariate Statistics), and M343 (Foundations of Mathematics). Near the end of both the fall and spring semesters, the mathematics department will offer Tier 1 and Tier 2 comprehensive exams in a classroom on campus. A syllabus for these exams will be made available to students in advance. Faculty will read these exams and provide feedback on each student's strengths and weaknesses and advice on how students can improve to the point that they will be well-prepared for Tier 2 courses or beginning their capstone research experiences (STAT433 (Stochastic Modeling), STAT3xx (Data Mining), STAT4xx (Advanced Modeling Experience), and M490, M498, or M499). Math majors should take no more than one of their Tier 2 courses before completing the Tier 1 Exam. Students should take no more than one of their capstone research courses before completing the Tier 2 exam. The Tier 2 exam will cumulatively assess mastery of both Tier 1 and Tier 2 concepts AND how they interrelate.
2. **Research Skills Assessment (Outcomes B, C, and D):** Research skills will be assessed at several points in the academic careers of mathematics majors.
 - a. **Research Proposals (B and C):** The first time a research proposal will be assessed will be at the end of M210: Introduction to Mathematical Software. In this class students are taught to use mathematical programming languages like MATLAB to solve mathematical problems. They are also taught how to write a scientific paper using the LaTeX typesetting software. Their final project in this course is to write a research paper on a prescribed mathematical problem they are assigned to solve. We assess their research skills by applying the Research Paper Rubric to their paper. In addition, students will be expected to write a research proposal in they enroll in M490 or M499 (Undergraduate Research or Senior Project/Thesis). In these cases, those proposals will also be assessed using the same rubric.
 - b. **Spoken Presentations (B and D):** Students will be expected to give spoken presentations in STAT433 (Stochastic Modeling) and STAT 3xx (Data Mining). These presentations will be assessed using the Spoken Presentation Assessment Rubric (see below). In addition,

spoken presentations may be assessed in M3xx (Discrete Mathematics), M4xx (Advanced Modeling Experience), and any of M490, 498, or 499.

- c. **Research Papers (B and C):** Students will be expected to write research papers in STAT 433 (Stochastic Modeling) and STAT 3xx (Data Mining). These papers will be assessed using the Research Paper Rubric (see below). Additionally, students might write research papers for M3xx (Discrete Mathematics), M4xx (Advanced Modeling Experience), and any of M490, 498, or 499. These papers could also be assessed using the same rubrics.

Near the end of each academic year, the department will meet and aggregate data collected from the core skills exams and the research rubrics. We will discuss apparent strengths and weaknesses in both the students and the curriculum and develop plans for adjustment when necessary.

Research Proposal Assessment Rubric					
<p>Structure</p> <ul style="list-style-type: none"> The proposal begins with a concise but appropriate title, the author's name and contact information, and an abstract that consists of a clear, concise, and self-contained statement of the research topic. The proposal has an introduction that provides the reader with a clear roadmap for what to expect in the remainder of the proposal, including an in-depth statement of the proposed research question and an explanation of the broader impacts of its resolution (how would the scientific community / society at large benefit from the author's success?). The proposal continues by placing the work proposed by the author into the context of the existing body of scientific or mathematical knowledge by conducting an in-depth literature review. This should review the key findings of past, published research that is relevant to the author's stated problem and it makes clear how the proposed work adds to what is already known. The proposal should report on any preliminary progress already made in resolving the author's proposed research problem. This might involve work you have already done on simplified or special aspects of your problem. The proposal should report in detail on all work that still needs to be done and provide a plausible methodology and set of techniques that the author will use in order to complete it. Any facts stated by the author that are not a direct result of his or her own work (or are not arguable to be "common knowledge" to the intended audience) are supported by a citation to a high quality, reputable, and preferably primary reference using a consistent citation style that directs the reader to a well-formatted bibliography. 					
A proposal that is weak in more than one of the above items scores at a level of "unacceptable" in content.		A proposal that is weak in any one of the of the above items scores at a level of "acceptable" in content.		A proposal with strong evidence of all of the above items scores at a level of "excellent" in content.	
Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery
<p>Grammar and Mechanics</p> <ul style="list-style-type: none"> The author writes in a consistent and appropriate voice for the intended audience. The author demonstrates a sophisticated and precise word choice. There are no spelling errors. There are no grammatical errors. 					
A proposal that is weak in more than one of the above items scores at a level of "unacceptable" in grammar and mechanics.		A proposal that is weak in any one of the of the above items scores at a level of "acceptable" grammar and mechanics.		A proposal with strong evidence of all of the above items scores at a level of "excellent" in grammar and mechanics.	
Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery
<p>Mathematical and Scientific Considerations</p> <ul style="list-style-type: none"> All mathematical expressions or equations are formatted appropriately and consistently, using established conventions when appropriate. All mathematical arguments are correct and they follow a clear, logical path. The author does not use any domain-specific jargon without first defining it. The author frames his or her research within a clearly stated and appropriately chosen methodology such as the scientific method or a process model that is intended for data mining, statistical analysis, mathematical modeling, etc. 					
A proposal that is weak in more than one of the above items scores at a level of "unacceptable" in citation of sources.		A proposal that is weak in any one of the of the above items scores at a level of "acceptable" in citation of sources.		A proposal with strong evidence of all of the above items scores at a level of "excellent" in citation of sources.	
Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery

Research Presentation Assessment Rubric					
<p>Structure</p> <ul style="list-style-type: none"> The presentation begins with a highly visible and appropriate title slide that also includes the speaker's name, institutional affiliation, and contact information. The presentation begins with an introduction that provides the audience with a clear roadmap for what to expect in the remainder of the presentation, including an in-depth outline of the key findings that the speaker will report upon and an explanation of their broader impacts (how would the scientific community / society at large benefit from the speaker's success?). The presentation continues by placing the speaker's work into the context of the existing body of scientific knowledge by conducting a brief literature review that addresses the highlights of prior research that laid the foundation for the speaker's work. The speaker should also clearly state how his or her work adds to what is already known. The presentation provides a summary review of the speaker's key research findings. It provides enough information about their methodology to allow another expert in the field to reproduce the author's research activities but doesn't get bogged down in details. In a concluding section, the presentation should highlight the key findings of the speaker, report in detail on what work still needs to be done, and suggest techniques the speaker would plausibly use in order to complete it. When appropriate, the speaker should provide the audience with a way to obtain more in-depth information about their work. 					
A presentation that is weak in more than one of the above items scores at a level of "unacceptable" in content.		A presentation that is weak in any one of the of the above items scores at a level of "acceptable" in content.		A presentation with strong evidence of all of the above items scores at a level of "excellent" in content.	
Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery
<p>Presentation Style</p> <ul style="list-style-type: none"> The speaker addresses his or her audience in an audible voice using language that is appropriate for the audience at hand. The slides are visible and clearly readable from a distance. The speaker uses slides effectively as visual aids to supplement his or her presentation. Slides should not be simple transcriptions of pages from a research paper that the speaker reads to the audience. There are no spelling or grammatical errors on the presentation slides or other visual aids. 					
A presentation that is weak in more than one of the above items scores at a level of "unacceptable" in grammar and mechanics.		A presentation that is weak in any one of the of the above items scores at a level of "acceptable" grammar and mechanics.		A presentation with strong evidence of all of the above items scores at a level of "excellent" in grammar and mechanics.	
Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery
<p>Mathematical and Scientific Considerations</p> <ul style="list-style-type: none"> All mathematical expressions or equations are formatted appropriately and consistently, using established conventions when appropriate. All mathematical arguments are correct and they follow a clear, logical path. The speaker does not use any domain-specific jargon without first defining it. The speaker frames his or her research within a clearly stated and appropriately chosen methodology such as the scientific method or a process model that is intended for data mining, statistical analysis, mathematical modeling, etc. 					
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Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery

Research Paper Assessment Rubric					
<p>Structure</p> <ul style="list-style-type: none"> The paper begins with a concise but appropriate title, the author’s name and contact information, and an abstract that consists of a clear, concise, and self-contained statement of the research topic. The paper has an introduction that provides the reader with a clear roadmap for what to expect in the remainder of the paper, including an in-depth outline of the key findings that the author will report upon and an explanation of their broader impacts (how would the scientific community / society at large benefit from your success?). The paper continues by placing the author’s work into the context of the existing body of scientific knowledge by conducting an in-depth literature review. This should review the key findings of past, published research that is relevant to the author’s work and make clear how this work adds to what is already known. The paper provides a comprehensive description of the author’s key research findings. It provides enough information about their methodology to allow another expert in the field to reproduce the author’s research activities but doesn’t get bogged down in details. In a concluding section, the paper should review the key findings of the author, report in detail on what work still needs to be done, and what techniques the author would plausibly use in order to complete it. Any facts stated by the author that are not a direct result of his or her own work (or are not arguable to be “common knowledge” to the intended audience) are supported by a citation to a high quality, reputable, and preferably primary reference using a consistent citation style that directs the reader to a well-formatted bibliography. 					
A paper that is weak in more than one of the above items scores at a level of “unacceptable” in content.		A paper that is weak in any one of the of the above items scores at a level of “acceptable” in content.		A paper with strong evidence of all of the above items scores at a level of “excellent” in content.	
Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery
<p>Grammar and Mechanics</p> <ul style="list-style-type: none"> The author writes in a consistent and appropriate voice for the intended audience. The author demonstrates a sophisticated and precise word choice. There are no spelling errors. There are no grammatical errors. 					
A paper that is weak in more than one of the above items scores at a level of “unacceptable” in grammar and mechanics.		A paper that is weak in any one of the of the above items scores at a level of “acceptable” grammar and mechanics.		A paper with strong evidence of all of the above items scores at a level of “excellent” in grammar and mechanics.	
Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery
<p>Mathematical and Scientific Considerations</p> <ul style="list-style-type: none"> All mathematical expressions or equations are formatted appropriately and consistently, using established conventions when appropriate. All mathematical arguments are correct and they follow a clear, logical path. The author does not use any domain-specific jargon without first defining it. The author frames his or her research within a clearly stated and appropriately chosen methodology such as the scientific method or a process model that is intended for data mining, statistical analysis, mathematical modeling, etc. 					
A paper that is weak in more than one of the above items scores at a level of “unacceptable” in citation of sources.		A paper that is weak in any one of the of the above items scores at a level of “acceptable” in citation of sources.		A paper with strong evidence of all of the above items scores at a level of “excellent” in citation of sources.	
Severe weaknesses	Moderate weaknesses	Severe weakness	Moderate weakness	Adequate evidence	Mastery

Assessment of Mathematics and Secondary Education PEPPS Standards

The mathematics major is designed to meet all PEPPS mathematics standards (10.58.518) that are related to content knowledge. Those standards that relate to pedagogy are assessed by the Education Department.

10.58.518 Mathematics

1. The program requires that successful candidates:
 - a. Demonstrate knowledge and understanding of and apply the process of mathematical problem solving;
 - **UMW Courses:** STAT121, STAT217/233, M171, M172, M221
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, projects, and core skills assessment exams.
 - b. Reason mathematically in constructing, evaluating, and communicating mathematical arguments;
 - **UMW Courses:** STAT121, STAT217/233, M171, M172, M221, STAT433
 - **Program Outcomes:** A,C,D
 - **Assessments:** Assignments/exams, projects, core skills assessment exams, research papers and presentations.
 - c. Demonstrate an appreciation for mathematical rigor and inquiry;
 - **UMW Courses:** M107, M343, M3xx (Discrete Mathematics)
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, projects, and core skills assessment exams.
 - d. Recognize, formulate and apply connections between mathematical ideas and representations in a wide variety of contexts;
 - **UMW Courses:** STAT121, STAT217/233, M171, M172, M221, M343, M3xx (Methods of Data Analysis and Modeling), STAT3xx (Multivariate Statistics)
 - **Program Outcomes:** A
 - **Assessments:** Core skills assessment exams.
 - e. Demonstrate understanding of the mathematical modeling process by interpreting and analyzing mathematical results and models in terms of their reasonableness and usefulness;
 - **UMW Courses:** M210, STAT3xx (Methods of Data Analysis and Modeling), STAT433
 - **Program Outcomes:** B,C,D
 - **Assessments:** Assignments/exams, projects, research proposals, research presentations, and research papers.
 - f. Recognize, use, and make connections between and among mathematical ideas and in contexts outside mathematics to build mathematical understanding including the ability to:
 - i. Attend to precision in mathematical language, notation, approximations, and measurements by consistently and appropriately applying mathematical definitions and procedures; and
 - **UMW Courses:** M210, STAT3xx (Methods of Data Analysis and Modeling), STAT433
 - **Program Outcomes:** C,D
 - **Assessments:** Assignments/exams, projects, research proposals, research presentations, and research papers.
 - ii. Choose appropriate symbolic representations and labels such as specifying units of measure, calculating accurately and efficiently, and expressing numerical answers with a degree of precision appropriate for the context and the data used in calculation;

