LEVEL II MEMORANDUM

DATE: December 14, 2011

TO: Chief Academic Officers, Montana University System

FROM: Sylvia Moore, Deputy Commissioner for Academic, Research, & 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 21, 2011**. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on **Friday, December 30**. That notification should be directed to Summer Marston, Assistant to the Deputy Commissioners. If Summer does not hear from you, in writing, by **noon on December 30**, OCHE will assume that the proposals have your approval.

The Level II submissions are as follows:

Flathead Valley Community College:
- Change Medical Coding Certificate of Applied Science to Associate of Applied Science Degree ITEM #154-303-R0112 | Request Form ˙ ˙# ˙h

Montana State University-Bozeman:
- Major in Religious Studies ITEM #152-2013-R0911 | Request Form | Curriculum Proposals
  * This item was originally submitted in September 2011, but was then pulled off the Level II memorandum before consent in November 2011 to allow for further clarification of details. It was then placed on the Level II memorandum for consent in March 2012.
- Establish an Associate of Arts Degree ITEM #154-2001-R0112 | Request Form | Curriculum Proposal
- Establish an Associate of Science Degree ITEM #154-2002-R0112 | Request Form | Curriculum Proposal
- Establish a Certificate of Applied Science – Residential Building Performance ITEM #154-2003-R0112 | Request Form | Curriculum Proposal
- Establish a Certificate in General Studies ITEM #154-2004-R0112 | Request Form | Curriculum Proposal

Montana State University-Billings:
- Rename of The Montana Center on Disabilities to Montana Center for Inclusive Education and revision of mission statement ITEM #154-2702-R0112 | Request Form | Prospectus and budget

Montana State University-Great Falls COT:
- Offer fully online Veterinary Technician Associate of Applied Science ITEM #154-2901-R0112 | Request Form | Curriculum Proposal | Letters of Support | Budget | Fees
- Add a Certificate in General Studies ITEM #154-2902-R0112 | Request Form | Curriculum Proposal

The University of Montana-Missoula:
- Create a program leading to a minor in Wildland Fire Sciences and Management in the Department of Forest Management of the College of Forestry and Conservation ITEM #154-1001-R0112 | Request Form | Curriculum Proposal

LEVEL II MEMORANDUM

- Establish an interdisciplinary minor in Global Public Health ITEM #154-1003-R0112 | Request Form | Curriculum Proposal
- Create a Minor in Arabic Studies ITEM #154-1006-R0112 | Request Form | Curriculum Proposal

January 17-18, 2012

ITEM 154-303-R0112
Medical Coding Certificate of Applied Science

THAT

The Flathead Valley Community College Board of Trustees has voted to change the Medical Coding Certificate of Applied Science to an Associate of Applied Science Degree.

EXPLANATION

The Medical Coding CAS Program advisory committee recommended offering a degree rather than a certificate because the students in the program are already here for four semesters and it would help them to earn a degree rather than a certificate. This will require that students take more credits during their last semester in the program to equal 64 total credits.

ATTACHMENTS

Level II Request Form

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: **154-303-R0112**   Meeting Date: **January 17-18, 2012**

Institution: **FVCC**   CIP Code: **46.0503**

Program Title: **Medical Coding Certificate of Applied Science**

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for __all__ that apply and __submit with completed Curriculum Proposals Form__):*

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:

_X_ 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; and

___ 4. 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:

Based on a recommendation of the Medical Coding advisory committee, The Flathead Valley Community College Board of Trustees requests permission to change the Medical Coding CAS degree to an Associate of Applied Science degree. This can be accomplished by adding 16 credits to the already four-semester program. Graduating with an AAS degree rather than a CAS will increase students' marketability in the field.

Montana Board of Regents
CURRICULUM PROPOSALS

1. **Overview**

   Our Medical Coding Program is currently being offered as a Certificate of Applied Science with 50 credits taken in a 4 semester time sequence. Our proposal is to make this Program an AAS Degree in Medical Coding. This would not add more time to the program as students are currently here for 4 semesters. This would add an AAS Degree to their credentials

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

   This program currently exists as a CAS program and we would like to give students the opportunity to earn an AAS Degree in Medical Coding.

3. **Need**

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

   Medical Coding is a highly specialized field and the coding standards are about to change significantly from ICD-9-CM to ICD-10-CM. This means that students need to be prepared for the change and become trained using the new standards; however, in addition to the coding specifics, students need to be good leaders and communicators of their assigned task because they will be entering a medical profession amidst significant change and will need to guide medical staff tactfully through that change. The addition of a leadership, communication, and spreadsheet class, all recommended by advisory board members, will increase the number of credits so that students already attending for 4 semesters will leave with an AAS Degree instead of a CAS Certificate in Medical Coding.

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

   Students will gain a degree from this change instead of a Certificate for their 4 semesters of attendance.

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

   The demand for this program remains the same as before. It was originally calculated by a survey in the medical community, help from AHIMA, and recommendations from advisory committee members. Rapid growth in the health services industry as a whole and the expansion of the medical community in the area should fuel growth within this occupation. Positions for Health Information Technicians in Montana are projected to experience an 18% growth increase from 2008-2018.

4. **Institutional and System Fit**

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

   This program is very popular on campus and has significant enrollment. The classes used for this program are also used for most other Health Sciences programs.

Montana Board of Regents
CURRICULUM PROPOSALS

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

This change will not affect other programs on campus.

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

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

By achieving an AAS Degree instead of a Certificate, this change will allow students to better follow our Health Information Technology Pathway. This Degree will be a good stepping stone for students who would like to eventually earn a Bachelor's Degree.

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.

Medical Coding Programs exist at several campuses throughout the Montana University System. Most of these programs are a one-year certificate program that prepares students for an entry level position at a medical facility. Our Advisory committee and KRMC in particular were having problems finding qualified advanced medical coders, so they asked us to increase the length of our certificate giving students more practice at their skill and better preparing them for the workforce. This change brought about a Certificate program where students were on campus for 4 semesters. We would like to have them earn the AAS Degree for that length of time. We would be the only campus that has the AAS Degree in Medical Coding.

5. Program Details

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

The detailed course catalog page is attached.

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

We currently have approximately 25 students in this program at various stages. Students who are currently in the program will have the choice to leave with the CAS or the AAS. Students who enter this program in Fall 2012 will leave campus with the AAS Degree pending Board of Regents Approval of this proposal.

Montana Board of Regents
CURRICULUM PROPOSALS

6. Resources

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

    The courses added to this program already exist with qualified faculty teaching the courses. I don't anticipate additional faculty resources.

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

    No additional resources will be required.

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

    The success of the program is already being measured by employers, advisory members and various other assessment activities. This assessment will not change.

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

    This process included:
1. Advisory input and recommendations
2. Faculty input and Faculty Senate approval
3. Curriculum Committee Approval
4. Board Of Trustees Approval

September 21-22, 2011

ITEM 152-2013-R0911
Major in Religious Studies

THAT

The Board of Regents of Higher Education authorizes Montana State University-Bozeman to establish a major in Religious Studies.

EXPLANATION

Montana State University-Bozeman is proposing a new undergraduate major in Religious Studies, which will be housed in the Department of History and Philosophy. The program will provide students with the cultural knowledge and critical tools necessary to understand the role that religion plays in the contemporary world. Students will be trained in the academic study of religion, including basic religious literacy, a working knowledge of world religions and global culture, critical thinking skills, with particular attention to cultural, social, and textual analysis, and intensive training in writing, research, discussion, and oral presentation. Students who major in Religious Studies will graduate as able global citizens, with the ability to critically examine and analyze topics pertaining to religion and its effects on the cultural, economic, social and political issues of today.

* This item was originally submitted in September 2011, but was then pulled off the Level II memorandum before consent in November 2011 to allow for further clarification of details. It was then placed on the Level II memorandum for consent in March 2012.

ATTACHMENTS

Level II Request Form
Curriculum Proposal

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **152-2013-R0911**   Meeting Date: **March 1-2, 2012**

Institution: **Montana State University-Bozeman**   CIP Code: **38.0201**

Program Title: **Major in Religious Studies**

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for __all__ that apply and __submit with completed Curriculum Proposals Form__):*

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.)

 X **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; and

    4. 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-Bozeman is proposing a new undergraduate major in Religious Studies, which will be housed in the Department of History and Philosophy. Students who major in Religious Studies will graduate as able global citizens, with the ability to critically examine and analyze topics pertaining to religion and its effects on the cultural, economic, social and political issues of today. The Religious Studies option in History and the Religious Studies option in Philosophy will be eliminated upon approval of this proposal.

* This item was originally submitted in September 2011, but was then pulled off the Level II memorandum before consent in November 2011 to allow for further clarification of details. It was then placed on the Level II memorandum for consent in March 2012.

Montana Board of Regents
CURRICULUM PROPOSALS

1. Overview

This submission requests authorization to offer a new major in Religious Studies at Montana State University-Bozeman. The Religious Studies option in History and the Religious Studies option in Philosophy will be withdrawn immediately upon approval of this proposal.

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

Montana State University-Bozeman is proposing a new undergraduate major in Religious Studies, which will be housed in the Department of History and Philosophy. The program will provide students with the cultural knowledge and critical tools necessary to understand the role that religion plays in the contemporary world. Students will be trained in the academic study of religion, including basic religious literacy, a working knowledge of world religions and global culture, critical thinking skills, with particular attention to cultural, social, and textual analysis, and intensive training in writing, research, discussion, and oral presentation. Students who major in Religious Studies will graduate as able global citizens, with the ability to critically examine and analyze topics pertaining to religion and its effects on the cultural, economic, social and political issues of today.

3. Need

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

Religion's prominence in public life, both in the U.S. and abroad, has grown substantially in recent decades and is likely to continue to grow in the years ahead. This program has been designed to meet the needs of multiple student constituencies:

- Students who currently go to other institutions because MSU-Bozeman does not offer a degree in Religious Studies
- Students who are interested in completing a high-quality program in Religious Studies as preparation for professional education
- Students who intend to go on to do graduate-level work in Religious Studies
- Students who are eager to pursue careers – in law, government service, teaching – for which a rigorous degree in Religious Studies is the most appropriate kind of preparation
- Lifelong learners who want to take a broad range of courses on American and world religions

Recommendations for MSU-Bozeman to pursue the development of such a degree came from a number of campus constituencies, most notably students and faculty in the College of Letters and Science. Student interest in the proposed program, as expressed by inquiries directed to faculty and to student advisors, and by the number of students in the Religious Studies option in History, the Religious Studies option in Philosophy, and the non-teaching minor in Religious Studies, support the claim that there is a need to respond to student demand for this program.

Montana Board of Regents

CURRICULUM PROPOSALS

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

The proposed course of study equips students with basic literacy in major world religious traditions. It also prompts students to interrogate the intersection of religion with broader cultural forms, including politics, science and technology, literature, and visual and material culture. The uniquely multi-disciplinary nature of Religious Studies ensures students' familiarity with a range of academic research methods, from archaeology to textual analysis, from ethnography to critical theory. At all levels of the Religious Studies curriculum, students will develop the skills to think rigorously and critically; to read, analyze, and evaluate primary texts from a variety of religious and cultural contexts; to navigate scholarly literature about religious traditions; to conduct research, both independently and in conjunction with faculty; and to articulate their thoughts precisely both orally and in writing. Students who major in Religious Studies will graduate as able global citizens, with knowledge of ancient and contemporary religious cultures, both at home and abroad.

