

L E V E L I I
M E M O R A N D U M

DATE: December 13, 2010

TO: Chief Academic Officers, Montana University System

FROM: Sylvia Moore, Deputy Commissioner for Academic & Student Affairs
John Cech, Deputy Commissioner for Two-Year & Community College Education

RE: Level II Submission Items

The campuses of the Montana University System have proposed new academic programs or changes under the Level II approval process authorized by the Montana Board of Regents. The Level II proposals are being sent to you for your review and approval. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, you need to raise those concerns at the Chief Academic Officer's conference call on **December 15, 2010**. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, December 15. That notification should be directed to Summer Marston, Executive Assistant to the Deputy Commissioners. If Summer does not hear from you, in writing, by noon on December 15, OCHE will assume that the proposals have your approval.

The Level II submissions are as follows:

Flathead Valley Community College:

- Emergency Management Associate of Applied Science [ITEM #150-301-R0111](#)
- Nursing Associate of Science [ITEM #150-302-R0111](#) | *Feasibility Study (separate document)*
- Physical Therapist Assistant Associate of Applied Science [ITEM #150-303-R0111](#)

Montana State University-Bozeman:

- Professional Master of Science and Engineering Management [ITEM # 150-2013-R0111](#)

Montana State University-Great Falls COT:

- Associate of Science in Nursing [ITEM # 150-2951-R0111](#) | *Feasibility Study (separate document)* | *MSU-Northern Nursing Graduates (Addendum to Feasibility Study)*

The University of Montana-Missoula:

- Master of Arts in Teaching Middle School Mathematics [ITEM #150-1004-R0111](#)
- East Asian Studies Major [ITEM #150-1005-R0111](#)

The University of Montana-Western:

- New Majors in the Department of History, Philosophy, and Social Science [ITEM #150-1601-R0111](#)
- Changes in B.S. Major in Secondary Education [ITEM #150-1602-R0111](#)
- B.S. Major in Health and Human Performance [ITEM #150-1603-R0111](#)

ITEM 150-301-R0111

Emergency Management Associate of Applied Science

THAT

The Montana Board of Regents authorizes Flathead Valley Community College to offer an Emergency Management Associate of Applied Science degree.

EXPLANATION

Flathead Valley Community College requests approval to offer an Emergency Management Associate of Applied Science degree. This program will be the only program of its kind in Montana and will potentially serve the northwest region of the United States. The program includes emergency management and planning, including development of operational capabilities and facilitation of an effective response to emergencies and disasters. Strong emphasis is placed on prevention and planning, along with public education. The program is specifically designed to attract area fire fighters, law enforcement officers, emergency medical services members, local emergency services employees and private safety and security professionals as part of a statewide effort to establish standardized training.

ATTACHMENTS

Level II Request Form and Supporting Documents

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: **150-301-R0111** Meeting Date: **January 12-13, 2011**
Institution: **Flathead Valley Community College** CIP Code: **43.0302**
Program Title: **Emergency Management Associate of Applied Science**

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

Flathead Valley Community College requests authorization to offer the Emergency Management Associate of Applied Science degree.

Montana Board of Regents
LEVEL II REQUEST FORM

Curriculum Proposals

1. Overview

Flathead Valley Community College requests approval to offer an Emergency Management Associate of Applied Science degree.

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

This program will be the only program of its kind in Montana and will potentially serve the northwest region of the United States. The Federal Emergency Management Association's (FEMA) Emergency Management Institute (EMI) has been working toward establishing Emergency Management programs in each state. The Montana Department of Emergency Services (DES) and Montana's Department of Natural Resources and Conservation (DNRC) have indicated a need for this program. The program is designed to serve as the focal point for the delivery of emergency management training and to enhance emergency management and planning, including development of operational capabilities and facilitation of an effective response to emergencies and disasters. Strong emphasis is placed on prevention and planning, along with public education. The program is specifically designed to attract area fire fighters, law enforcement officers, emergency medical services members, local emergency services employees and private safety and security professionals as part of a statewide effort to establish standardized training.

3. Need

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

Flathead Valley Community College is responding to the ongoing need to develop a trained, employable community workforce. Emergency management specialists are employed as part of the public safety team. They coordinate disaster response or crisis management activities, provide disaster preparedness training, and prepare emergency plans and procedures for natural (e.g., hurricanes, floods, earthquakes), wartime, or technological (e.g., nuclear power plant emergencies, hazardous materials spills) disasters. Emergency management specialists may be employed in the private sector, serving as safety officers for local businesses and hospitals or may work in municipal government in planning departments. They are also employed at colleges and universities where they are responsible for development and implementation of the emergency action plan. Montana is one of five states without an Emergency Management degree.

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

Students who have an interest in emergency management will have this option for entry into the emergency management field. The Montana Department of Emergency Services is in the process of developing a certification program for current emergency managers statewide, and Level II certification includes completion of an associate's degree.

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

FVCC worked with a local advisory committee of emergency service providers to determine program need. Emergency management has been called a "recession-proof" profession, and some publications have estimated that the field will increase in jobs by more than 20% over the next decade. Montana's Department of Labor and Industry predicts an increase in the number of positions in the state through 2018, and the Bureau of Labor Statistics predicts a much faster than average growth nationally.

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4. Institutional and System Fit

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

The Emergency Management AAS will be a unique program at FVCC and in Montana.

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.

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

The Emergency Management AAS will be an additional option in the field of public safety along with FVCC's Paramedicine and Criminal Justice programs.

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

The mission of FVCC is to promote excellence in lifelong learning focused on student success and community needs. The institution has stated goals to achieve this mission, and they include providing programs that prepare students for the workforce (Goal #1) and being responsive to the community's economic and workforce training needs (Goal #3). This program will provide members of the community the opportunity to be trained in a viable growing profession which is needed and desired in the community.

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

There are no other Emergency Management programs in the state of Montana.

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.

Program Outcomes: Upon successful completion of this program students will:

- Describe the elements of an integrated emergency management system;
- Compare the roles and responsibilities of key local, state, and federal personnel in dealing with localized emergency incident vs. disasters;
- Identify hazards and propose a strategy to resolve the problem;
- Write a mitigation plan;
- Design an emergency operations center considering the special needs of the occupants;
- Formulate and disseminate accurate news releases;
- Understand the geography and geopolitics of terrorism;
- Develop an action plan for recruiting, interviewing, training, supervising, and evaluating volunteers;
- Utilize the Montana Code Annotated to understand the specifics of Montana state law in

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LEVEL II REQUEST FORM

relation to emergency management;

- Develop a mass fatality incident plan; and
- Construct an emergency action plan for their agency or community.

First Year
Fall Semester

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
BADM	175	Principles of Management	3
CAPP	131T*	Basic MS Office	2
EM	100*	Principles of Emergency Management	3
EM	110*	Disaster Response	3
SP	120C	Interpersonal Relations/Communications	3
WRIT	101W*	College Writing	3
First Semester Total			17

Spring Semester

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
EM	120*	Mitigation Planning	3
EM	130*	Emergency Operations Center (EOC) Management and Operations	3
EM	140*	Public Information Officer	3
M	108*	Business Mathematics	4
PHL	132	Introduction to Critical Thinking	3
Second Semester Total			16

Second Year
Fall Semester

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
BADM	176	Human Relations in Business	3
BUS	132	Leadership	3
EM	200*	Responding to Terrorism	3
EM	210*	Exercise Design	3
PSCI	210B	Introduction to American Government	3
WRIT	121C	Introduction to Technical Writing	3
First Semester Total			18

Spring Semester

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
EM	220*	Management of Volunteers	3
EM	230*	Emergency Management Law & Ethics	3
EM	240*	Mass Fatalities Incident Response	3
EM	250*	Emergency Management Capstone Project	4
SP	215	Negotiations/Conflict Resolution	3
Second Semester Total			16

Total Credits **67**

*Indicates prerequisite and/or corequisite needed.

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

- November, 2010 FVCC Board of Trustees approval
- January, 2011 Level II to Montana Board of Regents
- March, 2011 Montana Board of Regents Approval
- Spring, 2011 Advertise the program and accept applicants (25 estimated)
- Fall, 2011 First class begins course work
- Spring, 2013 First class graduates

6. Resources

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

The college currently has a full-time paramedicine faculty member who will also serve as the program director for Emergency Management. Additionally, the college plans to use adjunct faculty to supplement instruction in the program. Adequate adjunct faculty budget exists for the instruction of the added Emergency Management courses.

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 special equipment or other additional resources are required.

7. Assessment

How will the success of the program be measured?

There are a number of tools that will be utilized to measure the success of students as well as success of the program. Program assessment will include:

- Student enrollment
- Retention analysis
- Student satisfaction surveys
- Employer surveys
- Graduate surveys
- Student employment rates

8. Process Leading to Submission

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

- In spring 2010, a group of emergency services providers met to discuss the needs of the state regarding both associate of applied science degree development and professional development coursework for Montana's current emergency management employees.
- In June 2010, the proposed program director attended FEMA's Emergency Management Higher Education Conference. Using the information from this conference and research compiled throughout summer and early fall, a schedule for program development and approval was outlined.
- In summer 2010, the FVCC continuing education staff met with emergency managers throughout

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the state to discuss both professional development and degree opportunities. An advisory committee was formed to be utilized for both the degree program and potential professional development courses.

- In November 2010, the FVCC Curriculum Committee approved a new Emergency Management AAS degree.
- In November 2010, FVCC Board of Trustees approved the Emergency Management AAS.

ITEM 150-302-R0111

Flathead Valley Community College
Nursing Associate of Science

THAT

The Board of Regents authorizes Flathead Valley Community College to offer the Nursing Associate of Science Degree.

EXPLANATION

Flathead Valley Community College is proposing an Associate of Science Degree in Nursing which follows the Montana State Model of Nursing Education Curriculum for Two-Year Institutions. The proposed program adds an additional 28 credits of required courses (two semesters) to FVCC's existing Associate of Applied Science Degree in Practical Nursing. FVCC's proposed ASN program will prepare students to sit for the Montana State Board of Nursing NCLEX-RN licensing exam to become a Registered Nurse.

ATTACHMENTS

Level II Request Form and Supporting Documents
Montana Board of Nursing Feasibility Study

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: **150-302-R0111** Meeting Date: **January 12-13, 2011**
Institution: **Flathead Valley Community College** CIP Code: **51.3801**
Program Title: **Nursing Associate of Science**

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

Flathead Valley Community College requests authorization to offer the Nursing Associate of Science degree.

Montana Board of Regents
LEVEL II REQUEST FORM

Curriculum Proposals

1. Overview

Flathead Valley Community College is proposing an Associate of Science Degree in Nursing which follows the Montana State Model of Nursing Education Curriculum for Two-Year Institutions.

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

The proposed program adds an additional 28 credits of required courses (two semesters) to FVCC's existing Associate of Applied Science Degree in Practical Nursing. The proposed program consists of nursing courses that have been approved through the common course numbering process, as well as existing courses in microbiology, pathophysiology, and sociology. FVCC's proposed ASN program will prepare students to sit for the Montana State Board of Nursing NCLEX-RN licensing exam to become a Registered Nurse.

3. Need

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

Flathead Valley Community College proposes establishing a new nursing program to respond to growing workforce needs at a local and national level. FVCC's feasibility study (see attached) submitted to the Montana Board of Nursing October 2010, vividly illustrates projected health care workforce shortages and emphasizes the large number of students turned away from nursing training every year. Ongoing discussions with Kalispell Regional Medical Center, North Valley Hospital, and FVCC's Practical Nursing Advisory Committee have highlighted the need for additional nursing education.

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

In addition to Kalispell Regional Medical Center and North Valley Hospital, a host of community organizations have expressed support for a registered nursing program for Flathead and Lincoln counties, including Montana Veterans Home, Whitefish Care and Rehabilitation, The Springs at Whitefish, Immanuel Lutheran Home, Brendan House, Pathways Treatment Center, Libby Care Center, St. John's Lutheran Hospital, and Heritage Place in Kalispell.

Health care is the only industry that has added jobs during this past year's recession. Enrollment at FVCC has grown in double digits for the last two years with a 33 percent increase from fiscal year 2009 to fiscal year 2010, partially due to the high unemployment in the region. The closure of several wood product mills and Columbia Falls Aluminum Plant has resulted in unemployment rates in the service area significantly higher than the state average. FVCC expects to help alleviate some of the hardship caused by the unusually severe recession in northwest Montana, as well as fulfill a critical role in community-based health care for Flathead and Lincoln Counties. FVCC's proposed ASN Program will provide an opportunity for students to receive training for jobs that have a high demand.

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

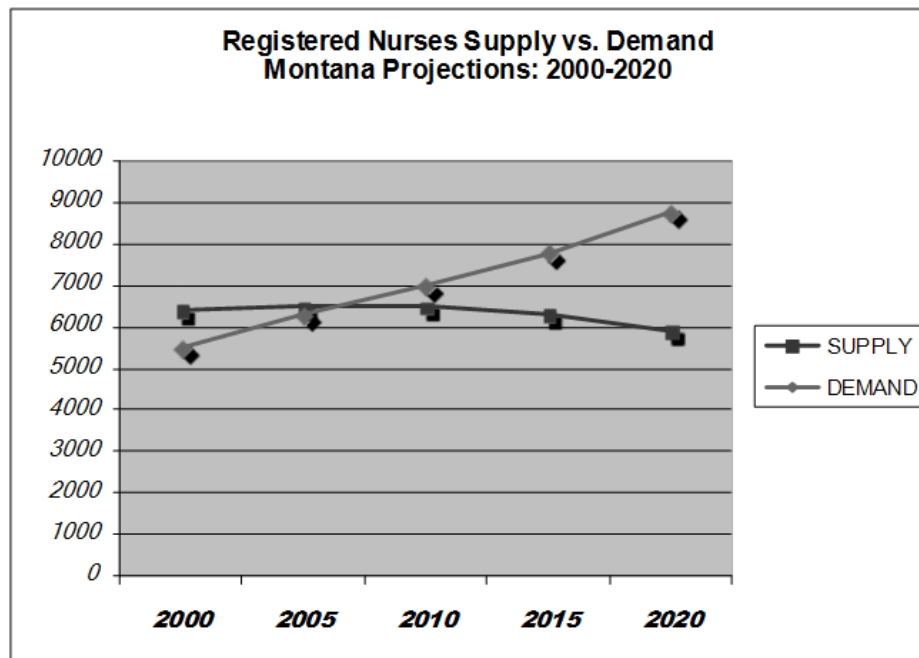
As highlighted in FVCC's feasibility study submitted to the Montana Board of Nursing, the Bureau of Labor Statistics anticipates a 22.2% growth in jobs by 2018 for nurses holding associate degrees. RN employment opportunities will also increase in response to the care needs of an increasingly elderly population. According to the U.S. Census Bureau, starting in 2011, the size of the elderly population

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aged 65 and over in Montana is projected to increase by at least 15% per year.

Present-day nurses are nearing retirement age. The retirement of a significant portion of the RN workforce will contribute to a shortage of nurses expected in the latter half of the next decade. There is also a growing gap in many areas of the nation between the number of needed registered nurses and the number of people available to fill these positions. This gap is driven largely by an aging baby boomer population and a training bottleneck that limits the capacity to train the number of nurses necessary to meet growing demand.

Projections indicate demand for RNs will increase 40 percent by 2020 in the United States, while only a six percent increase in trained RNs is expected. The U.S. nursing shortage is expected to grow to 260,000 registered nurses by 2025. The following chart illustrates the need in Montana for more registered nursing training.



Source: HRSA ; <http://bhpr.hrsa.gov/healthworkforce/reports/behindrbprojections/behindshortage.htm>

According to the Department of Labor and Industry, in Montana, there will be 165 annual openings and 137 replacement jobs for registered nurses or 302 new registered nurses every year between 2008 and 2018. The U.S. Bureau of Labor predicts a shortage of 2,188 nurses in Montana by 2020.

National data, local advisory committee input and student surveys were used to determine need. FVCC has identified 145 students interested in pursuing the ASN program.

4. Institutional and System Fit

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

The proposed ASN curriculum adds an additional 28 credits (two semesters) to FVCC's existing Associate of Applied Science Degree in Practical Nursing. The proposed program consists of nursing

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courses and existing courses in microbiology, pathophysiology, and sociology that are consistent with the Montana State Model of Nursing Education Curriculum for Two-Year Institutions.

The program will provide an additional option for students interested in a health care profession.

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

No changes will be required to existing programs.

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

The ASN prepares students to take the NCLEX-RN licensing exam to become a Registered Nurse.

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

Flathead Valley Community College's mission is to promote excellence in lifelong learning, focusing on student success and community needs. FVCC and its partners are committed to meeting the workforce needs of its community by offering quality and timely workforce training programs where needs have been identified. Flathead Valley Community College's expansion of the nursing program to include the Associate of Science Degree RN is supported by FVCC's Board of Trustees, the health care community, and the community at large.

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.

Flathead Valley Community College's proposed ASN program follows the Montana State Model of Nursing Education Curriculum for Two-Year Institutions. The model curriculum allows individuals a pathway to higher degrees and an opportunity to continue their education by building on their current education.

FVCC's ASN program will be coordinated with existing MUS nursing education programs to avoid clinical fatigue in any one facility. The plan for the Associate of Science Degree RN Program is to offer courses in the spring and summer semesters. This schedule will decrease the demand on the acute care facilities in the spring semester. Currently no RN programs regularly schedule groups of students in the clinical facilities during the summer.

The proposed ASN program should not impact any existing similar nursing programs in the MUS system, but rather provide an opportunity for qualified individuals who were previously turned away to obtain placement in a nursing program. The letter of intent to establish the ASN program at FVCC was sent to the Montana Board of Nursing in June 2010 and discussed at their July meeting. FVCC's feasibility study submitted to the Montana Board of Nursing was shared with all nursing program directors in the state of Montana.

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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.

Program Outcomes: Upon completion of this program students will demonstrate:

- Critical thinking and accountability for clinical decision-making through use of the nursing process;
- Effective communication with clients, families, and health team members and sensitivity to individual and cultural diversity;
- Ability to coordinate care for groups of clients by collaborating and consulting with the interdisciplinary health team, clients and families;
- Effective organization and management of nursing care through delegation, client advocacy and evaluation of health care delivery using client centered outcomes;
- Basic knowledge of self-assessment leading to individual development and continuous learning;
- An ethical legal framework for nursing practice; and
- An understanding of the political, economic and societal factors affecting nursing practice, health care delivery, health care change and nursing research.

Fall Semester			
<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
NRSG	250*	LPN to RN Transition	3
First Semester Total			3
Spring Semester			
<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
NRSG	252*	Complex Care Maternal/Child Client	3
NRSG	254*	Complex Care/Mental Health Client	2
NRSG	256*	Pathophysiology	4
BIOM	250N/251L*	Microbiology for Health Sciences/Lab	4
Second Semester Total			13
Summer Semester			
<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
SOCI	101A	Introduction to Sociology	3
NRSG	262*	Complex Care Needs - Adult Client	4
NRSG	265*	Advanced Clinical Skills Lab	1
NRSG	266*	Managed Client Care	4
Third Semester Total			12
Total Credits			28

*Indicates prerequisite and/or corequisite needed.

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

- November, 2010 FVCC Board of Trustees approval.
- January, 2011 Level II to Montana Board of Regents.
- March, 2011 Montana Board of Regents Approval.
- July, 2011 Program approval by Montana Board of Nursing allowing students to apply for FVCC ASN program.
- August, 2011 Students apply for placement in FVCC's ASN program. Application will be open to all licensed PNs and/or PN graduates.
- November, 2011 20 students accepted in FVCC's ASN program.
- Spring, 2012 20 Students begin FVCC's ASN program.

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.

FVCC was awarded a Department of Labor Community Based Jobs Training (CBJT) Grant on July 1, 2010. The CBJT grant represents a total of \$3.7 million in federal grant funds, in-kind donations and cash support from community organizations. The budget provides significant support sufficient to meet the nursing program needs during development and first two years of the ASN program. Using grant funding, the college has hired two master's prepared nurses to develop the program. FVCC has been fortunate to be able to identify master's prepared nursing faculty for the PN and ASN programs.

The program will accept 20 RN students per year and will follow a spring/summer term providing clinical opportunities in the summer when no other nursing programs are using area medical facilities.

Following the grant period, Kalispell Regional Medical Center has committed to funding 1 FTE nursing faculty. The second faculty member and clinical resource nurses will be funded by tuition, FTE and a nursing program fee. (See attached spreadsheet.)

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.

Lab and classroom space currently support the existing LPN program. The ASN program requires additional lab space in order to offer new nursing program courses, as well as have enough space for a laboratory that simulates patient care situations. The college has remodeled existing space to create an expanded laboratory for the ASN program with support from the local medical community and building fee funds. Required equipment will initially be supplied by the CBJT grant and upgraded on an on-going basis through the support of the medical community, Kalispell Regional Medical Center, and student equipment fee funds. The cost of consumable supplies will be covered by course lab fees. One METI man (Medical Education Technologies, Inc.) high fidelity, tetherless patient simulator has been ordered from CBJT grant funds and dedicated space has been identified for this equipment. A second

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METI man is being purchased for the Paramedicine program and will be used by both the Nursing and Paramedicine programs. Kalispell Regional Medical Center has committed \$30,528 to purchase a METI man nursing simulation model.

7. Assessment

How will the success of the program be measured?

The program's success rate will be measured by the NCLEX-RN (National Council Licensure Examination for the licensing of nurses) passage rate and the Department of Labor Community Based Jobs Training grant tracking data for program completion and employment.

Annual Student Graduate and Employer Satisfaction Surveys will also be administered and evaluated.

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 development process has included community members and potential employers through Practical Nursing Advisory Committee meetings and support for the Department of Labor CBJT grant. Advisory committee members will continue to be involved throughout the development and approval process. Current students and potential students were surveyed to determine interest in an ASN program. Faculty have been included in the process through nursing faculty meetings, division meetings and discussions, Faculty Senate, and Curriculum Committee meetings. The proposal has been approved by each level of FVCC's internal review processes.

The Feasibility study submitted to the Montana Board of Nursing in September 2010 was approved in October 2010. The ASN degree was approved by Flathead Valley Community College Board of Trustees in November, 2010.

BUDGET ANALYSIS

Program Name: AS Nursing --third year standard curriculum										
Campus: FLATHEAD VALLEY COMMUNITY COLLEGE										
	Year 1		Year 2		Year 3		Year 4		Year 5	
	FY12		FY13		FY14		FY15		FY16	
Estimated ENROLLMENT										
FTE Enrollment ASN third year nursing students	20		20		20		20		20	
Estimated Incremental REVENUE										
Use of Current General Operating Funds							24,940		28,440	
State Funding for Enrollment Growth										
Tuition Revenue										
A. Gross Incremental Tuition Revenue	60,060		60,060		60,060		60,060		60,060	
B. Reductions to Incremental Tuition										
C. Net Tuition Revenue (A-B)	60,060		60,060		60,060		60,060		60,060	
Program Fees	12,000		12,000		12,000		12,000		12,000	
External Funds- Federal Grant	234,000		137,000		140,000					
Other Funds -Kalispell Regional Medical Center Support	-						71,500		71,500	
Estimated Incremental Revenue	306,060		209,060		212,060		168,500		172,000	
Estimated Incremental EXPENDITURES										
Personal Services	FTE	Cost	FTE	Cost	FTE	Cost				
Faculty	2.2	146,000	2.2	149,000	2.2	152,000	2.2	155,000	2.2	158,000
Staff		-								
Operating Expenses		12,000		12,500		13,000		13,500		14,000
Start-up Expenditures		100,000								
Estimated Incremental Expenditures		258,000		161,500		165,000		168,500		172,000
Estimated Revenues		48,060		47,560		47,060		-		-
Over/(Under) Expenditures										

ITEM 150-303-R0111

Flathead Valley Community College

Physical Therapist Assistant Associate of Applied Science

THAT

The Montana Board of Regents authorizes Flathead Valley Community College to offer a Physical Therapist Assistant Associate of Applied Science degree.

EXPLANATION

Approval of the proposed program will provide students with an AAS degree that, when completed, will allow them to sit for the National Physical Therapist Assistant licensing exam. Physical therapist assistants work under the supervision of a physical therapist in a variety of settings including hospitals, clinics, schools and extended care facilities. A local advisory committee was utilized to determine need and to assess available clinical resources.

ATTACHMENTS

Level II Request Form and Supporting Documents

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: 150-303-R0111 Meeting Date: January 12-13, 2011
Institution: Flathead Valley Community College CIP Code: 51.0806
Program Title: Physical Therapist Assistant Associate of Applied Science

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

Flathead Valley Community College requests authorization to offer the Physical Therapist Assistant Associate of Applied Science degree.

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Curriculum Proposals

1. Overview

Flathead Valley Community College (FVCC) proposes a new Physical Therapist Assistant (PTA) Associate of Applied Science degree.

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

Although this will be the second program of its kind in the state of Montana, local physical therapists have expressed a need for additional PTA graduates, and both the Montana and National Bureau of Labor Statistics project an increase in demand and employment opportunities both in the state and nationwide.

3. Need

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

An advisory committee of area physical therapists has verified the local need for more certified physical therapist assistants in the Flathead Valley. Physical therapists are now required to use licensed PTAs in their practice and, therefore, can no longer train their own assistants. PTAs work under the supervision of a physical therapist in a variety of settings, including hospitals, outpatient clinics, home health, extended care facilities, schools, and sports facilities.

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

Students will be provided with an additional opportunity to train in a health profession at FVCC. Health care continues to grow in employment opportunities. The need for the type of care provided by physical therapists will continue to increase as our population ages, and graduating trained physical therapist assistants will benefit the clients and employers.

Graduates of the proposed program will have the opportunity to sit for the National Physical Therapist Assistant Licensing exam. Medicare requires that licensed physical therapist assistants are used any time physical therapists are not visually and directly supervising any work being done with a patient. The addition of PTAs to our community will increase the availability of physical therapy services and promote a more cost efficient system for health care providers. Physical therapists can see more patients requiring their scope of practice, while physical therapist assistants can provide additional follow-up services.

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

There are currently 15 accredited programs in a ten-state area that includes Montana. According to the U.S. Bureau of Labor and Statistics, unemployment in this field compared to other jobs is low; the 2009 median salary was \$48,290 nationally and \$39,061 in Montana. There were 63,750 jobs nationally in 2009, and job growth by 2018 is expected to increase 33.3%. Since the job growth in this field will exceed the number of students graduating each year in the Northwest, there is not only a need to be filled within the state, but it is also anticipated that there will be high interest from out-of-state students.

During the first program planning advisory committee meeting, attendees commented on the difficulty they have had in recruiting PTAs to their clinics. Even though the MSU-Great Falls College of Technology is graduating approximately 20 students a year, PTs in the Flathead Valley have been

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unsuccessful in filling vacant positions.

This situation goes beyond the physical therapists preferring to have PTAs working with them in their facilities; the Montana Board of Physical Therapy Examiners requires that treatments be done by either physical therapists or licensed PTAs. An individual may sit for the licensure exam only if they have graduated from an accredited program.

4. Institutional and System Fit

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

FVCC currently provides prerequisite classes for a wide variety of health science programs, including physical therapy, nursing, radiologic technology, surgical technology, paramedicine, medical assistant, and athletic training. PTA students will take many of these courses which already exist.

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

The introduction of the PT Assistant program will have no impact on the programs currently being offered at FVCC. It will provide another alternative for students interested in a health care profession.

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

The scope of practice of a PTA is unlike any other program at FVCC. The closest would be personal trainer (a certificate) and the transfer program for athletic training and exercise science. Although these programs do cover such things as anatomy, kinesiology, evaluation, and prescribing a plan to measure physical strength and flexibility, the targeted audience for a PTA is completely different. PTAs work directly under the physical therapists as they 1) instruct, motivate, safeguard, and assist patients as they practice exercises and functional activities; 2) administer active and passive manual therapeutic exercises, therapeutic massage, and heat, light, sound, water, and electrical modality treatments, such as ultrasound; 3) fit patients for orthopedic braces, prostheses, or supportive devices, such as crutches; 4) measure patients' range-of-joint motion, body parts, and vital signs to determine effects of treatments or for patient evaluations; and 5) transport and monitor patients during various treatments.

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

The mission of FVCC is to promote excellence in lifelong learning focused on student success and community needs. The institution has stated goals to achieve this mission, and they include providing programs that prepare students for the workforce (Goal #1) and being responsive to the community's economic and workforce training needs (Goal #3). This program will provide members of the community the opportunity to be trained in a viable growing profession which is needed and desired in the community.

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- 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.**
- FVCC contacted the MSU-Great Falls College of Technology regarding the possibility of their providing the Physical Therapist Assistant AAS degree in the Flathead. COT-Great Falls administration studied the possibility and, due to strict accreditation requirements, decided that this program could not be offered effectively and efficiently at a distant site. Additionally, they indicated that their program is fully enrolled, and they would support an additional program in Montana. The proposed program at FVCC will be very similar to the PTA program at the COT-Great Falls. PTA courses will have at least 80% overlap in outcomes and will utilize common course numbering, thus facilitating the possibility of transferability for students.

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.**

Program Outcomes: Upon successful completion of this program students will be trained to:

- Instruct, motivate, safeguard and assist patients as they practice exercises and functional activities;
- Confer with physical therapy staff or others to discuss and evaluate patient information for planning, modifying, and coordinating treatment;
- Administer active and passive manual therapeutic exercises, therapeutic massage, and heat, light, sound, water, and electrical modality treatments, such as ultrasound;
- Observe patients during treatments to compile and evaluate data on patients' responses and progress, and report to physical therapist;
- Measure patients' range-of-joint motion, body parts, and vital signs to determine effects of treatments or for patient evaluations;
- Secure patients into or onto therapy equipment
- Fit patients for orthopedic braces, prostheses, or supportive devices;
- Train patients in the use of orthopedic braces, prostheses, or supportive devices;
- Transport patients to and from treatment areas, lifting and transferring them according to positioning requirements; and
- Monitor operation of equipment and record use of equipment and administration of treatment.

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First Year

Fall Semester (Required Prerequisite Courses)

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
AHMS	144	Medical Terminology	3
BIOH	201NL*	Human Anatomy & Physiology I	4
M	115M*	Probability & Linear Mathematics	3
WRIT	101W*	College Writing I	3
First Semester Total			13

Spring Semester (Required Prerequisite Courses)

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
BIOH	211NL*	Human Anatomy & Physiology II	4
PSYX	100A	Introduction to Psychology	4
PTA	105	Intro to Physical Therapist Assisting	3
SP	120C	Interpersonal Relations/Communications	3
Second Semester Total			14

Second Year

Fall Semester

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
PTA	101*	Physical Therapist Assisting I	5
PTA	205*	Anatomy & Kinesiology for PTA	6
PTA	206*	Pathophysiology for the PTA	3
PTA	210*	Clinical Experience I	3
PTA	218*	Therapeutic Exercise for the PTA	2
First Semester Total			19

Spring Semester

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
PTA	201*	Physical Therapist Assisting II	5
PTA	213*	Neurorehabilitation for the PTA	6
PTA	215*	Introduction to Orthopedics	4
PTA	220*	Clinical Experience II	3
Second Semester Total			18

Summer Semester

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
PTA	225*	Seminar & Project in PTA	3
PTA	230*	Clinical Experience III	5
Summer Semester Total			8

Total Credits **72**

*Indicates prerequisite and/or corequisite needed.

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

The plan is to begin with the admission of 20 students. This number is based on a reasonable expectation of available clinical sites in the area. The anticipated timeline is listed below:

- November, 2010 FVCC Board of Trustees approval
- January, 2011 Level II to Montana Board of Regents
- March, 2011 Montana Board of Regents Approval
- March, 2011 Apply for CAPTE accreditation candidacy
- Summer, 2011 Advertise the program
- Fall, 2011 Students begin first year of prerequisites
- Fall, 2012 First class of 20 students begins PTA course work
- Summer, 2013 First class graduates

6. Resources

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

The Physical Therapist Assistant AAS requires the addition of two new full-time faculty. One will function as the program director and instructor, and the other will be a full-time instructor. A minimum of two faculty is an accreditation requirement.

FVCC will realign 1 FTE faculty from Philosophy/Religion to Physical Therapist Assistant Program Director. The second faculty member salary and benefits will be covered by tuition and FTE- generated by the new program. Twenty students will start the program each fall. (See attached spreadsheet.)

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 new equipment is required in 2011-12. The medical community, Kalispell Regional Medical Center, and area physical therapists have committed the use of their facilities and equipment for clinical classes. All FVCC students pay an equipment fee which covers upgrading instructional equipment. Class lab fees will be assessed to cover the cost of consumable supplies. (See attached spreadsheet.)