- **UMW Courses:** M210, STAT3xx (Methods of Data Analysis and Modeling), STAT433
 - **Program Outcomes:** C,D
 - **Assessments:** Assignments/exams, projects, research proposals, research presentations, and research papers.
- g. Appropriately use current and emerging technologies as essential tools for teaching and learning mathematics; **(Assessed by the Education Department)**
- h. Look for and recognize repeated reasoning patterns and the mathematical structures behind those patterns to organize and generalize mathematical methods and results in mathematical problem solving and inquiry;
- **UMW Courses:** M107, M343, M3xx (Discrete Mathematics)
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, core skills exams
- i. Demonstrate how students learn mathematics and the pedagogical knowledge specific to mathematics teaching and learning by demonstrating:
- i. How learners develop mathematical proficiency through the interdependent processes of integrating conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition; **(Assessed by the Education Department)**
 - ii. An understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments in mathematics and ensure high standards of mathematical work for all students; **(Assessed by the Education Department)**
 - iii. An understanding of learning environments that promote mathematical learning, including individual and collaborative learning, positive social interaction about mathematics, active engagement in mathematics learning, and promote self-motivation among mathematical learners; **(Assessed by the Education Department)**
 - iv. An understanding of multiple methods of assessment of mathematical learner growth, progress, and decision making; **(Assessed by the Education Department)**
 - v. An understanding of a variety of instructional strategies that encourage learners to develop deep understanding of mathematics; **(Assessed by the Education Department)** and
 - vi. an understanding of grades 5-12 mathematics curriculum as specified by the State of Montana Content Standards and of the assessment process as specified by the Montana statewide assessment; **(Assessed by the Education Department)**
- j. demonstrate content knowledge in:
- i. numbers and operations including knowledge and understanding of number systems, arithmetic algorithms, fundamental laws of number theory, proportion and rate, quantitative reasoning, modeling, and applications.
 - **UMW Courses:** M343
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, core skills exams
 - ii. Different perspectives on algebra including knowledge and understanding of algebraic structures, basic function classes, functional representations, algebraic models and applications, formal structures and results in abstract algebra, and linear algebra;

- **UMW Courses:** M221, M343, M3xx (Discrete Mathematics)
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, core skills exams
- iii. Geometry and trigonometry including knowledge and understanding of Euclidean and non-Euclidean geometries, geometric transformations, axiomatic reasoning and proof, formulas and calculations related to classical geometric objects, and properties of trigonometric functions;
- **UMW Courses:** M107, M343, M171, M172
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, core skills exams
- iv. Calculus including knowledge and understanding of limit, continuity, differentiation, integration involving single and multiple-variable functions, sequences and series, and a thorough background in the techniques and applications of the calculus;
- **UMW Courses:** M171, M172
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, core skills exams
- v. Discrete mathematics including knowledge and understanding of basic discrete structures, counting techniques, iteration, recursion, formal logic, and applications in the formulation and solution of problems;
- **UMW Courses:** M343, M3xx (Discrete Mathematics)
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, core skills exams
- vi. Data analysis, statistics, and probability including knowledge and understanding of descriptive statistics using numbers and graphs, survey design, sources of bias and variability, empirical and theoretical probability, simulation, and inferential statistics related to univariate and bivariate data distributions and
- **UMW Courses:** STAT121, STAT217/233, STAT3xx (Multivariate Statistics),
 - **Program Outcomes:** A
 - **Assessments:** Assignments/exams, core skills exams
- vii. Historical development and perspectives of various branches of mathematics including contributions of significant historical figures and diverse cultures, including American Indians and tribes in Montana.
- **UMW Courses:** M107, M210, M343, STAT433
 - **Program Outcomes:** A,B
 - **Assessments:** Assignments/exams, core skills exams