Conversations with faculty in other Religious Studies programs suggest that about 25% of graduates go on to graduate school or professional training (e.g., law school). Degree-holders pursue multiple careers, ranging from academic and professional to business and government. These include education, non-profit organizations (including faith-based and development programs), federal diplomatic and intelligence agencies, journalism, publishing, television media, social welfare organizations (counseling, interfaith initiatives), and youth organizations.

Like other majors in the Humanities, a major in Religious Studies equips students with highly transferable skills in writing, discussion, and critical analysis. Courses in world religions like Islam and Hinduism serve as valuable preparation for students interested in careers in international business, government service and related fields in which training in cultural diversity is important.

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

Traditionally, courses in Religious Studies have enrolled large numbers of majors (416 in AY 2009-10, 356 in AY 2010-11), and will continue to do so. Judging from: 1) the popularity of Religious Studies courses; 2) current enrollments in the Religious Studies option in History, the Religious Studies option in Philosophy, and the minor in Religious Studies - 14 students altogether in Fall 2010; and 3) the number of majors in other regional Religious Studies programs - 34 majors (Fall 2010) at the University of North Dakota, 20 majors (Fall 2010) in the brand new Religious Studies major at the University of Wyoming - we anticipate that enrollment in MSU's proposed major in Religious Studies would initially be perhaps 15-25 students.

Montana State University will phase out the proposed major, if, by Fall 2017, it has fewer than 25 majors.

It is worth emphasizing that the purpose of establishing a major in Religious Studies is not to enroll large numbers of students, but to provide for those students whose first and primary interest is the academic study of religion, or whose career or educational goals would be better served by having an undergraduate degree in Religious Studies. There is, for example, no doubt that students with a Bachelor's degree in Religious Studies would be better positioned to gain admission to nationally competitive graduate-level programs in Religion.

Montana Board of Regents
CURRICULUM PROPOSALS

4. Institutional and System Fit

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

The proposed major in Religious Studies would offer MSU students a unique, multi-disciplinary curriculum that is not replicated in any of our existing majors. It would serve to complement other Humanities-based programs, like American Studies and Women's and Gender Studies.

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

The Department of History and Philosophy currently offers Religious Studies options both in History and in Philosophy, in large part as a (generally unsatisfactory) way to satisfy long-standing student interest in the study of religion. Both options will be removed from the curriculum immediately upon approval of this proposal.

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

No other program at MSU offers a fully integrated undergraduate education in the academic study of religion.

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

Among the foremost challenges of the 21st century will be a sharp increase in global connectedness and the continuing importance of religion to political and cultural life both in the U.S. and abroad. In order to be able to face these challenges, MSU graduates should be "religiously literate"; that is, they should have a solid working knowledge of the major world religions, as well the ability to think critically about how religion enters into public life. The Religious Studies major would be uniquely well suited to equip students with such religious literacy, as well as with the global and cross-cultural awareness that it necessarily entails. In addition to training global citizens, the program would promote the integration of knowledge through its deep-seated commitment to multi-disciplinary study, and it would provide numerous opportunities for international exchange. An undergraduate major in Religious Studies could also help to support graduate programs in the Humanities (for example, in History, English and Native American Studies). Religious Studies faculty also have a long history of outreach to the world beyond the campus by engaging in service, speaking, and other collaborative projects with a range of local and state groups. Corona productions, for example, under the direction of the faculty in Religious Studies, has produced a one-hour film on early children's books, a lecture-theatre, a text-and-image experimental journal, and an on-going lecture series open to the public. The faculty is committed to organizing additional opportunities for majors to engage in public outreach, like the current pilot program that trains MSU undergraduates to work with teachers at a local middle school in developing a curriculum on world religions. Such programs will foster collaboration between MSU and the community, and serve as a model for how Religious Studies graduates could use their training in professional lives that feature public service.

Montana Board of Regents

CURRICULUM PROPOSALS

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.**

No unit of the Montana University System currently offers a major in Religious Studies. Religious Studies is one of several options in the Liberal Studies major at the University of Montana. The scope of our proposed major, as well as its distinctive focus on teaching students about the intersection of religion, science, and technology, would render it substantially different from the Liberal Studies option at the University 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.**

Proposed curriculum

I. Degree requirements

Core curriculum	27-30 credits
Religious Studies courses	33-35 credits
Foreign language requirement	8 credits
Methodologies requirement	6 credits
Capstone course (RLST 4XX)*	3 credits
Electives	38-43 credits
TOTAL	120 credits

*New course to be developed in support of the curriculum

II. Four-Year Plan

FRESHMAN YEAR	Credits
CLS 101US-Freshman Seminar	3
WRIT 101W-College Writing I	3

Take one of the following:

RLST 100D	Introduction to the Study of Religion	3
RLST 110D	Religion, Conflict, & Politics	4
One Year Foreign Language		8
Other University Core and Electives		12-13
		30

Montana Board of Regents
CURRICULUM PROPOSALS

SOPHOMORE YEAR

Take one of the following:
RLST 202D	Asian Religions 1: Hinduism & Buddhism3	
RLST 203D	Asian Religions 2: Daoism to Zen	3

Take one of the following:
RLST 204IH	Introduction to the Hebrew Bible	3
RLST 205IH	Introduction to the New Testament	3

Take two of the following:
RLST 206IH	Origins of God	3
RLST 207IH	Myth and Metaphor	3
RLST 217IH	Religion and Science	3
RLST 220IH	Interpretation of American Religion	3
RLST 223IH	Nature & Culture	3
RLST 290R	Undergraduate Research	3
RLST 291	Special Topics	3
University Core and Electives		18
		30

JUNIOR YEAR

Take three of the following:
Any 200-level RLST course		3
RLST 321	Gender and Religion	3
RLST 325	Literature and Religion	3
RLST 326	Mystics, Founders, and Reformers	3
RLST 330	Religion in Ancient Egypt	3
RLST 332	Biblical Archaeology	3
RELS 370	Philosophy of Religion	3

Methodologies requirement: in consultation with their advisor, students will take two courses outside the major that focus on any of the following methodologies:
- archival/historical, archaeological, ethnographic,
- theoretical/philosophical, literary/textual, quantitative,
- performative, visual, etc. (examples include ANTY 225,
- Culture, Language and Society; HSTR 499R, Seminar
- Capstone: Historical Methodology; LIT 285, Mythologies;

PHL 255, Philosophy and Culture)		6
University Core and Electives		15
		30

Montana Board of Regents
CURRICULUM PROPOSALS

SENIOR YEAR
RLST 4XX	Capstone Seminar	3

Take three of the following:
RLST 321	Gender and Religion	3
RLST 325	Literature and Religion	3
RLST 326	Mystics, Founders, and Reformers	3
RLST 330	Religion in Ancient Egypt	3
RLST 332	Biblical Archaeology	3
RELS 370	Philosophy of Religion	3
RLST 402	Natural/ Unnatural/Supernatural	4
RLST 405	Text and Image	3
RLST 407	Isms: Religion & Categories	3
RLST 410	Psyche and the Sacred	3
RLST 490R	Undergraduate Research	3
RLST 491	Special Topics	3
RLST 492	Independent Study	3
RLST 570	Independent Study	3
Electives		17-18
		30

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

We anticipate that students would first be admitted to the major in Fall semester, 2011. Initial enrollment is likely to be small, perhaps 10-15 students, with a modest, and gradual, increase over time.

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.

Because the proposed curriculum will draw almost exclusively on existing courses, no additional faculty resources will be required. The teaching of the proposed capstone course (RLST 4XX) will be accommodated by the reassignment of faculty. Starting Spring 2013, a member of the Religious Studies faculty will be assigned, probably on a rotating basis, to teach the capstone course once a year in place of another 400-level RLST course.

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. Administrative support for the program will be provided through the Department of History and Philosophy. Library resources in the area of Religious Studies are adequate to support undergraduate teaching and research.

Montana Board of Regents
CURRICULUM PROPOSALS

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

   The primary responsibility for assessment of this program will lie with the Chair of the Department of History and Philosophy. Formative data will be collected from required courses in the major. The data will be used to guide curricular and programmatic changes. The capstone course offers a significant opportunity for summative assessment. The Religious Studies faculty will produce written summary reports of the projects completed in the capstone. The program will also by assessed by its track-record in placing graduates in competitive graduate-level programs. Finally, there will be exit surveys and interviews.

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.

   It can be said that MSU has been in the process of developing a major in Religious Studies for several years. A minor in Religious Studies and a Religious Studies option in Philosophy were instituted in the 1990's, a Religious Studies option in History in 2005. Religious Studies faculty have studied curricular and programmatic features of other Religious Studies programs both regionally and nationally, have discussed our proposed curriculum with teacher-scholars at peer institutions, have participated in national meetings on pedagogy in Religious Studies and Religion and Science, and have consulted with many other faculty at MSU, both in the College of Letters and Science and campus-wide. Students have been given many opportunities, both through routine evaluations and intensive interviews, to provide input into the development of the proposed curriculum, especially in regard to the kinds of courses that best meet their interests and academic needs. This proposal was reviewed and approved by the Undergraduate Studies Committee, the Academic Affairs subcommittee of Faculty Senate, and Deans' Council.

Montana Board of Regents
CURRICULUM PROPOSALS

1. **Overview**

   This submission requests authorization to offer a new major in Religious Studies at Montana State University-Bozeman. The Religious Studies option in History and the Religious Studies option in Philosophy will be withdrawn immediately upon approval of this proposal.

   * This item was originally submitted in September 2011, but was then pulled off the Level II memorandum before consent in November 2011 to allow for further clarification of details. It was then placed on the Level II memorandum for consent in March 2012.

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

   Montana State University-Bozeman is proposing a new undergraduate major in Religious Studies, which will be housed in the Department of History and Philosophy. The program will provide students with the cultural knowledge and critical tools necessary to understand the role that religion plays in the contemporary world. Students will be trained in the academic study of religion, including basic religious literacy, a working knowledge of world religions and global culture, critical thinking skills, with particular attention to cultural, social, and textual analysis, and intensive training in writing, research, discussion, and oral presentation. Students who major in Religious Studies will graduate as able global citizens, with the ability to critically examine and analyze topics pertaining to religion and its effects on the cultural, economic, social and political issues of today.

3. **Need**

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

      Religion's prominence in public life, both in the U.S. and abroad, has grown substantially in recent decades and is likely to continue to grow in the years ahead. This program has been designed to meet the needs of multiple student constituencies:
      - Students who currently go to other institutions because MSU-Bozeman does not offer a degree in Religious Studies
      - Students who are interested in completing a high-quality program in Religious Studies as preparation for professional education
      - Students who intend to go on to do graduate-level work in Religious Studies
      - Students who are eager to pursue careers – in law, government service, teaching – for which a rigorous degree in Religious Studies is the most appropriate kind of preparation
      - Lifelong learners who want to take a broad range of courses on American and world religions

      Recommendations for MSU-Bozeman to pursue the development of such a degree came from a number of campus constituencies, most notably students and faculty in the College of Letters and Science. Student interest in the proposed program, as expressed by inquiries directed to faculty and to student advisors, and by the number of students in the Religious Studies option in History, the Religious Studies option in Philosophy, and the non-teaching minor in Religious Studies, support the claim that there is a need to respond to student demand for this program.