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7. Assessment

How will the success of the program be measured?

The success of the students and this program will be assessed by the following:

- Number of applications
- Student assessment for PTA competencies as well as campus-wide abilities
- The number (i.e. percentage) of students accepted into the program who graduate (i.e. retention analysis)
- Student satisfaction surveys
- The percentage of graduates who sit for the national licensure exam and the pass rate of those graduates
- Student employment data
- Employer satisfaction surveys once graduates are licensed and employed

8. Process Leading to Submission

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

- In 2009, FVCC was contacted by area physical therapists with a request to establish a Physical Therapist Assistant AAS degree. The college first checked to see if MSU-Great Falls COT could provide the program. When they were unable, a local advisory committee was formed.
- In September 2010, the college received input from a community advisory committee on the need for a Physical Therapist Assistant program in the valley. There was great enthusiasm expressed by the attendees about the prospect of adding an additional program in the state. Many had the opinion that this has been a significant need for a number of years. The small pool of available licensed PTAs has made hiring a challenge, resulting in the community being underserved in an area of health care that is actually growing with the aging of the population. Attendees of the meeting, as well as several, who could not be there, have expressed their full support and willingness to provide assistance to the program as clinical sites.
- In October 2010, the proposed PTA program was approved by the Allied Health Division, the FVCC Faculty Senate, and the FVCC Curriculum Committee.
- In November 2010, the PTA program and curriculum were approved by the FVCC Board of Trustees.

BUDGET ANALYSIS

Program Name: Physical Therapy Assistant										
Campus: FLATHEAD VALLEY COMMUNITY COLLEGE										
	Year 1		Year 2		Year 3		Year 4		Year 5	
	FY12		FY13		FY14		FY15		FY16	
Estimated ENROLLMENT										
FTE Enrollment Physical Therapy Assistant	18		41		41		41		41	
Estimated Incremental REVENUE										
Use of Current General Operating Funds*	67,000		67,000		67,000		67,000		67,000	
State Funding for Enrollment Growth										
Tuition Revenue										
A. Gross Incremental Tuition Revenue	54,054		123,123		123,123		123,123		123,123	
B. Reductions to Incremental Tuition										
C. Net Tuition Revenue (A-B)	54,054		123,123		123,123		123,123		123,123	
Program Fees	4,000		8,000		8,000		8,000		8,000	
Other Funds (please specify)										
Estimated Incremental Revenue	125,054		198,123		198,123		198,123		198,123	
Estimated Incremental EXPENDITURES										
Personal Services	FTE	Cost	FTE	Cost	FTE	Cost				
Faculty***	1	67,000	2	134,000	2	134,000	2	134,000	2	134,000
Staff		-		-		-		-		-
Operating Expenses	10,000		10,500		11,000		11,500		12,000	
Indirect Expenses	0		0		0					
Start-up Expenditures	20,000		0							
Estimated Incremental Expenditures	97,000		144,500		145,000		145,500		146,000	
Estimated Revenues	28,054		53,623		53,123		52,623		52,123	
Over/(Under) Expenditures										

* Realignment of existing faculty position

November 22, 2010

Jane A. Karas, PhD
Flathead Valley Community College
777 Grandview Drive
Kalispell, MT 59901

Dear Dr. Karas,

This letter is being sent to support the proposed Physical Therapist Assistant AAS degree at Flathead Valley Community College.

I am presently employed in an out patient clinic and Home Health setting. In both avenues I have been fortunate to work with a physical therapist assistant. Both these assistants are invaluable to patient care under my supervision. Job openings are expected to increase 35% regionally over the next eight years.

Due to financial challenges in the present economy it is much more practical to receive an associate degree that can be completed in two years than a Doctor of Physical Therapy degree that can be completed in seven years.

I spoke with physical therapist aide yesterday who is in her mid thirties, has taken some college courses and would be very interested in this program. She enjoys the patients and feels this would be a wonderful opportunity to pursue a career as a physical therapy assistant.

Thank you for considering this proposal and for the potential it represents to our organization and our patients, as well as to our community and its students.

Sincerely,

Margaret Bartels PT,DPT
Orthopedic Rehab,Inc/Flathead County Home Health



KALISPELL OFFICE

KEITH ORI, P.T. • MARGARET BARTELS, P.T. • TERESA KROPP, P.T., A.T.C. • ROD MICHEL, P.T.A.
111 SUNNYVIEW LANE, SUITE B • KALISPELL, MT 59901 • 406-752-3597 • FAX 406-756-7605



COLUMBIA FALLS OFFICE

BILL BRUNETT, P.T.
P.O. Box 95 • COLUMBIA FALLS, MT 59912 • 406-892-0681 • FAX 406-892-0682



WHITEFISH OFFICE

PATRICK GULICK, MS, P.T.
710 EAST 13TH STREET, SUITE B • WHITEFISH, MT 59937 • 406-862-2670 • FAX 406-862-2711

November 18, 2010

Jane A. Karas, PhD
Flathead Valley Community College
777 Grandview Drive
Kalispell, MT 59901

Dear Dr. Karas:

Please accept this letter on behalf of Orthopedic Rehab Inc. to extend my support of the proposed Physical Therapist Assistant AAS degree at Flathead Valley Community College.

As a physical therapist and physical therapy clinic owner I see a definite need for physical therapist assistants. As it is now, physical therapist aides are only able to assist with escorting patients to exam rooms and to perform limited duties. Physical therapist assistants would be able to actually assist with patient care and treatments under the supervision of a physical therapist. Job openings are expected to increase 35% regionally over the next eight years.

We would be able to offer the students ample opportunities for clinical internships and I am quite certain that many of the qualified physical therapists in this valley would provide educational resources to this program

Thank you for considering this proposal and for the potential it represents to our organization and our patients, as well as to our community and its students.

Sincerely,

Keith Ori, PT
Co-Owner, Orthopedic Rehab Inc.
Kalispell, MT



KALISPELL OFFICE

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November 18, 2010

Jane A. Karas, PhD
Flathead Valley Community College
777 Grandview Drive
Kalispell, MT 59901

Dear Dr. Karas:

Please accept this letter on behalf of Orthopedic Rehab Inc. to extend my support of the proposed Physical Therapist Assistant AAS degree at Flathead Valley Community College.

As a physical therapist I see a need for physical therapist assistants every day. This has been a problem for a long time and it is my belief that a PTA program in Kalispell would greatly help relieve the deficit of PTAs that we are experiencing. Currently, physical therapist aides are only able to assist with escorting patients to exam rooms and to perform limited duties. Physical therapist assistants are able to be much more involved with patient care and treatments under the supervision of a physical therapist. They present a very cost-effective way to provide physical therapy and thus, are a highly sought after resource. Job openings are expected to increase 35% regionally over the next eight years.

I expect that a physical therapy assistant program would quickly reach full class size, and would be able to place graduates in jobs without difficulty. As a clinic, we would be able take students in clinical experiences and assist with on-the job training. We feel this is a valuable program and hope to see it implemented soon.

Thank you for considering this proposal and for the potential it represents to our organization and our patients, as well as to our community and its students.

Sincerely,

Sarah Schmautz, DPT
Doctor of Physical Therapy
Orthopedic Rehab Inc.

ITEM 150-2013-R0111

Professional Master of Science and Engineering Management and four associated graduate certificate programs

THAT

The Board of Regents of Higher Education authorizes Montana State University-Bozeman to establish a Professional Master of Science and Engineering Management and four associated graduate certificate programs

EXPLANATION

Montana State University seeks approval to establish a Professional Master of Science and Engineering Management (PMSEM). The purpose of the PMSEM is to provide an interdisciplinary educational service to science and engineering professionals. The PMSEM program includes a unique offering of foundation courses in business and technical management that are highly valued by industry. The integrated and interdisciplinary foundation courses are specifically for individuals with a science or engineering background who are or will be working in a science or engineering business in a technical management capacity. This unique program will provide individuals an alternative to the traditional research oriented M.S. degree in the sciences or engineering. The proposed 30 credit program consists of 15 credits of required courses and a minimum of 15 credits of electives.

In addition to the new graduate degree, four graduate level, professional certificate options are being offered through the program. These certificates are for those individuals who are technically competent but not interested in a full master's program. The Graduate Certificate offerings are:

- Science and Engineering Business Management
 - Science and Engineering Project Management
 - Manufacturing Best Practices – PROCESS
 - Manufacturing Best Practices – SYSTEMS
-

ATTACHMENTS

Curriculum proposal
Level II request form

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: **150-2013-R0111** Meeting Date: **January 13, 2011**
Institution: **MSU-Bozeman** CIP Code: **14.99**
Program Title: **Professional Master of Science and Engineering Management and four associated graduate certificate programs**

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

Montana State University seeks approval to establish a Professional Master of Science and Engineering Management (PMSEM). The purpose of the PMSEM is to provide an interdisciplinary educational service to science and engineering professionals. The PMSEM program includes a unique offering of foundation courses in business and technical management that are highly valued by industry. The integrated and interdisciplinary foundation courses are specifically for individuals with a science or engineering background who are or will be working in a science or engineering business in a technical management capacity. This unique program will provide individuals an alternative to the traditional research oriented M.S. degree in the sciences or engineering. The proposed 30 credit program consists of 15 credits of required courses and a minimum of 15 credits of electives.

In addition to the new graduate degree, four graduate level, professional certificate options are being offered through the program. These certificates are for those individuals who are technically competent but not interested in a full master's program. The Graduate Certificate offerings are:

- Science and Engineering Business Management
- Science and Engineering Project Management
- Manufacturing Best Practices – PROCESS
- Manufacturing Best Practices – SYSTEMS

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LEVEL II REQUEST FORM

Curriculum Proposals

1. Overview

PROFESSIONAL MASTER OF SCIENCE AND ENGINEERING MANAGEMENT (PMSEM)
MONTANA STATE UNIVERSITY – BOZEMAN (Previously listed as: Engineering Systems and Scientific Management)

The proposed Professional Master of Science and Engineering Management (PMSEM) is a collaborative program of Extended University, College of Letters and Science, College of Engineering, College of Business and the Division of Graduate Education that will be jointly administered through Extended University, Montana State University (MSU)-Bozeman. The program directly addresses the Montana Board of Regents comprehensive strategic plan and goals for (1) increasing educational attainment of Montanans by increasing enrollment of traditional and non-traditional students and leveraging and improving distance and online learning; and (2) assisting in the expansion and improvement of the economy by increasing responsiveness to workforce development.

The purpose of the PMSEM is to provide an interdisciplinary educational service to science and engineering professionals. The PMSEM program includes a unique offering of foundation courses in business and technical management that are highly valued by industry. The integrated and interdisciplinary foundation courses are specifically for individuals with a science or engineering background who are or will be working in a science or engineering business in a technical management capacity.

The goal of the proposed program is to produce graduates who will be better positioned to bridge the gap between science and/or engineering activities and business management in the workplace. The program's course work will develop or enhance the student's decision-making and technical abilities and provide the student with a tangible and marketable skill set.

The proposed professional master's program provides three educational alternatives for the professional development of science and engineering professionals and students seeking similar professional careers. The alternatives include a PMSEM degree, four professional graduate certificate options (which may be pursued independently of the master's degree), and elective course enrollment based on the student's individual career goals and educational needs.

The program offerings directly align with the needs of industry and provide an advanced educational service to MSU's science and engineering students and alumni, local industry, and the local science and engineering workforce. Montana State University has served this constituency for decades. The proposed program is an expression of the commitment that MSU has for its constituency.

This unique program will provide individuals an alternative to the traditional research oriented M.S. degree in the sciences or engineering. The proposed 30 credit program consists of 15 credits of required courses and a minimum of 15 credits of electives.

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

Montana State University is seeking the Montana Board of Regents' approval for a Professional Master of

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Science and Engineering Management degree program. This interdisciplinary and flexible program is specifically designed for individuals with a science or engineering background who are or will be working in a science or engineering business in a technical management capacity. Overall, the goal of this program is to provide industry with employees who possess a tangible skill set that will enable them to serve as cross-functional leaders within their organizations. The program will equip the science and engineering workforce with the skills needed to manage day-to-day business activities, collaborate with multiple departments and improve organizational efficiencies.

3. Need

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

The educational need identified by local industry is to have cross-functional employees who are able to lead others and bridge the gap between science or engineering activities and business management in the workplace. This proposed professional master's program course work and structure is designed to meet this educational need for four types of students. A description of each type follows.

First, the proposed program is designed for individuals who have an undergraduate degree in science or engineering, have worked professionally for a minimum of two, consecutive years (full-time) in a science or engineering related entity, and are interested in the PMSEM degree. These potential students will be required to provide validation of their work experience and a letter of recommendation from their employer for admittance into the program. In addition, they must meet all of the requirements set forth by MSU's Division of Graduate Education. Any admittance exceptions will require the approval of the College of Engineering, the College of Letters & Science, the College of Business and the Division of Graduate Education.

Second, this proposed graduate program will provide graduate certificate options for those individuals who are technically competent but not interested in a full master's program. The certificate options will allow an individual to develop valuable skills that will enhance their work performance and strengthen their marketability. Obtained certificate(s) will be included on the student's transcript. To be admitted into the certificate program, potential students must meet the same program prerequisites as those set forth for admittance into the master's degree program. All credits earned through the certificate program may be applied toward the PMSEM degree. Students that participate in the certificate program and then later decide to enroll in the PMSEM degree program must do so within six years of initial course enrollment.

Third, the proposed program is also designed for individuals who have an undergraduate degree but lack relevant professional work experience in a science or engineering field. These potential students will be required to take the GRE for admission to the program and meet all of the requirements set forth by MSU's Division of Graduate Education. Any admittance exceptions will require the approval of the College of Engineering, the College of Letters & Science, the College of Business and the Division of Graduate Education.

Fourth, the foundation courses of this program will be available to all individuals who meet course prerequisites and have an undergraduate GPA of 3.0. Any admittance exceptions will require the approval of the instructor, the College of Engineering, the College of Letters & Science, the College of Business and the Division of Graduate Education. A limit of one foundation course may be taken

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without enrollment in a certificate or master's degree program at MSU. Individuals admitted to a degree or certificate program will have preference over those enrolling in individual courses if space availability in a course is an issue.

Please note that any transfer of credits into the master's degree program must comply with the credit transfer policy set forth by the Division of Graduate Education. A maximum of nine credits from another institution may be transferred into the PMSEM degree program. Credit transfers will not be accepted for the certificate programs or the foundation courses.

Overall, this program will provide industry with employees who possess a tangible skill set that will enable them to serve as cross-functional leaders within their organizations; employees who can bridge the gap between science or engineering activities and business management in the workplace.

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

The proposed professional master's program provides three educational alternatives for the professional development of science and engineering professionals and students. The alternatives include a Professional Master's degree, graduate certificate options, and selective course enrollment based on a very specific educational need:

Professional Master's Degree

The 30 credit degree provides an interdisciplinary education that includes the teaching of business management skills and relevant technical skills. This unique program will provide individuals an alternative to the traditional research oriented M.S. degree in the sciences or engineering.

Graduate Certificate Options

This new graduate program will provide graduate certificate options for those individuals who are technically competent but not interested in a full master's program. The certificate options will allow an individual to develop valuable skills that will enhance their work performance and strengthen their marketability. Certificate(s) obtained through this master's program will be included on the student's transcript.

Individual Courses

The proposed program's course offerings are highly valued by industry. Individual companies may recommend a particular course for members of their workforce. In addition, the program's course offerings will strengthen other graduate programs by providing those students the opportunity to learn business and technical management skills relevant to the science or engineering work environment. This additional course work will broaden their expertise in the fields of science and engineering; thus increasing their marketability.

These three program offerings align with the workforce educational needs of industry by integrating the discipline of business with the disciplines of science and engineering. As a result, the offerings not only serve science and engineering students and professionals, the offerings also serve alumni, industry, and MSU:

Alumni

The offerings provided through this program will provide science and engineering alumni with

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additional advanced educational opportunities for career development. These offerings are consistent with the level of education alumni expect from MSU.

Industry

The educational offerings provided through this program will provide employers with a cross-functional employee. As a result of participating in this program, the employee will be better equipped to manage day-to-day business activities, collaborate with multiple departments and improve organizational efficiencies.

Montana State University

For MSU, this proposed professional master's program provides a new opportunity to share its educational excellence with the regional workforce. Also, this program is an avenue to increase graduate level enrollment through a self-sustaining program and provide new teaching opportunities to faculty and others.

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

The anticipated demand for this program is 15-18 students the first year and 25-30 students within 3 years. This determination is based upon feedback received from industry leaders. In addition, a survey of College of Engineering and College of Letters & Sciences alumni indicated that 39% of respondents were interested in the proposed program.

4. Institutional and System Fit

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

The program's course offerings will strengthen other science and engineering graduate programs offered by Montana State. This will be accomplished by providing students the opportunity to take additional business and technical management course work relevant to the science or engineering work environment. These course offerings will broaden the student's expertise in the fields of science and engineering, thus increasing their marketability for positions within industry.

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

Approval of the proposed PMSEM program will not require changes to any existing programs at MSU.

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

The proposed PMSEM program is the first of its kind at Montana State University.

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

The proposed program will support MSU by (1) increasing enrollment and capitalizing on opportunities for new revenue generation; (2) increasing inter-disciplinary collaboration; and (3) leveraging distance education opportunities strategically and as appropriate.

Increasing enrollment and capitalizing on opportunities for new revenue generation

This proposed professional master's program supports increasing enrollment and capitalizes on an opportunity for new revenue generation by providing a flexible mix of educational offerings within a single program to science and engineering professionals and students. This program may be tailored to

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meet the educational needs of a science or engineering student, working professional, or company, thus serving a broader constituency.

Increasing inter-disciplinary collaboration

The success of this program is dependent upon inter-disciplinary collaboration among the College of Engineering, the College of Letters and Science, the College of Business, Extended University and the Division of Graduate Education. This is an opportunity to leverage the expertise of each group for the continued evolution of this program. This collaboration is very important for three reasons; first, to ensure that the program offerings are legitimate and attract high caliber participants; second, to ensure that the program is favorably recognized among Land Grant universities as a “best in class” program; and third, to ensure that the program offerings continue to meet the ever-changing educational needs of science and engineering students, working professionals, and industry.

Leveraging distance education opportunities strategically and as appropriate

The foundation courses offered through this program will be delivered using a hybrid model of instruction. This instruction will include face-to-face interactions between the instructor and the students and capitalize on MSU’s distance learning capabilities.

This proposed program supports the institution in ways that are important to meeting the ever-changing educational needs of its constituents.

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

The proposed PMSEM program is the first of its kind in the Montana University System. Analysis of other programs offered within the Montana University System and the differences between them and the proposed PMSEM program are outlined below.

Traditional Research Oriented M.S. Degrees

The PMSEM program is different from the traditional research oriented M.S. degree in three major respects; first, there is no required thesis or professional paper; second, the foundation courses are tailored to the science and engineering workplace and are based on a core set of managerial and technical issues addressed from a variety of functional area perspectives; and, third, technical courses are selected by the student based on their specific educational needs and career goals.

M.B.A. Degrees

The PMSEM program is different from M.B.A. programs in two major respects; first, there is only one business management course offered which is tailored and intended for science and engineering students and professionals; and, second, there is no business related specialization in a specific area such as accounting, economics, finance, international business, or marketing.

Master’s of Project and Engineering Management Degree

The PMSEM program is different from Montana Tech’s Master’s of Project and Engineering Management (MPEM) in four distinct ways:

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First, the PMSEM program is designed specifically for individuals with either a science or engineering undergraduate degree. In contrast, Montana Tech's MPEM program is designed for individuals with an engineering undergraduate degree.¹

Second, the PMSEM program is designed to develop or enhance the science or engineering professional's business management skills, project management skills, and science and/or engineering skills that are relevant and applicable to science and engineering work environments. The goal of this program is to produce graduates who will be better positioned to bridge the gap between science and/or engineering activities and business management activities in the workplace. In contrast, Montana Tech's MPEM program is primarily designed to "...provide the tools necessary to become an effective project manager..."²

Third, the PMSEM program has extensive requirements for individuals enrolling in the program. All students enrolling in the program must have completed a bachelor's degree in either science or engineering. In addition, students enrolling in the program are required to either (a) provide validation that they have worked professionally for a minimum of two, consecutive years (full-time) in a science or engineering related entity and a Letter of Recommendation from their employer or, (b) submit a satisfactory GRE score if they do not meet the professional science or engineering work experience requirement. In contrast, Montana Tech's MPEM program requires a bachelor's degree in Engineering and a satisfactory GRE score.³

Fourth, the PMSEM program offers three educational alternatives for the professional development of science and engineering professionals and students. The alternatives include a professional master's degree, professional graduate certificate options (which may be pursued independently of the master's degree), and elective course enrollment based on individual career goals and educational needs. In addition, students not only have the opportunity to take courses from MSU, but they have the opportunity to transfer up to nine approved credits from another institution into the PMSEM degree program to contribute to the fulfillment of the electives required for the degree. The spectrum and flexibility of this professional master's program appeals to a wide range of scientists and engineers in many different enterprises as evidenced in the recent survey responses from and discussions with industry leaders. In contrast, Montana Tech's MPEM educational offering is a single degree program with a defined set of course work.⁴

Historically, MSU and Montana Tech have collaborated on degree programs and individual courses. In keeping with tradition, a draft copy of the proposal was provided to Montana Tech in August 2010. On November 1, 2010, MSU planning committee members met with representatives from Montana Tech to discuss the PMSEM proposal. This good faith effort was made by MSU to ensure that MSU and

¹ Montana Tech, "Frequently Asked Questions". Montana Tech of the University of Montana. May 26, 2010.
<http://www.mtech.edu/mines/mpem/fax.html>.

² Montana Tech, "Welcome to the Online Degree Web Site ". Montana Tech of the University of Montana. May 26, 2010.
<http://www.mtech.edu/mines/mpem/overview.html>.

³ Montana Tech, "Frequently Asked Questions". Montana Tech of the University of Montana. May 26, 2010.
<http://www.mtech.edu/mines/mpem/fax.html>.

⁴ Montana Tech, "Curriculum and Course Descriptions". Montana Tech of the University of Montana. May 26, 2010.
<http://www.mtech.edu/mines/mpem/curriculum.html>.

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Montana Tech had an opportunity to review, discuss and collaborate on the program proposal.

Discussions included a comparison of the PMSEM program and the MPEM program. Specifically, program audience, purpose, requirements, educational offerings, course delivery methods and course audiences were discussed. It was concluded that there are key differences between the two programs and that both programs address identified workforce educational needs in a unique way. By offering both of these programs within the Montana University System, there are two key benefits for both MSU and Montana Tech.

First, online electives offered through the MPEM program may be of interest to students enrolled in the PMSEM program depending on the student's educational needs and career goals; thus increasing course enrollment numbers for Montana Tech. Alternatively, MSU students enrolled in the PMSEM program will have additional course elective options (offered by a Montana institution) from which to choose. Please note the PMSEM program allows for students to transfer up to nine credits of electives into the degree program.

Second, recognizing that each institution serves a loyal and local constituency, MSU and Montana Tech plan to collaborate on further program development as the PMSEM program is established and begins to evolve and the MPEM program is further refined. Both institutions recognize the value of on-going collaboration to (1) ensure that unnecessary duplication is avoided; (2) ensure that the strengths and intellectual capital of both institutions are continually leveraged for the benefit of their respective programs; and (3) to ensure that each institution is positioned well to serve their respective constituencies.

As a result of the meeting, Montana Tech has offered MSU their full support to move forward with submitting this proposal to the Montana Board of Regents for review and approval.

Professional Master's Degree Programs

The proposed PMSEM degree program is a unique program offering within the Montana University System. Professional Master's Degree Programs are increasingly being offered by other universities throughout the country. To learn more about these programs, please refer to the following links:

- Council of Graduate Schools: <http://www.cgsnet.org/?tabid=120>
- National Professional Science Master's Association: <http://npsma.org/>
- Sloan Foundation: <http://www.sloan.org/program/15/page/68>

MSU is able to meet this local and regional need by leveraging its capacity for educational excellence through its leadership, faculty and staff. In addition, MSU will use its distance learning capabilities so that the program's foundational offerings may be made available to the regional workforce as well.

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.**

Professional Master of Science and Engineering Management (PMSEM)

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This proposed program offering aligns the educational excellence of MSU with local industry workforce needs. The proposed 30 credit program will consist of 15 credits of required course work and a minimum of 15 credits of electives.

The required course work will be delivered using a problem/case-based approach, with a core set of managerial and technical issues addressed from a variety of functional area perspectives. This approach will leverage the educational expertise of the MSU colleges of Business, Engineering, and Letters and Science in a truly integrated manner.

A hybrid delivery method will be implemented to (1) provide strategic opportunities for face-to-face interaction among instructors and students; and (2) to optimize distance learning and student collaboration by using MSU's Desire2 Learn program. In addition, students may identify relevant internship opportunities that may be included as part of their course of study. The internship must meet the criteria set forth by the MSU Division of Graduate Education. A maximum of 10 credits may be allocated to a student's internship to meet the requirements of the professional master's program.

Required Foundation Course Work (15 Credits)

The foundation course work for the proposed program will be specifically designed for individuals with a science or engineering background who are or will be working in a technical science or engineering business in a technical management capacity. The foundation courses will be segmented into modules that are to be completed sequentially. Each course will require a longer term for deployment; however, breaks between modules will be defined at the outset of the course so that students may plan accordingly. The two foundation courses are outlined below:

- **Leading and Managing the Human and Financial Enterprise (9 cr.)**
 - The purpose of this course is to develop and enhance the student's business management skills as they relate to the technical enterprise. The course topics will be delivered in an integrated fashion. The course will focus on the following:
 - Leadership
 - Motivation
 - Team Dynamics
 - Communication
 - Human Resource Management
 - Managerial Accounting
 - Budget Development and Management
 - Resource Allocation
 - Financial Decision-making Tools
 - Technical and Marketing Challenges of Introducing New Products & Services
 - Success Factors and Inhibitors of Commercialization
 - Product Life Cycles
 - Creating and Establishing Demand for New Products

- **Optimizing and Harnessing the Technical Enterprise (6 cr.)**
 - The purpose of this course work is to develop the student's ability to problem solve

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and increase the efficiencies of a technical enterprise through project and process management and optimization. The course topics will be delivered in an integrated fashion. The course will focus on the following:

- Planning
- Estimating
- Budgeting
- Scheduling
- Implementation
- Evaluation
- Controlling Engineering and Research Projects
- Labor Scheduling
- Related Governmental Compliance
- Analyzing and Optimizing Engineering, Manufacturing, and Transactional Processes
- Lean Methodologies Application

Elective Courses (15 Credits Minimum)

Students admitted to the graduate program will be assigned a faculty advisor. The faculty advisor will provide guidance on course electives that (1) are approved for use on a graduate Program of Study; (2) meet the student's educational needs; and (3) meet the student's career goals. Students may also consult with their employer for assistance in identifying educational gaps that may be addressed through this master's program.

Courses may include applicable 400 and/or 500 level courses from biology, chemistry, computer science, earth sciences, engineering, mathematics, physics, statistics or other courses deemed relevant to this degree that meet the guidelines set forth by the Division of Graduate Education.

A preliminary analysis of applicable courses indicates that each discipline has more than 20 graduate level courses available to students enrolled in the professional master's program. Examples include:

- **BCHM 441** Biochemistry of Macromolecules
- **MB525** Advanced Immunology
- **PHYS 426** Modern Optics
- **CS 510** Computability
- **CE 505** Quality Assurance/Risk Management

In addition, students have the opportunity to transfer up to 9 credits of electives into the PMSEM degree program. Montana Tech offers online courses⁵ that may be of interest to some students. For example:

- MPEM 5110 Energy Conversion
- MPEM 5140 Systems Safety & Management
- MPEM 5120 Application and Design of Industrial Experiments

⁵ Montana Tech, "Project Engineering & Management (Web-Based)". Montana Tech of the University of Montana. November 9, 2010. <http://www.mtech.edu/gradschl/programs/MPEM.html>.

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The diversity of electives will appeal to a broad educational market within the science and engineering industries. The flexibility of this program provides science and engineering students a unique opportunity to select electives that directly align with their educational needs and career goals.

Professional Certificate Options

In addition to the new graduate degree, four graduate level, professional certificate options are being offered through the program. These certificates are for those individuals who are technically competent but not interested in a full master's program. The certificate options will allow an individual to develop valuable skills that will enhance their work performance and strengthen their marketability. Certificate(s) obtained through this master's program will be included on the student's transcript. The Graduate Certificate offerings are:

- Science and Engineering Business Management
- Science and Engineering Project Management
- Manufacturing Best Practices – PROCESS
- Manufacturing Best Practices – SYSTEMS

Certificate program details are listed on the next few pages:

Science and Engineering Business Management (12 credits)

- **Leading and Managing the Human and Financial Enterprise (9 cr.)**
 - The purpose of this course is to develop and enhance the student's business management skills as they relate to the technical enterprise. The course topics will be delivered in an integrated fashion. The course will focus on the following:
 - Leadership
 - Motivation
 - Team Dynamics
 - Communication
 - Human Resource Management
 - Managerial Accounting
 - Budget Development and Management
 - Resource Allocation
 - Financial Decision-making Tools
 - Technical and Marketing Challenges of Introducing New Products & Services
 - Success Factors and Inhibitors of Commercialization
 - Product Life Cycles
 - Creating and Establishing Demand for New Products
- **Relevant and approved elective (3 cr.)**
 - Relevant course electives are those that are (1) approved for use on a graduate Program of Study; (2) meet the student's educational needs; and (3) meet the student's career goals. Course examples include:
 - **M 501** Intermediate Probability and Statistics
 - **I&ME 534** Design and Decision Support Systems
 - **EE 582** Optical Design

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Science and Engineering Project Management (12 credits)

- **Optimizing and Harnessing the Technical Enterprise (6 cr.)**
 - The purpose of this course work is to develop the student's ability to problem solve and increase the efficiencies of a technical enterprise through project and process management and optimization. The course topics will be delivered in an integrated fashion. The course will focus on the following:
 - Planning
 - Estimating
 - Budgeting
 - Scheduling
 - Implementation
 - Evaluation
 - Controlling Engineering and Research Projects
 - Labor Scheduling
 - Governmental Compliance
 - Analyzing and Optimizing Engineering, Manufacturing, and Transactional Processes
 - Lean Methodologies Application

- **Relevant and approved electives (6 cr.)**
 - Relevant course electives are those that are (1) approved for use on a graduate Program of Study; (2) meet the student's educational needs; and (3) meet the student's career goals. Course examples include:
 - **M 501** Intermediate Probability and Statistics
 - **I&ME 534** Design and Decision Support Systems
 - **EE 581** Fourier Optics and Imaging Theory
 - **EE 582** Optical Design
 - **MB 501** Principles & Techniques of Animal Experimentation
 - **MB 535** Genomic Analysis

Manufacturing Best Practices – PROCESS (12 credits)

- **I&ME 480 Introduction to Computer Integrated Manufacturing**
 - This course introduces core concepts of computer controlled manufacturing systems and their applications. Topics include fundamentals of automation, programmable logic controllers, numerical control, industrial robotics, material handling and storage, and flexible manufacturing systems. Laboratories require students to apply course concepts in solving simulated industrial problems, and implement hardware-software solutions to meet state objectives.
 - Details: New, F 3 cr. LEC 2 LAB 1
 - Prerequisite: ME 255; or consent of instructor.

- **MET 420 CNC and CAM Technology**
 - Application and optimization of computer numerical control (CNC) and computer-aided manufacturing (CAM) technology fundamentals as related to turning, milling, and plasma cutting operations. Development of tool-paths and machine code (G&M)

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from associated CAD models is emphasized. Specific hands-on experiences included in laboratory.

- Details: Existing, S 3 cr. LEC 1 LAB 2
- Prerequisite: MET 314 or instructor approval.
- **MET 449 Design for Manufacturing and Tooling**
 - Overview of production systems and lean manufacturing fundamentals and principles. Introduction to design for assembly and design for manufacturing principles. Fundamentals of tool design, including tooling materials, work holding principles, jig design, fixture design, assembly tool design, design of tools for inspection and gauging, and tool fabrication techniques. Practical lab experiences will enhance the course material. Cross-listed with ME 448.
 - Details: Existing, S 3 cr. LEC 2 LAB 1
 - Prerequisite: ME 255, MET 256 or ME 257, MET 314; or instructor approval.
- **CHBE 451 Process Dynamics and Control**
 - Transient response analysis of controllers and instruments. Design of chemical process control systems.
 - Details: Existing, S 3 cr. LEC 3
 - Prerequisite: CHBE 328, CHBE 323, M 274.

Manufacturing Best Practices – SYSTEMS (12 credits)

- **I&ME 442 Facility and Material Handling Systems Design**
 - Principles and techniques for planning and designing production facilities and material handling systems. Product and process analysis, requirements, layout and support facilities. Computer-aided analysis and design.
 - Note: Capstone component – may not be needed for program.
 - Details: Existing, F 3 cr. LEC 2 LAB 1
 - Prerequisite: Seniors in their last full academic year, I&ME 313, ME 116, ME 255
 - Co-requisite: I&ME 300
 - Senior capstone course: The first course in the senior capstone sequence.
- **I&ME 458 Production and Engineering Management**
 - Design and management of efficient production/delivery systems for goods and services, emphasizing quantitative analysis and systems approaches. Topics include forecasting, inventory management, production planning, scheduling, material planning, and lean manufacturing systems; plus introduction to organization and management theory.
 - Note: Factory Physics Textbook
 - Details: Existing, S 3 cr. LEC 3
 - Prerequisites: I&ME 264
- **I&ME 447 Quality Assurance**
 - Statistical and non-statistical aspects of quality assurance assessment. Includes classical SPC and process improvement via control charts. Also includes product and process design through planned experimentation and simple experimental designs (ANOVA). Limited use of case studies. A design project or course capstone paper demonstrating significant elements of the course is required.

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- Note: Qualitative Aspects
- Details: Existing, S 3 cr. LEC 3
- Prerequisite: I&ME 354 or I&ME 350 or consent of instructor
- **Relevant and approved elective (3 cr.)**
 - Relevant course electives are those that are (1) approved for use on a graduate Program of Study; (2) meet the student’s educational needs; and (3) meet the student’s career goals. Course examples include:
 - **I&ME 501** Advanced Design & Control of Manufacturing Systems
 - **I&ME 525** Economic & Multiple-Attribute Analysis of Advanced Manufacturing Systems
 - **I&ME 558** Managerial Forecasting & Decision Analysis

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

Implementation for the planned program begins in 2011. Foundation course development will be finalized after the Montana Board of Regents’ review and approval of the proposed PMSEM program. The face-to-face segments of the course work will be delivered from the Montana State University-Bozeman campus. The date(s) and specific on-campus locations(s) will be determined as the course development is finalized.

The foundation courses noted in the table below will be offered sequentially so that PMSEM students may plan accordingly.

Foundation Course	Credits	Delivery Method
Leading and Managing the Human and Financial Enterprise	9	<ul style="list-style-type: none"> • Hybrid (face-to-face and online; executive model) • Series of integrated modules showcasing relationships across functional areas such as finance, management, and new product development • Problem/ case-based approach • Delivery timeline of 20 weeks, excluding breaks • Industry-friendly hours (evening, weekend, summer)
Optimizing and Harnessing the Technical Enterprise	6	<ul style="list-style-type: none"> • Hybrid (face to face and online; executive model) • Series of integrated modules showcasing the optimization and lean methodologies in technical enterprises • Problem/ case-based approach • Delivery timeline of 15 weeks, excluding breaks • Industry-friendly hours (evening, weekend)

Enrollment

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The anticipated enrollment for the PMSEM program is:

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
Number of Enrollees	15-18	19-24	25-30

Evolution

To ensure that the program continues to directly align the educational excellence of MSU with the educational needs of industry, a proactive communication strategy will be implemented. This communication strategy will include on-going communications with industry leaders, employers, students, and faculty to ensure that the program continues to evolve and meet educational needs.

Specifically, a program Advisory Council will be created to ensure that the program continues to evolve and meet the changing educational needs of local industry. This council will provide an on-going channel of communication between MSU and local industry about this program's offerings.

In addition, employers of students who participate in the program will be interviewed to determine the effectiveness and specific benefits their company may have realized as a result of their employee's participation in the program. Conversely, if the program is not meeting the educational needs of their workforce, it is an opportunity for employers to let MSU know their findings.

Also, students participating in this program will be interviewed or surveyed to garner their feedback about the course work and program offerings. This interview will be done to ensure that individual courses and the overall program are meeting their educational needs. And finally, instructors will be interviewed to identify their overall satisfaction with the program's course content, caliber of students, and institutional support.

The central purpose to these communications is to ensure that the program offerings continue to meet the educational needs of industry, students, and faculty.

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 MSU faculty and adjuncts (when necessary) will be utilized for course development and instruction. Core faculty will serve as student advisors during program launch. As the program grows and additional resources are available, instructional and advisory duties will be re-evaluated and re-assigned as appropriate. Management of this program will be facilitated by Extended University staff with the support of core faculty.

Existing MSU classroom facilities will be used for course delivery. Please note that the foundation courses will be delivered outside of traditional 'Monday through Friday' class periods; courses will be delivered during evenings and weekends with brief executive style stints during the summer.

The online component of the foundation courses will utilize the existing Desire2Learn software currently being used by MSU instructors. Extended University staff provides all technical support for use of this software.

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

No new state instructional dollars will be required for implementation and maintenance of this program. Professional master's degree programs are frequently offered through an institutional self-support division due to the unique niche audience, delivery mode, third-party payment, and individualization of these types of programs. Similarly, the proposed program will be administered through Extended University, MSU-Bozeman, a self-support division. Resources for program/course development will be provided from Extended University development funds and program implementation will be supported by Extended University staff. Tuition for the program will be set at a market rate with the intent to cover all associated costs and expenses from tuition and fees. Budget projections show that the program will be self-sustaining and able to cover all expenses and overhead. Revenue beyond all expenses and overhead will be used to enhance the program and support expansion as the program evolves to meet the ever-changing educational needs of science and engineering alumni, students, working professionals and the industries they represent.

The development process for the proposed program included a review of existing practices and programs in professional master's degrees across the United States. This review indicated that in a number of disciplines (particularly those in science, technology, and engineering) employers are willing to (1) pay the cost for employees enrolling in professional master's programs; and (2) pay a premium price for quality programs.

In March 2010, these findings were confirmed with local industry leaders during an Industry Focus Group for the proposed professional master's program. Local companies are willing to (1) pay educational costs for employees; and (2) pay a premium price for a quality program that delivers results. Please note that educational policies vary from company to company; however, the companies are willing to pay a portion, if not all, of the costs for this valued educational program.

The proposed degree represents a unique growth opportunity for MSU. In general, master's education is the fastest growing segment of graduate education in the United States. The professional master's degree is an exciting development that combines "advanced, discipline-specific course work with activities that develop those communication and technical skills that are highly valued by non-academic employers." Professional master's degrees have become highly respected and sought after due to expectations of employers for background and training that exceeds typical bachelor's degrees. The growth of professional master's degrees nationally "signal an intent to better prepare graduates for entry-level professional careers , to respond to employer and local/regional economic development needs and to meet growing student demand for post-baccalaureate education . . . that is career oriented, affordable and accessible."⁶

7. Assessment

How will the success of the program be measured?

The success measures for this proposed program will be based on enrollment numbers, completion rates, referral rates, faculty and staff engagement, and program accessibility. An assessment of program

⁶ Sims, Leslie B., and Daniel D. Denecke. Professional Master's Education, A CGS Guide to Establishing Programs. Washington, D.C.: Council of Graduate Schools, 2006. Pp. ix-8.

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graduates and employers will be conducted; adjustments on curricula and/or delivery may be made based on findings. The initial success measures and indicators are noted in the table below.

Success Measure	Objective	Success Indicator
PMSEM Enrollment	Increase Enrollment	<ul style="list-style-type: none"> 1st year after implementation: >= 19-24 Students
Completion Rate	Increase educational attainment of Montanans	<ul style="list-style-type: none"> Program graduates/professional certificates awarded: 100%
Referral Rate	Meet identified workforce educational need and secure program referrals	<ul style="list-style-type: none"> Industry and student referrals: 100%
Faculty and Staff Engagement	Increase inter-disciplinary collaboration at MSU	<ul style="list-style-type: none"> Multiple departments participating Enthusiasm evaluation: positive
Program Accessibility	Leverage distance learning opportunities strategically and as appropriate	<ul style="list-style-type: none"> Video conferencing usage Online usage Accelerated format usage (e.g., seminars, workshops)

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 concept for this program presented itself two years ago in discussions between various deans and local industry representatives. The discussions continued over two years. In the Fall of 2009, a planning committee was formed consisting of the College of Business, Dan Moshavi, Dean; College of Engineering, Robert Marley, Dean, and Anne Camper, Associate Dean; College of Letters and Science, Paula Lutz, Dean; Extended University, Kimberly Obbink, Director; and the Division of Graduate Education at MSU, Carl Fox, Vice Provost for Graduate Education.

In November 2009, this committee selected and assigned a program specialist, working on a part-time basis, to organize and spearhead the effort to develop a professional master's program. In January 2010, a draft profile of the proposed program was developed by the program specialist as a result of collaboration with the planning committee members.

In February 2010, the proposed program was socialized with members of MSU faculty, with industry representatives attending the MSU Career Fair and through conversations with other industry representatives as opportunities presented themselves. The purpose of this socialization was to determine the level of interest in this type of program.

In March 2010, the proposed program was presented to the College of Engineering Advisory Council and the Montana BioScience Alliance Board. The purpose of these presentations was to gain perspective about the proposed program from national industry representatives and state industry representatives.

In addition, an Industry Focus Group was conducted. Ten recognized leaders from the local community attended and identified gaps in their workforce skill sets, abilities and knowledge. They also provided suggestions as to how the program could be structured to meet the diverse educational needs of the science and engineering workforce.

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Also, an Alumni Survey and Industry Survey about the proposed program were created. The Alumni Survey was distributed electronically to 2,671 science and engineering alumni members. The Alumni Survey indicated that 39% of respondents were interested in the proposed program. In addition, an Industry Survey was created and a hardcopy distributed to a select few industry representatives who were interested in supporting the proposed program. The purpose of these surveys was to garner more detailed feedback about the proposed program.

In April of 2010, the program feedback received from the various audiences was compiled and an initial draft of the Level II Curriculum Proposal was written. This draft was presented to the planning committee to review and share with faculty members for further program input and refinement of the draft proposal.

On May 6, 2010, a Level II Curriculum Proposal for the PMSEM degree program was presented to the MSU Graduate Council for review, feedback, and recommendation to the MSU Provost's office for further review. In addition, seven Letters of Support were provided by accomplished industry leaders from the following companies:

1. Allied Engineering Services, Inc.
2. Bacterin International, Inc.
3. Morrison Maierle, Inc.
4. Right Now Technologies
5. S2 Corporation
6. Scientific Materials Corp.
7. Wavelength Electronics

After proposal review and discussion, the MSU Graduate Council recommended the proposal to the MSU Provost's office.

During the following months, the proposal concept was discussed with additional members of the Montana University System. Recommendations were noted and the proposal was further refined.

On November 5, 2010, the Level II Curriculum Proposal together with the seven Letters of Support for the PMSEM degree program was presented to the MSU Faculty Senate Academic Affairs committee for review, feedback, and recommendation to the MSU Provost Office. The committee provided proposal recommendations and granted recommendation to the Provost's Office.

On November 23, 2010, the Level II Curriculum Proposal together with the seven Letters of Support for the PMSEM degree program was presented to the MSU Deans Council for review and recommendation to the Provost's Office.

On November 24, 2010, the Level II Curriculum Proposal together with the seven Letters of Support for the PMSEM degree program was submitted to the MSU Provost's office for processing and submittal to the Montana Board of Regents.



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32 Discovery Drive
Bozeman, Montana 59718
Ph: (406) 582-0221
Fax: (406) 582-5770

April 12, 2010

Robert Marley, Dean and Director, College of Engineering
Montana State University
128 EPS Building
Bozeman, MT 59717-3860

**RE: Letter of Support
MSU Professional Masters in Science and Engineering Management**

Dear Robert,

Thank you for your efforts toward a professional Masters degree in Science and Engineering Management. This program is of great interest to Allied Engineering because I believe it will help develop cross-functional employees who are able to lead others and bridge the gap between engineering activities and business management activities in a business such as ours.

We also support this program because it will supply the Montana labor market with highly skilled technical professionals capable of working in research, product development and other business-centric technical positions. Recent studies indicate that holders of such degrees tend to stay near the institutions where they study, producing a regional brain gain for the Bozeman area and Montana. Good luck instituting this program. Please let me know if I can help.

Sincerely,

Allied Engineering Services, Inc.

Digitally signed by Douglas S. Chandler, PhD, PE
 DN: cn=Douglas S. Chandler, PhD, PE, o=Allied Engineering Services, Inc., ou, email=doug@alliedengineering.com, c=US
 Date: 2010.04.12 15:02:30 -06'00'

Douglas S. Chandler, PhD, PE
President



Bacterin International, Inc.
664 Cruiser Lane
Belgrade, MT 59714

April 29, 2010

Robert Marley, Dean and Director, College of Engineering
Dan Moshavi, Dean, College of Business
Paula Lutz, Dean, College of Letters & Science
Carl Fox, Vice Provost for Graduate Education
Kimberly Obbink, Director, Extended University

Montana State University
128 EPS Building
Bozeman, MT 59717-3860

Dear Montana State University Representatives,

Please accept our support for Montana State University's proposal for a professional Masters in Science and Engineering Management degree program. This program is of great interest to our company because it has the potential to meet an educational need we have identified within our workforce; specifically, the need to have cross-functional employees who are able to lead others and bridge the gap between science or engineering activities and business management activities in the workplace.

This proposed program includes a unique offering of business management and project management related courses that we highly value. This value is due to the fact that the courses will be designed specifically for individuals with a science or engineering background and who will be working in a technical science or engineering business such as ours.

We also support this program because it will supply the Montana labor market with very highly skilled workers capable of working in research, product development and other business-centric technical positions. A recent Sloan Foundation report notes that professional master's degree holders in science and engineering management tend to stay near the institutions where they study, producing a regional brain gain. Supporting this proposed program is a benefit, not only to us, but to regional industry as well.

Sincerely,

A handwritten signature in black ink, appearing to read "Darrel Holmes", is written over a horizontal line.

Darrel Holmes
Vice President Medical Devices
Bacterin International, Inc.

www.bacterin.com

Bacterin International • 664 Cruiser Lane • Belgrade, MT 59714
Phone: 406-388-0480 • Fax: 406-388-1354 • sales@bacterin.com

Bacterin Biologics • 600 Cruiser Lane • Belgrade, MT 59714
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Fax: 406-388-0422 • sales@bacterin.com



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April 26, 2010

Robert Marley, Dean and Director, College of Engineering
Dan Moshavi, Dean, College of Business
Paula Lutz, Dean, College of Letters & Science
Carl Fox, Vice Provost for Graduate Education
Kimberly Obbink, Director, Extended University

Montana State University
128 EPS Building
Bozeman, MT 59717-3860

Dear Montana State University Representatives,


Please accept our support for Montana State University's proposal for a professional Masters in Science and Engineering Management degree program. This program is of great interest to our company because it has the potential to meet an educational need we have identified within our workforce; specifically, the need to have cross-functional employees who are able to lead others and bridge the gap between science or engineering activities and business management activities in the workplace. We have identified the need to strengthen our staff's project management skills after being in the engineering work force for 6-12 years, as they move into management positions. Presently to fill this need we have provided in house training and in many cases sent key employees to management seminars.

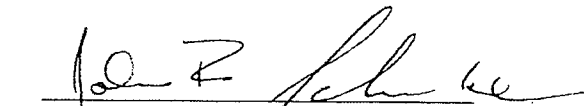
Your proposed program appears to include a unique offering of business management and project management related courses that we highly value. This value is due to the fact that the courses will be designed specifically for individuals with a science or engineering background and who will be working in a technical science or engineering business such as ours. The nature of our work relies on good project management as well as strong technical skills. I feel that our key employees will benefit from the program as well as the clients that we work for.

We also support this program because it will supply the Montana labor market with very highly skilled workers capable of working in research, product development and other business-centric technical positions. Supporting this proposed program is a benefit, not only to us, but to regional industry as well.

I would like to thank you for the opportunity to provide my input on this matter and encourage you to continue to develop this valuable program.

Sincerely,

 MORRISON-MAIERLE, INC.


John R. Schunke, PE
Bozeman Office Manager



April 21, 2010

Robert Marley, Dean and Director, College of Engineering
Dan Moshavi, Dean, College of Business
Paula Lutz, Dean, College of Letters & Science
Carl Fox, Vice Provost for Graduate Education
Kimberly Obbink, Director, Extended University

Montana State University
128 EPS Building
Bozeman, MT 59717-3860

Dear Montana State University Representatives,

RightNow Technologies is pleased to support Montana State University's proposal for a professional Masters in Science and Engineering Management degree program. As the largest software company in Montana, this program is of great interest to RightNow because we are continually challenged to find qualified local candidates to fuel our growth. We spend considerable resources locating qualified candidates. This proposal has the potential to provide us with an additional source of qualified candidates, thereby allowing us to channel resources that would otherwise be spent on recruiting and thus leave the state into growth that will further our market position and improve the local economy.

Within engineering disciplines it is particularly difficult to find candidates that have both technical skills and management and leadership skills. One attractive attribute of the proposal is that this program has the potential to take existing technically talented individuals and give them additional management training enabling them to bridge the gap between engineering activities and business management activities. A strength of this program is that that the courses will be designed specifically for individuals with a science or engineering background.

We strongly encourage the approval of the Masters in Science and Engineering Management degree program

Sincerely,

A handwritten signature in black ink, appearing to read "Michael A. Myer".

Michael A. Myer
Chief Technical Officer

RightNow Technologies, Inc.

136 Enterprise Blvd. P.O. Box 9300 Bozeman, MT 59718 • Phone 1-406-522-4200 Fax 1-406-522-4227

www.rightnow.com



2310 University Way, Bldg. #4-1
Bozeman, Montana 59715
Ph: 406-922-0334; Fax 406-922-0337

April 23, 2010

Robert Marley, Dean and Director, College of Engineering
Dan Moshavi, Dean, College of Business
Paula Lutz, Dean, College of Letters & Science
Carl Fox, Vice Provost for Graduate Education
Kimberly Obbink, Director, Extended University

Montana State University
128 EPS Building
Bozeman, MT 59717-3860

Dear Montana State University Representatives,

Please accept this letter as S2 Corporation's expressed support for the Montana State University's proposal to implement a professional Masters in Science and Engineering Management degree program.

Our company has several cases of people primarily with technical training then assuming program management positions, and we would like to educate them while they are working. This program is of interest to our company with its potential to meet this educational need. This is specifically as it is intended to create cross-functional employees who are able to lead others and bridge the gap between science or engineering activities and business management activities in the workplace. This proposed program includes a unique offering of business management and project management related courses that we value. This value is due to the fact that the courses seem to be designed specifically for individuals with a science or engineering background and who are working in a technical research and development business such as ours.

We also support this program because it will supply the Montana labor market with very highly skilled workers capable of working in research, product development and other business-centric technical positions. A recent Sloan Foundation report notes that professional master's degree holders in science and engineering management tend to stay near the institutions where they study, producing a regional brain gain. Supporting this proposed program is a benefit, not only to us, but to regional industry as well.

Sincerely,

Dr. Kristian D. Merkel, President/CEO
merkel@s2corporation.com

ITEM 150-2013-R0111



31948 E Frontage Rd.
Bozeman, MT 59715
406.585.3772
www.flir.com

4/23/2010

Robert Marley, Dean and Director, College of Engineering
Dan Moshavi, Dean, College of Business
Paula Lutz, Dean, College of Letters & Science
Carl Fox, Vice Provost for Graduate Education
Kimberly Obbink, Director, Extended University

Montana State University
128 EPS Building
Bozeman, MT 59717-3860

Dear Montana State University Representatives,

Please accept our support for Montana State University's proposal for a professional Masters in Science and Engineering Management degree program. As a growing high-tech lite manufacturing company in the Gallatin Valley, we strongly support this program. This program is of great interest to our company because it has the potential to meet an educational need we have identified within our workforce; specifically, the need to have cross-functional employees who are able to lead others and bridge the gap between science or engineering activities and business management activities in the workplace.

This proposed program includes a unique offering of business management and project management related courses that we highly value. This value is due to the fact that the courses will be designed specifically for individuals with a science or engineering background and who will be working in a technical science or engineering business such as ours.

We also support this program because it will supply the Montana labor market with very highly skilled workers capable of working in research, product development and other business-centric technical positions. At present, we believe there is a dirth of qualified individuals in our area who meet these criteria, and as such we are forced to either train individuals internally, or recruit outside of the state.

Sincerely,

Zachary Cole
Business Unit Manager



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April 23, 2010

Robert Marley, Dean and Director, College of Engineering
Dan Moshavi, Dean, College of Business
Paula Lutz, Dean, College of Letters & Science
Carl Fox, Vice Provost for Graduate Education
Kimberly Obbink, Director, Extended University

Montana State University
128 EPS Building
Bozeman, MT 59717-3860

Dear Montana State University Representatives:

Please accept our support for Montana State University's proposal for a professional Masters in Science and Engineering Management degree program. This program is of great interest to our company because it has the potential to meet an educational need we have identified within our workforce; specifically, the need to have cross-functional employees who are able to lead others and bridge the gap between science or engineering activities and business management activities in the workplace.

This proposed program includes a unique offering of business management and project management related courses that we highly value. This value is due to the fact that the courses will be designed specifically for individuals with a science or engineering background and who will be working in a technical science or engineering business such as ours.

We also support this program because it will supply the Montana labor market with very highly skilled workers capable of working in research, product development and other business-centric technical positions. A recent Sloan Foundation report notes that professional master's degree holders in science and engineering management tend to stay near the institutions where they study, producing a regional brain gain. Supporting this proposed program is a benefit, not only to us, but to regional industry as well.

Regards,

A handwritten signature in black ink that reads "Mary W. Johnson". The signature is fluid and cursive.

Mary W. Johnson,
CEO

ITEM 150-2951-R0111

**Authorization to Offer an Associate of Science in Nursing:
Montana State University-Great Falls College of Technology**

THAT

The Montana Board of Regents approves Montana State University-Great Falls College of Technology to offer an Associate of Science in Nursing.

EXPLANATION

At their October 13-14, 2010 meeting, the Montana State Board of Nursing reviewed and approved a feasibility study to establish an Associate of Science in Nursing at the College. Notification of their approval was sent to the Office of the Commissioner of Higher Education on November 4, 2010. Therefore, MSU-Great Falls College of Technology wishes to secure authorization to offer the Associate of Science in Nursing from the Montana Board of Regents.

The purpose of the Associate of Science in Nursing is to prepare graduates to become health care professionals responsible for implementing the practice of nursing through the use of the nursing process in conjunction with other health care professionals. In their work as advocates for the patient, RNs use the nursing process to assess, plan, implement, and evaluate nursing care of the sick and injured. RNs have a significantly expanded scope of practice, education and clinical training compared to that of licensed practical nurses. Additionally, the ASN program:

- addresses local, state, and national nursing shortages by increasing the supply of registered nurses;
- supports the economic stability and development of Montana, particularly north central Montana;
- provides Cascade County residents an accessible path to an associate degree leading to an RN license;
- affords currently licensed practical nurses another accessible approach to become registered nurses;
- offers graduates of the practical nurse program at MSU-Great Falls a seamless transition to the third year of the State Model Curriculum; and

provides a basis for continued educational studies in nursing to progress to the baccalaureate.

ATTACHMENTS

Level II Request Form, Fee Request Spreadsheet, Feasibility Study, and Supporting Documents

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number:	150-2951-R0111	Meeting Date:	January 13, 2011
Institution:	Montana State University-Great Falls, College of Technology	CIP Code:	51.1601
Program Title:	Associate of Science in Nursing, ASN		

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

Montana State University-Great Falls College of Technology requests authorization by the Board of Regents to offer an Associate of Science in Nursing.

Montana Board of Regents
LEVEL II REQUEST FORM

Curriculum Proposals

1. Overview

Montana State University-Great Falls College of Technology (MSU-Great Falls) requests approval to offer an Associate of Science in Nursing (ASN) program.

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

On October 14, 2010, the Montana Board of Nursing voted to accept the feasibility study to add an ASN program to MSU-Great Falls' offerings. The Board of Nursing has notified the Board of Regents regarding the acceptance of the feasibility study (*See Attachment 1*). The ASN program will be used to provide a career ladder in education from the Practical Nurse to the Registered Nurse. The Montana Model Nursing Curriculum will continue to be utilized at the College, and this would add the third year of the model curriculum to the nursing program at MSU-Great Falls.

3. Need

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

To support our regional medical hub, MSU-Great Falls is responding to the ongoing need to provide a diverse, professional healthcare workforce. The Great Falls medical community has encouraged MSU-Great Falls to pursue the offering of the Associate of Science in Nursing.

According to the U.S. Bureau of Labor Statistics, Registered Nursing is the top occupation in terms of the largest job growth from 2008 - 2018. Government analysts project that more than 581,500 new RN jobs will be created through 2018. Other federal projections indicate that by 2020, the U.S. nursing shortage will grow to more than 800,000 registered nurses. Even as health care continues to shift beyond the hospital to more community-based primary care and other outpatient sites, federal projections say the rising complexity of acute care will see demand for RNs in hospitals climb by 36 percent by 2020.

Since the implementation of the model curriculum at the College, students have continually requested the addition of the third year (RN program) to allow for seamless continuation in the curriculum without the requirement to transfer institutions or travel for their clinical rotations. They have also desired the same tuition and fee structures associated with the practical nursing coursework at MSU-Great Falls.

A November 2010 *Great Falls Tribune* article entitled "Study: Health Care Bigger Sector Than Military." Highlights of the article are as follows:

"...A recent study commissioned by Benefis Health System shows that the health care sector represents a larger portion of non-farm earnings in Cascade County than the military sector. Health care is responsible for 16 percent of non-farm earnings in the county, while military — long thought to be the county's largest sector — accounts for 14 percent of earnings, said Gregg Davis, director of health care research at University of Montana's Bureau of Business and Economic Research, who led the economic impact study..."

Montana Board of Regents
LEVEL II REQUEST FORM

"...Benefis alone accounts for 10 percent of all jobs and labor income in the county..."

"...Health care's a big player in Cascade County, and Benefis is a big player in terms of health care..."

"...Health care represents a bigger share of the Great Falls area economy than it does in Missoula, Billings and Montana as a whole..."

"...In 2008, health care was responsible for 14 percent of Cascade County's gross county product, compared with 12 percent in Missoula and Billings. Statewide, health care makes up 9 percent of the economy..."

"According to the Western Interstate Commission for Higher Education (WICHE), nursing is one of Montana's fastest growing jobs, and the nursing field will see a 33% increase in need. WICHE estimates that approximately "4,300 registered nurses will need to be hired for new posts and to replace those leaving the field" (<http://healthinfo.montana.edu/research.html> Health Care Workforce Summary, Angela Chou, 2006).

The Occupational Supply Demand System for 2008 - 2016 states Montana's registered nurses will be experiencing employment growth of 26.3%, along with an 18.6% growth in wage earnings.

The State of Aging in Montana Report published by the Department of Public Health and Human Services (DPHHS) in 2002 notes registered nurses represent 30 percent of Montana's healthcare workforce. With the aging population and the average age of nurses in Montana growing, the need for registered nurses far exceeds the supply. (<http://www.nursing-school-degrees.com/Nursing-Schools-State/Nursing-Schools-in-Montana.html>)

Patti Iversen, FNP, completed her Master's in Nursing degree from Gonzaga University in 2002, by producing a project titled "Keeping Health Care Blooming in Eastern Montana." The study consisted of a mailed survey to all nurses residing in fifteen eastern Montana counties. The response rate was 59.42% which represented 533 nurses.

A summary of her findings that are pertinent to workforce supply in Montana are:

- About one third of RNs planned to retire over the next 10 years, by 2012.
- About 39.85% of nurses planned to retire between ages 55 and 64 years of age.
- A significant number of RNs (41.1%) planned to reduce their hours of work prior to full retirement.
- The average age of planned work reduction was 52.9 years.
- For Eastern Montana nurses, the mean age is 46.7, while nationally the mean age is 45.2.
- Six percent of RNs were planning to move to a non-nursing field of employment.

Patti Iversen's full study can be found at www.montana.edu/mint/iversen.html.

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

Montana Board of Regents
LEVEL II REQUEST FORM

The ASN program will be offered as an addition, or 1+1, to the MSU-Great Falls' practical nurse program. The practical nurse program gives students an excellent first year foundation on which to expand their nursing education to the registered nurse (RN) level. The practical nurse program has a history of 100% pass rates on the National Council of State Boards of Nursing's National Council Licensure Examination-Practical Nursing (NCLEX-PN). The ASN program will allow practical nurse students the opportunity of a seamless nursing education to the RN level without leaving the Great Falls community. Additionally, the State Model Curriculum encourages seamless transition from the practical to professional level of practice. At the present time, practical nurse students in Great Falls have to reapply, usually at a college out of town, to receive an RN education. Due to the inability of most practical nurse students to move their home, family, and children, 35% choose to go through Excelsior College (an out-of-state online program).

MSU-Great Falls will use a 2+1 model of implementing the model curriculum. Twenty students will be admitted into the program each fall. The first year consist of prerequisite courses. Then, students will apply to the LPN program and will complete their first year of nursing course work, which is the third and fourth semester of the State Model Curriculum. Students do not have to be Licensed Practical Nurses (LPNs) to enter the third year, or fifth semester of the State Model Curriculum. The students do have to be eligible to be licensed as LPNs, having graduated from an approved school of Practical Nursing. Current LPNs will be encouraged to apply for the program. Graduation after the first two years will result in the Practical Nursing degree. The completion of the third year will result in attaining the ASN degree.

MSU-Great Falls' ASN program will consist of 72 credit hours, based on the State Model Curriculum. The program is designed to prepare graduates to take the National Council of State Boards of Nursing's National Council Licensure Examination for Registered Nurse (NCLEX-RN). Students not under the State Model Curriculum will be encouraged to apply and to transfer equivalent course work to the College.

The ASN program will incorporate MSU-Great Falls' vision statement of "...transforming the lives of our students, their communities and the economic prosperity of Montana by responding to learner and community needs through the use of partnerships, innovation, outreach and technology."

The program will also integrate the College's mission statement "...to foster the success of our students and their communities through innovative, flexible learning opportunities for people of all ages, backgrounds, and aspirations resulting in self-fulfillment and competitiveness in an increasingly global society."

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

Per Board of Nursing requirements, a feasibility study was conducted by the nursing program director at MSU – Great Falls. This study was submitted and accepted by the Montana State Board of Nursing at their October 13-14, 2010, meeting in Helena. (*See Attachment 2*)

As a component of the feasibility study, the MSU-Great Falls' practical nurse program created and posted a survey on the College's website questioning students regarding the feasibility of having an ASN program. The survey ran from June 17 – July 25, 2010. There were a total of 246 responses.

Montana Board of Regents
LEVEL II REQUEST FORM

Considering it was the middle of summer and most students do not take courses during this time of year, the total response numbers are extremely impressive.

Below is the level of interest that was gathered from the Survey:

What is your level of interest in an RN program through MSU Great Falls College of Technology?		
Answer Options	Response Percent	Response Count
Strongly interested	89.8%	221
Interested	7.7%	19
Maybe	2.0%	5
Not interested	0.4%	1
Comment		28

The MSU-Great Falls’ ASN program is planning to admit 20 students every fall semester. This will be done through an application process similar to other ASN programs in the state.

The Chief Clinical Officer at Benefis Hospitals writes in a letter of support for the ASN program, dated February 25, 2009, to the Montana Board of Nursing:

“As a healthcare administrator, one of the major challenges facing our industry is the recruitment and retention of qualified nursing personnel. The current national shortage of health care professionals, in combination with geographic isolation of Eastern Montana communities, results in inadequate numbers of health care professionals to fill current and projected vacancies in the health care professions. Over the past several years, Benefis has experienced a continued shortage of licensed nursing personnel that has varied from moderated to severe. There are numerous things that have contributed to the shortage, and we cannot solve some of them. However, the issue of accessible education to allow interested individuals to pursue and education in nursing is something I believe we can resolve.”

4. Institutional and System Fit

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

The Health Sciences Division at MSU-Great Falls is one of the strongest programmatic areas of the College, which offers 18 healthcare programs, more than any other institution in the state of Montana. There are approximately 600 pre-program and program students in these programs. MSU-Great Falls is committed to responding to the healthcare community and the students’ requests to provide more professional health related programming. Additionally, the ASN program will provide the practical nurse graduate the opportunity to ladder their education to the RN level.