Montana Board of Regents
CURRICULUM PROPOSALS

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

The proposed course of study equips students with basic literacy in major world religious traditions. It also prompts students to interrogate the intersection of religion with broader cultural forms, including politics, science and technology, literature, and visual and material culture. The uniquely multi-disciplinary nature of Religious Studies ensures students' familiarity with a range of academic research methods, from archaeology to textual analysis, from ethnography to critical theory. At all levels of the Religious Studies curriculum, students will develop the skills to think rigorously and critically; to read, analyze, and evaluate primary texts from a variety of religious and cultural contexts; to navigate scholarly literature about religious traditions; to conduct research, both independently and in conjunction with faculty; and to articulate their thoughts precisely both orally and in writing. Students who major in Religious Studies will graduate as able global citizens, with knowledge of ancient and contemporary religious cultures, both at home and abroad.

Conversations with faculty in other Religious Studies programs suggest that about 25% of graduates go on to graduate school or professional training (e.g., law school). Degree-holders pursue multiple careers, ranging from academic and professional to business and government. These include education, non-profit organizations (including faith-based and development programs), federal diplomatic and intelligence agencies, journalism, publishing, television media, social welfare organizations (counseling, interfaith initiatives), and youth organizations.

Like other majors in the Humanities, a major in Religious Studies equips students with highly transferable skills in writing, discussion, and critical analysis. Courses in world religions like Islam and Hinduism serve as valuable preparation for students interested in careers in international business, government service and related fields in which training in cultural diversity is important.

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

Traditionally, courses in Religious Studies have enrolled large numbers of majors (416 in AY 2009-10, 356 in AY 2010-11), and will continue to do so. Judging from: 1) the popularity of Religious Studies courses; 2) current enrollments in the Religious Studies option in History, the Religious Studies option in Philosophy, and the minor in Religious Studies - 14 students altogether in Fall 2010; and 3) the number of majors in other regional Religious Studies programs - 34 majors (Fall 2010) at the University of North Dakota, 20 majors (Fall 2010) in the brand new Religious Studies major at the University of Wyoming - we anticipate that enrollment in MSU's proposed major in Religious Studies would initially be perhaps 15-25 students.

Montana State University will phase out the proposed major, if, by Fall 2017, it has fewer than 25 majors.

It is worth emphasizing that the purpose of establishing a major in Religious Studies is not to enroll large numbers of students, but to provide for those students whose first and primary interest is the academic study of religion, or whose career or educational goals would be better served by having an undergraduate degree in Religious Studies. There is, for example, no doubt that students with a Bachelor's degree in Religious Studies would be better positioned to gain admission to nationally competitive graduate-level programs in Religion.

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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 proposed major in Religious Studies would offer MSU students a unique, multi-disciplinary curriculum that is not replicated in any of our existing majors. It would serve to complement other Humanities-based programs, like American Studies and Women's and Gender Studies.

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

The Department of History and Philosophy currently offers Religious Studies options both in History and in Philosophy, in large part as a (generally unsatisfactory) way to satisfy long-standing student interest in the study of religion. Both options will be removed from the curriculum immediately upon approval of this proposal.

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

No other program at MSU offers a fully integrated undergraduate education in the academic study of religion.

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

Among the foremost challenges of the 21st century will be a sharp increase in global connectedness and the continuing importance of religion to political and cultural life both in the U.S. and abroad. In order to be able to face these challenges, MSU graduates should be "religiously literate"; that is, they should have a solid working knowledge of the major world religions, as well the ability to think critically about how religion enters into public life. The Religious Studies major would be uniquely well suited to equip students with such religious literacy, as well as with the global and cross-cultural awareness that it necessarily entails. In addition to training global citizens, the program would promote the integration of knowledge through its deep-seated commitment to multi-disciplinary study, and it would provide numerous opportunities for international exchange. An undergraduate major in Religious Studies could also help to support graduate programs in the Humanities (for example, in History, English and Native American Studies). Religious Studies faculty also have a long history of outreach to the world beyond the campus by engaging in service, speaking, and other collaborative projects with a range of local and state groups. Corona productions, for example, under the direction of the faculty in Religious Studies, has produced a one-hour film on early children's books, a lecture-theatre, a text-and-image experimental journal, and an on-going lecture series open to the public. The faculty is committed to organizing additional opportunities for majors to engage in public outreach, like the current pilot program that trains MSU undergraduates to work with teachers at a local middle school in developing a curriculum on world religions. Such programs will foster collaboration between MSU and the community, and serve as a model for how Religious Studies graduates could use their training in professional lives that feature public service.

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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.

No unit of the Montana University System currently offers a major in Religious Studies. Religious Studies is one of several options in the Liberal Studies major at the University of Montana. The scope of our proposed major, as well as its distinctive focus on teaching students about the intersection of religion, science, and technology, would render it substantially different from the Liberal Studies option at the University 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.

Proposed curriculum

I. Degree requirements

Core curriculum	27-30 credits
Religious Studies courses	33-35 credits
Foreign language requirement	8 credits
Methodologies requirement	6 credits
Capstone course (RLST 4XX)*	3 credits
Electives	38-43 credits
TOTAL	120 credits

*New course to be developed in support of the curriculum

II. Four-Year Plan

FRESHMAN YEAR		Credits
CLS 101US-Freshman Seminar		3
WRIT 101W-College Writing I		3

Take one of the following:

RLST 100D	Introduction to the Study of Religion	3
RLST 110D	Religion, Conflict, & Politics	4
One Year Foreign Language		8
Other University Core and Electives		12-13
		30

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SOPHOMORE YEAR

Take one of the following:
RLST 202D	Asian Religions 1: Hinduism & Buddhism	3
RLST 203D	Asian Religions 2: Daoism to Zen	3

Take one of the following:
RLST 204IH	Introduction to the Hebrew Bible	3
RLST 205IH	Introduction to the New Testament	3

Take two of the following:
RLST 206IH	Origins of God	3
RLST 207IH	Myth and Metaphor	3
RLST 217IH	Religion and Science	3
RLST 220IH	Interpretation of American Religion	3
RLST 223IH	Nature & Culture	3
RLST 290R	Undergraduate Research	3
RLST 291	Special Topics	3
University Core and Electives		18
		30

JUNIOR YEAR

Take three of the following:
Any 200-level RLST course		3
RLST 321	Gender and Religion	3
RLST 325	Literature and Religion	3
RLST 326	Mystics, Founders, and Reformers	3
RLST 330	Religion in Ancient Egypt	3
RLST 332	Biblical Archaeology	3
RELS 370	Philosophy of Religion	3

Methodologies requirement: in consultation with their advisor, students will take two courses outside the major that focus on any of the following methodologies:

• archival/historical, archaeological, ethnographic,
• theoretical/philosophical, literary/textual, quantitative,
• performative, visual, etc. (examples include ANTY 225,
• Culture, Language and Society; HSTR 499R, Seminar
• Capstone: Historical Methodology; LIT 285, Mythologies;

PHL 255, Philosophy and Culture)		6
University Core and Electives		15
		30

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SENIOR YEAR
RLST 4XX       Capstone Seminar                    3
Take three of the following:
RLST 321       Gender and Religion                 3
RLST 325       Literature and Religion             3
RLST 326       Mystics, Founders, and Reformers    3
RLST 330       Religion in Ancient Egypt           3
RLST 332       Biblical Archaeology                3
RELS 370       Philosophy of Religion              3
RLST 402       Natural/ Unnatural/Supernatural     4
RLST 405       Text and Image                      3
RLST 407       Isms: Religion & Categories         3
RLST 410       Psyche and the Sacred               3
RLST 490R      Undergraduate Research              3
RLST 491       Special Topics                      3
RLST 492       Independent Study                   3
RLST 570       Independent Study                   3
Electives                                          17-18
                                                   30
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B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

We anticipate that students would first be admitted to the major in Fall semester, 2011. Initial enrollment is likely to be small, perhaps 10-15 students, with a modest, and gradual, increase over time.

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.

Because the proposed curriculum will draw almost exclusively on existing courses, no additional faculty resources will be required. The teaching of the proposed capstone course (RLST 4XX) will be accommodated by the reassignment of faculty. Starting Spring 2013, a member of the Religious Studies faculty will be assigned, probably on a rotating basis, to teach the capstone course once a year in place of another 400-level RLST course.

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. Administrative support for the program will be provided through the Department of History and Philosophy. Library resources in the area of Religious Studies are adequate to support undergraduate teaching and research.

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

   The primary responsibility for assessment of this program will lie with the Chair of the Department of History and Philosophy. Formative data will be collected from required courses in the major. The data will be used to guide curricular and programmatic changes. The capstone course offers a significant opportunity for summative assessment. The Religious Studies faculty will produce written summary reports of the projects completed in the capstone. The program will also by assessed by its track-record in placing graduates in competitive graduate-level programs. Finally, there will be exit surveys and interviews.

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.

   It can be said that MSU has been in the process of developing a major in Religious Studies for several years. A minor in Religious Studies and a Religious Studies option in Philosophy were instituted in the 1990's, a Religious Studies option in History in 2005. Religious Studies faculty have studied curricular and programmatic features of other Religious Studies programs both regionally and nationally, have discussed our proposed curriculum with teacher-scholars at peer institutions, have participated in national meetings on pedagogy in Religious Studies and Religion and Science, and have consulted with many other faculty at MSU, both in the College of Letters and Science and campus-wide. Students have been given many opportunities, both through routine evaluations and intensive interviews, to provide input into the development of the proposed curriculum, especially in regard to the kinds of courses that best meet their interests and academic needs. This proposal was reviewed and approved by the Undergraduate Studies Committee, the Academic Affairs subcommittee of Faculty Senate, and Deans' Council.

January 19-20, 2012

ITEM 154-2001-R0112
Associate of Arts Degree

THAT

The Board of Regents of Higher Education authorizes Montana State University—Bozeman to establish an Associate of Arts Degree

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EXPLANATION

MSU-Gallatin College Programs is proposing an Associate of Arts Degree to meet the needs and requests of area students who are seeking foundational coursework as they prepare to transfer into a baccalaureate-degree program. MSU—Gallatin College Programs is particularly looking to engage students in our area who are not currently participating in postsecondary education, specifically working adults. The A.A. degree is a 60 credit hour degree based on the Montana University System and Montana State University core curriculum requirements.

This degree is developed to meet Strategy One of the College! Now initiative, to extend the comprehensive community college mission to two-year colleges across the state of Montana. At the November 2011 Board of Regents meeting, Gallatin College Programs was added to the institutions charged with implementing the College! Now strategies.

ATTACHMENTS

Curriculum proposal
Level II request form

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **154-2001-R0112**   Meeting Date: **January 19-20, 2012**

Institution: **Montana State University—Gallatin College Programs**   CIP Code: **24.0199**

Program Title: **Associate of Arts degree**

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for all that apply and submit with completed Curriculum Proposals Form)*:

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;

 X **3. Establish new degrees and add majors to existing degrees; and**

    4. 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—Gallatin College Programs requests authorization from the Board of Regents of Higher Education to offer the Associate of Arts degree, which responds to the needs of area students who plan to transfer into baccalaureate-degree programs.

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1. Overview

Montana State University—Gallatin College Programs seeks to meet the needs and requests of area students who are seeking foundational coursework as they prepare to transfer into a baccalaureate-degree program. These needs and requests will be met through an Associate of Arts degree.

This degree is developed to meet Strategy One of the College! Now initiative, to extend the comprehensive community college mission to two-year colleges across the state of Montana. At the November 2011 Board of Regents meeting, Gallatin College Programs was added to the institutions charged with implementing the College! Now strategies.

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

Montana State University—Gallatin College Programs proposes to offer an Associate of Arts (A.A.) degree in response to the needs of students seeking general education courses for either transfer to a baccalaureate-degree program, particularly at MSU, or as a credential for employment. The A.A. degree is a 60 credit hour degree based on the Montana University System and Montana State University core curriculum requirements.