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

This will not require changes to the program but rather an addition to current program offerings. The State Model Curriculum is a 1+1+1 pathway for students interested in nursing careers. This change will add the third year and provide additional options for practical nursing graduates and licensed practical

Montana Board of Regents
LEVEL II REQUEST FORM

nurses currently employed in the community to become registered nurses. This will add the additional year to the existing practical nurse program to result in the completion of the ASN degree.

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

N/A

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

The ASN program aligns with the College's institutional strategic goal number two. This strategic goal is to increase the number of adult students participating in earning a post-secondary credential. The goal of the ASN program will be to graduate 20 adult students annually.

MSU-Great Falls' Core Indicators of Institutional Effectiveness will be incorporated into the ASN program by the demonstration of the Eight Abilities (Institutional Student Learning Outcomes) throughout the program. We will continue to persist in increased retention rates via the use of specialized tutors for the ASN students. Student success will be demonstrated by maintaining high graduation rates within the nursing programs. The student will be provided the opportunity to transfer to a bachelor's degree program in nursing upon completion of the ASN degree. The graduates of the ASN program will qualify to enter into the workforce and be a productive member of the community. (*See Attachment 3*).

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

The MSU-Great Falls' Practical Nurse program has a proud history of working cooperatively with all the schools of nursing in Montana, regardless of the level of nursing. With the submission of the feasibility study for an ASN program, we will continue with this history of cooperation. There are no plans or desire to displace students from current Montana programs existing in Great Falls. This, as well as clinical slot availability, has been discussed with Dr. Mary Pappas, Dean of Nursing at MSU-Northern. Also discussed was the long history of both schools working together, and both parties agreed that there wasn't anything that could not be discussed or compromised upon.

Dr. Susan Raph, Campus Director for MSU-Bozeman's Great Falls campus, has been informed of the plans for the MSU-Great Falls ASN program, and a conversation was held with her concerning clinical, number of students, and time frame. Students that desire a Bachelor of Science in Nursing (BSN) educational experience will continue to apply to MSU-Bozeman or Carroll College. The high numbers of responses to the ASN survey has shown the strong need for RN education in Great Falls. We will work alongside MSU-Northern to provide the desired RN education requested by the students.

ASN programs in Missoula, Billings, and Helena are receiving record number of application requests for limited admissions slots. In fall 2010, the University of Montana College of Technology in Missoula received over 100 applications for 30 slots for LPN and RN programs. Most of the nursing schools are receiving more applications than slots available for admission. Over the course of the last two years, the practical nurse program at MSU-Great Falls has received 49 applications for 20 available slots. There will not be an impact on the other ASN schools of nursing in the state, because there appears to

Montana Board of Regents
LEVEL II REQUEST FORM

be more students asking for admission than there are available slots. With the adoption of the State Model Curriculum and the ease of transfer, students expect the ability to pursue the entire three years of nursing education in their home town. Great Falls' students would like to be included with those other students. They want the seamless nursing education promised with the Model Curriculum that they see in Helena, Billings, Missoula, Havre, Lewistown, Miles City, and Butte.

MSU-Great Falls' nursing faculty believe in lifelong learning, and these see opportunities for nurses past the ASN. For example, the faculty encourage all students to complete a BSN. In Great Falls, this pathway continues to be an option either through MSU-Bozeman, or it may be accomplished with a final year from MSU-Northern or the University of Great Falls.

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.**

Montana Board of Regents
LEVEL II REQUEST FORM

The ASN program will follow the approved Montana State Nursing Curriculum:

TABLE 1 – MODEL NURSING CURRICULUM
CURRICULUM FOR 72 CREDIT ASN WITH OPTIONAL PN EXIT AFTER 48(+) CREDITS
(“STAND-ALONE” PN PROGRAMS WILL OFFER FIRST FOUR SEMESTERS)

SEMESTER ONE			SEMESTER TWO		
Course		Credits Didactic/Clinical/Lab	Course		Credits Didactic/Clinical/Lab
			<i>(Apply for admission to Nursing Program during Semester Two)</i>		
BIO 213	Anatomy & Physiology I/Lab	3/0/1 = 4	BIO 214	Anatomy & Physiology II	3/0/1 = 4
WRIT 101	College Writing I	3/0/0 = 3	CHMY 121	Intro to General Chemistry/Lab	3/0/1 = 4
M 121	College Algebra	3/0/0 = 3	NRSG 100	Introduction to Nursing	1/0/0 = 1
AH 219	Nutrition and Diet Therapy for Nurses	2/0/0 = 2	PSYX 100	Intro to Psychology	3/0/0 = 3
Total		11/0/1 =12	Total		10/0/2/=12

NOTE: Admission to Nursing Program required before taking Semester Three coursework

SEMESTER THREE			SEMESTER FOUR		
NRSG 130	Fundamentals of Nursing	4/0/3 = 7	NRSG 140	Core Concepts of Adult Nursing	4/3/0 = 7
NRSG 135	Nursing Pharmacology	3/0/0 = 3	NRSG 142	Core Concepts of Maternal/Child Nursing	2/1/0 = 3
NRSG 138	Gerontology for Nursing	1/1/0 = 2	NRSG 144	Core Concepts of Mental Health Nursing	2/0/0 = 2
Total		8/1/3 = 12	Total		8/4/0 =12
			NRSG 148	Leadership Issues (for those opting PN exit)	1/1/0 = 2
			Total		9/5/0 = 14
			Total 50 credits		

NOTE: PNs applying for entry in Semester Five must take a 3-credit Transition (NRSG 250, LPN to RN Transition) to Registered Nursing course.

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A skills assessment may also be required.

SEMESTER FIVE			SEMESTER SIX		
NRSG 252	Complex Care Needs—Maternal/Child Client	2/1/0 = 3	SOCI 101	Intro Sociology	3/0/0 = 3
NRSG 254	Complex Care Needs—Mental Health Client	1/1/0 = 2	NRSG 262	Complex Care Needs—Adult Client	2/2/0 = 4
NRSG 256	Pathophysiology	3/0/0 = 3	NRSG 265	Advanced Clinical Skills	0/0/1 = 1
BIOM 250	Microbiology	3/0/1 = 4	NRSG 266	Managed Client Care	2/2/0 = 4
Total		9/2/1 = 12	Total		7/4/1 = 12

Clinical credits are 3:1 Lab credits are 2:1

50 credit PN AAS

- 23 credits cognates, 27 credits Nursing (includes PN exit class)
- 38 credits didactic, 6 credits clinical, 6 credits lab (includes PN exit class)

72 credit ASN

- 30 credits cognates; 42 credits Nursing
- 52 credits didactic, 12 credits clinical, 8 credits lab

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

Twenty students will be admitted into the program each fall with the first intake to occur 2012. These students will have completed all prerequisite courses or have transferred equivalent course work to the college. In addition, students will have completed the first year of nursing coursework which is the third and fourth semesters of the State Model Curriculum. Students do not have to be LPNs to enter the third year, or fifth semester, of the State Model Curriculum, but they do have to be eligible to sit for the NCLEX national exam to become licensed as LPNs, having graduated from an approved school of Practical Nursing.

Time table for implementation of the ASN Program:

Activity	Date	Status
1. Submit letter of intent to the Montana Board of Nursing	July 13, 2010	Completed
2. Gather data for feasibility study	June and July 2010	Completed
3. Submit feasibility study to Montana Board of Nursing	September 1, 2010	Completed
4. Board of Nursing meeting for outcome of feasibility study	October 13 & 14, 2010	Approved by the BON
5. Board of Regents meeting Level II report submitted	January 13 & 14, 2011 May 19 & 20, 2011	
6. Hire a nursing consultant to assist with construction of ASN program – work with Flathead Community College	Coordinate with FVCC & Consultant	
7. Hire full time Program Director	August 2011	
8. Start recruiting faculty and clinical instructors	September 2011	
9. Set up informal informational workshops for interested students	September 2011	
10. Acquire administrative support	September 2011	
11. Begin construction of curriculum design, mission state, philosophy, and ASN program and student outcomes.	October 2011	
12. Construct Student handbook	November 2011	
13. Create syllabi for ASN courses	November 2011	
14. Take new curriculum to College's curriculum committee	January 2012	
15. Create application for ASN program and post on college website	January 2012	
16. Coordinate with MSU Northern clinical facilities for fall 2012	March 2012	
17. Get clinical contracts as needed	March 2012	
18. Work with ATI testing to set up program here at the college	April 2012	
19. Work with NLNAC to get application format – go to conference	May 2012	

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20. Receive and evaluate student applications for admission	May & June 2012	
21. Admit students	July 2012	
22. Finalize faculty positions, offices, and course work	July 2012	
23. Orientation for new faculty at college	August 2012	
24. Begin ASN program	September 2012	
25. Advisory board meeting	October 2012	

6. Resources

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

The current Practical Nurse Program Director will also serve as the ASN Program Director. The director has a Master’s degree in Nursing and a current unencumbered license to practice as a registered nurse in Montana. The Program Director will be a full-time position responsible for program administration and preparation, as well as the presentation and administration of the budget of the nursing program.

There is a pool of academically strong candidates for faculty positions for the Associate’s degree RN program:

- Master’s degree nurse, who has taught for 10 years in the Practical Nurse program, with expertise in adult nursing, advanced clinical skills and pathophysiology. She has been an RN for over 25 years, and continues to work on an acute hospital unit.
- Master’s degree nurse completing her Doctorate in Nursing, who has taught in RN programs for over 10 years. Her expertise is in Maternal/Child. She has been an RN for over 25 years.
- Master’s degree nurse who has taught in an ADN and LVN program in Texas for over 10 years. She has been an RN for over 20 years, and her Master’s thesis was on the “utilization of high-fidelity simulation in healthcare education (with an emphasis on nursing education).”
- BSN nurse completing her Master’s in Nursing – FNP from Gonzaga this year, 2010. Her expertise is in adult nursing, pathophysiology, and assessment. She has four years experience at a correctional facility as RN administration. She has two years teaching experience in the Practical Nurse program. She has been an RN for over 17 years.
- BSN nurse completing her Clinical Nurse Leader Master’s program from Bozeman. She will be graduating this year 2010. Her expertise is in adult nursing, management, and assessment. She has one year teaching experience with the Practical Nurse program. She has been an RN for over 32 years.
- BSN nurse completing her Masters Degree in Nursing, with only her thesis left. Her expertise

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is in Maternal/Child. She has nine (9) years of teaching experience in the Practical Nurse program and in an ADN RN program. She has been an RN for over 30 years.

- BSN nurse completing her Masters Degree in Nursing. She has completed the first year from Drexel. Her expertise is in Critical Care and Cardiac nursing. She has taught in the Practical Nurse program for over five (5) years. She has been an RN for over 17 years.
- BSN nurse with a Masters Degree in Counseling and 18 hours of upper level nursing. She has national accreditation as a Clinical Nurse Specialist in Adult Psychiatric/Mental Health and is licensed as a Licensed Professional Counselor in Texas. She has taught in an LVN and ADN program in Texas for over 10 years. While this faculty might not meet the requirements for this program in Montana, she can teach in the PN portion of the program.

The ASN program will require an additional .05FTE administrative program director, a 1.0FTE tenure-track faculty member, and then additional clinical faculty (adjunct) to cover the curriculum of the ASN portion of the model program.

In addition to the resources currently allocated to the PN program, MSU-Great Falls is committed to providing the additional resources necessary to adequately fund the successful operation of the Associate degree in Nursing program.

Benefis Health System has committed financially to assist MSU-Great Falls to support the ASN program. Benefis continues to talk with the administration at MSU-Great Falls regarding subsidizing nurse faculty salaries, and the availability of their Master's prepared nurses for educational purposes.

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 College anticipates the need for two offices for the additional nursing faculty. The College's Simulated Hospital will be completed June 2011 and there will be two offices in that area allocated to the faculty. Since MSU-Great Falls already has an LPN program present on campus, the existing nursing lab will also be used by the ASN program. This will result in a good use of present resources. The ASN program will also be using the Simulated Hospital for lab and clinic procedures.

The ASN program will work with Assessment Technologies Institute, to strengthen students' knowledge throughout the program leading to a more competent, successful nurse after graduation. Assessment Technologies Institute will provide students with tutorials, assessment, and review modules to aid students in review and remediation of courses as needed. The costs of this program will be \$370.00 per student and is anticipated to be a program fee.

Course fees of \$88.00 will be assessed to NRS 250, LPN to RN Transition and \$35.00 to NRS 265, Advanced Clinical Skills, for course specific consumables ensuring safe practice and competence with equipment and procedures prior to clinical internships and exposure to patients. Students must have hands-on experience with nursing materials and procedures to assure appropriate and safe use.

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Additionally, it is our plan to hire a nursing consultant for program development. We will do this in partnership with Flathead Valley Community College, as they are also developing their ASN program. We will share in this cost of \$2000.

7. Assessment

How will the success of the program be measured?

There will be a number of assessment tools used to measure student success, as well as the success of the ASN program. The information from these data gathering resources will be reviewed by the ASN program director and the institution's Internal Program Review Committee. The tools to be used include:

- Student enrollment
- Retention analysis
- Student satisfaction surveys
- Employer surveys
- Graduate surveys
- Student employment rates
- Student passing rates on the national exam

Program review occurs every five (5) years on the Great Falls campus. This process is all inclusive and results in program improvements. The ASN program will also be reviewed every five (5) years by the Montana Board of Nursing.

Additionally, there will be on-going student learning outcomes assessment that will measure; course objectives, program outcomes, and institutional abilities to verify that these indicators are being met.

8. Process Leading to Submission

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

In 2009, the healthcare community in Cascade County suggested the nursing program at MSU-Great Falls add an RN program. On October 23, 2009, the Practical Nursing Advisory Board had a discussion regarding the community request for a RN program at MSU-Great Falls. After much discussion, the Advisory Board voted to recommend the College move forward with a proposal to start an ASN program in Great Falls.

The nursing program director and campus administration has been working with the major employers in Great Falls to determine the logistics of the addition of the ASN program. The clinical rotations have been worked out so all nursing programs in the area will have the needed access to the clinical sites for the total number of students presently enrolled, plus the addition of the ASN Great Falls program.

The present nursing faculty members at the College have been involved in discussion with the advisory board regarding the addition of the ASN program. They have agreed to have their teaching assignments adjusted to fit the needs of the program. The faculty and nursing administration are continuing to work together to meet the needs of the ASN program.

Benefis Health Systems has been instrumental in providing guidance and support in this process. They are evaluating their nursing pool and will look at providing specialty lectures and clinical expertise as needed

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via our request. Benefis shared that in 2008 they had hired approximately 71 nurses and believe the demand will continue at about the same rate per year.

As mentioned above, the practical nursing students were involved via a survey and interaction in class discussion. They also attended the Practical Nursing Advisory Board meetings. The Board of Nursing Feasibility Study provides the results of the study and narrative comments of the students and their involvement. Also included in the Feasibility Study are the many letters of community support.

The Associate degree program will be seeking accreditation with the National League of Nursing Accrediting Commission (NLNAC). The nursing administrator has been in communication with the NLNAC regarding accreditation. The NLNAC has a process and structure in place to provide for external peer review to evaluate nursing programs and involve institutions, administrators, faculty and staff, and students of nursing programs in the process of continuous self-examination. The NLNAC assures nursing programs are perceived as providing quality education and services to students who, as graduates, express satisfaction with their program of study and who continue to learn.

Subject: FW: Board of Nursing Actions
Attachments: Feasibility Study Acceptance Ltr MSU GF COT BON 11-4-2010.pdf

From: Gustafson, Cynthia [mailto:CGustafson@mt.gov]
Sent: Thursday, November 04, 2010 4:26 PM
To: smooore@montana.edu
Cc: Myrna Ridenour; Cheryl Alt
Subject: Board of Nursing Actions

Dear Dr. Moore,

On behalf of the Board of Nursing (BON), I wanted to give you notice that the BON at their Oct 14, 2010 meeting officially accepted feasibility studies from MSU-Great Falls College of Technology and Flathead Valley Community College to add an associate of science in registered nursing program. Please see the attached letters sent to these programs from the BON.

By accepting these feasibility studies the BON is acknowledging that these programs have completed the first step toward the approval of the programs. A program needs BON approval so that graduates of the programs are eligible to take the licensure examination. We also understand that the Montana Board of Regents has an approval process for new educational programs in the state.

Please feel free to contact me with any questions about our BON processes.

Thanks,
Cynthia Gustafson

Cynthia Z. Gustafson, RN, PhD
Executive Director, Montana Board of Nursing
PO Box 200513, Helena, MT 59620-0513
cgustafson@mt.gov (406) 841-2380
www.nurse.mt.gov



Governor Brian Schweitzer

Montana

Department of Labor and Industry

Business Standards Division

BOARD OF NURSING

November 4, 2010

Cheryll Alt, MSN, RN
Montana State University-Great Falls College of Technology
2100 16th Ave South
Great Falls, MT 59405

Dear Ms. Alt,

We are pleased to send you official notification that the Board of Nursing (BON) at the October 14, 2010 meeting accepted the MSU-Great Falls COT Nursing Feasibility Study to add an Associate of Science RN program as submitted to the BON in September 2010. The BON wants to commend you for the work involved in submitting this study.

As you are aware, the BON also adopted new rules related to Nursing Education Programs which will be finalized this month and available on our web site in December. The reference to the new rules is ARM 24.159.625 Establishment of a New Nursing Education Program. When these rules appear in their final form, I will contact you so that we can work together in the next steps to continue to move the process forward. The BON will also send notice to the Montana Board of Regents on the acceptance of the Feasibility Study.

Sincerely on behalf of the BON,

A handwritten signature in black ink, appearing to read "Cynthia Gustafson".

Cynthia Gustafson, PhD, RN
Executive Director for the Board of Nursing
cgustafson@mt.gov 406-841-2380

P.O. BOX 200513 • 301 SOUTH PARK • HELENA MT 59620-0513 • PHONE (406) 841-2340
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"AN EQUAL OPPORTUNITY EMPLOYER"



Montana State University-Great Falls College of Technology Vision, Mission, Values & Core Themes

Changing Lives – Achieving Dreams

Vision

In the next decade, MSU-Great Falls will play a leading role in transforming the lives of our students, their communities and the economic prosperity of Montana by responding to learner and community needs through the use of partnerships, innovation, outreach and technology.

Mission

Our Mission is to foster the success of our students and their communities through innovative, flexible learning opportunities for people of all ages, backgrounds, and aspirations resulting in self-fulfillment and competitiveness in an increasingly global society.

Values

- **Accountability** –We ensure our decisions are data-informed and grounded in the best interest of our students and their communities.
- **Integrity** – We value civic responsibility, high academic standards, ethical practices, and the courage to act.
- **Lifelong Learning** – We believe education is a lifelong necessity and commitment; we personify this belief by engaging and reengaging students from all generations in learning opportunities.
- **Respect** - We value differences and treat others with civility, encouraging open and honest communication.
- **Responsiveness** – We recognize and act upon opportunities to be innovative, flexible, and adaptable to our students’ and communities’ needs.
- **Student Success** – We are dedicated to student success and achievement; we strive to meet the educational needs of our students and their communities.

Core Themes

At MSU-Great Falls we live the community college experience through an open-access admissions policy, a comprehensive educational program, a focus on teaching and learning, and a philosophy of student-centeredness. We strive to attain our Mission through the core themes and goals of:

1. **Workforce Development:** Through applied programming our students successfully attain a credential leading to life sustaining careers;
2. **Transfer Preparation:** Our students complete transfer programming and successfully transfer toward a four-year degree;
3. **Academic Preparation:** We prepare individuals for success in college coursework through developmental (remedial) education and adult basic education; and
4. **Community Development:** As the community’s college, we support social and economic development through outreach, lifelong learning, and active partnership.

Montana State University - Great Falls College of Technology
Core Indicators of Institutional Effectiveness

MSU - Great Falls College of Technology (MSUGF), is committed to the evaluation of institutional effectiveness and the assessment of student learning outcomes. This commitment is reflected through an assortment of activities and processes emanating from the College's mission, vision, values, core themes, and strategic plan.

As we strive to become more performance based in the allocation of resources and create a mission-centric model to document our effectiveness, MSUGF has established a set of measures to guide our processes. These measures, known as core indicators of institutional effectiveness¹, support our everyday operations and assist us as we seek continuous improvement towards mission achievement.

MSUGF's core indicators of institutional effectiveness² stem from the Montana Board of Regent's system measures of effectiveness, federal accountability law and policy and the College's core themes and values. The core indicators of institutional effectiveness are summarized and grouped in the following:

Participation

Core Indicator 1: Enrollment Rates

Core Indicator 2: Regional Market Penetration Rates

Student Success

Core Indicator 3: Persistence (Retention)

Core Indicator 4: Graduation Rates

Core Indicator 5: Demonstration of Abilities

Academic Preparation

Core Indicator 6: Success of Remedial Students in Developmental Coursework

Core Indicator 7: Success of Remedial Students in Subsequent and Related Coursework

Workforce Development

Core Indicator 8: Workforce Degree Production

Core Indicator 9: Placement Rates

Core Indicator 10: Licensure and Certification Pass Rates

Core Indicator 11: Employer Satisfaction with Graduates

Transfer Preparation

Core Indicator 12: Transfer Degree Production

Core Indicator 13: Transfer Rates

Core Indicator 14: Performance after Transfer

¹ A core indicator is "...a regularly produced measure that describes a specified condition or result that is central (or foundational) to the achievement of a college's mission and to meeting the needs and interests of key stakeholders" (Alfred, Shults, and Seybert, 2007, p. 12). Alfred, Shults, and Seybert (2007, p. 23) identified sixteen core indicators of effectiveness for community colleges. If applied comprehensively, these indicators will establish the foundation for a model of institutional effectiveness that will allow us to document our performance. We have adapted those core indicators and they are divided into five components related to our mission: student progress; developmental education; outreach; workforce development; and transfer preparation (Alfred, Shults, & Seybert, 2007, p. 23).

² Core Indicators of Institutional Effectiveness are assessed at the institutional level. In addition departments and divisions maintain and assess their effectiveness with unit-level indicators.

Montana State University - Great Falls College of Technology

Eight Abilities

The faculty and staff of MSU–Great Falls College of Technology have deemed the following abilities to be central to the personal and professional success of all graduates:

1. **Communication:** The ability to utilize oral, written and listening skills to effectively interact with others.
2. **Quantitative Reasoning:** The ability to understand and apply mathematical concepts and models.
3. **Inquiry and Analysis:** The ability to process and apply theoretical and ethical bases of the arts, humanities, natural and social science disciplines.
4. **Aesthetic Engagement:** The ability to develop insight into the long and rich record of human creativity through the arts to help individuals place themselves within the world in terms of culture, religion, and society.
5. **Diversity:** The ability to understand and articulate the importance and influence of diversity within and among cultures and societies.
6. **Technical Literacy:** The ability to use technology and understand its value and purpose in the workplace.
7. **Critical Thinking:** The ability to understand thinking that is responsive to and guided by intellectual standards such as relevance, accuracy, precision, clarity, depth, and breadth.
8. **Effective Citizenship:** The ability to commit to standards of personal and professional integrity, honesty and fairness.

New Fees Only

THE MONTANA UNIVERSITY SYSTEM

Inventory and Validation of Fees -- Fiscal Years 2010 and 2011

Non-Mandatory Fees -- Rates per Semester

Unit Name: MSU - Great Falls COT			PROPOSED RATES								
NAME OF FEE	RUBRIC	BOR AUTHORIZATION	CURRENT FY09 FEE	FY 10 FEE	% CHANGE	FY 11 FEE	% CHANGE	FUND	DESCRIPTION	JUSTIFICATION	
Designated Fees											
Associate of Nursing Science-American Testing Institute (ATI)-National Testing and Evaluation Service Fee		Upon Board Approval	NEW	370.00	100.0%	370.00	0.0%	33XXXX	Fee assessed to pay for study materials, evaluation, mentoring, on-line resources and testing through American Testing Institute (ATI) National Testing and Evaluation	The Montana Board of Nursing recommends that students participate in the ATI National Testing and Evaluation program to help show them which areas they have strength in and which areas are deficient. It has been shown to increase higher pass rates when it comes time for the students to take their board exams.	
Materials Fees											
Advanced Clinical Skills	NRSG	265	Upon Board Approval	NEW	35.00	100.0%	35.00	0.0%	33XXXX	Costs of course specific consumables including, but not limited to items for wound care, intravenous (not IV course), catheter insertion, nasogastric tube insertion, colostomy care, tracheostomy care and suctioning, hand washing, sterile technique, isolation precautions, elimination assistance, specimen collection, medication administration non-parenteral and administration of	Laboratory practice on students in lab to ensure safe practice and competence with equipment and procedures prior to clinical internships and exposure to patients. Students must have hands-on experience with nursing materials and procedures and that their uses are appropriate and safe.
LPN to RN Transition Course	NRSG	250	Upon Board Approval	NEW	88.00	100.0%	88.00	0.0%	33XXXX	Costs of course specific consumables including, but not limited to items for syringes, filter needles, gloves, strips for glucometer, dressings, tracheostomy kit, catheters, Foley	Laboratory practice on students in lab to ensure safe practice and competence with equipment and procedures prior to clinical internships and exposure to patients. Students must have hands-on experience with nursing materials and procedures and their uses are appropriate and safe.

BUDGET ANALYSIS

Program Name: Nursing (state standard three-year curriculum)									
Campus: MONTANA STATE UNIVERSITY - GREAT FALLS COLLEGE OF TECHNOLOGY									
	Year 1		Year 2		Year 3		Year 4		Year 5
	FY12		FY13		FY14		FY15		FY16
Estimated ENROLLMENT									
FTE Enrollment (pre-nursing & nursing students)*	122		137		140				
Estimated Incremental REVENUE									
Use of Current General Operating Funds									
State Funding for Enrollment Growth									
Tuition Revenue									
A. Gross Incremental Tuition Revenue	368,928		414,288		423,360		-		-
B. Reductions to Incremental Tuition									
C. Net Tuition Revenue (A-B)	368,928		414,288		423,360		-		-
Program Fees (\$45/student)	900		1,800		1,800		-		-
External Funds**	30,000		30,000		30,000				
Other Funds (please specify)									
TOTAL Estimated Incremental Revenue	399,828		446,088		455,160		-		-
Estimated Incremental EXPENDITURES									
Personal Services	FTE	Cost	FTE	Cost	FTE	Cost			
Faculty***	5	273,000	6	337,428	6	347,551			
Staff	1	75,000	1	75,000	1	75,000			
Operating Expenses	10,035		16,000		18,000				
Indirect Expenses	803		1,280		1,440				
Start-up Expenditures	6,985		5,000						
TOTAL Estimated Incremental Expenditures	365,823		434,708		441,991				
Estimated Revenues Over/(Under) Expenditures	34,005		11,380		13,169				

* Includes both pre-nursing and nursing students in the PN and RN programs. Pre-nursing numbers based off of FY11 enrollment, and program numbers assume 75% capacity in FY113, and full capacity in FY14.

** Support from Benefis Health Systems for RN nursing faculty.

*** Includes 3.0 FTE in full-time, tenured/tenure-track nursing faculty, plus approximate 2.0 FTE in proportionate related instruction faculty and 1.0 FTE in clinical faculty (years 2 and 3).

ITEM 150-1004-R0111

The University of Montana-Missoula
Master of Arts in Teaching Middle School Mathematics

THAT

In accordance with Montana University System Policy, the University of Montana requests approval from the Board of Regents of Higher Education to create a Master of Arts program in Teaching Middle School Mathematics.

EXPLANATION

The University of Montana's Master of Arts in Teaching Middle School Mathematics (MATMSM) program addresses the fact that the qualifications of middle school teachers of mathematics with K-8 teaching endorsements do not meet the current recommendations of national or international mathematics educators. Middle School teachers in the MATMSM Program will learn mathematics content and pedagogy to provide them with skills and expertise to teach middle school students appropriate mathematics. The program of 24 core credits and 6 elective credits also includes a professional project involving research about the teaching and learning of mathematics. In addition, appropriate pedagogy and technology will be modeled in all courses. This program will involve the Department of Mathematical Sciences and the Department of Curriculum and Instruction.

ATTACHMENTS

Level II Request Form and Curriculum Proposal
Letters of Support

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: **150-1004-R0111**

Meeting Date: **January 13-14, 2011**

Institution: **The University of Montana-Missoula**

CIP Code: **13.1311**

Program Title: **Master of Arts in Teaching Middle School Mathematics**

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

The Department of Mathematical Sciences at The University of Montana proposes to create a new Program, the Master of Arts in Teaching Middle School Mathematics. This would allow teachers who are certified to teach middle school mathematics with a K-8 teaching endorsement to acquire a graduate degree that expands their mathematical and pedagogical knowledge significantly to a level that meets current recommendations of both national and international mathematics educators.

Montana Board of Regents
LEVEL II REQUEST FORM

Curriculum Proposals

1. Overview

The proposed program was suggested by a statewide task force formed to improve the teaching of mathematics and science in Montana. The fact that middle school teachers of mathematics often have a K-8 teaching endorsement that requires only two courses of mathematical content and one course in pedagogy led to concerns when teachers are required to meet the standards that are being advocated in today's mathematics curriculum. This program, unique to Montana, was designed to address that concern.

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

Middle School Teachers in the MATMSM Program will learn mathematics content and pedagogy to provide them with skills and expertise to teach middle school students appropriate mathematics. The program of 24 core credits and 6 elective credits includes a professional project that engages the student in action research about the teaching and learning of mathematics. One course specific to mathematics pedagogy is required. In addition, appropriate pedagogy and technology will be modeled in all courses. This innovative program can be completed during two summers and the included academic year. Components of this program are offered online with two summer sessions, each consisting of three courses. Summer courses involve face to face (FTF) sessions on campus.

3. Need

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

Teachers of middle school mathematics with a K-8 teaching certificate will be better served if they have an opportunity to increase their content and pedagogical knowledge in mathematics.

Under the direction of the recently created Montana Mathematics and Science Teacher Initiative (MMSTI) Steering Committee, a needs assessment survey was distributed to the entire membership of the Montana Council of Teachers of Mathematics (MCTM). The results of this survey indicated a significant number of teachers thought that increasing content knowledge would improve instructional practices and enhance the rigor in teaching middle school mathematics. An example of this demand is reflected by the following quote from a Montana mathematics teacher, "At the middle school level I need more content knowledge.... I feel that content knowledge holds me back in expanding and making my lessons more engaging." (MCTM Survey, 2009).

Further evidence supporting the need to enhance middle school content knowledge is contained in the policy implications section in *The Preparation Gap: Teacher Education for Middle School Mathematics in Six Countries* (Mathematics Teaching in the 21st Century, MT21, 2007):

We do recommend that discussions should be begun having to do with the amount of mathematics required in the training of middle school teachers. However, just as importantly, the belief that the preparation of future teachers might be done without any preparation in practical pedagogy seems unwise and should certainly be reconsidered. The fact that none of the five countries prepare their teachers in this way tells us something. The real question then is not whether such experiences are necessary but rather the nature and the extent of the learning opportunities in each of the three areas that should be available for future teachers. It is quite revealing that the countries whose students continuously perform well on the

Montana Board of Regents
LEVEL II REQUEST FORM

international benchmark tests have the teachers who have been trained with extensive educational opportunities in mathematics as well as in the practical aspects of teaching mathematics to students in the middle grades. (p. 42)

The Master of Arts in Teaching Middle School Mathematics intends to address deficiencies among current middle school mathematics teachers who have been prepared in programs for licensure in K-8 programs that do not emphasize the mathematical content and appropriate methodology for middle school students.

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

The students of these teachers will also be better served by the enhanced opportunity to offer more choices and depth in the middle school mathematics curriculum.

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

According to the Office of Public Instruction, it is estimated that approximately half of the middle school mathematics teachers in Montana do not have an adequate depth of preparation (in mathematics) to meet current standards of federal legislation.

4. Institutional and System Fit

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

The program extends the effort to enhance the mathematical preparation already offered to secondary mathematics teachers to teachers of middle school mathematics. Current graduate programs in mathematics require a major or minor in mathematics as a starting point, so teachers who majored in elementary or special education are not eligible for those programs. This new program offers a graduate degree in mathematics specifically for teachers who majored in elementary education or special education. The institution has the personnel and facilities to provide this program.

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

No changes are expected except to offer more courses in sufficient number to allow students to complete the program.

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

With current programs, K-8 certified teachers are not eligible to obtain an advanced degree in the mathematical sciences. This program extends that opportunity.

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

The program expands the commitment of The University of Montana in graduate education. It will also serve to build community through outreach and engagement. It will offer a much-needed service to the middle school students of Montana.

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

This program is unique in the Montana University System. The developers consulted with faculty at

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Montana State University for their input in the design of this 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 Master of Arts in Teaching Middle School Mathematics degree addresses the specific need for highly qualified teachers of mathematics at the middle grades level. Students in this program learn mathematics content and pedagogy to provide them with skills and expertise to teach middle school students appropriate mathematics. The program is available mostly online, with a two-summer 3-week on-campus requirement and can be completed during two summers and the included academic year. Typically, students would take 10 credits in each of the three blocks, summer one, academic year, and summer two, but they could begin in any summer. The program overview follows:

24 Credit Core (all have online components; some have FTF components):

<u>Course Title</u>	<u>Semester/format</u>
M 500 (3 cr) Current Mathematical Curricula	Spring online
M 501 (3 cr) Technology in Mathematics for Teachers	Summer 1 week FTF
M 572 (3 cr) Algebra for Middle School Teachers	Summer 1 week FTF
M 573 (3 cr) Geometry for Middle School Teachers	Summer 1 week FTF
M 574 (3 cr) Probability and Statistics for Middle School Teachers	Summer 1 week FTF
M 570 (3 cr) Concepts of Calculus for Middle School Teachers	Summer 1 week FTF
C&I 542 (3 cr) Supervision and Teaching of Mathematics	Summer 1 week FTF
C&I 588 (3 cr) Action Research in Classrooms	Fall online

Electives (6 credits):

M 504 (R-12) Topics in Math Education (such as ...)	
Number Theory	Fall or Spring online
Anatomy of Curves	Fall or Spring online
Historical Topics	Fall or Spring online
M 506 (3 cr) Integrated Math/Science	Fall or Spring online
M 578 (3 cr) Discrete Math for Middle School Teachers	Fall or Spring online
M 510 (3 cr) Problem Solving for Teachers	Fall or Spring online
(3 cr) Cognate Field Course chosen with Advisor	

Professional Paper:

Students, under the direction of an advisor, are required to prepare a professional paper and give an oral presentation of the research topic chosen. This project will be planned and evaluated by a committee of at least three faculty that must include at least two from Mathematical Sciences and one from Curriculum and Instruction.

Proposed Rotation:

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Summer One	Fall	Spring	Summer Two
M 573 (3 cr)	C&I 588 (3 cr) online	M 500 (3 cr) online	M 570 (3 cr)
M 574 (3 cr)	Elective (3 cr) online	Elective (3 cr) online	M 572 (3 cr)
C&I 542 (3 cr)			M 501 (3 cr)

Students could take 9 credits each summer and 12 credits during the year to finish in two summers and one academic year (9-12-9). They could take a lighter load during the academic year and finish in two summers and two academic years (9-6-9-6).

Students can begin the program in any summer, so some beginning students will be attending summer classes with those completing the program as well as those starting the program (beginning in the second summer).

If the program grows to a significant number of students, there could be more electives offered each summer so the students would have a choice of more topics. The description given above assumes that three required courses are available every summer. These would need to be offered every second summer so students can finish the program in two years.

C&I 588 Action Research in Classrooms must be taken early in the students program. During and following the course, students will work on their final project during the school year with their advisor and committee, then present their results in the final term.

Teachers in MATMSM Program will learn mathematics content and pedagogy to provide them with skills and expertise to teach middle school students appropriate mathematics. One course specific to mathematics pedagogy is required. Another course focuses on classroom research. In addition, appropriate pedagogy and technology will be modeled in all courses. This innovative program can be completed during two summers and the included academic year. Components of this program are offered online with two summer sessions, each consisting of two or three courses. Summer courses typically involve one week of face-to-face (FTF) sessions on campus with online assignments completed later.

Descriptions of Courses in the MATMSM Program

September 2010

M 500 Current Mathematical Curricula

(current catalog description, new prereq.)

Offered intermittently. Prereq., [teacher certification or consent of instructor]. Analysis of contemporary materials for secondary school mathematics: the goals, the mathematical content, alternative methodologies, and curriculum evaluation.

M 501 Technology in Mathematics for Teachers

(current catalog description, new prereq.)

Offered intermittently. Prereq., [teacher certification or consent of instructor]. Technology usage – when it is appropriate and when it is not. Experience is provided with scientific calculators, graphing utilities, computers, and identification of exemplary software.

M 504 Topics in Mathematics Education

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(current catalog description) Repeatable up to 12 credits.
Offered intermittently. Prereq., teacher certification. Topics of current interest which may include calculus, number theory, probability and statistics, geometry, or algebra, at a level suitable for teachers.

Some recent examples include:

- Anatomy of Curves. Analysis of equations and their corresponding curves in two- and three-dimensional coordinate systems: rectangular form, polar form, parametric form.
- Number Theory. Topics in algebra selected from quadratic forms and elementary number theory. A variety of materials to explore the relationships in the multiplicative structure of the integers.
- Historical Topics in Mathematics. Topics on how mathematical ideas have developed over time, how social, cultural, and historical factors impacted the development of mathematics, and how mathematics has contributed to society and human culture.

M 506 Topics in Integrated Mathematics and Science

(new course) Repeatable up to 6 credits.

Offered intermittently. Prereq., [teacher certification or consent of instructor]. Mathematical concepts and their applications in life sciences, astronomy, physical sciences, and environmental sciences.

M 510 Problem Solving for Teachers

(current catalog description, new prereq.)

Offered intermittently in summer. Prereq., [teacher certification or consent of instructor]. Strategies for problem solving, problem posing in a variety of situations, modeling and applications. Problems are selected from various areas of mathematics.

M 570 Concepts of Calculus for Middle School Teachers

(new course) 3 credits

Offered online in full-year format. Prereq., [teacher certification or consent of instructor]. A first course in differential and integral calculus. Concepts, definitions, properties, and elementary applications of the calculus of single-valued real variables.

M 572 Algebra for Middle School Teachers

(new course) 3 credits

Offered intermittently in summer. Prereq., [teacher certification or consent of instructor]. Topics include algebraic number fields, linear algebra topics, polynomials, and applications appropriate for teachers of middle school mathematics.

M 573 Geometry for Middle School Teachers

(new course) 3 credits

Offered intermittently in summer. Prereq., [teacher certification or consent of instructor]. Introduction to synthetic, analytic, vector, and transformational approaches to geometry. Includes topics in 2- and 3-dimensional geometry and measurement appropriate for teachers of middle school mathematics.

M 574 Probability and Statistics for Middle School Teachers

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(new course) 3 credits

Offered intermittently in summer. Prereq., [teacher certification or consent of instructor]. A survey of topics in probability and statistics appropriate for teachers of middle school mathematics.

M 578 Discrete Mathematics for Middle School Teachers

(new course) 3 credits

Offered intermittently. Prereq., [teacher certification or consent of instructor]. Elements and operations of finite structures, combinatorics, recursion, graphs, matrices, and finite models appropriate for teachers of middle school mathematics.

C&I 542 Supervision and Teaching of Mathematics (existing course)

(3 credits: current catalog description)

Curriculum trends, instructional materials, research and supervisory techniques relevant to a modern school mathematics program.

[This course focuses on effective implementation of teaching/learning strategies to best supervise, assess, and facilitate middle school mathematics instruction. Students will learn about the history of the national standards efforts in mathematics and the National Board for Professional Teaching Standards (NBPTS), as well as the more recent controversies in methodological implementations of the Standards. Students will use appropriate technology, search the Internet, use hands-on–minds-on learning strategies, evaluate student materials, and develop a philosophy for approaching school mathematics learning and teaching for enhancing mathematical power of all students.]

C&I 588 Action Research in Classrooms

(new course) 3 credits

Readings in research in teaching/learning. Strategies to implement all components of an action research project in a classroom including planning/research design, action, reflection, and sharing.

Appropriate courses in the Curriculum and Instruction Department are considered from a cognate field in the MATMSM Program. For instance, the following kind of course has been suggested:

C&I 5XX Middle School Development, Motivation, and Learning

(new course) 3 credits

Offered intermittently. This course focuses on the middle school student. Cognitive, social, and emotional development are addressed. Motivation, learning, and management strategies are emphasized.

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

When advertised appropriately, we hope to attract 10-15 students each year, which we expect to continue for several years to come.

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.

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The anticipated size of the program will require no additional faculty.

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

No additional resources are anticipated. The courses offered will be in the regular schedule of the departments involved.

7. Assessment

How will the success of the program be measured?

Reports of the progress of students in the program will be a part of the regular assessment of courses and programs that have been established for the units involved in its delivery.

8. Process Leading to Submission

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

In response to the national imperative to increase the quality, quantity, and diversity of mathematics and science teachers, a task force composed of leading state educators in Montana was assembled on October 3, 2008. The task force, led by President George M. Dennison (The University of Montana), President Geoffrey Gamble (Montana State University), Commissioner Sheila Stearns (The Office of the Commissioner of Higher Education), and Denise Juneau (Montana Superintendent of Public Instruction), discussed the importance of galvanizing statewide leadership in order to assess how Montana can support and sustain education reform efforts regarding mathematics and science education. As a result, additional key stakeholders including faculty from tribal colleges, executive directors of State education associations, teachers and students from multiple Montana school districts, and business leaders throughout Montana communities are now part of the Montana Mathematics and Science Teacher Initiative (MMSTI) Steering Committee. This statewide network represents Montana's commitment to improve collaboration and information exchange across multiple levels of state education agencies, businesses, private foundations, and state industries to ensure success for college and career readiness and civic engagement.

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This proposal was reviewed and approved by the following departments/programs:

Department Name: **Department of Mathematical Sciences** Date: 10/04/2010

Department Name: **Department of Curriculum & Instruction** Date: 10/06/2010

This proposal was also reviewed and approved by the following College Deans and Faculty Governance:

Dean of: **College of Arts and Sciences** Date: 10/04/2010

Dean of: **Phyllis J. Washington College of Education and Human Sciences**
Date: 10/21/2010

Dean of: **Libraries** Date: 10/25/2010

The proposal was reviewed and approved by the Graduate Council at the University of Montana
Date: 12/2010

The proposal was reviewed and approved by the Faculty Senate at the University of Montana
Date: 12/9/2010

[No outside consultants were employed for the development of this proposal.]



MONTANA COUNCIL OF TEACHERS OF MATHEMATICS

June 11, 2010

Dr. Rick Billstein
Department of Mathematical Sciences
The University of Montana
32 Campus Drive
Missoula MT 59812

Dear Dr. Billstein,

I am writing this letter on behalf of the Montana Council of Teachers of Mathematics (MCTM) in support of a Middle School Math Masters Program at the University of Montana. This is an unique opportunity for elementary teachers to further their math knowledge through a credited program. Ultimately the students of Montana would benefit the most. Algebra, a course taught to only a few middle school students in the past, is now a common class offering to more than half of the eighth graders in the state. Middle school math teachers need to have a deeper understanding of the material in order to teach this challenging course to eighth graders. The mathematics taught at the seventh and eighth grade level, not in an Algebra course, is much more challenging as well. More Algebra, Geometry, and Statistics and Probability are introduced at these levels. In order to have more confident mathematical students we need to have more confident mathematics teachers. A middle school masters program that focuses on content, pedagogy, and technology would greatly benefit teachers and students. MCTM, an organization dedicated to mathematical excellence is strongly in favor of this grant and supports the Middle School Math Masters Program. Please seriously consider their proposal. If you have any further questions regarding MCTM and our support, feel free to contact me at woodl@billings.k12.mt.us or phone me at (406) 690-5191.

Sincerely,

A handwritten signature in blue ink that reads "Lisa M. Wood". The signature is written in a cursive style with a large initial "L" and "W".

Lisa M. Wood, President
Montana Council of Teachers of Mathematics



22 June 2010

Professor Richard W. Billstein
Department of Mathematical Sciences
The University of Montana
Missoula MT 59812

Dear Professor Billstein,

Missoula County Public Schools strongly supports the “Enhancing Professional Knowledge of Middle School Mathematics Teachers (EPKM²)” project. We have a good working relationship with The University of Montana and would be very happy to collaborate once again on a much-needed project for our teachers and students.

The Missoula County Public Schools has worked this year with the University on a Mathematics Professional Development Academy to increase the understanding of the transition from K-12 to post-secondary education as well as to strengthen teacher knowledge of mathematics and statistics. This EPKM² project continues those efforts especially for middle school teachers. Teachers who teach middle grades mathematics are excited at the thought of being able to learn more content and pedagogical knowledge through the EPKM² project and to improve their students’ mathematics achievement! Our school and community would proudly welcome the opportunity to be involved with this project.

Sincerely,

A handwritten signature in blue ink that reads "Mark A. Thane".

Mark A. Thane, Executive Regional Director
Missoula County Public Schools

Department of Teaching & Learning
Administration Building
215 S. 6th St. W. Missoula MT 59801
406-728-2400, ext. 7021 Fax 406-329-5933
mthane@mcps.k12.mt.us
www.mcps.k12.mt.us

ITEM 150-1005-R0111

The University of Montana – Missoula
East Asian Studies Major

THAT

In accordance with Montana University System Policy, The University of Montana – Missoula requests approval from the Board of Regents of Higher Education to establish an Undergraduate Major in East Asian Studies.

EXPLANATION

Following on the formal approval given to a Central and Southwest Asian Studies major and a South and Southeast Asian Studies minor, the East Asian Studies major provides students with the necessary structure to pursue their undergraduate study of this dynamic geographic sub-region of Asia in the form of a major. The major brings together already existing courses under an interdisciplinary umbrella defined as a major that speaks to the needs of students seeking to study the peoples, cultures, politics and economic systems of China, Korea, Japan, and Vietnam in greater depth. Currently, there is no program in Montana that allows students to focus on undergraduate studies comprehensively on this region as an ever-increasingly important actor on the global stage.

ATTACHMENTS

Level II Request Form and Curriculum Proposal

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Item Number: **150-1005-R0111** Meeting Date: **January 13-14, 2011**
Institution: **The University of Montana** CIP Code: **05.0104**
Program Title: **East Asian Studies Major**

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

The University of Montana requests permission to establish an undergraduate major in East Asian studies on the Missoula campus.

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Curriculum Proposals

1. Overview

This is a proposal to create an interdisciplinary East Asian Studies major. While formally designated a “new” program, virtually all of the courses available in this proposed major have been available to students under a broad umbrella Asian Studies option in Liberal Studies. Our decision to create an independent major follows upon the formal approval given two other degree programs: Central/Southwest Asian Studies, which is now a major, and South/Southeast Asian Studies, which recently became a minor. We seek a stand-alone East Asian Studies major to provide students with the necessary structure to pursue their study of that vital geographic sub-region of Asia and to receive degree credit in the form of a major. As in the case of Central/SW Asian Studies, we are essentially repackaging a large number of existing courses to create a defined major that can be identified and listed in catalog listings under its own name and appeal to the needs of students wishing to study one or more East Asian culture in depth.

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

This major requires successful completion of 34 credit hours, including 10 credits or the second year equivalent of Chinese or Japanese language. As noted below, the major aims at providing UM students a broad understanding of the cultures of the dynamic East Asian region by requiring a spread of courses among China, Japan and either Vietnam or Pan-Asian religions/philosophies, while allowing some specialization in either China or Japan. It also seeks to ensure that students receive training in both the traditional cultures of the East Asian region (which represent major contributions to the world’s philosophical and artistic systems but also continue to exert a strong influence on the region today) as well more contemporary political, economic, and related trends affecting East Asia. We perceive the program preparing UM students to pursue graduate work in East Asian Studies, as well as careers in academe, government, education (middle and senior high school), business, law, and any other disciplines (e.g., environmental and climate change) in which Japan, China, Korea, and other East Asian countries are key global players.

3. Need

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

We feel that the need for a program dedicated to East Asia is almost essential for a university that seeks to provide its students with a broad global perspective. China produced one of the oldest and most influential civilizations in the world, and the Chinese Confucian culture was refined in Japan, in particular, to form a related but richly unique pattern of philosophy and government, as well a rich artistic aesthetic. In the last forty years, China, Japan and their neighbors have built on their rich cultural base to turn East Asia into the most dynamic region on the globe. In economic terms alone, East Asia currently controls more than half of the world’s wealth as well as more than half of its total trade, and the region has translated its economic might into strategic influence. Japan’s post-World War II technological modernization set the tone, as it joined with a new model of export-led economic growth during the 1980s to vault the nation into prominence as the world’s second largest economy. While Japan has retained its significance both culturally and economically, China has become the second global “phenomenon” to emanate from East Asia in our lifetime, as it has swept aside Maoism in a dizzying (and in some ways wrenching) reform movement that has now propelled the PRC into

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position as the globe's second largest economy, with Japan now holding place at number three. No major company can now expect to succeed without an understanding of China and Japan. East Asia also looms large as a strategic concern. As Japan has quietly become a military force, China has likewise used its wealth, trade and investment more boldly to become a global military and strategic force, one that has increasingly sought to sell "authoritarian capitalism" as a compelling alternative to the democratic model so long offered by the United States.

Other countries that might receive attention in the major are also significant. Korea is a major economic power and, as a counterpoint to an increasingly unstable regime in North Korea, is also strategically important in the region and the world. Finally, Vietnam, which we at UM also include under the East Asia rubric because of its long Confucian tradition and political dominance by China, is emerging after decades of communism to be one of the most vibrant states in the region.

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

Although we have taken pride in offering courses on East Asia that allow us to provide many students with at least some fundamental knowledge of this region, we think the creation of a formal and well-publicized major can enhance UM's ability to meet the needs of students seeking greater knowledge of this increasingly important part of the world. Offering students the opportunity to pursue a defined program of study that includes Japanese or Chinese language and instruction on the cultures, histories, as well as sweeping economic, social and political changes of the region comes at a timely moment, as it serves UM's strategic goal of increasing its international curricular offerings. No less important, it can be done with existing resources.

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

Interest in contemporary China is currently very high, sustaining a longstanding interest in the region by students at UM. No less telling is the continued vibrancy of Japanese language at UM. A record 411 students enrolled in Japanese unit courses in Fall semester 2010.

As a result of a PRC funded "Confucius Institute" run by the Mansfield Center, there is a growing focus on China in Montana high schools. In just its second year of operation the CI is teaching Chinese to about 50 students in four Missoula high schools and to another 90 across the state on-line in the first year of the new Montana Digital Academy. (Chinese language had never been taught in Montana's public schools prior to last year). We are cheered by the initial level of interest and have plans to dramatically expand this language instruction. In conjunction with parallel cultural programming and teacher training, we anticipate the creation of a "feeder" system of students going to UM who not only have a strong interest in China and the surrounding region, but sufficient Chinese background to seek real Chinese proficiency through this major.

Finally, although UM has long had an excellent study abroad program in Japan, with more than half a dozen major exchange partners, we have ramped up opportunities for study abroad in China and Vietnam that may draw more students to the major and assist those who pursue it. This includes two short term China study tours (in Chinese/East Asian Studies and business) that will take place in the summer of 2011 and a new intensive winter-term program, funded by a U.S. Department of State grant and created by the Mansfield Center, that focuses on climate change in Vietnam. In short, there is a sharp increase in East Asian activity on campus that will contribute either directly or indirectly to

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the proposed East Asian major.

4. Institutional and System Fit

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

While responding to the objective importance of East Asia, the creation of a major in East Asian Studies is consistent with the growth of the program at UM over time and a recent reorganization that now allows us to highlight existing offerings.

When East Asian studies first emerged at UM in the early 1980s, the University had much more breadth than depth in Asia-related fields. Moreover, several of the faculty with area expertise specialized in religious and cultural systems that had influence across a broad geographic spread across South, East, and Southeast Asia. Accordingly, when Asian Studies first was formally created as a minor overseen by a faculty team, East Asian studies became part of a broad interdisciplinary program that also included courses on South and Southeast Asian traditions.

Although logical at the time, the breadth of the Asian Studies minor gradually led some UM faculty to question its scope, especially as an increasing number of courses focusing on Central and Southwest Asia was added, and to raise concerns that it was becoming overly diffuse and lacking in structure or depth. Students were able to take broad array of courses that stretched across the entirety of “greater Asia.” This enabled them to graduate with general understanding of the peoples, cultures and geography of the continent from Japan all the way to North Africa, but often with little in-depth knowledge of any particular region. In response to this concern, individual academic programs focusing on specific regions within Asia began to expand their course offerings, enrollments and programmatic activities – a trend that led to the existence of a major and minor in Central and Southwest Asian Studies, and a minor in Southeast Asian Studies. While the humanities-based Asia Studies Option continues to have a valued place in Liberal Studies at UM, the broader Asian Studies minor was dissolved in 2009. In parallel with the on-going regionalization trend, we request that a full major in East Asian Studies to be put into place to enable a more concentrated focus on that area.

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

Despite some recent faculty retirements, there are sufficient academic offerings and resources at UM to sustain an excellent East Asia program major. Eight core faculty spread across Modern and Classical Languages and Literatures, History, Religious Studies and the Mansfield Center (all with Ph.Ds and area language fluency) teach East Asian subjects exclusively. They are supplemented by additional faculty in other departments who regularly teach courses on East Asia (largely China) in fields ranging from management to climate change. The Mansfield Center also brings a visiting scholar from the region to enhance UM offerings on an annual basis (most recently via an exchange agreement with the history faculty at Vietnam National University in Hanoi). As a result, students in the new major will be able to draw from over 40 courses focusing on Japanese and Chinese language, and Chinese, Japanese (and to a much lesser extent Vietnamese) history, culture, politics, economic systems, and foreign policy, all of which are taught regularly within a three year cycle.

The Mansfield Center has become a more prominent contributor to the University and to East Asian Studies curriculum, linkages, and programming. In addition to funding visiting professors, and

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administering the Confucius Institute, for example, the Center has recently obtained \$700,000 in grant funding to broaden UM's East Asian involvement related to the environment.¹ The Center has also been able to draw on two China experts employed by a separate \$5m Defense Critical Language and Culture program to provide occasional China-related courses to UM students, and continues to offer scholarships to several UM students each year who study Chinese language and culture. The Center also brings top experts to campus from East Asia through Chinese leadership and faculty mentoring programs, as well as through the annual Mansfield Conference and occasional symposia.

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

The proposed major will complement, rather than compete with, existing programs with a focus on Asia at UM. Significantly, our colleagues in Liberal Studies share our view that the existing Asian Studies Option and our proposed major cannot only coexist, but that a new and separately listed program on East Asia can promote interest in the broad array of Asia-focused offerings at UM. Our Japanese section sees the East Asia major having strong appeal for many students who take substantial coursework on Japan and up to two years of Japanese language but are interested in China and Japan equally or wish to obtain a broader background in East Asian studies. We also see the major as having appeal, respectively, to those who now take the Chinese language and economic development minors and are seeking the opportunity to expand their study into a full major. In addition, we anticipate at least small numbers of students with a strong interest in business, political science history, and environment/climate change deciding to choose East Asian Studies as a co-major.

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

The creation of a new major in East Asian Studies is very consistent with UM's strategic goals. Responding to the expressed need to provide UM graduates with more instruction on a key geographic area and the University's tradition and existing strengths, a deans-level International Strategy Committee tasked with guiding the allocation of program development and resources last year put China/East Asia at the top of its list. Former Arts and Sciences Dean Gerald Fetz had also signaled his recognition of Japan by expressing support for a fourth line in Japanese, although fiscal issues ultimately prevented that line from being funded. Increased attention to East Asia is also reflected in the decision in 2009 to form an "Asian small group" consisting of the Provost, the Dean of Arts and Sciences, the Mansfield Center Director, and the Associate Provost for International Programs. The group meets monthly to guide strategy and foster communication on cross-campus programming relevant to the area.

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.

¹ For example, a \$440,000 environmental grant secured by the Center will bring young Chinese professionals to campus for training in the area, and a three year program grant is bringing outstanding young undergraduates from Vietnam and other SE Asian countries to campus for study. Another grant has enabled us to establish a winter term program on climate change in Vietnam. UM has also formally been invited to join just three other American universities (all Research I institutions) in Mekong 1000, which will bring young Vietnamese professors to campus long term for graduate training in diverse fields.

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We see the new East Asian major as complementing the more modest East Asia program at MSU, which now has a Japanese language program and an excellent Japanese historian, but has just begun instruction in beginning Chinese and has neither an East Asia major or minor. (So far as we are aware, MSU has no courses dedicated fully to Chinese history, culture, politics, economics, or related topics.) Plans for additional UM online courses in the East Asia major (beginning with a new offering on "The Strategic Environment in East Asia" slated for Spring 2012) will make them more easily accessible to interested students at other institutions. These students will be encouraged to participate in the new study abroad opportunities as appropriate. Outside of MSU, no other institution in the state has an East Asia program. Very strong programs exist at the University of Washington, Brigham Young University, and the University of Minnesota.

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 new major will have the following requirements:

1. Successful completion (grade of C or higher) of a total of **16 credits in lower division East Asia courses** in the humanities, social sciences or language:
 - a. Successful performance (grade of C or higher) in two "layers" of intro/Lower Division courses:
 - i. Either **EA 102** (Introduction to East Asian Studies or **HIST 240** (East Asian Civilizations)
AND
 - ii. Either **JPNS 150** (Japanese Culture and Civilization) or **CHN 211** (Chinese Culture and Civilization)
 - b. Successful completion (grade of C or higher) of second year (10 credits) or the equivalent of either Chinese or Japanese language.
2. Successful performance (grade of C or higher) in a minimum of **18 additional credits in upper division East Asian courses**, either humanities or social science (no strictures placed). Among those 18 credits, students would be required to include 2 courses (6 credit hours) devoted to Chinese studies, and 2 courses (6 credit hours) in Japanese studies. The remaining two selected courses (6 credit hours) may taken from any other East Asia courses, including those dedicated to Japan, China, Viet Nam, pan- East Asia, or Buddhism, as available). At least one of the six courses taken as part of the upper division requirement must be at the 400 level.

Total Credit requirement: 34 credit hours.

Upper Division credit requirement: 18 credit hours

Language requirement: completion of second year Chinese or Japanese or equivalent.

Detailed List of Courses Supporting the Major:

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Introductory courses:

U EAS 102 Introduction to East Asian Studies 3 cr. An introduction to the modern history of China and Japan and to contemporary trends in those two countries that have particular import to the U.S. and East Asia.

U HSTR 240 East Asian Civilizations 3 cr. An introduction to East Asia, its geography, cultures and ways of thinking, presented in geographical and historical context. Focus on China and Japan.

U JPNS/MCLG 150H Japanese Culture and Civilization 3 cr. Offered intermittently. The historical, religious, artistic, literary and social developments in Japan from earliest times to the present.

U CHN 211H Chinese Culture and Civilization 3 cr. Offered intermittently. An introduction to the historical, intellectual, political, literary and social developments of China from early times to the present.

Additional Undergraduate Courses:

U 161H Introduction to Asian Humanities 3 cr. Offered autumn. Coreq., LS 151L or consent of instr. Selective survey of classical South and East Asian perspectives on the humanities as introduced in LS 151L. Hinduism, Confucianism, Taoism and Buddhism are the primary traditions considered.

U SSEA/RLST 232 H (RELS 232H) Buddhism 3 cr. Offered autumn. A historical introduction to the development of Buddhist thought and practice in the cultures of Asia and the West.

U 233 (RELS 233) Traditions of Buddhist Meditation 3 cr. Offered autumn. Prereq. or coreq., RLST 232 H (RELS 232H). A critical and phenomenological introduction to meditation as the Buddhist method of systematic inquiry into the nature of the mind and its role in the construction of experience.

U 236 (RELS 236) Chinese Religions 3 cr. An exploration of the development of thought and practice in and the interactions between the major religious movements of Chinese religion: Confucianism, Taoism, Buddhism, and folk religion/animism.

U 238 (RELS 238) Japanese Religions 3 cr. Offered at least once every two years. An introductory exploration of Japan's unique religious synthesis of Buddhist, Shinto, Taoist, Confucian and folk/shamanistic traditions.

U 195 and 295 Special Topics Variable cr. (R-6) Offered intermittently. Prereq., consent of instructor. Experimental offerings of new courses or one-time offerings of current topics.

U CHIN/JPN 101 and 102 10 cr Elementary Chinese/Japanese I

U CHIN/JPN 201 and 202 10 cr Intermediate Chinese/Japanese

Upper Division Courses:

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UG 311L Classical Japanese Literature in English Translation 3 cr. Same as MCLG 311. Introduction to the classical literature of the Japanese court, ca. 7th to 14th century. Kojiki, Man'yoshu, Kokinshu, Genji Monogatari, and other major classics of the period.

UG 306 Japanese for Business and Tourism 3 cr. Prereq., JPNS 202 or equiv. Offered autumn. Vocabulary and idiom of oral and written communication in business and tourism. Professional, ethical practices and special etiquette.

UG 312L Japanese Literature Medieval to Modern Times 3 cr. Offered spring. Same as MCLG 312. Introduction to the literature of Japan from the 15th to the 20th century.

U 313L Classical Chinese Poetry in English Translation 3 cr. Offered intermittently. Same as AS, CHIN, and LS 313L. The works of major Chinese poets to 1300 A.D.

U 314L Traditional Chinese Literature in English Translation 3 cr. Offered intermittently. Same as AS, CHIN, and LS 314L. Highlights of Chinese literature to 1800; includes philosophy, poetry, prose, and fiction.

U 380 Chinese Folktales 3 cr. Same as LS 311. Offered intermittently. The study of the aspirations, desires, loves, moral and aesthetic values of the Chinese people as expressed in their folk literature.

UG 386 History of the Japanese Language 3 cr. Offered intermittently. Prereq., JPNS 202. Overview of Japanese language history from earliest times to the modern day. Topics include the development of writing systems, changes in phonology, and issues concerning orthography and lexicon.

U 324 (PSCI) Sustainable Climate Policies: China and the USA, 3 cr. Explores historic, current, and future greenhouse-gas (GHG) emissions of the United States and China, reasons why both are the two largest CO₂ emitters, and prevailing national and subnational government policies and nongovernmental actions that affect emissions mitigation and adaptation.

U HSTR 343 (HIST 381H) Modern Japan. Survey that focuses on Japan's transformation from a feudal Shogunate to a modern state during the Meiji Restoration and subsequent Taisho period, including an examination of the political forces and social strains that led to Japan's involvement in World War II.

U 354 (RELS 354) Topics in East Asian Religions 3 cr. (R-6) Offered at least once every three semesters, no prerequisites. This course will examine select topics of central importance with respect to the history of interaction between the major religions (Confucianism, Taoism, Buddhism, and folk animism and shamanism) of East Asia.

UG 360 (RELS 360) Classics of Buddhist Literature 3 cr. (R-6) Offered spring. Close reading of a selection of core Buddhist texts drawn from various Asian cultures and spanning the three main phases of the tradition.

U 367 (RELS 367) Approaches to the Study of Zen Buddhism 3 cr. Offered at least once every two years; no prerequisites. An exploration of both key developments in the history of Zen Buddhist

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thought and practice and the variety of ways that Zen has been studied by Western popular and academic cultures.

U 369 (RELS 369) Contemplative Tradition of Asia 3 cr. Offered at least once every two years. An exploration of the rich and diverse approaches to mental transformation and cultivation of gnosis as developed by several of Asia's major religious traditions, such as Buddhism, Jainism, Hinduism, Taoism, and Confucianism.

U HSTR 380H (HIST 331H): Modern China. Survey of China's 19th century efforts to confront internal rebellions and the threat of the West and the ensuing, tortured reform period. Includes an examination the Revolution of 1911, the rise of Chinese nationalism and the competition between the Nationalists and Communists.

U 390 Supervised Internship 1–12 cr. Offered intermittently. Paid work experience in Japan, combined with language/culture course work by correspondence directed by UM department staff.

U 391 (395) Special Topics Variable cr. (R–12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one–time offerings of current topics. Includes course currently taught on Japanese film.

U 393 Omnibus Variable cr. (R-10) Offered intermittently. University omnibus option for independent work. See index.

U 398 Internship Variable cr. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

U CHIN/JPN 301 and 302 10 Advanced Chinese/Japanese

Above 400 level courses:

UG 411 Modern Japanese Writers and Thinkers 3 cr. (R–6) Offered autumn or spring. Prereq., JPNS 302. Introduction to the important writers, thinkers, and poets of the 20th century. Readings include a wide range of topics in the humanities, including philosophy, history, sociology, and the arts.