3. Need

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

MSU—Gallatin College Programs is looking to engage students who are not currently participating in postsecondary education and will offer courses at times designed specifically for working adults. This need is identified in the second College! Now strategy, which asks two-year colleges to serve as regional clearinghouse hubs for adult friendly postsecondary credentials. Montana enrolls a significantly lower percent of the adult population in two-year education than the regional average (7.7% of the population in Montana versus 21.7% as the average of regional states). Montana ranks 11th out of 14 states in the region for the number of 25-64 year old adults enrolled in two-year institutions/programs as a percent of the total population of 25-64 year old adults; therefore, programs and delivery models designed to meet adult students' needs are warranted.

Bozeman is one of the few major communities in the state of Montana without local access to an Associates degree for transfer. Gallatin College Programs has heard this need expressed by counselors and administrators at area high schools, phone calls and walk-in requests expecting transfer and general education offerings, and by local employers.

The first of five Montana University System College! Now strategies is to extend "the comprehensive two-year mission to all of Montana's two-year colleges". The priority of providing transfer education opportunities is recognized as one of the key purposes of the development of the comprehensive two-year education mission/vision which the Board of Regents approved at the May 2011 Board of Regents meeting. The importance of transfer opportunities is also addressed in the Montana University System strategic plan. Objective 3.3.1. states, "Improve articulation and transferability among all two-year and four-year institutions."

A National Center for Education Statistics report found that of first-time public two-year college students

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in 2003-04 who transferred to a four-year college, only 29 percent attained a bachelor's degree. An additional 15 percent transferred and enrolled in a four-year college, but had yet to earn a degree (Community College Journal, April-May 2011, www.ccjournal-digital.com). The potential roadblocks that typically exist for these students and that we can directly address—lack of communication between institutions and unclear pathways to programs of study, should be easily addressed between Gallatin College Programs and MSU.

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

Students will be served by courses offered in evenings and with hybrid (in-class and online) delivery models, as well as new models that meet the needs of working adults. Courses will be offered in small class sizes at the two-year college tuition rate. The College will work with community partners to find classrooms for these courses. Upon successful completion of the Associate of Arts, students will experience seamless transfer into MSU.

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

MSU-Gallatin College Programs identified this need through the student recruitment and advising process. GCP has had requests for general education coursework since its inception. When GCP was transferred from MSU-GF COT to MSU-Bozeman in July 2010 and the development of a local two-year college was announced in the Bozeman Daily Chronicle, GCP received twelve calls in two weeks requesting general education coursework. GCP continues to respond to similar requests.

Based on data from Larry Swanson with the UM Center for the Rocky Mountain West, the Bozeman area is the fourth largest population service area in the state of Montana with 105,000 individuals. This service area is not currently served by a two-year college offering general education coursework designed for transfer.

A comparison community in Montana might be Missoula given the similarity of having a flagship university in the community. The University of Montana COT had 1,781 FTE in fiscal year 2011. Fall 2007 enrollment demographics for UM COT lists 57.4% of students as pursuing transfer coursework. Although GCP does not anticipate growing to this rate in the near future, it is clear that a two-year college can meet significant student need for transfer coursework, even in a community with a flagship university.

4. Institutional and System Fit

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

GCP general education degree programs will be designed to meet general education requirements for both the Montana University System and for Montana State University. Developing the requirements around the MSU Core 2.0 requirements will ensure that students who transfer to MSU prior to achieving the A.A. degree will have met MSU-specific requirements.

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

No. The proposed degree would enhance existing degree programs at Gallatin College Programs by

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offering expanded general education course offerings for students currently pursuing A.A.S. degrees.

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

Gallatin College Programs does not currently offer courses to meet the 'transfer' mission area of the comprehensive community college mission. This program does, however, relate closely to courses offered by Montana State University-Bozeman. The A.A. degree program will be different in that courses will all be taught in small class sizes and learning support will be provided when necessary. Small classes, taught at times and location convenient to working adult students, and offered at the Gallatin College Programs tuition rate differentiates the Associates' degree option.

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

The development of the A.A. degree supports the commitment MSU made to two-year education when approval was requested from the Board of Regents to provide two-year education programs through MSU-Bozeman. GCP is driven by the goals and strategies of the College! Now initiative and is working toward strategy one of delivering the comprehensive community college mission to local residents. Gallatin College is also motivated by strategy two which asks two-year colleges to serve as regional hubs for adult friendly postsecondary offerings.

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.

Strategy 1 of the College! Now initiative's five strategies includes "Extending the comprehensive two-year mission to all of Montana's two-year colleges". Strategy 2 includes providing "adult friendly postsecondary credential opportunities." While there is intentional overlap with MSU-Bozeman to promote transfer, this degree program seeks to meet the needs of a different population of students who seek smaller classes taught in a different location and at times convenient to working adults.

GCP sought advice from administrators at other Montana two-year institutions, as well as MSU's Provost, Registrar, and Advisory Board, as we developed the general education and transfer options.

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 Associate of Arts degree is offered for students enrolling in general education studies who wish to earn a degree as preparation to transfer to a Bachelor degree program at Montana State University or another university. Each student will follow a specific curriculum based on the student's personal, long

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term, and educational goals and entering skills in math and writing.

The A.A. program contains 30 credit hours of transferable general education identified as the Montana University System Core. In addition the A.A. degree requires a concentration of nine credits in the arts, humanities and social sciences, and 21 credits of general education coursework that meets accreditation requirements of instruction from the humanities and fine arts, the natural sciences, mathematics, and the social sciences.

Associate of Arts	60 credit hours; carries no designation of field of study	Includes: 30 credits MUS Core; 9 credits of arts, humanities or social sciences; 21 credits of general education electives

This degree program is designed for students who are undecided about their educational goals, prefer smaller class sizes, need academic skills improvement, or desire a more gradual entrance into the university.

Program description:
- A total of 60 credits is required for graduation with an Associate of Arts degree. The minimum grade point average for graduation is a 2.0 in all graded courses.
- In accordance with MSU general education policies, a grade of C- or better is required in all courses taken toward the A.A. degree.

The Core component of the Associate of Arts degree program is based on coursework required for the MUS Core.

Montana University System Core Curriculum
(from http://mus.edu/transfer/muscore.asp)

The Montana University System Core Curriculum (MUS Core), described in Policy 301.10, represents an agreement among community, tribal, and publicly-funded colleges and universities in the State of Montana. It assures the transfer of up to 30 semester credits for those students enrolled in courses prescribed within each of six areas at a participating host institution. The six areas are:

Natural Science **-- at least one of the classes must have a laboratory experience**	6 credits
Social Sciences/History	6 credits
Mathematics	3 credits
Communication **--Written communication and oral communication**	6 credits
Humanities/Fine Arts	6 credits

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Cultural Diversity   3 credits

                                                        TOTAL   **30 credits**

Students may be required to take additional coursework at the upper division level that is part of an approved general education program at the receiving campus.

A General Education Council was established in December 2005 to oversee the provisions of Policy 301.10, including the MUS Core. The General Education Council of the Montana University System believes that the purpose of general education, and its importance in undergraduate education, is best articulated by the "The Essential Learning Outcomes" statement developed by the Association of American Colleges and Universities. The Council formally adopted that statement, in February 2008, as the rationale for the Montana University System General Education Core.

The Essential Learning Outcomes

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

- Knowledge of Human Cultures and the Physical and Natural World
- Intellectual and Practical Skills
- Personal and Social Responsibility
- Integrative Learning
- Natural Science
- Social Sciences/History
- Math
- Communication
- Humanities/Fine Arts
- Cultural Diversity

Building on "The Essential Learning Outcomes" statement and its rationale, the General Education Council adopted learning outcomes for the six (6) areas established in the MUS Core. These learning outcomes will guide curriculum development for courses in each of the Core areas.

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

Gallatin College Programs estimates the following enrollment and graduation numbers in the A.A. and A.S. degree programs:

Enrollments/year: AY12-13: 20   AY13-14: 35   AY14-15: 50

Graduates/year: AY12-13: 0   AY13-14: 10   AY14-15: 20

Gallatin College Programs will roll out courses as enrollments in the general education program grow. The

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following courses may be offered in these semesters. Courses will be determined based on enrollment and availability of qualified faculty and adjunct faculty.

FALL 2012:

COLS 100 Effective Academic Practices

COLS 101US First Year Seminar

COMM 135 Interpersonal Communication

CAPP 120 Introduction to Computers

WRIT 101W College Writing

M 145Q Math for the Liberal Arts

HSTA 101IH American History I

DE 161 Introduction to Design

ECNS 101IS The Economic Way of Thinking

SPRING 2013:

Continue: COLS 101US; COLS 100

Add: NUTR 221CS Basic Human Nutrition

AMST 201D Introduction to American Studies

LIT 110IH Introduction to Literature

M 121Q College Algebra (4 cr.)

ART 145RA Web Design

FALL 2013:

Continue: COLS 101US; COMM 135; WRIT 101W; CAPP 120; M 145Q; DE 161; ECNS 101IS

Add: SOCI 101IS Introduction to Sociology

NAS 201D American Indians in Montana

Natural Science core course—TBD

SPRING 2014:

Continue: COLS 101US; COLS 100; AMST 201D; LIT 110IH; M 121Q; CS 145IA

Add: CHMY 121IN Intro to General Chemistry

DANC 230IA Dance Appreciation

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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Yes. MSU–GCP will hire a 1 FTE Transfer Program Director/Faculty for coursework leading to the Certificate in General Studies, Associate of Arts, and Associate of Science. This tenure track faculty position should be no higher than the Level II (VTEM collective bargaining Agreement Article 10.1 sec. C) minimum salary $39,660. The program director will teach 9 credits per semester with 6 credits equivalent release time used to perform administrative duties.   Additional Adjunct Faculty will be hired as needed at a rate of $900.00 per credit hour per semester.

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

The annual operating budget for the first three years of the MSU-GCP Certificate in General Studies, A.A. and A.S. degree programs is listed below. This includes the cost of the Program Director/Faculty salary including benefits, adjunct instructors, tutoring and academic support, and the annual operating expenses.

	Year-1	**Year-2**	**Year-3**	
Enrollment	**30**	**55**	**80**	Projected Enrollment for all three degree programs
Revenue				
Tuition	$69,854	$128,066	$186,278	$99 per credit, F/T with flatspot, yield 98% for waivers
Total Revenue	**$69,854**	**$128,066**	**$186,278**	
Expenses				
F/T Faculty	$39,660	$39,660	$39,660	VTEM Contract level II with Masters
Faculty Benefits and Taxes	$16,375	$16,375	$16,375	Full Benefits And Payroll Taxes
Adjunct Faculty	$10,800	$37,800	$37,800	$900 per credit, # of courses taught increase in second year
Adjunct Payroll Taxes	$918	$3,213	$3,213	Payroll Taxes
Other Operating Expenses	$5,500	$6,500	$7,500	Modeled after other GCP Degree Programs
Total Expenses	**$73,253**	**$103,548**	**$104,548**	
Net	**($3,399)**	**$24,518**	**$81,730**	

The start-up budget for the program includes classroom furnishings, equipment, supplies and curriculum development assistance in the amount of $45,000. Start-up expenses will be covered by the program

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development funding that has been provided by the City of Bozeman.

The proposed general fund support for this program is within the MSU-Gallatin College Programs established FY 11-12 budget.

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

Success of the program will be measured through retention, completion, and transfer 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.

This proposal has been reviewed by the following groups:

GCP Advisory Board, MSU Undergraduate Studies Council, MSU Faculty Senate Academic Affairs Committee, MSU Faculty Senate, and MSU Dean's Council.