UG 412 Introduction to Classical Japanese 3 cr. Offered spring. Prereq., JPNS 302. Introduction to the language of the Japanese court, ca. 7th to 14th century. Essential features of grammar, sentence structure, vocabulary, and orthography.

UG 431L Post–War Japanese Literature 3 cr. Offered spring odd–numbered years. Same as MCLG 431L. Introduction to issues, literature, and criticism of Japanese literature from the postwar (1945) through the contemporary period, using texts in English translation.

UG 415 Advanced Japanese for Professionals 3 cr. Offered spring even–numbered years. Prereq., JPNS 302. A high–level professional language course covering all coordinated reading, writing, and

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speaking skills. Intended for majors hoping to enter the Japanese job market and prepare for professional testing in Japan.

UG HSTR 432 Tradition and Reform in China 3 cr. Detailed discussion of the epochal changes that swept China between the mid-19th and the mid-20th century. After an initial discussion of some broad Chinese historical trends, focus will be on 19th century, when China's last dynasty tried unsuccessfully to come to terms with massive economic dislocations, two great rebellions, and the entry of the west. Class will then turn to the 20th century reform movement that spawned the Maoist revolution and evaluate its record.

UG PSCI 422/ HSTR 449 Revolution and Reform in China 3 cr. After briefly reviewing the reasons for the communist victory in China and the nature of the Mao Zedong regime, this course focuses on the Dengist and post-Deng governments that destroyed it. Major attention is given to the nature and impact of economic reforms contributing to the "Chinese economic miracle," including their impact on Chinese domestic society and China's position in East Asia and the world.

UG 495 Special Topics Variable cr. (R-9) Offered intermittently. Experimental offerings of visiting professors—including Visitors from China and Vietnam brought in annually by the Mansfield Center--experimental offerings of new courses, or one-time offerings of current topics.

UG 491 (495) Special Topics 1–9 cr. (R–9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one–time offerings of current topics.

UG 495: The East Asian Strategic Environment 3 cr. (To be offered 1st time in Spring 2012). Examination of the complex strategic situation in contemporary times, including the nature and impact of the threat posed by North Korea, China's rapidly changing military and strategic capabilities and intentions, and how Japan and Taiwan are calibrating their approaches in light of their perceptions of these forces.

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

We are confident the proposed major can be sustained over the long term. As noted, although the East Asia major will be new, a large core of courses on East Asia has existed at UM for more than twenty years. Introductory courses on East Asian culture have routinely drawn 40-60 students; two-hundred level courses in history/culture/religion range from 25-40 and four-hundred level history/politics courses 20-30. Our beginning Chinese language classes usually begin with about 20-25 students before slowly tapering to about 8-10 (as is characteristic for difficult languages) by the third-year level. Japanese does even better, typically beginning with 25 beginning students in three first-year sections and tapering off to about 15 in its third-year classes. Three Japanese language professors have averaged in excess of 150 students for five years. Students can obtain a minor in Chinese language and a major and minor in Japanese. We anticipate a sustained growth in those numbers as the East Asia major becomes more visible as a separate academic program and is more effectively publicized.

6. Resources

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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.

Our hope is that the formalization of support for East Asia in the strategic planning process will allow for expansion of faculty resources dedicated to East Asia receiving University priority when resources permit, depending on growth of the program. The major we propose requires no new courses or faculty resources. The requisite courses are taught on an ongoing basis by faculty members in Modern and Classical Languages and Literatures (who teach not only language but culture), History, Political Science, and Religious Studies.

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.

In the future, more faculty lines would help us reach the goal of making East Asian Studies a hallmark of the University. In response to a request from the Provost, the Mansfield Center will work together with relevant faculty to create a plan (to be submitted for review in fall 2011) that suggests a strategy and timetable for future hires. The plan is anticipated to suggest greater coverage in social sciences (e.g., political science, sociology, anthropology, or geography) and the modern/contemporary period.

7. Assessment

How will the success of the program be measured?

If the East Asian major is approved, we will systematically track both class-by-class enrollments within the major and the total number of declared majors and graduates on an annual basis, in order to monitor the contributions the program is making to UM students and our effectiveness as instructors and promoters of the major. In order to monitor quality, we will also approach the Dean of Arts and Sciences with a proposal to allow a small committee of East Asian faculty access to teaching evaluations for courses within the major. Finally, the Mansfield Center will work with the College of Arts and Sciences (and fund) an outside evaluation of the new major five years after its launch.

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.

A reorganization that would give East Asia its own identity and separate listing has been discussed among relevant faculty and with the Provost, the Dean of Arts and Sciences, the Director of the Mansfield Center and the Associate Provost for International Programs for several years—for all the reasons noted above. We initially entered into discussions with East Asian faculty thinking it might be more appropriate to create a minor and then build toward a major. However, when we surveyed our collective course offerings, it became clear that a viable and sustained major was possible. The Mansfield Center Director followed up by finalizing the list of electives and drafting this document, which was sent to East Asian faculty by email and refined with their feedback. We are pleased to offer this proposal for a major that we believe is important for UM and other Montana students, and that we feel is wholly consistent with UM's strategic vision and the state's economic needs.

ITEM 150-1601-R0111

The University of Montana Western

New Majors in the Department of History, Philosophy, and Social Science

THAT

The University of Montana Western requests that new B.A. majors in Anthropology and Sociology; Global Politics; History-American; Modern History; Interdisciplinary Social Science; and Psychology be created. Montana Western also requests to establish new B.A. minors in Anthropology; Global Politics; History; Legal Studies; Psychology; Sociology.

If permission for these changes is granted, Montana Western wishes to concurrently eliminate the current B.A. Option in Social Science and all of its nine associated Related Areas (sub-options)

EXPLANATION

Students enrolled in the Department of History, Philosophy, and Social Science's B.A.: Social Science Option and a HPSS Related Area typically do so with the intent of preparing for a graduate program, the expressed mission of said degree program. Graduate school applications have been confounded by the nature of the Montana Western transcript which does not list the related area as a "major" even though the coursework and credits are similar to single-discipline majors at other institutions. The current proposal will make it possible for students to be issued a transcript and a diploma that actually reflects their course of study. Additionally, the proposal provides for three "tracks" within the Interdisciplinary Social Science B.A. programs so that students can more easily tailor the programs to their interests and career plans.

ATTACHMENTS

Level II Request Form and Curriculum Proposal
Appendix: Program Details

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: 150-1601-R0111

Meeting Date: January 13-14, 2011

Institution: The University of Montana Western

CIP Code: **See Below**

Program Title: New Majors in the Department of History, Philosophy, and Social Science

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

This proposal is a request for B.A. Majors in the following areas: Anthropology & Sociology; Global Politics; Modern History; Interdisciplinary Social Science; and Psychology. The creation of new Minors in the following areas is also requested: Anthropology; Global Politics; Modern History; Legal Studies; Psychology; and Sociology. The current B.A. Social Science Option and all connected Related Areas would be eliminated if the new degree structure is granted.

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Curriculum Proposals

1. Overview

Proposal to move from current B.A.: Social Science Option and 9 Related Areas (sub-options) to standard majors and minors.

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

This proposal is a request for B.A. Majors in the following areas: Anthropology & Sociology; Global Politics; Modern History; Interdisciplinary Social Science; and Psychology. The creation of new Minors in the following areas is also requested: Anthropology; Global Politics; Modern History; Legal Studies; Psychology; and Sociology. The current B.A. Social Science Option and all connected Related Areas would be eliminated if the new degree structure is granted.

3. Need

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

Students enrolled in the Department of History, Philosophy, and Social Science BA: Social Science Option and a HPSS Related Area typically do so with the intent of preparing for a graduate program, the expressed mission of said degree program. Reviewers of graduate school applications have been confounded by the nature of the Montana Western transcript which does not list the related area as a “major” even though the coursework and credits are similar to single-discipline majors at most other institutions. The current proposal will make it possible for students to be issued a transcript and a diploma that actually reflects their course of study. Additionally, the proposal provides for two “tracks” within the Interdisciplinary Social Science B.A. programs so that students can more easily tailor the programs to their interests and career plans.

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

The first or “Interdisciplinary/Major+Minor Track” is the option expected to be preferred by most students. With this program of study students would select both a Major and Minor field within the Social Sciences. Majors can be pursued in the following areas: Anthropology & Sociology, Global Politics, Modern History, or Psychology. Students would be able combine any of these social science content Majors with a double Major in Secondary Education. The second or “Interdisciplinary/Multiple Minor Track” (B.A. Major in Interdisciplinary Social Science) provides a more flexible degree program for students without an overriding interest in a particular social science. This track is well-suited for students planning on law school or graduate school in an interdisciplinary program (cultural studies, ethnic studies, women’s studies, etc.), and may provide the fastest time to completion for transfer students.

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

It is anticipated that the steady rise in demand for HPSS Department major programs to continue, with particular growth in the History and Psychology majors (and Anthropology, Global Politics, Legal Studies, and Sociology minors) within the “Interdisciplinary/Major+Minor Track” in the next 3-5 years. These projections are based mainly on current enrollment trends and communication with current, exiting, and recent program graduates.

4. Institutional and System Fit

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

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These changes, while possibly appearing on paper as an expansion of programs, actually represent a streamlining of the social science offerings at Montana Western. Our current program offers a B.A. Option with a core of social science courses (46-52 credits) all program students take, and a list of Related Areas (24-32 credits) in which students choose to focus. There are currently nine such Related Areas listed with the Social science Core in the 2010-11 Montana Western catalog (Note: although students may select any Related Area – not just those listed in connect to a Core, nearly all Social Science students choose from the nine listed). These new proposals would both reduce the scope and extent of our programs to reflect current staffing, student demand, and potential duplication within the MUS. The nine current Related Areas will be reduced to five B.A. Majors.

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

These proposals have been the product of long-term collaboration and negotiation with the UMW Education Department to better serve the need of students seeking certification in History and Social Science Broadfield. Students under the proposed changes would double major in a content field plus Secondary Education, thus being "Highly Qualified Teachers" at graduation under NCLB (No Child Left Behind) rules.

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

N/A

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

These changes will allow the HPSS Department to best promote the goals of Montana Western's Strategic Plan, in particular: Goal #1 Improve undergraduate education, Goal #2 Increase enrollment through enhanced affordability, access, success and retention and increase graduation rates, and Goal #5 Strategically position the university for maximum efficiency and long-range success.

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

The proposed B.A. Major in Modern History is built on the same courses currently required to satisfy the Social Science Core and the History Related Area. By creating this specific Modern History major Montana Western more accurately reflects its current state of staffing (no pre-modern historian on staff) and course offerings (no pre-modern, upper-division courses in history are offered), and reduce duplication with other MUS units (UMM, MSU, and MSUB all have generic, non-concentration History majors). The B.A. Psychology Major draws from the existing list of PSYX courses, with one exception – the proposal creates one new course (PSYX 356) while dropping one old course (PSYX 252). The B.A. Psychology Major would serve those students who plan on clinical psychology Master's programs, as well as those going on to graduate work in experimental psychology and more competitive/advanced clinical psychology. The proposed B.A. Global Politics Major both reflects current staffing levels, and distinguishes Montana Western's program from the generic Political Science majors found at other MUS units (UMM and MSU do offer International Relations Options within their Political Science Majors). The new B.A. Anthropology & Sociology Major combines those two disciplines to reflect that nearly all coursework in those areas at Montana Western is offered in interdisciplinary settings (under the ISSS prefix), with minimal staffing (1 FTE faculty). Finally, the B.A. Interdisciplinary Social Science Major will be a totally unique program within the MUS, the department's most flexible degree track for

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transfers students, and the means by which students can also pursue a double-major with Secondary Education leading to a Social Science Broadfield teaching certification.

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.

See attached UMW Curriculum Proposals #66 (revised).

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

Students planning to graduate in 2010-11 will complete the current program. Students aiming for graduation in 2012 and beyond will be advised into the new majors/minors beginning in Fall 2011. They would also have the option of continuing with the current programs although few would be expected to do so. It is expected that the total number of majors in the department will continue to grow slowly, while the distribution of those students within the new majors will have to be observed and documented in the first few years of implementation.

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.

Additional faculty resources would not be needed to offer these new programs. However, that does not account for staffing resource pressure on the HPSS Department arising from our service obligations to General Education and our Teacher Education Program (TEP). Despite the new proposals' streamlining of departmental program staffing needs, the department remains understaffed under either the current program or the new proposed programs. Adding new faculty to the department would remain a high campus priority, either with the old or proposed new programs.

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 new program structure would not alter our need for additional resources. See HPSS Experiential Learning Report and Program Review for more details on those needs.

7. Assessment

How will the success of the program be measured?

Assessment for each of these programs will be carried out for the graduate outcomes listed on the first page of the Program Details. These assessment plans will follow in the model of our current plan, which employs both primary (observed performance) and secondary (survey) assessment tools collected at both the benchmark and capstone levels.

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.

These proposals have been developed out of extensive research on interdisciplinary social science instructional models from across the English-speaking world; collaborative work within the Department of History, Philosophy, and Social Sciences; communication with current, graduating, and past program students; and has passed through the Montana Western internal curriculum process, including extensive

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collaboration with the Montana Western Education department on teaching certification coordination. They have passed through the entire campus approval process including the Curriculum Committee, Faculty Senate, Provost, and Chancellor.

Academic Year Proposal Submitted 2008-2009

For: 2010-2011??? Catalog



Date Received _____
By _____

Level I - Campus Level Approval
 Level II - OCHE Approval
Level III - BOR Approval

Curriculum Proposal Form

Department or Program Approval
 Date _____ Initials _____

General Education Committee (if appropriate)
 Date _____ Initials _____

Proposed as Gen Ed Course? Yes No

Gen Ed Category:

Course Fee Attached to Any Course?

No Yes (Completed Course Fee Request Form attached)

Forms just submitted to Provost/Business Services

Curriculum Committee Use Only

Proposal Tabled _____
Date Initials

Approved _____
Date Initials

Rejected _____
Date Initials

Withdrawn _____
Date Initials

Faculty Senate Approval _____
Date Initials

Provost Approval _____
Date Initials

Chancellor Approval _____
Date Initials

Type of Proposal (check all that apply)

- Program Requirement Change
- Course Number Change
- Course Title Change
- Course Credit Change
- Course Description Change
- Prerequisite Change
- Delete Course from Catalog
- New Course
- Other (describe): SEE BELOW

For Curriculum Committee Use Only:

Submitted by: H. Mark Krank and Seán Eudaily

Department (Program) contact person: Seán Eudaily – HPSS Chair

Succinct Statement of Proposed Change: (attach shell syllabus for new course(s) that includes course description, course outcomes, and assessment information/tools)

New degree proposal for BAs in the following major areas: Anthropology & Sociology, Global Politics, Modern History, Interdisciplinary Social Science, and Psychology. Also creates minors in the following areas: Anthropology, Global Politics, Modern History, Legal Studies, Psychology, and Sociology. Also includes creation of 1 new PSYX course. Current BA Social Science Option and all connected Related Areas to be put on moratorium.

Provide assessment information supporting the request (rationale):

Students from the Department of History, Philosophy, and Social Science BA: Social Science Option and a HPSS Related Area do so with the intent of preparing for a graduate program, the expressed mission of said degree program. Graduate school applications have been confounded by the nature of the Montana Western transcript which does not list the related area as a “major” even though the coursework and credits are similar to single-discipline majors at other institutions (including UM). The current proposal will make it possible for students to be issued a transcript and a diploma that actually reflects their course of study. Additionally, the proposal provides for three “tracks” within the Interdisciplinary Social Science BA programs so that students can more easily tailor the programs to their interests and career plans. The first or “Interdisciplinary/Major+Minor Track” is the preferred option, where students would select both a major and minor field within the Social Sciences. This track can be pursued in the following areas: Anthropology & Sociology, Global Politics, Modern History, or Psychology. The second or “Interdisciplinary/Multiple Minor Track” provides a more flexible degree program (BA in Interdisciplinary Social Science) for students without an overriding interest in a particular social science. This track is well-suited for students planning on law school or graduate school in an interdisciplinary program (cultural studies, ethnic studies, women’s studies, etc.), and may provide the fastest time to completion for transfer students.

REVISIONS: This proposal (as amended and passed by Faculty Senate on 10/12/09) was subjected to a few revisions based upon the feedback generated by our External Review in particular and our Program Review in general, as well as continuing collaboration with the Education Department on paths to certification. These changes fall in three categories: credit reduction, revised capstone options, and refining the “BA content major + Secondary Education Major” concept.

- *Credit Reduction:* All majors have now been standardized to 40 credits. This is a reduction of 8 credits in the Anthropology & Sociology Major, and 4 credits in the Psychology Major. All minors have been standardized to 24 credits. This is a reduction of 4 credits in both the Anthropology Minor and the Sociology Minor.
- *Revised Capstone options:* In order to achieve two of the recommendations from our External Review (stronger non-graduate/professional school track, and increased options for interdisciplinary contact across the new majors/minors) we have added a third capstone option in each major. In addition to the choice between a 4 credit Internship or Senior Thesis/Project, students may now select an additional 4 credit 494 Seminar course from any discipline in the HPSS Department. This provides an additional opportunity for interdisciplinary experience at the senior level. Students selecting this option would choose one seminar paper/project to present at the Campus Research Symposium and to serve as the basis of their critical thinking/research, written communication, and oral communication assessments.
- *Double Major/certification:* In anticipation of the current Secondary Education curriculum proposal being passed, our program has been updated to reflect the proposed 30 credit Teacher Education Program. HPSS/Secondary Education double majors will now have the same capstone options as other HPSS majors, with the Student Teaching requirements moved to the list of additional requirements for certification advising protocols (which will appear in both the Interdisciplinary Social Science and Secondary Education sections of the catalog). One additional benefit to this approach is that a student who pursued the HPSS/Secondary Education Double Major but decided (or was advised) against student teaching would neither be delayed in graduating nor required to go back and add an additional content minor.

REVISIONS #2: This proposal (as amended and passed by Faculty Senate on 10/12/09) was subjected to a few revisions based upon the objections of the UM-Missoula Provost. These include the collapsing of the two History (American and European Focus) majors into a single “Modern History” major (in this proposal), and dropping the proposed new BS Biopsychology major (found in a separate proposal).

Attach new or revised information as it should appear in the Catalog (include course rotation(s) and/or revised degree requirements, if applicable; **course descriptions should include assessment and experiential learning activities**) SEE ATTACHED PAGES.

INTERDISCIPLINARY SOCIAL SCIENCES BACHELOR OF ARTS DEGREES

Program Mission Statement

The mission of the BA degree programs in the Interdisciplinary Social Sciences is to establish an integrated, multidisciplinary foundation for more focused study in one of the Major Areas offered by the department. Together, a departmental Major and Minor Area or the Interdisciplinary Social Science major are intended to prepare students for entry into graduate or professional programs.

Graduate Outcomes

- **ANTHROPOLOGY & SOCIOLOGY MAJOR**
 - Graduates demonstrate a comprehension of human groups and how they develop, how they are structured, and how they function.
 - Graduates possess written and oral communication skills necessary to demonstrate problem-solving and technological skills consistent with the objectives of the Anthropology & Sociology Major.
 - Graduates can demonstrate the ability to carry out independent, original scholarly work, which includes the ability to: identify and formulate problem statements appropriate to the academic discipline; select matching investigation methods; and collect, analyze and interpret information.
- **GLOBAL POLITICS MAJOR**
 - Graduates demonstrate a comprehension of and ability to apply political thinking, defined as the ability to interpret the concepts of government, knowledge, and subjectivity, supported by the use of legal, historical, and sociological evidence to pose and answer questions relating to the distribution and exercise of power as well as the evaluation of how power should be distributed and exercised throughout the world.
 - Graduates possess written and oral communication skills necessary to demonstrate problem-solving and technological skills consistent with the objectives of the Global Politics Major.
 - Graduates can demonstrate the ability to carry out independent, original scholarly work, which includes the ability to: identify and formulate problem statements appropriate to the academic discipline; select matching investigation methods; and collect, analyze and interpret information.
- **MODERN HISTORY MAJOR**
 - Graduates learn to think historically, meaning: understanding the importance of chronology in determining cause and effect relationships between events; developing an ability to effectively compare the effects of similar events in different contexts (recognizing how the past and present are connected); and developing the ability to effectively compare and evaluate varied interpretations of the same events or issues.
 - Graduates possess written and oral communication skills necessary to demonstrate problem-solving and technological skills consistent with the objectives of the Modern History Major.
 - Graduates can demonstrate the ability to carry out independent, original scholarly work, which includes the ability to: identify and formulate problem statements appropriate to the academic discipline; select matching investigation methods; and collect, analyze and interpret information.
- **INTERDISCIPLINARY SOCIAL SCIENCE MAJOR**
 - Graduates possess written and oral communication skills necessary to demonstrate problem-solving and technological skills consistent with the objectives of the Interdisciplinary Social Science Major.
 - Graduates can demonstrate the ability to carry out independent, original scholarly work, which includes the ability to: identify and formulate problem statements appropriate to the academic discipline; select matching investigation methods; and collect, analyze and interpret information.
- **PSYCHOLOGY MAJOR**
 - Graduates demonstrate an understanding of the basic history, theories, and research methods of psychology as the scientific study of the thoughts and actions of individuals.
 - Graduates possess written and oral communication skills necessary to demonstrate problem-solving and technological skills consistent with the objectives of the Psychology Major.
 - Graduates can demonstrate the ability to carry out independent, scholarly work, which includes the ability to: identify and formulate problem statements appropriate to the academic discipline; select matching investigation methods; and collect, analyze and interpret information.

Assessment

The graduate outcomes for the BA: Interdisciplinary Social Sciences degree programs are assessed through the graduate/exit survey, alumni survey, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BA: Interdisciplinary Social Sciences degree programs are available on the web at www.umwestern.edu/administration/vcaa/accreditation/accsocial/.

BA: ANTHROPOLOGY & SOCIOLOGY

CREDIT SUMMARY – General Education, Major, & Minor

GENERAL EDUCATION – see page XX

General Education Credits 32

Highly Recommended General Education Courses:	
PHIL 100 Intro to Philosophy	4
STAT 121 Probability	4

ANTHROPOLOGY & SOCIOLOGY MAJOR

Major+Minor Credits 64

ISSS 222 Qualitative Research Meth For Soc Sci	4
Select 1 from the following:	4
ANTH 105 Intro to Cultural Anthropology (4) SOCI 101 Intro to Sociology (4)	
ISSS 315 Political Anthropology & Sociology	4
ISSS 425 Montana Indian Sovereignty	4
ISSS 450 Social Stratification	4
ISSS 475 Cultural Ecology	4
ISSS 484 Economic Anthropology & Sociology	4
ISSS 485 Gender/Econ/Social Change	4
Select 1 from the following:	4
ANTH 494 Seminar/Workshop (4) SOCI 494 Seminar/Workshop (4)	
Select 1 from the following ISSS Minors (non-ISSS Minors by departmental permission only):	24
Global Politics (24) Modern History (24) Legal Studies (24) Psychology (24)	
Select 1 from the following Capstone options:	4
ANTH/SOCI 498 Internship (4), or ANTH/SOCI 499 Senior Project/Thesis (4), or Select 1 HPSS 494 Seminar course (4)	

ELECTIVE REQUIREMENTS

Elective Credits 24

Select from any catalog courses.	24
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TOTAL CREDITS REQUIRED 120

BA: GLOBAL POLITICS

CREDIT SUMMARY – General Education, Major, & Minor

GENERAL EDUCATION – see page XX

General Education Credits 32

Highly Recommended General Education Courses:	
PHIL 100 Intro to Philosophy	4
STAT 121 Probability	4

GLOBAL POLITICS MAJOR

Major+Minor Credits 64-70

ISSS 222 Qualitative Research Meth For Soc Sci	4
Select 1 from the following:	4
ISSS 121 American National & State Govt (4) ISSS 202 Political Geog of Rocky Mt West (4) PSCI 294 Seminar/Workshop (4)	
ISSS 201 The World Economy	4
ISSS 213 Intro to Global Politics	4
PSCI 250 Intro to Political Theory	4
Select 3 from the following:	12
ISSS 321 Comparative Politics (4) PSCI 331 Intntl Relations Theory (4) ISSS 341 Political Economy (4) PSCI 471 American Constitutional Law (4)	
PSCI 494 Seminar/Workshop	4
Select 1 from the following ISSS Minors (non-ISSS Minors by departmental permission only), or the Secondary Education Major ¹ :	24-30
Anthropology (24) Modern History (24) Legal Studies (24) Psychology (24) Sociology (24)	
Select 1 from the following Capstone options:	4
PSCI 498 Internship (4), or PSCI 499 Senior Project/Thesis (4), or Select 1 HPSS 494 Seminar course (4)	

ELECTIVE REQUIREMENTS

Elective Credits 18-24

Select from any catalog courses.	18-24
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TOTAL CREDITS REQUIRED 120

¹ Certification in *Secondary Education: Social Science Broadfield* would require additional coursework described in the advising protocol on page xx.

BA: MODERN HISTORY

CREDIT SUMMARY – General Education, Major, & Minor

GENERAL EDUCATION – see page XX

General Education Credits 32

Highly Recommended General Education Courses:	
PHIL 100 Intro to Philosophy	4
STAT 121 Probability	4

MODERN HISTORY MAJOR

Major+Minor Credits 64-70

ISSS 222 Qualitative Research Meth For Soc Sci	4
Select 3 from the following:	12
HSTA 101 American History I (4) HSTA 102 American History II (4) HSTR 101 Western Civilization I (4) HSTR 102 Western Civilization II (4)	
Select 1 from the following:	4
HSTR 255 History of the Far East (4) HSTR 260 Africa & The Middle East (4) HSTR 274 World History (4)	
Select 1 from the following:	4
HSTA 412 American Thought & Culture (4) HSTR 423 European Intellectual History (4)	
Select 1 from the following:	4
HSTA 494 Seminar/Workshop (4) HSTR 494 Seminar/Workshop (4)	
Select 2 additional 300- or 400-level History courses	8
Select 1 from the following ISSS Minors (non-ISSS Minors by departmental permission only), or the Secondary Education Major ¹ :	24-30
Anthropology (24) Global Politics (24) Legal Studies (24) Psychology (24) Sociology (24) Sec Ed Major Professional Core (30)	
Select 1 from the following Capstone options:	4
HSTA 498 Internship (4), or HSTA 499 Senior Project/Thesis (4), or HSTR 498 Internship (4), or HSTR 499 Senior Project/Thesis (4), or Select 1 HPSS 494 Seminar course (4)	

ELECTIVE REQUIREMENTS

Elective Credits 18-24

Select from any catalog courses.	18-24
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TOTAL CREDITS REQUIRED 120

¹ Certification in either *Secondary Education: History* or *Secondary Education: Social Science Broadfield* would require additional coursework described in the advising protocol on page xx.

BA: INTERDISCIPLINARY SOCIAL SCIENCE

CREDIT SUMMARY – General Education & Major

GENERAL EDUCATION – see page XX

General Education Credits 32

Highly Recommended General Education Courses:	
PHIL 100 Intro to Philosophy	4
STAT 121 Probability	4

INTERDISCIPLINARY SOCIAL SCIENCE MAJOR

Major Credits 76-78

Select 3 from the following ISSS Minors, or 2 from the following ISSS Minors and 1 non-ISSS minor from another department (more than 1 non-ISSS Minor by departmental permission only), or the Secondary Education Major ¹ :	72-78
Anthropology (24) Global Politics (24) Modern History (24) Legal Studies (24) Psychology (24) Sociology (24) Sec Ed Major Professional Core (30)	
Select 1 Capstone option from one of your Minors (in non-ISSS Minor by Departmental permission only):	4
Select 1 HPSS 498 Internship (4), or Select 1 HPSS 499 Senior Project/Thesis (4), or Select 1 HPSS 494 Seminar course (4)	

ELECTIVE REQUIREMENTS

Elective Credits 10-12

Select from any catalog courses.	10-12
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TOTAL CREDITS REQUIRED 120

¹ Certification in *Secondary Education: Social Science Broadfield* would require additional coursework described in the advising protocol on page xx.

BA: PSYCHOLOGY

CREDIT SUMMARY – General Education, Major, & Minor

GENERAL EDUCATION – see page XX

General Education Credits 32

Highly Recommended General Education Courses:	
BIO 111 Biology I	4
CHMY 141 College Chemistry I	4
PHIL 100 Intro to Philosophy	4
PSYX 100 Intro to Psychology	4

PSYCHOLOGY MAJOR

Major+Minor Credits 64

STAT 121 Probability	4
BIO 233 Biostatistics	4
PSYX 230 Developmental Psychology	4
PSYX 280 Fund of Memory & Cognition	4
PSYX 322 Quant Resrch Meth/Behav Sci	4
PSYX 356 Human Neuropsychology	4
PSYX 360 Social Psychology & Human Dynamics	4
PSYX 385 Psychology of Personality	4
PSYX 440 Abnormal Psychology & Research	4
Select 1 from the following ISSS Minors (non-ISSS Minors by departmental permission only):	24
Anthropology (24) Global Politics (24) Modern History (24) Legal Studies (24) Sociology (24)	
Select 1 from the following Capstone options:	4
PSYX 498 Internship (4), or PSYX 499 Senior Project/Thesis (4), or Select 1 HPSS 494 Seminar course (4)	

ELECTIVE REQUIREMENTS

Elective Credits 24

Select from any catalog courses.	24
Highly recommended electives	
BIO 255 Cell Biology	4
BIO 331 Bioinformatics	4
CHMY 142 College Chemistry II	4
STAT 433 Stochastic Modeling	4

TOTAL CREDITS REQUIRED 120

**Interdisciplinary Social Science
CREDIT SUMMARY – Minors**

ANTHROPOLOGY MINOR

ISSS 222 Qualitative Research Meth For Soc Sci	4
ANTH 105 Intro to Cultural Anthropology	4
Select 1 from the following:	4
HSTR 255 History of the Far East	
HSTR 260 Africa & The Middle East	
ISSS 425 Montana Indian Sovereignty	4
ISSS 475 Cultural Ecology	4
ANTH 494 Seminar/Workshop	4
Total Credits	24

LEGAL STUDIES MINOR

ISSS 222 Qualitative Research Meth For Soc Sci	4
ISSS 121 American National & State Govt	4
PSCI 250 Intro to Political Theory	4
Select 2 from the following:	8
BUS 280 Business Law (4)	
ENVS 381 Natural Resource Law (4)	
SOCI 317 Restorative Justice (4)	
PSCI 471 American Constitutional Law	4
Total Credits	24

GLOBAL POLITICS MINOR

ISSS 222 Qualitative Research Meth For Soc Sci	4
Select 1 from the following:	4
ISSS 121 American National & State Govt (4)	
ISSS 201 The World Economy (4)	
ISSS 202 Political Geog of Rocky Mt West (4)	
ISSS 213 Intro to Global Politics (4)	
PSCI 250 Intro to Political Theory	4
Select 2 from the following:	8
ISSS 321 Comparative Politics (4)	
PSCI 331 Intntl Relations Theory (4)	
ISSS 341 Political Economy (4)	
PSCI 471 American Constitutional Law (4)	
PSCI 494 Seminar/Workshop	4
Total Credits	24

PSYCHOLOGY MINOR

STAT 121 Probability	4
PSYX 230 Developmental Psychology	4
PSYX 280 Fund of Memory & Cognition	4
PSYX 322 Quant Resrch Meth/Behav Sci	4
PSYX 360 Social Psychology & Human Dynamics	4
PSYX 385 Psychology of Personality	4
Total Credits	24

MODERN HISTORY MINOR

ISSS 222 Qualitative Research Meth For Soc Sci	4
Select 2 from the following (must include either HSTR 101 or HSTR 102):	8
HSTA 101 American History I (4)	
HSTA 102 American History II (4)	
HSTR 101 Western Civilization I (4)	
HSTR 102 Western Civilization II (4)	
HSTA 215 Post-WWII America (4)	
HSTR 255 History of the Far East (4)	
HSTR 260 Africa & The Middle East (4)	
HSTR 274 World History (4)	
Select 2 from the following:	8
Any 300-400 HSTA or HSTR course	
Select 1 from the following:	4
HSTA 494 Seminar/Workshop (4)	
HSTR 494 Seminar/Workshop (4)	
Total Credits	24

SOCIOLOGY MINOR

ISSS 222 Qualitative Research Meth For Soc Sci	4
SOCI 101 Intro to Sociology	4
Select 2 from the following:	8
ISSS 315 Political Anthropology & Sociology (4)	
ISSS 450 Social Stratification (4)	
ISSS 475 Cultural Ecology (4)	
ISSS 484 Economic Anthropology & Sociology (4)	
ISSS 485 Gender/Econ/Social Change (4)	
ISSS 425 Montana Indian Sovereignty	4
SOCI 494 Seminar/Workshop	4
Total Credits	24

Transferability Considerations (if any):

This is a degree proposal thus transferability does not apply. It will enhance the graduate school admissions process for the Western's psychology students. All courses are drawn from MUS transferability FLOCs therefore all courses will transfer.

Effects, if any, of this proposal on any of our degree programs. (Review other degree programs that may be potentially affected by this proposal; affected Dept Chair aware of possible implications: **Discussed and approved by ED Chair (D. Norris-Tull) 10/20/10**)

This proposal's primary impacts are on HPSS, and secondary impacts on the campus as a whole.

Resource Implications (if applicable):

STAFFING:

Who will teach course(s)?

No change in teaching assignments will be required. Current faculty positions will teach all courses.

Effect on faculty member's workload?

No change in faculty workload is expected, with the exception of the Psychology faculty. In that case, there should be a significant reduction in the ongoing overload assignment.

OTHER (Library, etc.):

General Education Committee Comments (if appropriate): Date _____

All Chairs/Provost Comments (if appropriate): Date _____

Curriculum Committee Comments (if appropriate): Date: _____

APPENDIX A-PSYX 356 Syllabus Shell

Course description:

PSYX 356 HUMAN NEUROPSYCHOLOGY (4) Study of the organization of the nervous system, functional neuroanatomy, and behavioral neurology. Specific topics will include structures and related behaviors as well as the methods used to study these relationships. Investigations will include simulations as well as exploration of the research literature. Prereq: PSY 322, or c/i. (fall/odd-numbered years)

Statement of course purpose:

This course provides an introduction to theory, methods, and practical applications of human neuropsychology. Topics include fundamentals of brain-behavior relationships, functional neuroanatomy, human cortical organization, neuroimaging, neuropsychological assessment, and complex functions. Both normal and abnormal functions of the central nervous system are considered. Class sessions include lecture, discussion, simulations, demonstrations, group activities, and student presentation formats.

Course outcomes:

On completion of this course, students will be able to:

1. Demonstrate understanding of the history and current status of neuropsychological approaches.
2. Identify major structures of the Central Nervous System, their connections, and their functions.
3. Demonstrate a basic understanding of the methods of structural and functional evaluation of the Central Nervous System, including neuroimaging techniques, electroencephalography (EEG), neurological examination, and neuropsychological assessment.
4. Describe neural pathways for sensory/perceptual, motor, language, memory, and executive functions.
5. Describe the normal development of the Central Nervous System.

Course assessment tools:

Examinations and a literature review.

Course experiential learning:

Students will complete a literature review specific to neuropsychology.

Students will utilize computer simulations and models of the brain to gain an understanding of its structure.

Students will complete classroom demonstrations/activities related to neuro-functioning.

APPENDIX B-External Review

**External Review: HPSS Program, The University of Montana
Western**

Prepared by Mark Smith Ph.D.
Vice President for Academic Affairs, The College of Idaho

This Program Review was conducted on campus, January 26-28, 2010. In preparation for this review, I was provided with a departmental self-study, curricular proposals, catalog copy, data on courses enrollments, and guidelines for Program Review. My visit included two meetings with departmental faculty, individual meetings with Sean Eudaily, Brian Price, and Karl Ulrich, a lunch meeting with three majors in HPSS, and the attendance of parts of four courses taught by departmental faculty. I was very pleased with the hospitality, openness, and kindness with which my visit was received.

A. Program Role, Mission, and Objectives:

- a. The program mission is mostly in line with the mission of the university, though the program mission emphasizes preparation for graduate school. I do not consider this emphasis inconsistent with the mission of the university, and I applaud the intent as well as the track record of graduate school placements, which is truly remarkable. That said, not every student could or should or would want to attend graduate school. It might be well to emend the departmental mission to include specific references to portions of the university mission which in fact appear in departmental curricula, as well as the significance of their preparation (including internships) for students who do not wish to attend graduate school.
- b. Departmental intended outcomes are clear and reasonable. I did not ask students or review syllabi to determine the extent to which these are communicated to students.

B. Curriculum:

- a. The HPSS curriculum is clear and appropriate. I wondered, after reviewing catalog copy, how well they could build a coherent curriculum out of so many discrete disciplines, but based on my conversations with students and faculty, I have concluded that they have done a remarkable and successful job. Moreover, they have proven that a well-taught and well-conceived interdisciplinary curriculum is attractive to graduate schools in many different disciplines. I will not take the time to comment on this curriculum, because the department has proposed and received campus approval of a major curricular change, introducing a host of new majors and minors. I would endorse this new curriculum, for the language of majors and minors is already evident among students and is the standard coin of the realm. I do so with some concern, however, for the new majors and minors could be implemented with the same strengths as the present system, but they could also lend themselves to the building of academic silos over time, and that would be most unfortunate in such a collaborative department. It will take focused effort for the department to build new means of interdisciplinary integration and to avoid the centrifugal force that could threaten their unique strength as a group. I would urge the department to consider the integration of courses from other disciplines within their new majors, interdisciplinary courses, reducing the size of minors, and to think through increasing curricular efficiencies, minimizing specificity and hierarchy to provide the flexibility necessary for students to make interdisciplinary choices and for a thinly stretched faculty to serve a rigorous and innovative curriculum.

- b. There are three fairly obvious gaps in the curriculum. First, there is almost no premodern history available within that major. This can lead to a rather shallow chronological exposure at a time when ancient history is becoming increasingly popular. I would recommend that every student be required to take the one premodern course available (Western Civ.), as well as the development of a couple of other courses in classics.

Second, the fact that there is only one Psychologist, despite his excellent reputation and flexibility, necessitates a thin curriculum in a very popular field. This situation is not sustainable, for no single professor can long sustain sole ownership of such a diverse and popular field. Since most students become Psych majors because of interests in clinical areas, the lack of courses in this area, as well as the lack of anyone to teach them is significant.

Perhaps the most glaring curricular gap is the lack of availability of foreign language instruction. Without availability of at least rudimentary language instruction, many good students who wish to go to graduate school will transfer away from UMW, for many graduate schools in Humanities, Social Sciences, Business and Education expect at least minimal exposure to at least one foreign language. HPSS faculty have collected some anecdotal information supporting this concern. Moreover, every student with a solid background in foreign language is more competitive in a difficult job market. I would therefore strongly recommend that UMW offer at the very least, a two year sequence in Spanish, since this is universally the most popular language. While it is often difficult to hire a tenure-track faculty member in this area, my experience is that it is not terribly difficult to hire adjuncts for basic language instruction.

- c. I see no areas that should be discontinued, though I do suspect that significant efficiencies could be gained in other departments (not HPSS which is, by all accounts, the most efficient on campus) by reducing the size of some majors at UMW which are extremely large by comparative standards.
- d. The structure of the current HPSS program is quite unusual, but not unknown. The new curriculum is fairly mainstream, with the exception of the common methodology course (a very good idea, in my opinion). The curricular gaps mentioned above stand out in when comparing HPSS programs with other colleges and universities with similar missions. In addition, the new majors and minors are relatively large in terms of the number of credits required for a Liberal Arts College (though I realize that the HPSS major and minor proposals are quite lean by UMW standards). For example, the History major at C of I is 33 units, and the minor is 15. No major at our college requires more than 36 units in a single department, and no minor requires more than 22. Our largest major, Biology, requires 35 units of BIO with an additional 15 units of Math and Chem, for 50 total required units. Both of these programs have extremely high placement rates in graduate schools, and our medical school acceptance rate is the highest in the Northwest at over 80%. In my judgment, bigger is not better, when it comes to majors, but simply narrower. The strengths of HPSS lie in integration, more than specialization. Thus, there is modest room within HPSS to consider ways to tighten required curriculum, and there seems to be a great deal of room for such considerations within other UMW departments.
- e. Based on these considerations, from my perspective as an administrator, I think it is quite possible, over time, to encourage increased efficiencies in other departments,

and to shift personnel resources (based on retirements, resignations, etc.) to fill important gaps in Psych staffing and foreign language. Of course, such a shift would not be without political consequences, but my understanding of budget constraints indicates that such shifting of resources will be the only way to address these gaps on the short term. I would also add the caveat that I have not reviewed the details of any other program, nor do I have sufficient understanding of UMW's administrative structure and priorities to make any specific administrative recommendation. I'm simply indicating the issues I would consider in attempting to address the gaps I do understand.

C. Students and Student Satisfaction:

- a. I had only one meeting with three students, all of whom I would term "overachievers." Thus, my sample size is both small and not terribly representative. That said, the graduate school acceptance rate for HPSS indicates that there are many similar students in the department. These three students were highly satisfied with their experience at UMW, and especially HPSS. They spoke highly of all the faculty, their academic opportunities and experiences, their advising, their curriculum. They love the perceived high level of academic rigor and creativity combined with personal attention and concern for their progress.
- b. They believe they are being well-prepared for their futures and are great ambassadors for the department. I pressed them to find any areas of concern or suggestions for improvement. They offered only a few considerations. They love the block system, but indicated that sometimes scheduling issues happen in which two core courses that are offered only once per year are scheduled in the same block. When this happens, they face a very difficult choice. Thus, I would recommend careful scrutiny of the schedule looking for such potential conflicts. They also mentioned the problem of the thin staffing in Psych. (especially concern over the advising load of the single Psych. professor) as well as concern over the lack of foreign language offerings.
- c. Assessment plans in the Social Sciences are notoriously difficult to devise and manage. Given that common difficulty, HPSS faculty have done a solid job of designing both direct and indirect methods of assessment. I understand, however, that it has proven difficult to get all seniors to participate in exit interviews. Since this information is very important and useful, I would recommend that, in future, all seniors be required in a senior level course, to complete the exit interview as part of that course. That way, they may not graduate without participating in the assessment process.
- d. In my judgment, assessment is only worth the effort if faculty make use of it to improve teaching, learning, and curricular design. In fact, HPSS has been conscientious about this. The clearest example is the way they have changed their requirement for a common methodology course in direct response to assessment data.
- e. I have no specific recommendations for changing their assessment program beyond the one mentioned above – requiring exit interviews of Seniors.

D. Faculty:

- a. Faculty specializations are appropriate to the department, and faculty build on their specialized training in flexible and creative ways. The one additional specialty needed, in my judgment, is Clinical Psychology.
- b. HPSS use of non-tenured faculty and adjuncts appears to be appropriate.
- c. Faculty are highly engaged in innovative pedagogy informed by assessment. Everyone I talked to emphasized this, including administration. HPSS faculty seem

to have grasped and energetically practice the innovative opportunities provided by the block system.

- d. Faculty appear to be appropriately engaged in service to the University, profession, and community.
- e. Faculty are appropriately engaged in creative/scholarly activities. My one caveat is that departmental faculty often teach overloads, thus forfeiting “development blocks.” While one can do this for a little while, in time, the tradeoffs involved may result in stunted faculty development and inappropriate levels of professional engagement beyond University walls.

E. Resources/Institutional Support:

- a. The resources of small institutions are always tight, and the HPSS department has learned to do much with little. I heard few complaints about facilities or operational funding, but the need for staffing in Psych. is no small matter.
- b. I have no other suggestions for initiatives beyond what appears elsewhere in this report.

Summary Commendations and Recommendations:

Commendations:

1. Faculty: HPSS faculty are to be commended for their collegiality, professionalism, vision, organization, commitment to innovative pedagogy, and devotion to students. I also wish to commend them for the Integrity of their departmental self-study which my experience verified at every turn.
2. Students: HPSS students are to be commended for their energy, openness, and willingness to help strengthen the department in any ways they can. They are also to be commended for their willingness to set their sights for academic accomplishment very high.
3. Curriculum: HPSS faculty are to be commended for developing an innovative curriculum taught with an unusual level of collaboration, coherence, and creativity.
4. Experience One: The Ex One system is to be commended as a significant success. Not only is UMW one of only a few colleges to develop such a system, given that system’s relative infancy, in the opinion of everyone I encountered, it is a resounding success.
5. Administration: The UMW academic administration is to be commended for asking the right questions, for having genuine concern for the quality of experience for both faculty and students, and for their open appreciation for the accomplishments and value of the HPSS department. They have done much under extraordinary pressures from state bureaucracy and budgetary constraints.

Recommendations:

1. I would endorse the HPSS proposal for major/minors, as well as the leadership of the department on this not inconsiderable change campus-wide.
2. I would recommend that the department seek to retain the special level of coherence that many value within the current system. The new majors and minors will naturally lend themselves to silo-bound thinking, so the department will need to devise consistent means of ensuring coherence among Social Science disciplines.
3. I would recommend that the department continue to seek efficiencies in curriculum. Although by all accounts, the HPSS department has the most efficient curriculum at the university, there is still room to improve by conflating some courses and possibly reducing size of majors and/or minors. Doing so will create decreased need for overloads and allow

better controls for class size. It will have the added benefit of enhancing faculty development by preserving development blocks.

4. I would strongly recommend that UMW hire a clinical Psychologist as soon as possible. In the interim, adjuncts should be sought. I strongly believe that one of your most popular majors will become even more popular and blossom with such a hire. Without that hire, the university is in danger of burning out a highly respected faculty member and weakening one of its more popular majors.
5. I would strongly recommend that the university offer basic language instruction, beginning with two years of Spanish.
6. I would recommend that the Administration seek ways to empower the leadership of the HPSS department in campus-wide dialogue about how best to develop the potential of the block system in terms of innovative pedagogy, and innovative, streamlined curriculum.

Should you wish me to elaborate on any of these matters or should you have any questions, please don't hesitate to contact me.

Respectfully submitted,

Mark Smith
Vice President for Academic Affairs
The College of Idaho
msmith@collegeofidaho.edu
208 459 5313

ITEM 150-1602-R0111

The University of Montana Western
Changes in B.S. Major in Secondary Education

THAT

The University of Montana Western requests that changes occur to the structure of its secondary education teaching degree programs so that students will be required to complete both a major in Secondary Education and a true subject area major.

EXPLANATION

Currently students pursuing a career as a secondary education teacher at Montana Western complete a Major in Secondary Education with Options (equivalent in credits to true majors) in a subject area. Under the proposed restructuring, students would complete a double major in Secondary Education and in a content area. The proposed changes would improve the employability of Montana Western graduates while keeping the total credit requirements constant with no need for additional faculty or other resources.

ATTACHMENTS

Level II Request form and Curriculum Proposal
Appendix – Program Details

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: **150-1602-R0111**

Meeting Date: **January 13-14, 2011**

Institution: **The University of Montana Western**

CIP Code: _____

Program Title: **New Structure of B.S. Secondary Education Offerings**

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

Currently UMW students complete the Secondary Education Major and a content area "Major" that is actually an Option within the Secondary Education Major. This causes confusion for employers as it is not always clear that the candidate has a true major in their content area. To eliminate this confusion, several of the current BS Secondary Education Options propose to convert to Double Majors, and several will be changed to create new majors, that clearly indicate the content area. This could still be accomplished in 128 credits (4 years of study) since the existing Secondary Education content area "Majors" have the same number of credits as true content area majors (40 or more credits).

Montana Board of Regents
LEVEL II REQUEST FORM

Curriculum Proposals

1. Overview

It is a common misconception among the general public (including many U.S. legislators) that a Major in Secondary Education does not translate to a true major in a content area. At Montana Western, all students in the B.S. Secondary Education programs obtain the equivalent of a major in their content area. However, the BOR website reveals that the BOR does not list the Secondary Education content areas as majors, but rather as Options within the major of Secondary Education. The intent of UMW is to ensure that it is clear to anyone hiring our teacher education candidates, and any university considering our candidates for graduate school, that our students do in fact have a true major in their content area.

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

Seven of the current Secondary Education Option areas would be converted to double majors - students would complete the Secondary Education major AND a content area major (Biology; Earth Science; English; General Science; Modern History; Interdisciplinary Social Science; or Mathematics). Five of the current Secondary Education Option areas would be converted to a new major (Art Education K-12; Business & Computer Applications Education; Industrial Technology Education; Music Education K-12; Physical Education & Health K-12).

3. Need

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

Increasingly states and school districts are requiring true content area Majors in addition to completion of a recognized Teacher Education Program. Federal legislation (No Child Left Behind) emphasizes the importance of teachers having a major in their teaching field.

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

Secondary Education graduates will be more easily hired into non-provisional positions while school districts will be able to report that their teachers have completed true content area Majors in addition to completing an NCATE approved teacher education program.

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

In Fall 2009, 594 students were enrolled in education programs at UMW (47 percent of the university's students), with 235 of them enrolled in the various B.S.: Secondary Education Option areas. The number of teacher education students at UMW is rapidly growing.

4. Institutional and System Fit

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

The University of Montana-Western was the first institution in the state to prepare teachers. The number one Strategic goal of the university is to improve undergraduate education. One of the primary objectives under that goal is to further support our mission to prepare teachers.

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

Most content area disciplines are in the process of converting existing B.A. Option areas to new true majors and minors. This is being done to more accurately reflect the content of existing programs but will also make it very useful for Teacher Education Program graduates. None of these changes require

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LEVEL II REQUEST FORM

additional coursework or faculty, as all the coursework is already offered in our existing Secondary Education Option areas.

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

N/A

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

The original and still prominent mission of Montana Western was to prepare teachers for the state of Montana. This is still reflected in strategic goals of the institution as well as of the MUS BOR: Goal 1: Increase educational attainment of Montanans. Goal II: Assist in the expansion and improvement of the economy. The UMW education programs relate directly to both of these BOR goals. Education is one of the top employers in the state. UMW plays a key role in providing teachers for the state of Montana. A high percentage of UMW teacher education graduates attain teaching jobs immediately. Of the students who completed our teacher education programs in 2008-2009, 90% have already obtained teaching positions, and 67% have obtained teaching jobs in Montana.

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

Most four-year campuses in the MUS now offer teacher education programs. This proposed change would not alter the nature of the current teacher education program, other than to require true content majors in conjunction with a Secondary Education Major. Montana Western education faculty collaborate with other campuses frequently, and have cooperated fully with the common course numbering project. Due to the limited number of field placements available in K-12 schools throughout the state, it is essential to maintain teacher education programs at distributed universities around the state. It would literally be impossible to place all teacher education candidates in schools within a reasonable distance of any one university.

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.

See attachment

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

It is proposed that all new Secondary Education students would enter into the new double major program in the fall of 2011. Current students could elect to either complete their existing program or convert to the new program. All courses required for both program versions will continue to be offered in the future. This would affect approximately 250 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.

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The proposed changes will not require any additional resources. All the BS Secondary Education programs listed in this proposal already exist. This proposal simply changes all of the BS Secondary Education Options into true Majors.

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 would be required for this transition.

7. Assessment

How will the success of the program be measured?

The UMW Department of Education has an extensive assessment system in place. The faculty members hold regular retreats, at least twice annually, to review aggregated data on student performance. In addition to assessments embedded within education courses (assessments used by all individuals teaching a specific course, as agreed upon by the faculty), the department reviews individual student progress at three points in the degree program, through a portfolio and interview process. School personnel (teachers and principals) are also involved in the assessment of our education students. In commenting on our assessment system during the fall NCATE/OPI joint review, the reviewers stated that:

- The education department uses LiveText, as well as Excel and Access databases, in a coordinated process for managing candidate performance and unit operations data. This system provides the unit with data in a timely fashion.
- The department is continually seeking both formal and informal input from the professional community as part of its ongoing review and vision of the assessment process and assessment instruments. It was able to provide numerous examples of such involvement.

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 proposed program changes were developed through collaboration between the faculty of the UMW Department of Education and every other department on campus. We have a very collaborative faculty at UMW, as evidenced by the joint success of implementation of Experience One. Other sources of data: reports and data from the NCATE/OPI program review October 2008; aggregated data from the various assessments used by the department; advice from the UMW Department of Education's school partners (advisory boards); data from the Teacher Shortage Areas Nationwide Listing (published March 2009); annual graduates and employers survey conducted by UMW; survey of Montana school principals conducted by the Montana School Principals Association.

(Replace the information on page 95 of 2010 catalog, with the following)

Bachelor of Science: Secondary Education and K-12 Education

Teacher education candidates in Secondary Education or K-12 Education must complete at least one Major or Broadfield Major in a subject that leads to licensure in Montana. Graduates with a Secondary Education major are prepared to teach grades 5-12. Graduates with a K-12 education major are prepared to teach grades K-12. Refer to pages 85-89 in this catalog, and the UMW Teacher Education Program Student Handbook, up-dated annually (<http://www.umwestern.edu/shares/education/>), for further details on education program requirements, including grade and GPA requirements and other admissions and retention requirements.

It is advantageous to the candidate to have multiple teaching areas (majors or minors), or a broadfield or interdisciplinary major that prepares them to teach multiple subjects, or a K-12 licensure area, especially if you plan to teach in a rural state such as Montana. In Montana, teachers are licensed to teach in their Minor subject area if they have taken the appropriate methods course, carry out a student teaching experience in the specified area, and receive acceptable scores on the applicable PRAXIS II exams.

A grade of C- or higher is required in all General Education courses and required courses in the content major or minor.

A grade of B- or higher is required in all required Professional Education courses.

All candidates must pass the Computer Competency exam prior to admission to the Teacher Education Program. COMS 115 prepares students for this exam.

All candidates must pass a recent federal and state Criminal Background Check prior to admission to the Teacher Education Program. This must be up-dated every two years.

All candidates must have a recent Certificate of First Aid and Safety (including First Aid, Infant, Child, & Adult CPR, Child & Adult AED), prior to Student Teaching. HHP 231 fulfills this requirement.

<i>Preferred Sequence of Education Courses and TEP Portfolio/Interviews</i>							
Freshman Year		Sophomore Year		Junior Year		Senior Year	
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
		EDU 201 Intro to Education	HHP 245 or HHP 241	EDU 382 Assessment, Curriculum, & Instruction	EDU 311 Cultures, Diversity & Ethics in Global Education	Methods Courses (now or previous semester)	EDU 495 Student Teaching
		EDU 222 Ed Psych & Child Development				EDU 340 Classroom Management	EDU 306 School Law (or in semester prior to student teaching)
			TEP Phase I portfolio & interview (fall or spring of sophomore year)		EDU 481 Content Area Literacy (now or next semester)	TEP Phase II – PRAXIS II exams & TEP II portfolio & interview – mid-semester, prior to Student Teaching	TEP Phase III Portfolio

Secondary Education Major – 42-46 credits

Professional Education Core

Professional Ed Core Credits 30-34

New Course (CCN)	Former UMW Course	Credits
EDU 201 Introduction to Education with Field Experience	ED 120 Becom/Prof Educator	4
EDU 222 Educational Psychology & Child Development	ED 253 Psych Found /Teach/Learn	4
EDU 382 Assessment, Curriculum, & Instruction	ED 328/329 Curriculum, Instr, Assessment, & Mgmt	4
EDU 340 Classroom Management	ED 328/329 Curriculum, Instr, Assessment, & Mgmt	4
EDU 311 Cultures, Diversity & Ethics in Global Education	ED 425 Mltictrl/Glob Ed ED 426 Mltictrl/Glob Ed Prac	4
EDU 481 Content Area Literacy	ED 455 Content Area Literacy	2
Methods Courses (Varies by program)	Methods Courses (Varies)	4-8
Select 1 from the following:		4
HHP 241 Pers/Comm Hlth (4) HHP 245 Human Sexuality (4)	HHP 241 Pers/Comm Hlth (4) HHP 245 Human Sexuality (4)	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in EDU 311.		
A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all Secondary Education majors prior to student teaching. HHP 231 is recommended.		

Student Teaching

Student Teaching Credits 12

EDU 495 Student Teaching: 5-12 Or EDU 495: Student Teaching: K-12	ED 473 Student Teaching-Secondary Or ED 474 Student Teaching K-12	8
EDU 306 School Law/Advoc/All	May be taken during, or in the semester prior to, student teaching	4

The Secondary Education major is not a stand-alone major. It must be taken in combination with a major in a subject that leads to licensure in the state of Montana. Any of the following Majors offered at the University of Montana Western may be combined with the Secondary Education major:

- Biology – see page ???
- Earth Science – see page ?? (Earth Science is not a stand-alone major. It must be taken in conjunction with the Secondary Education major. Students completing the Earth Science program may also consider completing the BS: Environmental Sciences: Geology Option)
- English – see page ??
- General Science Broadfield – see page ??? (General Science Broadfield is not a stand-alone major. It must be taken in conjunction with the Secondary Education major)
- Modern History - see page ???
- Interdisciplinary Social Science - see page ???
- Mathematics - see page ???

In addition, the following education majors also lead to licensure. These majors include the required Secondary Education or K-12 Education course sequence within the extended major:

- Art Education K-12 – see page ???
- Business & Computer Applications Education - see page ???
- Industrial Technology Education - see page ???

- Music Education K-12 - see page ???
- Physical Education and Health K-12 - see page ???

The following pages will replace all the current BS: Secondary Education programs. These pages will ALSO be placed adjacent to each corresponding non-education degree.

BS: Art Education K-12

Credit Summary

Refer to page ??? 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.

General Education – see page ?? for full list of requirements **General Education Credits** **31-32**

Pre-Fall 2009 UMW Course	OCHE Equivalent Course	
Art courses used for the major may also satisfy Gen. Ed. Humanities requirements	TBD	

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Art Education K-12 Major **Major Credits** **86**

Content Core		Content Core Credits
Pre-Fall 2009 UMW Course	OCHE Equivalent Course	
ART 140 Color & Design	TBD	4
ART 141 Drawing	TBD	4
ART 211 Art History I	TBD	4
ART 212 Art History II	TBD	4
ART 271 Sculpture	TBD	4
In consultation with advisor, select <u>two</u> 2-D courses, <u>one</u> 3-D course, and <u>one</u> additional 200-level studio elective course from the following:		16
ART 170 Intro/Photog [2-D] (4)	TBD	
ART 225 Digital Media [2-D] (4)	TBD	
ART 231 Ceramics [3-D] (4)	TBD	
ART 243 Printmaking [2-D] (4)	TBD	
ART 247 Glass [3-D] (4)	TBD	
ART 261 Watercolor [2-D] (4)	TBD	
ART 267 Painting [2-D] (4)	TBD	
ART 270 Photography [2-D] (4)	TBD	
ART 277 Fibers [3-D] (4)	TBD	
<u>Two</u> 300-level Art courses		8

Professional Education Core (see page 95 for recommended course sequence) **Prof. Ed. Core Credits** **30**

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ¹ (4)	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Litrcy	2
ART 351 Meth/Materials of Art	TBD	4
Take 1 from the following:		4
HHP 241 Pers/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).		
A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.		

Student Teaching **Student Teaching Credits** **12**

ED 474 Stu Teaching K-12	EDU 495A Stu Tchg: K-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4

Electives **Elective Credits** **10-11**

Select from any catalog courses	10-11
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TOTAL CREDITS REQUIRED 128

BS: Biology and Secondary Education Double Major

Credit Summary

Refer to page ??? 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. For Biology majors, we recommend the General Science Broadfield major. A coaching option is also available with any teaching major, but does not lead to licensure.

General Education – see page ??? for full list of requirements **General Education Credits 31-32**

Pre-Fall 2009 UMW Course	OCHE Equivalent Course	
BIO 111 Biology I	BIOB 160 Principles/Living Sys.	4
CHEM 131 General Chemistry	CHMY 141 Coll Chem I	4
MATH 131 Probability	STAT 121 Probability	4
ENVS 201 Hist/Philos/Science	PHL 241 Hist/Phil/Science	4

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Biology Major

Biology Core

Biology Core

Credits 52

BIOB 170 Principles of Biological Diversity	4
BIOO 220 General Botany	4
BIOB 260 Cellular & Molecular Biology	4
BIOE 370 Ecology	4
BIOB 375 General Genetics	4
BIOB 420 Evolution	4
CHMY 143 College Chemistry II	4
CHMY 321 Organic Chemistry I	4
CHMY 323 Organic Chemistry II	4
PHYS 233 General Physics	4
PHYS 234 General Physics	4
M 171 Calculus I	4
STAT 217 Intermediate Statistical Concepts or STAT 233 Biostatistics	4

Secondary Education majors do not take BIOB or HPP 400/498 or BIOB 495

Additional courses Recommended for Secondary Education

	CCN	
BIO 262 Microbiology	BIOM 260 General Microbiology	4
BIO 371 Human Anatomy & Physiology	TBD	4
BIO 372 Human Anatomy & Physiology	TBD	4

Secondary Education Major (substitutes for the Biology Option Area)

Sec. Ed. Major Credits 42

Professional Education Core (see page 95 for recommended course sequence)

Prof. Ed. Core Credits 30

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)	Global Educ ² (4)	
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Ltrcy	2
ED 355 Meth/Mat/Exper Sci Ed	EDU 497S Meth: 5-12 Science	4
Select 1 from the following:		4
HHP 241 Pers/Comm Hlth (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	

¹Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).

A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

Student Teaching

Student Teaching Credits

12

ED 473 Stu Teaching-Secondary	EDU 495S Stu Tchg: 5-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4

Electives

Elective Credits

2

Select from any catalog courses	2
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TOTAL CREDITS REQUIRED 128

BS: Business & Computer Applications Education

Credit Summary

Refer to page ??? 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.

General Education – see page ?? for full list of requirements

General Education Credits 31-32

Pre-Fall 2009 UMW Course	OCHE Equivalent Course	
ECON 250 Prin/Economics	ECNS Prin/Micro/Macro	4

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Business & Computer Applications Education Major

Major Credits 92-94
Content Core Credits 50-52

Content Core

BUS 201 Small Bus Development	TBD	3
BUS 217 Bus/Elec Comm	TBD	4
BUS 241 Fin Accting	ACTG 201 Prin/Fin Acctng	3
BUS 242 Managerial Acctng	ACTG 202 Prin/Mngrl Acctng	3
BUS 280 Business Law	TBD	4
COMS 101 Intro/Comp/Pres	CAPP 100 Sht Crs: Comp Literacy	1
COMS 135 Microcomp Appl	CAPP 131 Basic MS Office	4
COMS 205 Business Info Systems	TBD	4
COMS 210 Comp Hrdwr/Sftwr Mgt	ITS 205 Comp Hrdwr/Sftwr Mgt	4
COMS 236 Adv Microcomp Appl	CAPP 251 Adv MS Office	4
COMS 212 Intro/Web Design	TBD	4
BUS 325 Prin/Prac/Management	TBD	3
BUS 347 Prin/Prac/Marketing	TBD	3
Select 2 courses from the following:		6-8
BUS 304 Leadership (4)	TBD	
BUS 329 Human Resource Mgt (3)	TBD	
COMS 111 Prog Fundamentals (3)	TBD	
COMS 235 Video/Audio Design (4)	TBD	
COMS 242 Dig Print Media (4)	TBD	
COMS 306 Bus Info Syst Lab (3)	TBD	
COMS 325 Dig Graph/Anim Design (4)	TBD	
COMS 335 Adv Web Design (4)	TBD	

Professional Education Core (see page 95 for recommended course sequence)

Professional Ed Core Credits 30

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ² (4)	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Ltrcy	EDU 481 Content Area Ltrcy	2
BUS 351 Meth/Mat/Bus Theory Subj	TBD	2
COMS 351 Meth/Mat/Comp Appl	TBD	2
Select 1 from the following:		4
HHP 241 Personal/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311). A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.		

Student Teaching

Student Teaching Credits 12

ED 473 Stu Teaching-Secondary	EDU 495S Stu Tchg: 5-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4

Electives

Elective Credits 2-5

Select from any catalog courses	2-5
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TOTAL CREDITS REQUIRED

128

BS: Earth Science & Secondary Education

Double Major Credit Summary

The Earth Science major is not a stand-alone major. It can only be taken with the Secondary Education major.

Candidates might wish to consider also completing the major in Environmental Sciences: Geology Option (which does not lead to licensure in Montana, but does in some other states. See page ???). Refer to page ??? 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. For science teachers, we recommend the General Science Broadfield major. A coaching option is also available with any teaching major, but does not lead to licensure.