January 19-20, 2012

ITEM 154-2002-R0112
<u>**Associate of Science Degree**</u>

THAT

The Board of Regents of Higher Education authorizes Montana State University—Bozeman to establish an Associate of Science Degree

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EXPLANATION

MSU-Gallatin College Programs is proposing an Associate of Science Degree to meet the needs and requests of area students who are seeking foundational coursework as they prepare to transfer into a baccalaureate-degree program. MSU—Gallatin College Programs is particularly looking to engage students in our area who are not currently participating in postsecondary education, specifically working adults. The A.S. degree is a 60 credit hour degree based on the Montana University System and Montana State University core curriculum requirements.

This degree is developed to meet Strategy One of the College! Now initiative, to extend the comprehensive community college mission to two-year colleges across the state of Montana. . At the November 2011 Board of Regents meeting, Gallatin College Programs was added to the institutions charged with implementing the College! Now strategies.

ATTACHMENTS

Curriculum proposal
Level II request form

Montana Board of Regents
LEVEL II REQUEST FORM

Item Number: **154-2002-R0112**   Meeting Date: **January 19-20, 2012**

Institution: **Montana State University—Gallatin College Programs**   CIP Code: **24.0199**

Program Title: **Associate of Science degree**

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for all that apply and submit with completed Curriculum Proposals Form):*

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;**

X 3. **Establish new degrees and add majors to existing degrees; and**

    4. **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—Gallatin College Programs requests authorization from the Board of Regents of Higher Education to offer the Associate of Science degree, which responds to the needs of area students who plan to transfer into baccalaureate-degree programs.

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1. Overview

Montana State University—Gallatin College Programs seeks to meet the needs and requests of area students who are seeking foundational coursework as they prepare to transfer into a baccalaureate-degree program. These needs and requests will be met through an Associate of Science degree.

This degree is developed to meet Strategy One of the College! Now initiative, to extend the comprehensive community college mission to two-year colleges across the state of Montana. At the November 2011 Board of Regents meeting, Gallatin College Programs was added to the institutions charged with implementing the College! Now strategies.

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

Montana State University—Gallatin College Programs proposes to offer an Associate of Science (A.S.) degree in response to the needs of students seeking general education courses for either transfer to a baccalaureate-degree program, particularly at MSU, or as a credential for employment. The A.S. degree is a 60 credit hour degree based on the Montana University System and Montana State University core curriculum requirements.

3. Need

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

MSU—Gallatin College Programs is looking to engage students who are not currently participating in postsecondary education and will offer courses at times designed specifically for working adults. This need is identified in the second College! Now strategy, which asks two-year colleges to serve as regional clearinghouse hubs for adult friendly postsecondary credentials. Montana enrolls a significantly lower percent of the adult population in two-year education than the regional average (7.7% of the population in Montana versus 21.7% as the average of regional states). Montana ranks 11th out of 14 states in the region for the number of 25-64 year old adults enrolled in two-year institutions/programs as a percent of the total population of 25-64 year old adults; therefore, programs and delivery models designed to meet adult students' needs are warranted.

Bozeman is the only major community in the state of Montana without local access to Associates degrees designed for transfer. Gallatin College Programs has heard this need expressed by counselors and administrators at area high schools, phone calls and walk-in requests expecting transfer and general education offerings, and by local employers.

The first of five Montana University System College! Now strategies is to extend "the comprehensive two-year mission to all of Montana's two-year colleges". The priority of providing transfer education opportunities is recognized as one of the key purposes of the development of the comprehensive two-year education mission/vision which the Board of Regents approved at the May 2011 Board of Regents meeting. The importance of transfer opportunities is also addressed in the Montana University System strategic plan. Objective 3.3.1. states, "Improve articulation and transferability among all two-year and four-year institutions."

A National Center for Education Statistics report found that, of first-time public two-year college students

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in 2003-04 who transferred to a four-year college, only 29 percent attained a bachelor's degree. An additional 15 percent transferred and enrolled in a four-year college, but had yet to earn a degree (Community College Journal, April-May 2011, www.ccjournal-digital.com). The potential roadblocks that typically exist for these students and that we can directly address—lack of communication between institutions and unclear pathways to programs of study, can be handled between Gallatin College Programs and MSU.

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

Students will be served by courses offered in evenings and with hybrid (in-class and online) delivery models, as well as new models that meet the needs of working adults. Courses will be offered in small class sizes at the two-year college tuition rate. The College will work with community partners to find classrooms for these courses. Upon successful completion of the Associate of Science, students will experience seamless transfer into MSU.

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

MSU-Gallatin College Programs identified this need through the student recruitment and advising process. GCP has had requests for general education coursework since its inception. When GCP was transferred from MSU-GF COT to MSU-Bozeman in July 2010 and the development of a local two-year college was announced in the Bozeman Daily Chronicle, GCP received twelve calls in two weeks requesting general education coursework. GCP continues to respond to similar requests.

Based on data from Larry Swanson with the UM Center for the Rocky Mountain West, the Bozeman area is the fourth largest population service area in the state of Montana with 105,000 individuals. This service area is not currently served by a two-year college offering general education coursework designed for transfer.

A comparison community in Montana might be Missoula given the similarity of having a flagship university in the community. The University of Montana COT had 1,781 FTE in fiscal year 2011. Fall 2007 enrollment demographics for UM COT lists 57.4% of students as pursuing transfer coursework. Although GCP does not anticipate growing to this rate in the near future, it is clear that a two-year college can meet significant student need for transfer coursework, even in a community with a flagship university.

4. Institutional and System Fit

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

GCP general education degree programs will be designed to meet general education requirements for both the Montana University System and for Montana State University. Developing the requirements around the MSU Core 2.0 requirements will ensure that students who transfer to MSU prior to achieving the A.S. degree will have met MSU-specific requirements.

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

No. The proposed degree would enhance existing degree programs at Gallatin College Programs by

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offering expanded general education course offerings for students currently pursuing A.A.S. degrees.

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

Gallatin College Programs does not currently offer courses to meet the 'transfer' mission area of the comprehensive community college mission. This program does, however, relate closely to courses offered by Montana State University-Bozeman. The A.S. degree program will be different in that courses will all be taught in small class sizes and learning support will be provided when necessary. Small classes, taught at times and location convenient to working adult students, and offered at the Gallatin College Programs tuition rate differentiates the Associates' degree option.

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

The development of the A.S. degree supports the commitment MSU made to two-year education when approval was requested from the Board of Regents to provide two-year education programs through MSU-Bozeman. GCP is driven by the goals and strategies of the College! Now initiative and is working toward strategy one of delivering the comprehensive community college mission to local residents. Gallatin College is also motivated by strategy two which asks two-year colleges to serve as regional hubs for adult friendly postsecondary offerings.

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.

Strategy 1 of the College! Now initiative's five strategies includes "Extending the comprehensive two-year mission to all of Montana's two-year colleges". Strategy 2 includes providing "adult friendly postsecondary credential opportunities." While there is intentional overlap with MSU-Bozeman to promote transfer, this degree program seeks to meet the needs of a different population of students who seek smaller classes taught in a different location and at times convenient to working adults.

GCP sought advice from administrators at other Montana two-year institutions, as well as MSU's Provost, Registrar, and Advisory Board, as we developed the general education and transfer options.

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 Associate of Science (A.S.) degree is offered for students enrolling in general education studies who wish to earn a degree as preparation to transfer to a Bachelor degree program at Montana State University or another university. Each student will follow a specific curriculum based on the student's

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personal, long term, and educational goals and entering skills in math and writing.

The A.S. program contains 30 credit hours of transferable general education identified as the Montana University System Core. In addition the A.S. degree requires a concentration of nine credits in Math and natural sciences, and 21 credits of general education coursework that meets accreditation requirements of instruction from the humanities and fine arts, the natural sciences, mathematics, and the social sciences.

Associate of Science	60 credit hours; carries no designation of field of study	Includes: 30 credits MUS Core; 9 credits of Math or natural science; 21 credits of general education electives

This degree program is designed for students who are undecided about their educational goals, prefer smaller class sizes, need academic skills improvement, or desire a more gradual entrance into the university.

Program description:
- A total of 60 credits is required for graduation with an Associate of Science (A.S.) degree. The minimum grade point average for graduation is a 2.0 in all graded courses.
- In accordance with MSU general education policies, a grade of C- or better is required in all courses taken toward the A.S. degree.

The Core component of the Associate of Science degree program is based on coursework required for the MUS Core.

Montana University System Core Curriculum
(from http://mus.edu/transfer/muscore.asp)

The Montana University System Core Curriculum (MUS Core), described in Policy 301.10, represents an agreement among community, tribal, and publicly-funded colleges and universities in the State of Montana. It assures the transfer of up to 30 semester credits for those students enrolled in courses prescribed within each of six areas at a participating host institution. The six areas are:

Natural Science **-- at least one of the classes must have a laboratory experience**	6 credits
Social Sciences/History	6 credits
Mathematics	3 credits
Communication **--Written communication and oral communication**	6 credits
Humanities/Fine Arts	6 credits

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Cultural Diversity   3 credits

                                            TOTAL   30 credits

Students may be required to take additional coursework at the upper division level that is part of an approved general education program at the receiving campus.

A General Education Council was established in December 2005 to oversee the provisions of Policy 301.10, including the MUS Core. The General Education Council of the Montana University System believes that the purpose of general education, and its importance in undergraduate education, is best articulated by the "The Essential Learning Outcomes" statement developed by the Association of American Colleges and Universities. The Council formally adopted that statement, in February 2008, as the rationale for the Montana University System General Education Core.

The Essential Learning Outcomes

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

- Knowledge of Human Cultures and the Physical and Natural World
- Intellectual and Practical Skills
- Personal and Social Responsibility
- Integrative Learning
- Natural Science
- Social Sciences/History
- Math
- Communication
- Humanities/Fine Arts
- Cultural Diversity

Building on "The Essential Learning Outcomes" statement and its rationale, the General Education Council adopted learning outcomes for the six (6) areas established in the MUS Core. These learning outcomes will guide curriculum development for courses in each of the Core areas.

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

Gallatin College Programs estimates the following enrollment and graduation numbers in the A.A. and A.S. degree programs:

Enrollments/year: AY12-13: 20   AY13-14: 35   AY14-15: 50

Graduates/year: AY12-13: 0   AY13-14: 10   AY14-15: 20

Gallatin College Programs will roll out courses as enrollments in the general education program grow. The

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following courses may be offered in these semesters. Courses will be determined based on enrollment and availability of qualified faculty and adjunct faculty.

FALL 2012:

COLS 100 Effective Academic Practices

COLS 101US First Year Seminar

COMM 135 Interpersonal Communication

CAPP 120 Introduction to Computers

WRIT 101W College Writing

M 145Q Math for the Liberal Arts

HSTA 101IH American History I

DE 161 Introduction to Design

ECNS 101IS The Economic Way of Thinking

SPRING 2013:

Continue: COLS 101US; COLS 100

Add: NUTR 221CS Basic Human Nutrition

AMST 201D Introduction to American Studies

LIT 110IH Introduction to Literature

M 121Q College Algebra (4 cr.)