General Education – see page ??? for full list of requirements

General Education Credits

31-32

Pre-Fall 2009 UMW Course	OCHE Equivalent Course	
CHEM 131 General Chemistry	CHMY 141 Coll Chem I	4
MATH 131 Probability	STAT 121 Probability	4
ENVS 201 Hist/Philos/Science	PHL 241 Hist/Phil/Science	4
Select 1 from the following:		4
GEO 101 Intro to Geology (4)	GEO 101 Intro/Phys Geol (4)	
GEO 150 Envtl Geology (4)	GEO 103 Intro/Envtl Geol (4)	

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Earth Science Major

Earth Science Major Credits

44

CHEM 132 Gen Chem	CHMY 143 Coll Chem II	4
ENVS 348 Soil Science	TBD	4
GEO 226 Rocks/Minerals/Res	GEO 226 Rocks/Min/Res	4
GEO 230 Geol/American West	GEO 230 Geol/Amer West	4
GEO 330 Structure/Tectonics	GEO 315 Structural Geol	4
GEO 378 Surficial Processes	GEO 378 Surficial Process	4
GEO 409 Geology Seminar	GEO 494 Sr Geol Seminar	4
GEO 432 Depositional Environ.	GEO 309 Sed/Stratigraphy	4
MATH 232 Statistics	STAT 217 Int Stats Cncpts	4
PHYS 239 Physical Meteorology	PHSX 249 Phys. Meteorology	4
PHYS 240 Astronomy	ASTR 110 Intro/Astronomy	4

Secondary Education Major

Secondary Ed. Major Credits

42

Professional Education Core (see page 95 for recommended course sequence)

Professional Ed Core Credits

30

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)	Global Educ ¹ (4)	
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Ltrcy	2
ED 355 Meth/Mat/Exper Sci Educ	EDU 497S Meth: 5-12 Science	4
Select 1 from the following:		4
HHP 241 Pers/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).		
A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.		

Student Teaching

Student Teaching Credits 12

ED 473 Stu Teaching-Secondary	<i>EDU 495S Stu Tchg: 5-12</i>	8
May be taken during, or semester prior to, student teaching	<i>EDU 306 Schl Law/Advoc/All K-12 Learners</i>	4

Electives

Elective Credits 10-11

Select from any catalog courses	10-11
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TOTAL CREDITS REQUIRED 128

BS: English & Secondary Education Double Major

Credit Summary

Refer to page [???](#) 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.

General Education – see page [??](#) for full list of requirements

General Education Credits **31-32**

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

English Major

English Major Credits **44**

ENG 204 Creative Writing	4
LIT 300 Literary Criticism	4
Select 1 from the following:	
LIT 210 American Literature I	4
LIT 264 American Romance	4
LIT 265 Realism, Naturalism, Modernism	4
LIT 266 Generations and Conflicts	4
Select 1 from the following:	
LIT 273 The Oral Tradition	4
LIT 274 The Manuscript Tradition	4
LIT 276 The Print Culture	4
LIT 277 The Declining Empire	4
Select 3 from the following:*	
LIT 302 Literature in Translation	4
LIT 335 Women and Literature	4
LIT 339 Literary Regions	4
LIT 361 Poetry and Thought	4
LIT 385 Mythology	4
Select 4 from the following:*	
ENG 413 Hist, Struct, Nature of English	4
LIT 473 Studies in Shakespeare	4
LIT 494 Seminar: Literary Period	4
LIT 494 Seminar: Genre	4
LIT 494 Seminar: Major Authors	4
LIT 494 Seminar: Literary Theory	4
Capstone option:	0
For Secondary Education Double Majors, Student Teaching substitutes for the Capstone	

***Within the English Major, Secondary Education majors must take the following:**

Additional credits 4

New Course	Old UMW Course	
LIT 413 Hist, Struct, Nature of English	ENG 413 Hist, Struct, Nature of Language	4
LIT 385 Mythology	ENG 330 Mythology	4
LIT 473 Studies in Shakespeare	ENG/DR 455 Shakespeare	4
LIT 382 Literature for Children & Adolescents	No equivalent	4
Highly recommended:		
THTR 276 Play Production/Intro/Directing	DR 241 Play Production/Intro to Directing	4
LIT 218 Visions of America	ENG 280 Visions of America	4
WRIT 321 Adv Technical Writing	ENG 350 Tch/Prof Comm	4

Secondary Education Major

Secondary Education Major Credits

46

Professional Education Core (see page [95](#) for recommended course sequence) **Professional Ed Core Credits**

34

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4

ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ¹ (4)	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Ltrcy	2
Take both courses in same semester:		
ENG 352 Meth/Teaching Composition (4)	TBD	4
ENG 353 Meth/Teaching Literature (4)	TBD	4
Select 1 from the following:		4
HHP 241 Personal/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).		
A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.		
Student Teaching		
ED 473 Stu Teaching-Secondary	EDU 495S Stu Tchg: 5-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4
Electives		
Select from any catalog courses		2-3
TOTAL CREDITS REQUIRED	128	

Student Teaching Credits 12

Elective Credits 2-3

BS: General Science Broadfield & Secondary Education

Double Major Credit Summary

The General Science major is not a stand-alone major. It can only be taken with the Secondary Education major.

Refer to page ??? for information on applying for admission to the Teacher Education Program and other program requirements. The General Science Broadfield major prepares candidates to teach in multiple science subjects. Consider adding a single-subject major or minor. A coaching option is also available with any teaching major, but does not lead to licensure.

General Education – see page ?? for full list of requirements

General Education Credits **31-32**

Pre-Fall 2009 UMW Course	OCHE Equivalent Course	
MATH 201 Calculus I	M 171 Calculus I	4
ENVS 201 Hist/Philos/Science	TBD	4
BIO 111 Biology I	TBD	4
Select 1 from the following:		4
GEOL 101 Intro/Geology (4)	GEO 101 Intro/Phys Geol (4)	
GEOL 150 Envntl Geology (4)	GEO 103 Intro/Envntl Geol (4)	

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

General Science Broadfield Major

General Science Major Credits **56**

BIO 214 Gen Botany	BIOO 220 Gen Botany	4
BIO 255 Cell Biology	BIOB 260 Cell/Molec Biol	4
BIO 343 Genetics	BIOB 375 Gen Genetics	4
BIO 450 Evolution	BIOB 420 Evolution	4
CHEM 131 Gen Chem	CHMY 141 Coll Chem I	4
CHEM 132 Gen Chem	CHMY 143 Coll Chem II	4
CHEM 331 Organic Chem	CHMY 321 Organic Chem I	4
CHEM 332 Organic Chem	CHMY 323 Organic Chem II	4
GEOL 226 Rocks/Min/Res	GEO 226 Rocks/Min/Res	4
GEOL 432 Depos Envts	GEO 309 Sed/Stratigraphy	4
PHYS 233 Gen Physics	PHSX 220 Physics I	4
PHYS 234 Gen Physics	PHSX 222 Physics II	4
PHYS 235 Gen Physics III	PHSX 224 Physics III	4
PHYS 240 Astronomy	ASTR 110 Intro/Astronomy	4

Secondary Education Major

Secondary Ed Major Credits **42**

Professional Education Core (see page 95 for recommended course sequence)

Professional Ed Core Credits **30**

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrtl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ² (4)	4
ED 426 Mltictrtl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Ltrcy	2
ED 355 Meth/Mat/Exper Sci Ed	EDU 497S Meth: 5-12 Science	4
Select 1 from the following:		4
HHP 241 Pers/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).		
A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.		

Student Teaching

Student Teaching Credits **12**

ED 473 Stu Teaching-Secondary	EDU 495S Stu Tchg: 5-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4

Electives	0-1
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Total Credits Required

130

BA: Modern History & Secondary Education Double Major

Credit Summary

Refer to page ??? 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. For History majors, we strongly recommend adding the Interdisciplinary Social Science major. A coaching option is also available with any teaching major, but does not lead to licensure.

General Education – see page ?? for full list of requirements **General Education Credits** **31-32**

New Course	Old Course	
Highly Recommended:		
PHIL 100 Intro.to Philosophy	PHIL 100 Intro.to Philosophy	4
STAT 121 Probability	MATH 131 Probability	4
ISSS 202 Pol. Geog./Rocky Mtn.West	GEOG 202 Reg. Geog. North America	4

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Modern History Major **Modern History Major Credits** **40**

ISSS 222 Qualitative Research Meth For Soc Sci	4
Select 3 from the following: SECONDARY EDUCATION MAJORS: Must select both HSTA 101 and 102	12
HSTA 101 American History I (4) HSTA 102 American History II (4) HSTR 101 Western Civilization I (4) HSTR 102 Western Civilization II (4)	
Select 1 from the following:	4
HSTR 255 History of the Far East (4) HSTR 260 Africa & The Middle East (4) HSTR 274 World History (4)	
Select 1 from the following:	4
HSTA 412 American Thought & Culture (4) HSTR 423 European Intellectual History (4)	
Select 1 from the following:	4
HSTA 494 Seminar/Workshop (4) HSTR 494 Seminar/Workshop (4)	
Select 2 additional 300- or 400-level History courses SECONDARY EDUCATION MAJORS: Must select HSTA 355: Montana & the American West	8
Select 1 from the following ISSS Minors (non-ISSS Minors by departmental permission only), or the Secondary Education Major ¹ :	24-30
Anthropology (24) Global Politics (24) Legal Studies (24) Psychology (24) Sociology (24) Secondary Ed. Major Professional Core (30)	
Select 1 from the following Capstone options:	4
HSTA 498 Internship (4), or HSTA 499 Senior Project/Thesis (4), or HSTR 498 Internship (4), or HSTR 499 Senior Project/Thesis (4), or Select 1 HPSS 494 Seminar course (4)	

Secondary Education Major **Secondary Ed. Major Credits** **42**
Professional Education Core (see page 95 for recommended course sequence) **Professional Ed Core Credits** **30**

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4

ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mlticltrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ¹ (4)	4
ED 426 Mlticltrl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Ltrcy	2
ED 357 Meth/Mat in Soc Sci	EDU 497H Meth: 5-12 Soc Stdies	4
Select 1 from the following:		4
HHP 241 Personal/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).		
A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.		

Student Teaching

ED 473 Stu Teaching-Secondary	EDU 495S Stu Tchg: 5-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4

Student Teaching Credits 12

Electives

Select from any catalog courses		14-15
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Elective Credits 14-15

TOTAL CREDITS REQUIRED 128

BS: Industrial Technology Education

Credit Summary

This program is only available at the Helena College of Technology.

For information, contact Gary Frey (gary.frey@umhelena.edu) or Kevin Brockbank at Helena COT (406-444-6775).

Refer to page ??? 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 in Dillon, but does not lead to licensure.

General Education – see page ?? for full list of requirements **General Education Credits 31-32**

Pre-Fall 2009 UMW Course	OCHE Equivalent Course	
CHEM 101 Intro/Chemistry	CHMY 121 Intro/Gen Chem	4
PHYS 101 Intro/Physics	TBD	4

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Industrial Technology Education Major **IT Major Credits 82**
Content Core **Content Core Credits 42**

COMS 210 Comp Hrdwr/Sftwr Mgt	ITS 205 Comp Hrdwr/Sftwr Mgt	4
IT 120 Power/Energy/Transport Fund	TBD	4
IT 130 Graphic Communication	TBD	3
IT 135 Computer-Aided Drafting	TBD	4
IT 140 Metal Materials & Processes	TBD	4
IT 141 Plastics	TBD	1
IT 220 Appl Electric/Electronics	TBD	3
IT 240 Wood/Synthet Prod Syst	TBD	3
IT 241 Machining	TBD	3
IT 311 Technology Lab Mgt	TBD	2
IT 345 Comp-Aided Manufact	TBD	4
IT 350 Struc Analysis/Const Technol	TBD	4
IT 440 Mass Production	TBD	3

Professional Education Core (see page 95 for recommended course sequence) **Professional Ed Core Credits 30**

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ² (4)	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Litrcy	2
IT 351 Meth/Mat/Indust Technol	TBD	4
Select 1 from the following:		4
HHP 241 Pers/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311). A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.		

Student Teaching **Student Teaching Credits 12**

ED 473 Stu Teaching-Secondary	EDU 495S Stu Tchg: 5-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4

Electives **Elective Credits 14-15**

Select from any catalog courses	14-15
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TOTAL CREDITS REQUIRED 128

BA: Interdisciplinary Social Science & Secondary Education Double Major Credit Summary

Refer to page [???](#) 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. With the ISS major, we recommend adding the Modern History major. A coaching option is also available with any teaching major, but does not lead to licensure.

General Education – see page [??](#) for full list of requirements **General Education Credits** **31-32**

New Course	Old Course	
Highly recommended		
PHIL 100 Intro.to Philosophy	PHIL 100 Intro.to Philosophy	4
STAT 121 Probability	MATH 131 Probability	4

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Interdisciplinary Social Science Major **ISS Major Credits** **52**

Secondary Education Double Majors must take the following two ISSS Minors, along with the Secondary Education Major:	48
Global Politics (24) (Must include either ISSS 121 or ISSS 202) History (24) (Must include one non-American history course, & HSTA 355)	
Select 1 Capstone option from one of your Minors (in non-ISSS Minor by Departmental permission only):	4
Select 1 HPSS 498 Internship (4), or Select 1 HPSS 499 Senior Project/Thesis (4), or Select 1 HPSS 494 Seminar course (4), or <i>Waived for Sec Ed Majors ONLY</i>	

Secondary Education Major **Secondary Ed. Major Credits** **42**

Professional Education Core (see page [95](#) for recommended course sequence)

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ¹ (4)	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Ltrcy	2
ED 357 Meth/Mat in Social Science	EDU 497H Meth: 5-12 Soc Studies	4
Select 1 from the following:		4
HHP 241 Pers/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311)		
A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.		

Prof. Ed. Core Credits **30**

Student Teaching

ED 473 Stu Teaching-Secondary	EDU 495S Stu Tchg: 5-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Adv/All K-12 Lrnrs	4

Student Teaching Credits **12**

Electives Elective Credits

Select from any catalog courses	2-3
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2-3

TOTAL CREDITS REQUIRED 128

BS: Mathematics & Secondary Education Double Major

Credit Summary

Refer to page ??? 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.

General Education – see page ?? for full list of requirements **General Education Credits 31-32**

New Course	Old Course	
STAT 121 Probability	Math 131 Probability	4

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Mathematics Major **Mathematics Major Credits 48**

<i>Mathematics Major Core Courses</i>		
<i>Course #</i>	<i>Course Title</i>	<i>Credits</i>
M 171 / MATH 201	Calculus I	4
M 172 / MATH 202	Calculus II	4
M 273 / MATH 203	Calculus III	4
M 210 / MATH 210	Computer Mathematics	4
<i>Select one of the following three courses</i>		4
STAT 217 / MATH 232 STAT 422 / MATH 333 STAT 233 / MATH 233	Intermediate Statistical Concepts Mathematical Statistics Biostatistics	
M 221 / MATH 260	Introduction to Linear Algebra	4
M274 / MATH 311	Introduction to Differential Equations	4
M 329 / MATH 341	Modern Geometry	4
M 343 / MATH 343	Foundations of Mathematics	4
<i>Upper Division Courses and Thesis Credits for the B.S. Major in Mathematics</i>		
<i>Select three of the following courses. At least one must be M 414 or STAT 433.</i>		12
M 414 / MATH 401 STAT 433 / MATH 433 M 472 / MATH 441 M 472 / MATH 442 M 431 / MATH 443 M 444 / MATH 444	Deterministic Modeling Stochastic Modeling Advanced Calculus I Introduction to Complex Analysis Abstract Algebra Advanced Number Theory	
M 499 / MATH 498	Senior Project/Thesis (unless taking a secondary ed double major)	0

Secondary Education Major **Secondary Ed. Major Credits 42**

Professional Education Core (see page 95 for recommended course sequence) **Professional Ed Core Credits 30**

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)	Global Educ ² (4)	
ED 445 Meth/Tchg Cont Area Ltrcy	EDU 481 Content Area Ltrcy	2
M 341 Meth/Mater/Math	EDU 497M Meth:5-12 Math	4
Select 1 from the following:		4
HHP 241 Pers/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	
¹ Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).		

A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

Student Teaching

ED 473 Stu Teaching-Secondary	EDU 495S Stu Tchg: 5-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4

Electives

Select from any catalog courses	6-7
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TOTAL CREDITS REQUIRED

Student Teaching Credits 12

Elective Credits 6-7

128

BS: Music Education K-12

Credit Summary

Refer to page ??? 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.

General Education – see page ?? for full list of requirements **General Education Credits** **31-32**

Pre-Fall 2009 UMW Course	OCHÉ Equivalent Course	
Music courses used for the major may also be used to fulfill Gen. Ed. Humanities requirements	TBD	4

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Music Education K-12 Major

Major Credits **88**
Content Core Credits **46**

Pre-Fall 2010 UMW Course	OCHÉ Equivalent Course	
ED 379 Music for Elem Teachers	EDU 397 Meth: K-8 Music	3
MUS 131 Music Theory I (2)	MUSI 107 Mus Thry I/Aural Percep (4)	4
MUS 141 Appl Musicianship I (2)		
MUS 132 Music Theory II (2)	MUSI 109 Mus Thry II/Aural Percep (4)	4
MUS 142 Appl Musicianship II (2)		
MUS 162 Voice in Class	MUSI 152 Voice in Class	4
MUS 202 Intro/Music Lit	MUSI 202 Intro/Music Lit	4
MUS 209 String Methods	TBD	1
MUS 212 Woodwind Methods	MUSE 133 Techniq: Woodwinds	1
MUS 213 Brass Methods	TBD	1
MUS 214 Percussion Methods	MUSE 134 Techniq: Percussion	1
MUS 233 Mus Theory/Ear Train III	TBD	4
MUS 372 Conducting	TBD	3
MUS 374 Arranging	TBD	4
MUS 461 Music History	TBD	4
Select 4 credits from Lessons:		4
MUS 114 Orchestral Instruments (1)	TBD	
MUS 153 Piano (V 1-2)	MUSI 195Appl Music I (V 1-2)	
MUS 163 Voice (V 1-2)	MUSI 150 Beg Voice (V 1-2)	
MUS 187 Performance Seminar (1)	MUSI 187 Perform Study (1)	
MUS 314 Orchestral Instruments (1-2)	TBD	
MUS 353 Piano (V 1-2)	MUSI 395 Appld Mus III (V 1-2)	
MUS 363 Voice (V 1-2)	MUSI 363 Voice (V 1-2)	
MUS 387 Performance Seminar (1)	MUSI 387 Perform Study (1)	
Select 4 credits from Ensembles:		4
MUS 113 Instr Ensemble (1)	TBD	
MUS 116 Concert Band (1)	MUSI 114 Band: UMW Cncrt Bnd (1)	
MUS 117 Jazz Ensemble (1)	MUSI 131 Jazz Ens I: UMW (1)	
MUS 165 Voc Ensemble (1)	MUSI 147 Choral Ens: UMW (1)	
MUS 313 Instr Ensemble (1)	TBD	
MUS 316 Concert Band (1)	MUSI 314 Band III: UMW Cncrt Band (1)	
MUS 317 Jazz Ensemble (1)	MUSI 331 Jazz Ens II: UMW (1)	
MUS 365 Voc Ensemble (1)	MUSI 312 Choir III: UMW (1)	

Professional Education Core (see page 95 for recommended course sequence)

Prof. Ed. Core Credits **30**

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ² (4)	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Ltrcy	EDU 481 Content Area Ltrcy	2
MUS 351 Meth/Mat in Music (3)	MUSE 497 Methods: Sec Music Prog (4)	4
MUS 378 Sec Schl Music Tching Prac (1)		
Select 1 from the following:		4
HHP 241 Pers/Comm Health (4)	TBD	
HHP 245 Human Sexuality (4)	TBD	

¹Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).

A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

Student Teaching

ED 474 Stu Teaching k-12	<i>EDU 495A Stu Tchg: K-12</i>	8
May be taken during, or semester prior to, student teaching	<i>EDU 306 Schl Law/Advoc/All K-12 Lnrs</i>	4

Student Teaching Credits 12

Electives

Select from any catalog courses	8-9
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Elective Credits 8-9

TOTAL CREDITS REQUIRED

128

BS: Physical Education & Health K-12

Credit Summary

The Physical Education and Health K-12 major prepares candidates in two licensure fields. Refer to page ??? 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.

General Education – see page ?? for full list of requirements

General Education Credits **31-32**

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Physical Education & Health K-12 Major

Major Credits **88**
Content Core Credits **50**

Content Core

Pre-Fall 2010 UMW Course	OCHE Equivalent Course	
HHP 143 Found/Health/PE	TBD	4
HHP 201 Team Sport Methods/Tech	TBD	4
HHP 202 Indiv/Dual Sport Meth/Tech	TBD	4
HHP 205 Dance/Rhythm Meth/Tech I	DANC 285 Danc/Rhythm Meth/Tech I	1
HHP 206 Dance/Rhythm Meth/Tech II	DANC 286 Danc/Rhythm Meth/Tech II	1
HHP 231 First Aid & Safety	TBD	1
HHP 241 Pers/Comm Health	TBD	4
HHP 245 Human Sexuality	TBD	4
HHP 315 Biomechanics	TBD	4
HHP 317 Exercise Physiology	TBD	4
HHP 319 Motor Learning/Psychol	TBD	4
HHP 347 Org/Admin/Health Enhanc	TBD	4
HHP 364 Nutrition	TBD	4
HHP 374 Elem School HPE/&Pract	TBD	4
HHP 454 Adapted PE/Rec	TBD	4

Prof. Ed. Core Credits **26**

Professional Education Core (see page 95 for recommended course sequence)

ED 120 Becom/Prof Educator	EDU 201 Intro/Ed w/Fld Exper	4
ED 253 Psy Found Teach/Learn	EDU 222 Ed Psy/Child Devel	4
ED 328 Curr/Instruc/Assess/Mgt (3)	EDU 340 Classroom Mgt (4)	4
ED 329 Curr/Inst/Assess/Mgt Prac (1)	EDU 382 Assess/Curr/Instr (4)	4
ED 425 Mltictrl/Global Ed ¹ (3)	EDU 311 Cultr/Divers/Ethics in Global Educ ² (4)	4
ED 426 Mltictrl/Global Ed Prac ¹ (1)		
ED 445 Meth/Tchg Cont Area Litrcy	EDU 481 Content Area Litrcy	2
HHP 351 Sec PE/Hlth Methods	TBD	4

¹Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).

A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

Student Teaching

Student Teaching Credits **12**

ED 474 Stu Teaching K-12	EDU 495A Stu Tchg: K-12	8
May be taken during, or semester prior to, student teaching	EDU 306 Schl Law/Advoc/All K-12 Lrnrs	4

Electives

Elective Credits **8-9**

Select from any catalog courses	8-9
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TOTAL CREDITS REQUIRED

128

January 13, 2011

ITEM 150-1603-R0111

The University of Montana Western
B.S. Major in Health and Human Performance

THAT

The University of Montana Western requests that a new major be created in Health and Human Performance.

EXPLANATION

Currently no degree option exists at Montana Western for students interested in careers in Health and Human Performance who are not interested in becoming teachers. The proposed new major would create such an option using entirely existing coursework, faculty, and other resources.

ATTACHMENTS

Level II documentation with appendices

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: **150-1603-R0111**

Meeting Date: **January 13, 2010**

Institution: **The University of Montana –
Western**

CIP Code: **31.0501**

Program Title: **B.S. Major in Health & Human Performance**

Level II proposals require approval by the Board of Regents.

Level II action requested (place an X for all that apply): Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor or certificate where there is no major or no option in a major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

The University of Montana Western proposes to add a new B.S. Major in Health and Human Performance that would provide excellent preparation for students planning to pursue graduate studies and/or employment in the rapidly expanding fields of personal/corporate fitness and wellness programming, public health, exercise science, and exercise prescription. It would use entirely existing coursework already being regularly taught in the large and growing Physical Education and Health teaching major.

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Curriculum Proposals

1. Overview

The proposal is to create a new major that is a non-teaching Major within the Health and Human Performance discipline. This would satisfy the considerable demand for such a program from students interested in non-teaching career opportunities in this discipline.

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

This proposed B.S. Major in Health and Human Performance would provide extensive preparation for students planning to pursue graduate studies and/or employment in the rapidly expanding fields of personal/corporate fitness and wellness programming, public health, exercise science, and exercise prescription. It would use entirely existing coursework already being regularly taught in the large and growing Physical Education and Health teaching major.

3. Need

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

This degree is in response to student demand for preparation for careers in physical education and health that are not in the K-12 education realm.

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

This proposed major would allow students to pursue careers within the health and human performance discipline. Graduate school applications have been confounded by the nature of the Montana Western transcript which does not list the current program as a "major" even though the coursework and credits are similar to single-discipline majors at other institutions. The current proposal will make it possible for students to be issued a transcript and a diploma that actually reflects their course of study.

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

The Health & Human Performance program is the third largest program on the UMW campus (after Business and Elementary Education) and continues to grow. The program currently has 94 students, which represents 7 percent of the total student population, in our Physical Education & Health K-12 program. It is expected that approximately 20 percent of these students to switch to the proposed degree program. It is anticipated that the continued steady rise in demand for the major programs to continue. These projections are based mainly on current enrollment trends and communication with current, exiting, and recent program graduates.

4. Institutional and System Fit

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

These proposed changes, while possibly appearing on paper as an expansion of programs, actually represent another option for students within the HHP discipline. Currently, the only option for Montana Western students is to receive a teaching degree. This new major will provide them options for other careers in the HHP field.

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

No, the courses used in this degree are all existing courses on campus. All courses are offered once, twice, or more times per year. The rotations of the courses will allow all students to complete this degree in four years.

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

The Health & Human Performance Major differs significantly from the PE & Health teaching degree. Forty-five percent of the coursework in the HHP Major (new) is not part of the PE & Health teaching degree. However, as stated previously, all courses required for the proposed major are already being taught on campus on a regular basis.

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

These changes will allow the HHP Program to best promote the goals of Montana Western's Strategic Plan, in particular: Goal #1 Improve undergraduate education, Goal #2 Increase enrollment through enhanced affordability, access, success and retention and increase graduation rates, and Goal #5 Strategically position the university for maximum efficiency and long-range success.

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.

Both UMM and MSU-Bozeman have an exercise science program which specialize in the science aspects of the HHP field. The Montana Western Major would be a broadfield Major which will focus more on the administrative and business end of the HHP field. Since the programs on each of the other campuses do contain some similar coursework, Montana Western faculty will work with other faculty to identify similar courses on each of the campuses in order to ease potential transfer between the programs. Much of this has already been done since all of the courses that would be used in the new major are currently being taught on the Montana Western campus.

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.

See attached UMW Curriculum Proposal.

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

Students aiming for graduation in 2012 and beyond will be advised into the new majors/minors beginning in Fall 2011. It is expected that the total number of majors in the department to continue to expand, while the distribution of those students within the new majors will have to be observed and documented in the first few years of implementation.

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.

Additional faculty resources would not be needed to offer these new programs. However, if the new program grows at the same rate that the Physical Education & Health program grows, we would anticipate the need for additional faculty.

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

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No, all courses are currently available either within the existing HHP Program or other departments on campus.

7. Assessment

How will the success of the program be measured?

The assessment plans will follow in the model of our current plan, which employs both primary (observed performance) and secondary (survey) assessment tools collected at both the benchmark and capstone levels.

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.

These proposals have been developed through extensive research on interdisciplinary HHP instructional models from across the English-speaking world; communication with current, graduating, and past program students; and has passed through the Montana Western internal curriculum process, including extensive collaboration with the Education department on teaching certification coordination, review by the campus Curriculum Committee, Faculty Senate, Provost and Chancellor.

FROM: UMW Internal Curriculum Proposal

**UMW Proposed BS Major:
HEALTH & HUMAN PERFORMANCE**

PROPOSED CREDIT SUMMARY

General Education Credits 31-32

HHP MAJOR

HHP 143 Found/Hlth & PE	4
HHP 201 Team Sport Methods/Tech	4
HHP 202 Indiv/Dual Sport Meth/Tech	4
HHP 205 Dance/Rhythm Meth/Tech I	1
HHP 206 Dance/Rhythm Meth/Tech II	1
HHP 231 First Aid & Safety	1
HHP 241 Personal/Community Health	4
HHP 245 Human Sexuality	4
HHP 315 Biomechanics	4
HHP 317 Exercise Physiology	4
HHP 319 Motor Learning & Psychology	4
HHP 347 Org/Admin/Health Enhancement	4
HHP 364 Nutrition	4
HHP 240 Leisure Services	4
HHP 311 Athletic Training I	4
HHP 416 Conditioning Program Development	4
BUS 304 Leadership	4
COMS 101 Intro to Computers & Presentations	1
HHP 498 Senior Project/Thesis/Internship	10
<i>Select 1 from the following:</i>	
HHP 350 Coaching: Pedagogy, Admin. & Ethics	4
HHP 410 Athletic Training II	4

Major Credits 74

ELECTIVE REQUIREMENTS

Complete 14-15 credits from any catalog courses

Elective Credits 14-15

TOTAL CREDITS REQUIRED 120

Academic Year Proposal Submitted _____
 For: _____ Catalog



Date Received _____
By _____

Level I - Campus Level Approval
 Level II - OCHE Approval
 Level III - BOR Approval

Curriculum Proposal Form

Department or Program Approval
 Date _____ Initials _____

General Education Committee (if appropriate)
 Date _____ Initials _____

Proposed as Gen Ed Course? Yes No

Gen Ed Category:

Course Fee Attached to Any Course?

No Yes (Completed Course Fee Request Form attached)

If course Number/Name with Lab Fee is changing, previous course Number/Name:

Curriculum Committee Use Only

Proposal Tabled _____
Date Initials

Approved _____
Date Initials

Rejected _____
Date Initials

Withdrawn _____
Date Initials

Faculty Senate Approval _____
Date Initials

Provost Approval _____
Date Initials

Chancellor Approval _____
Date Initials

Type of Proposal (check all that apply)

- Program Requirement Change
- Course Number Change
- Course Title Change
- Course Credit Change
- Course Description Change
- Prerequisite Change
- Delete Course from Catalog
- New Course
- X Other (describe):
 A new major

For Curriculum Committee Use Only:

Submitted by:
 Dr. Megan Chilson

Department (Program) contact person:
 Dr. Megan Chilson

Succinct Statement of Proposed Change: (attach shell syllabus for new course(s) that includes course description, course outcomes, and assessment information/tools)

This proposed new Major in Health and Human Performance is derived from the existing teaching major in Physical Education and Health. Compared to the current Education PEH K-12 teaching Major, this proposed Major would provide more extensive preparation for students planning to pursue graduate studies and employment in the rapidly expanding fields of personal/corporate fitness and wellness

programming, public health, exercise science, and exercise prescription. The Health & Human Performance Major differs significantly from the PE & Health teaching degree. 45% of the coursework in the HHP degree (new) is not part of the PE & Health teaching Major, but all courses are currently available on campus on a regular rotation.

Provide assessment information supporting the request (rationale):

The Health & Human Performance program is the third largest program on the UMW campus (after Business and Elementary Education) and continues to grow. There are currently have 85 students, which represents 7% of the total student population, in our Physical Education & Health K-12 program. It is expected that approximately 20% of these students to switch to the new proposed major. It is anticipated the continued steady rise in demand for the HHP major programs will continue. These projections are based mainly on current enrollment trends and communication with current, exiting, and recent program graduates.

Montana Western has students who go into the HHP field with the desire to continue on to Graduate School. This degree would set them up nicely to transition into that next level of their education.

Many of Montana Western students know that they do not want to teach, but would rather use the HHP degree to go into personal training. This degree would set them up nicely to move on to the next level.

Attach new or revised information as it should appear in the Catalog (include course rotation(s) and/or revised degree requirements, if applicable; course descriptions should include assessment and experiential learning activities)

Transferability Considerations (if any):

HHP courses are currently being revised and reviewed with the transferability committees.

Effects, if any, of this proposal on any of our degree programs. (Review other degree programs that may be potentially affected by this proposal; affected Dept Chair aware of possible implications_____)

Courses are already being taught by the HHP faculty and faculty in the Business Department.

Resource Implications (if applicable):

STAFFING:

Who will teach course(s)?

Current Faculty

Current instructors

Effect on faculty member's workload?

OTHER (Library, etc.):

General Education Committee Comments (if appropriate): Date _____

All Chairs/Provost Comments (if appropriate):

Date _____

Curriculum Committee Comments (if appropriate):

Date: _____

BS:

HEALTH & HUMAN PERFORMANCE

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HHP 317 Exercise Physiology	4
HHP 319 Motor Learning & Psychology	4
HHP 347 Org/Admin/Health Enhancement	4
HHP 364 Nutrition	4
HHP 240 Leisure Services	4
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HHP 416 Conditioning Program Development	4
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