ART 145RA Web Design

FALL 2013:

Continue: COLS 101US; COMM 135; WRIT 101W; CAPP 120; M 145Q; DE 161; ECNS 101IS

Add: SOCI 101IS Introduction to Sociology

NAS 201D American Indians in Montana

Natural Science core course—TBD

SPRING 2014:

Continue: COLS 101US; COLS 100; AMST 201D; LIT 110IH; M 121Q; CS 145IA

Add: CHMY 121IN Intro to General Chemistry

DANC 230IA Dance Appreciation

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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Yes. MSU–GCP will hire a 1 FTE Transfer Program Director/Faculty for coursework leading to the Certificate in General Studies, Associate of Arts, and Associate of Science. This tenure track faculty position should be no higher than the Level II (VTEM collective bargaining Agreement Article 10.1 sec. C) minimum salary $39,660. The program director will teach 9 credits per semester with 6 credits equivalent release time used to perform administrative duties.   Additional Adjunct Faculty will be hired as needed at a rate of $900.00 per credit hour per semester.

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

The annual operating budget for the first three years of the MSU-GCP Certificate in General Studies, A.A. and A.S. degree programs is listed below. This includes the cost of the Program Director/Faculty salary including benefits, adjunct instructors, tutoring and academic support, and the annual operating expenses.

	Year-1	**Year-2**	**Year-3**	
Enrollment	**30**	**55**	**80**	Projected Enrollment for all three degree programs
Revenue				
Tuition	$69,854	$128,066	$186,278	$99 per credit, F/T with flatspot, yield 98% for waivers
Total Revenue	**$69,854**	**$128,066**	**$186,278**	
Expenses				
F/T Faculty	$39,660	$39,660	$39,660	VTEM Contract level II with Masters
Faculty Benefits and Taxes	$16,375	$16,375	$16,375	Full Benefits And Payroll Taxes
Adjunct Faculty	$10,800	$37,800	$37,800	$900 per credit, # of courses taught increase in second year
Adjunct Payroll Taxes	$918	$3,213	$3,213	Payroll Taxes
Other Operating Expenses	$5,500	$6,500	$7,500	Modeled after other GCP Degree Programs
Total Expenses	**$73,253**	**$103,548**	**$104,548**	
Net	**($3,399)**	**$24,518**	**$81,730**	

The start-up budget for the program includes classroom furnishings, equipment, supplies and curriculum development assistance in the amount of $45,000. Start-up expenses will be covered by the program

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development funding that has been provided by the City of Bozeman.

The proposed general fund support for this program is within the MSU-Gallatin College Programs established FY 11-12 budget.

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

Success of the program will be measured through retention, completion, and transfer 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.

This proposal has been reviewed by the following groups:

GCP Advisory Board, MSU Undergraduate Studies Council, MSU Faculty Senate Academic Affairs Committee, MSU Faculty Senate, and MSU Dean's Council.

January 19-20, 2012

ITEM 154-2003-R0112
Certificate of Applied Science – Residential Building Performance (weatherization)

THAT

The Board of Regents of Higher Education authorizes Montana State University-Bozeman to establish a Certificate of Applied Science – Residential Building Performance (weatherization)

EXPLANATION

MSU-Gallatin College Programs is proposing a Certificate of Applied Science – Residential Building Performance (weatherization).   The program will satisfy both local and national needs as more emphasis is placed on energy efficiency and green building practices. Two populations of students will be enrolling in the degree. The first population will consist of employees of the well-established Department of Energy's Weatherization Assistance Program. The second population will be private industry professionals, entrepreneurs, and recent high school graduates.

The Certificate of Applied Science in Residential Building Performance will be composed of online courses from Montana State University and face to face training from weatherization training centers, such as the Montana Weatherization Training Center in Bozeman and other state centers across the country. The program will include seven course electives that allow students to tailor the degree toward their individual professional interests.   Weatherization training centers are currently in the process of becoming accredited through the Interstate Renewable Energy Council.

ATTACHMENTS

Curriculum proposal
Level II request form

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LEVEL II REQUEST FORM

Item Number:	**154-2003-R0112**	Meeting Date:	**January 19-20, 2012**
Institution:	**MSU- Gallatin College Programs**	CIP Code:	**46.0499**
Program Title:	**Certificate of Applied Science – Residential Building Performance (weatherization)**		

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for __all that apply__ and __submit with completed Curriculum Proposals Form__):*

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;

X   **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:

MSU-Gallatin College Programs (GCP) is requesting Level II approval for a new Certificate of Applied Science (C.A.S.) in Residential Building Performance. This degree program will be operated by the MSU-GCP.

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1. Overview

This Certificate of Applied Science (C.A.S.) in Residential Building Performance has been developed in partnership between MSU Gallatin College Program (GCP), MSU Extension - Montana Weatherization Training Center and the Department of Energy. The degree will be offered through MSU Gallatin College Programs.

This program was originally proposed by weatherization center directors and trainers who saw a need for a formal degree program with an emphasis in weatherization. The Department of Energy's Low Income Weatherization Assistance Program has carried out its mission of weatherizing homes since 1977 by using crews and contractors that have developed their skills through conferences, mentoring, on–the-job training and some formal training through training centers spread broadly across the country. While weatherization is considered a job for many, there is no formal degree program designed for the weatherization workforce including Retrofit Installer Technician, Energy Auditor, Quality Insurance Inspector, and Crew Leader.

The program will satisfy both local and national needs as more emphasis is placed on energy efficiency and green building practices. Two populations of students will be enrolling in the degree. The first population will consist of employees of the well-established Department of Energy's Weatherization Assistance Program. The second population will be private industry professionals, entrepreneurs, and recent high school graduates.

The Certificate of Applied Science in Residential Building Performance will be composed of online courses from Montana State University and face to face training from weatherization training centers, such as the Montana Weatherization Training Center in Bozeman and other state centers across the country. The program will include seven course electives that allow students to tailor the degree toward their individual professional interests.   Weatherization training centers are currently in the process of becoming accredited through the Interstate Renewable Energy Council.

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

The 33 credit C.A.S. in Residential Building Performance will give students a solid foundation for work in a variety of occupations including energy auditor, insulation installer and weatherization worker as well as occupations associated with green building, architecture and home inspection. Depending on the electives the students choose, the C.A.S. will help prepare students for four specific Department of Energy certifications: Retrofit Installer Technician, Energy Auditor, Quality Insurance Inspector, and Crew Leader. In addition, the degree will help prepare students for private industry certifications offered through the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), Building Performance Industry (BPI) and Residential Energy Services Network (RESNET).

3. Need

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

The job outlook is strong for graduates in the areas of residential building retrofit and green

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technology. O*NET (sponsored by the US Department of Labor/Employment and Training Administration) lists job outlook information for careers associated with the C.A.S. in Residential Building Performance. O*NET gives energy auditors and weatherization installers/technicians a bright outlook rating. This rating indicates that occupations are expected to grow rapidly in the next several years and have large numbers of job openings.

In addition, according to a survey conducted by the Association of Energy Engineers in 2010, sixty-one percent (61%) of energy professionals indicate a shortage of qualified professionals in the energy efficiency and renewable energy fields in the next five years. In addition, sixty-one percent (61%) of energy professionals indicate a need for national and state training for "Green Jobs" to address shortages that are impairing growth in green industries.

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

The degree will benefit several constituencies. Weatherization assistance program employees, who are also potential students, indicate a strong interest in a degree program. These potential students already attend trainings at weatherization training centers and look forward to being able to use the trainings toward a degree. The degree will also assist the local building and contracting industries by providing a workforce educated in energy audits, home retrofits, energy efficiency and green building.

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

There is a strong demand for this program as determined by surveys and a focus group.

Twenty-four weatherization assistance employees participated in a student interest survey. Over half of the survey participants reported an interest in a degree program. Over half of the employees believe a degree in weatherization would assist them in the following areas: increased earning potential, recognition of weatherization as a profession, recognition of themselves as a professional, better prepared for a job in weatherization, increased capability to switch careers but stay in the weatherization field and a higher chance of finding employment.

In addition**,** forty-four weatherization center directors and trainers completed a survey. Approximately seventy-four percent (74%) of weatherization center directors and sixty-three percent (63%) of weatherization center trainers indicated they are interested in a degree program.   In addition seventy-two percent (72%) of weatherization training centers and sixty-eight percent (68%) of weatherization trainers believe that graduates, who hold a degree in weatherization, will be more employable for emerging weatherization careers compared with candidates who only hold industry certifications.

A focus group was held with industry professionals. Focus group members included builders, an architect, an insulation business owner, two energy auditor employees, a Gallatin College Programs staff member, weatherization center directors and a weatherization center trainer. The group was supportive of the program and the benefits it would bring to their industries.

4. Institutional and System Fit

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

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The program is consistent with MSU's land grant mission. It will meet local and statewide industry needs for a Residential Building Performance certificate program. It will be the first program in the country for students who receive training at national weatherization training centers. Having the Montana Weatherization Training Center in Bozeman and part of MSU Bozeman makes this a logical program for MSU's Gallatin College Programs.

This will be the first program offered by MSU-GCP in the green industry. The Residential Building Performance Program will share some existing general education courses with other workforce programs.

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

No. The approval of the proposed program will not require any changes to existing programs at MSU-GCP or MSU-Bozeman.

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

There are no other similar degree programs being offered by Gallatin College Programs.

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

In alignment with the strategic plan of the Montana Board of Regents and the College!Now initiative, MSU-GCP is committed to increasing participation of students in post-secondary education in the Gallatin Valley and surrounding area, specifically in one and two-year programming, as well as increasing the number of students earning a post secondary credential. In addition, preparing students for and placing them into high-demand jobs is a goal of MSU-GCP. The program will provide opportunities to both traditional and non-traditional students.

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

No other institution in the MUS offers a one or two year program in residential building performance. MSU-Great Falls COT, MSU-Billings COT and Montana Tech of the University of Montana have a C.A.S. and A.A.S. in Sustainable Energy Technology. The curriculum, of the Sustainable Energy Technology programs is substantially different than the Residential Building Performance Program.   The University of Montana College of Technology offers an A.A.S. degree in Energy Technology. Again, the curriculum is substantially different than the curriculum in the Residential Building Performance Program. The curriculum that is proposed for the Residential Building Performance Program is specific and unique.

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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.**

    The program's curriculum and course descriptions are included in Appendix A and B.

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

    Interest in the program is strong. Fourteen students are expected to enroll during the first year of the program. Gallatin College Programs estimates that half of the enrolled students will be in state students and half of the enrolled students will be out of state students. Non-resident student tuition will help offset program costs for resident students. Enrollments for year two and three are eighteen and twenty-two respectively. The implementation plan calls for the program to start in Fall 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.**

    Yes. MSU-GCP will hire a .5 FTE Residential Building Performance Director/Non Tenure Faculty. This non-tenure track faculty position should be no higher than the Level II (VTEM collective bargaining Agreement Article 10.1 sec. C) minimum .5 FTE salary of $19,330. The program director will teach twelve credits per year with three credits equivalent release time per year used to perform administrative duties.

    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 start-up budget is $2,700 which covers office furniture and a computer. Gallatin College will cover this cost through the college's existing budget. Costs associated with hiring the program director six months prior to the start date, for the continuation of program development, are covered by a Department of Energy grant.

    The annual operating budget for the MSU-GCP Residential Building Performance program is $36,615. This includes the cost of the program director/faculty (including benefits), travel, professional development, and communications costs. The annual expense is offset by an estimated $34,612 in tuition revenue for the first year and $44,501 in the second year. The first year's loss of $2,003 will be covered by the college's existing budget.

    There are no facility or equipment costs; these expenses are covered by the weatherization training centers.

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

The proposed program will be assessed using the college's institutional outcomes assessment practices. These include assessing standard performance with the following metrics:

1. Graduation/completion rates
2. Student retention
3. Enrollments
4. Placement in the field
5. Employer satisfaction with graduates

In addition, the program's student learning outcomes will be assessed to evaluate student success in obtaining the skills identified as goals of the program. The program's Residential Building Performance Advisory Board will review the assessment measures on an annual basis. Student evaluations will be another important assessment tool for GCP and the program director.

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 degree was developed in conjunction with students, a faculty member, trainers, and potential employers. Through a survey process, students and weatherization training center and directors had the opportunity to give input into the structure of the degree. In addition potential employers, a faculty member, and a trainer attended a focus group and discussed the degree curriculum. Furthermore a Department of Energy program coordinator helped ensure the degree meets Department of Energy certification protocols.

The proposal was reviewed and approved by the MSU Undergraduate Studies Committee, MSU Faculty Senate, and MSU Dean's Council. Upon approval from the Montana Board of Regents, MSU-GCP will move forward with the program start-up plan.

January 19-20, 2012

ITEM 154-2004-R0112
Certificate in General Studies

THAT

The Board of Regents of Higher Education authorizes Montana State University—Bozeman to establish a Certificate in General Studies

EXPLANATION

MSU—Gallatin College Programs is proposing a Certificate in General Studies to meet the needs and requests of area students who are seeking foundational coursework as they prepare to transfer into a baccalaureate-degree program. MSU—Gallatin College Programs is particularly looking to engage students in our area who are not currently participating in postsecondary education, specifically working adults. It is a 30 credit certificate that a student can earn through successful completion of the MUS general education core course requirements.

This degree is developed to meet Strategy One of the College! Now initiative, to extend the comprehensive community college mission to two-year colleges across the state of Montana. At the November 2011 Board of Regents meeting, Gallatin College Programs was added to the institutions charged with implementing the College! Now strategies.

ATTACHMENTS

Curriculum proposal
Level II request form

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **154-2004-R0112**   Meeting Date: **January 19-20, 2012**

Institution: **Montana State University—Gallatin College Programs**   CIP Code: **24.0102**

Program Title: **Certificate in General Studies**

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for __all__ that apply and __submit with completed Curriculum Proposals Form__):*

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;**

  X 3. **Establish new degrees and add majors to existing degrees; and**

    4. **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—Gallatin College Programs requests authorization from the Board of Regents of Higher Education to offer a Certificate in General Studies, which responds to the needs of area students who plan to transfer into baccalaureate-degree programs.

Montana Board of Regents
CURRICULUM PROPOSALS

1. **Overview**

   Montana State University—Gallatin College Programs seeks to meet the needs and requests of area students who are seeking foundational coursework as they prepare to transfer into a baccalaureate-degree program. These needs and requests will be met through a Certificate in General Studies degree, which has been designed in collaboration with MSU-GF COT for students who intend only to complete one year of general studies coursework at a two-year college prior to transferring to a baccalaureate institution.

   This Certificate in General Studies is developed to meet Strategy One of the College! Now initiative, to extend the comprehensive community college mission to two-year colleges across the state of Montana. At the November 2011 Board of Regents meeting, Gallatin College Programs was added to the institutions charged with implementing the College! Now strategies.

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

   The proposed Certificate in General Studies is a formal academic program that is aligned with the Montana University System (MUS) general education core. It is a 30 credit certificate that a student can earn through successful completion of the MUS general education core course requirements. The program is intended to provide a formal, Regents-approved post-secondary credential for students who are seeking general education coursework prior to transferring to a four-year degree program.

3. **Need**

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

      MSU—Gallatin College Programs is looking to engage students who are not currently participating in postsecondary education and will offer courses at times designed specifically for working adults. This need is identified in the second College! Now strategy, which asks two-year colleges to serve as regional clearinghouse hubs for adult friendly postsecondary credentials.

      The Certificate degree recognizes that many students in Montana are utilizing two-year institutions as a first step in their pursuit of a bachelor's degree, but that many of these students have no intention of completing more than a select number of general education courses prior to transferring. Thus, when they leave two-year institutions, their successful completion of a coherent collection of general education coursework is not celebrated, nor is it reported as a successful completion. This phenomenon is a national issue amongst community colleges and it is a major factor in the low graduation rates reported in national data. This proposed certificate program will provide an opportunity for students to be formally recognized through traditional commencement and college completion processes. And, it also provides a mechanism for the institution to formally capture the outcome as a successful completion. MSU-Gallatin College Programs is collaborating with MSU-GF COT to extend this degree option at each of our campuses.

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

      Students will have the opportunity to attend Gallatin College Programs to complete the first year of

Montana Board of Regents
CURRICULUM PROPOSALS

general education coursework in classes designed specifically for their success—small class sizes with applicable learning support. Upon successful completion of the Certificate in General Studies, students will experience seamless transfer into MSU. In addition, students who have completed the MUS core will now receive an official credential that can be celebrated and formalized.

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

MSU-Gallatin College Programs identified this need through the student recruitment and advising process. GCP has had requests for general education coursework since its inception. When GCP was transferred from MSU-GF COT to MSU-Bozeman in July 2010 and the development of a local two-year college was announced in the Bozeman Daily Chronicle, GCP received twelve calls in two weeks requesting general education coursework. GCP continues to respond to similar requests. The need for a Certificate in General Studies was specifically identified by MSU-GF COT and is based on their experiences with students transferring prior to completing a degree.

Based on data from Larry Swanson with the UM Center for the Rocky Mountain West, the Bozeman area is the fourth largest population service area in the state of Montana with 105,000 individuals. This service area is not currently served by a two-year college offering general education coursework designed for transfer.

4. Institutional and System Fit

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

The Certificate in General Studies is designed to meet general education requirements for both the Montana University System and for Montana State University. Students will be advised into coursework depending on their educational goal. Students who intend to transfer to MSU-Bozeman will be advised to take courses that will meet both the MSU and MUS Core requirements.

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

No. The proposed degree would enhance existing degree programs at Gallatin College Programs by offering expanded general education course offerings for students currently pursuing A.A.S. degrees.

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

Gallatin College Programs does not currently offer courses to meet the 'transfer' mission area of the comprehensive community college mission. This program does, however, relate closely to courses offered by Montana State University-Bozeman. The Certificate in General Studies will be different in that courses will all be taught in small class sizes and learning support will be provided when necessary. Small classes, taught at times and location convenient to working adults, and offered at the Gallatin College Programs tuition rate differentiates the Certificate in General Studies degree option.

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

Montana Board of Regents
CURRICULUM PROPOSALS

The development of the Certificate in General Studies supports the commitment MSU made to two-year education when approval was requested from the Board of Regents to provide two-year education programs through MSU-Bozeman. GCP is driven by the goals and strategies of the College! Now initiative and is working toward strategy one of delivering the comprehensive community college mission to local residents. Gallatin College is also motivated by strategy two which asks two-year colleges to serve as regional hubs for adult friendly postsecondary offerings.

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.**

Strategy 1 of the College! Now initiative's five strategies includes "Extending the comprehensive two-year mission to all of Montana's two-year colleges". Strategy 2 includes providing "adult friendly postsecondary credential opportunities." While there is intentional overlap with MSU-Bozeman to promote transfer, this degree program seeks to meet the needs of a different population of students who seek smaller classes taught in a different location and at times convenient to working adults.

GCP sought advice from administrators at other Montana two-year institutions as we developed the general education and transfer degree program. GCP is collaborating with MSU-GF COT on the development of the Certificate of General Studies. In addition, Gallatin College Programs sought the input of MSU's Provost, Registrar, and Advisory Board.

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 Certificate in General Studies degree program is based on coursework required for the MUS Core.

   Montana University System Core Curriculum
   (from http://mus.edu/transfer/muscore.asp)

   The Montana University System Core Curriculum (MUS Core), described in Policy 301.10, represents an agreement among community, tribal, and publicly-funded colleges and universities in the State of Montana. It assures the transfer of up to 30 semester credits for those students enrolled in courses prescribed within each of six areas at a participating host institution. The six areas are:

Natural Science **-- at least one of the classes must have a laboratory experience**	6 credits

Montana Board of Regents
CURRICULUM PROPOSALS

Social Sciences/History	6 credits
Mathematics	3 credits
Communication **--Written communication and oral communication**	6 credits
Humanities/Fine Arts	6 credits
Cultural Diversity	3 credits
TOTAL	**30 credits**

Students may be required to take additional coursework at the upper division level that is part of an approved general education program at the receiving campus.

A General Education Council was established in December 2005 to oversee the provisions of Policy 301.10, including the MUS Core. The General Education Council of the Montana University System believes that the purpose of general education, and its importance in undergraduate education, is best articulated by the "The Essential Learning Outcomes" statement developed by the Association of American Colleges and Universities. The Council formally adopted that statement, in February 2008, as the rationale for the Montana University System General Education Core.

The Essential Learning Outcomes

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

- Knowledge of Human Cultures and the Physical and Natural World
- Intellectual and Practical Skills
- Personal and Social Responsibility
- Integrative Learning
- Natural Science
- Social Sciences/History
- Math
- Communication
- Humanities/Fine Arts
- Cultural Diversity

Building on "The Essential Learning Outcomes" statement and its rationale, the General Education Council adopted learning outcomes for the six (6) areas established in the MUS Core. These learning outcomes will guide curriculum development for courses in each of the Core areas.

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

Montana Board of Regents
CURRICULUM PROPOSALS

Gallatin College Programs will be admitting students to the Certificate in General Studies upon Board of Regents approval. GCP estimates the following enrollment and graduation numbers for the upcoming academic years:

Enrollments/year: AY12-13: 10   AY13-14: 20   AY14-15: 30

Graduates/year: AY12-13: 8   AY13-14: 16   AY14-15: 24

6. Resources

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

Yes. MSU–GCP will hire a 1 FTE Transfer Program Director/Faculty for coursework leading to the Certificate in General Studies, Associate of Arts, and Associate of Science. This tenure track faculty position should be no higher than the Level II (VTEM collective bargaining Agreement Article 10.1 sec. C) minimum salary $39,660. The program director will teach 9 credits per semester with 6 credits equivalent release time used to perform administrative duties.   Additional Adjunct Faculty will be hired as needed at a rate of $900.00 per credit hour per semester.

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

The annual operating budget for the first three years of the MSU-GCP Certificate in General Studies, A.A. and A.S. degree programs is listed below. This includes the cost of the Program Director/Faculty salary including benefits, adjunct instructors, tutoring and academic support, and the annual operating expenses.

	Year-1	Year-2	Year-3	
Enrollment	**30**	**55**	**80**	Projected Enrollment for all three degree programs
Revenue				
Tuition	$69,854	$128,066	$186,278	$99 per credit, F/T with flatspot, yield 98% for waivers
Total Revenue	**$69,854**	**$128,066**	**$186,278**	
Expenses				
F/T Faculty	$39,660	$39,660	$39,660	VTEM Contract level II with Masters
Faculty Benefits and Taxes	$16,375	$16,375	$16,375	Full Benefits And Payroll Taxes

Montana Board of Regents
CURRICULUM PROPOSALS

Adjunct Faculty	$10,800	$37,800	$37,800	$900 per credit, # of courses taught increase in second year
Adjunct Payroll Taxes	$918	$3,213	$3,213	Payroll Taxes
Other Operating Expenses	$5,500	$6,500	$7,500	Modeled after other GCP Degree Programs
Total Expenses	**$73,253**	**$103,548**	**$104,548**	
Net	**($3,399)**	**$24,518**	**$81,730**	

The start-up budget for the program includes classroom furnishings, equipment, supplies and curriculum development assistance in the amount of $45,000. Start-up expenses will be covered by the program development funding that has been provided by the City of Bozeman.

The proposed general fund support for this program is within the MSU-Gallatin College Programs established FY 11-12 budget.

7. **Assessment**
   How will the success of the program be measured?
   Success of the program will be measured through retention, completion, and transfer 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.

This proposal has been reviewed by the following groups:

GCP Advisory Board, MSU Undergraduate Studies Council, MSU Faculty Senate Academic Affairs Committee, MSU Faculty Senate, and MSU Dean's Council.

January 19-20, 2012

ITEM 154-2702-R0112

MSUB College of Education, The Montana Center on Disabilities, is requesting a change in name and revision of its mission by the Commissioner of Higher or the Commissioner's designees.

THAT

The MSUB College of Education, The Montana Center on Disabilities requests a change in name and revision of its mission in order to expand its service mission for the educational needs of Montana's diverse citizenry. The MCD proposes to change its name to the Montana Center for Inclusive Education. Seeking approval from the Commissioner of Higher or the Commissioner's designees.

EXPLANATION

The department currently titled Montana Center on Disabilities proposed to change its name to the Montana Center for Inclusive Education. This change reflects the evolution of the Center's role and scope as a service agency of the State of Montana.

ATTACHMENTS

Level II Request Form
Prospectus and budget information

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number:	**154-2702-R0112**	Meeting Date:	**January 19-20, 2012**
Institution:	**MSU Billings College of Education**	CIP Code:	**N/A**
Program Title:	**Montana Center on Disabilities**		

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for all that apply and submit with completed Curriculum Proposals Form):*
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:

X____ 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; and

X____ 4. 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 Montana Center on Disabilities in the College of Education at MSU Billings is requesting a change in name and revision of its mission in order to expand its service mission for the educational needs of Montana's diverse citizenry. The MCD proposes to change its name to the Montana Center for Inclusive Education. This change reflects the evolution of the Center's role and scope as a service agency of the state of Montana.

The current mission statement reads:
> *To support the vision of inclusion, the Montana Center on Disabilities, a public service unit of Montana State University Billings, collaborates with campus, regional, state and national programs in support of increasing the number of leaders with disabilities.*

The Center proposes to expand its mission as indicated through the proposed *revised mission* statement:
> *The Montana Center for Inclusive Education serves the diverse population of Montana and provides continuing professional development opportunities for educators and direct service providers.*

The MCD current vision statement reads:
> *The vision of the Montana Center on Disabilities is to create a fully inclusive society which values people with disabilities and their perspectives.*

The MCD staff recommendation for a *revised vision* statement is as follows:
> *The vision of the Montana Center for Inclusive Education is creation of a fully inclusive society that values diversity.*

MONTANA CENTER ON DISABILITIES
FUTURE PROSPECTUS
AS THE
MONTANA CENTER FOR INCLUSION

HISTORICAL BACKGROUND

The Montana Center for Cerebral Palsy opened its doors November 4, 1947 under a five-year grant from the U. S. Children's Bureau. It was designed with the following goals:

- to demonstrate to the people of Montana that much could be done to help the child with palsy and
- to dispel the widespread belief that children with cerebral palsy were "hopeless" and nothing could be done for them.

Since that time there has been continued refinement of the Montana Center name and mission. This is reflective of the commitment to expand direct services from children with cerebral palsy to children with all types of disabilities and then to include the entire population of people with disabilities:

- 1955-Montana Center for Cerebral Palsy and Handicapped Children
- 1967-Montana Center for Handicapped Children
- 1993-Montana Center on Disabilities.

The Montana Center on Disabilities (MCD) was formally made a part of Eastern Montana College (EMC) by the Board of Regents in 1967. Partial funding was provided through Public Service funds with additional revenue generated through gifts, contracts, and grants. The MCD has continued direct service to individuals with a wide variety of disabilities – helping Social Security beneficiaries understand and utilize employment supports and work incentives so they can achieve their employment goals, identifying children with a hearing impairment and working with their parents/guardians and schools to ensure the child achieves their maximum educational potential.

ENDOWED PURPOSE

As mentioned previously, one of the sources of MCD funding has been through gifts. The Montana Center for Handicapped Children Endowment was established February 15, 1989 with gifts from the estates of Ruby Clark and Cecilia Thompson. It consisted of an agreement between the EMC Foundation and EMC and was created exclusively for the support of the mission and goals of MCD. Each year, the director of the MCD submits a proposal requesting allocation of net earnings for specific projects to the MSUB Chancellor for approval. This has traditionally included a reinvestment of a portion of these earnings into the Endowment and this, along with additional gifts over the years, has allowed the Endowment to continue to grow.

ENDOWED PURPOSE FUTURE PROSPECTUS

To remain true to the original endowment, direct services funded by the net earnings will continue. The direct services currently funded by the Endowment include scholarships to MSUB students with disabilities, awards to MSUB faculty for outstanding services to students with disabilities, and recognition of community leaders with disabilities.

PUBLIC SERVICE FUNDING

The Montana Center on Disabilities has limited funding through the state general fund as a public service agency. This funding allows for 2.5 FTE positions and supports administrative costs. The positions include the director (1.0 FTE), coordinator of service programs (.5 FTE), accounting associate (.5 FTE), and office manager (.5 FTE). These positions focus on the development of MCD and the administration of day-to-day operations.

PUBLIC SERVICE FUNDING FUTURE PROSPECTUS

The Montana Center on Disabilities will continue to provide excellent stewardship for the public service dollars it receives. This will include the development of future projects through grant writing and the management of those projects.

GRANT FUNDED PROJECTS

During the past 40 years as federal law mandated changes in the education of individuals with disabilities, MCD experienced an on-going identity crisis. Determining its direction has involved many changes in personnel, many sessions for redefining mission and vision, and name changes. In the past 15 years, the Montana Center on Disabilities has relied more and more on grant funding which has frequently been opportunistic with marginal connection to the original purpose. Several years ago with changes in COE administration, MCD inherited the Big Sky Teachers' Project directed toward preparing American Indians as educators in schools with high concentrations of American Indian students. Although at first perceived as an "additional duty as assigned", this project served as an opportunity for the Montana Center on Disabilities to further expand its service mission. Inclusion, internationally, has come to mean "including the excluded"—individuals with disabilities, individuals from low socio-economic environments, and individuals with limited educational opportunities. This is particularly true for women and individuals of minority cultures.

The MCD has also become a provider of indirect services to individuals with disabilities through the many professional development opportunities it provides for educators, care-givers, and families of individuals with disabilities. MCD houses the Montana Regional Education Service Area III that includes Region III Comprehensive System of Personnel Development (CSPD). The purposes of the regional service area, funded through subcontracts with the Montana Office of Public Instruction, are to improve student achievement in Montana schools by providing high quality professional

development in the core academic areas and provide trainings and technical assistance in response to state-wide initiatives and grants.

The continuing education and support of service providers is essential for provision of optimal educational programming for individuals with disabilities. As the nature of service has changed from special, separate residential or day school environments to inclusion in the mainstream of education and community wrap-around services, the MCD has expanded its role. This evolution serves the best interests of individuals with disabilities and positions the Montana Center on Disabilities as a leader in service provision.

GRANT FUNDED PROJECTS FUTURE PROSPECTUS

The Montana Center on Disabilities has expanded its service with a focus on inclusive opportunities. As a strong and continuing future direction, the focus on inclusion demands another name change—the *Montana Center for Inclusion*—and enhances the service work of the Center without diminishing attention to the original direct service purpose. Attention to direct service to individuals with disabilities and to indirect service assuring inclusion of the excluded are complementary activities.

RELATIONSHIP WITH THE COLLEGE OF EDUCATION

As a University with strong programs in special education, reading education, and rehabilitation counseling, Montana State University Billings is an appropriate home for the Montana Center on Disabilities. For approximately 20 years, the MCD has been under the direction of the Dean in the College of Education. Because of the original purpose of educating individuals with cerebral palsy and with the evolution of special education service provision, the College of Education remains an appropriate home for the Montana Center on Disabilities. During the past six years, the College and MCD have worked toward a mutual interdependence benefitting pre-service education candidates, in-service educators, and ultimately the children and youth whom they serve. All grants in the College of Education are administrated through the Montana Center on Disabilities. Faculty serve as Principal Investigators with MCD employing grant project coordinators. Faculty members are instructors for in-service workshops and MCD personnel are members of College of Education committees. With both the College and MCD focused on pre-service and in-service inclusive educational practice, this intertwined relationship has become essential to maintaining quality and achieving excellence in education service provision.

RELATIONSHIP WITH THE COLLEGE OF EDUCATION FUTURE PROSPECTUS

The Montana Center on Disabilities is approved through the Office of Public Instruction to provide Continuing Education Units (non-transcripted CEUs accrued on an hourly basis) through the Montana Regional Education Service Area III. The College of Education offers transcripted continuing education credits through the MSUB Continuing

Education Program. These efforts are more often intermingled than distinct. In its role, the Montana Center on Disabilities maintains currency regarding state requirements for credits appropriate for licensure renewal and district contractual lane changes. The College maintains currency regarding pre-service preparation. The work of both MCD and College toward inclusive educational practice portends a future of ever closer working relationships that are mutually beneficial. The Montana Center on Disabilities should be an integral feature in educator preparation and career-long educator professional development.

Montana Center on Disabilities
Montana State University – Billings

Income Statement as of 6/30/2011
Fiscal Year 2011

	Amount	%
Income:		
Federal Grants	$ 25,000	2%
State Contracts	$781,738	62%
State-University (MCD)	$170,303	14%
Misc. Income	$223,298	18%
Sub Contracts = $167,818		
Audiology Fees = $ 18,990		
Workshop Fees = $ 36,490		
MSUB Foundation	$56,078	4%
Total Income	$1,256,417	100%

Legend:
- Federal
- State
- University
- Misc Income
- Foundation
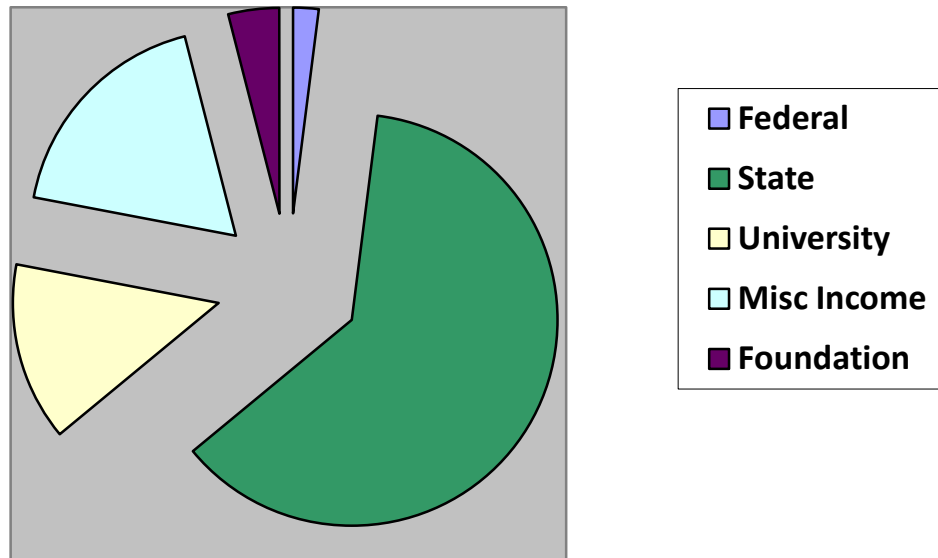
Funding Comparison
2003 to 2011
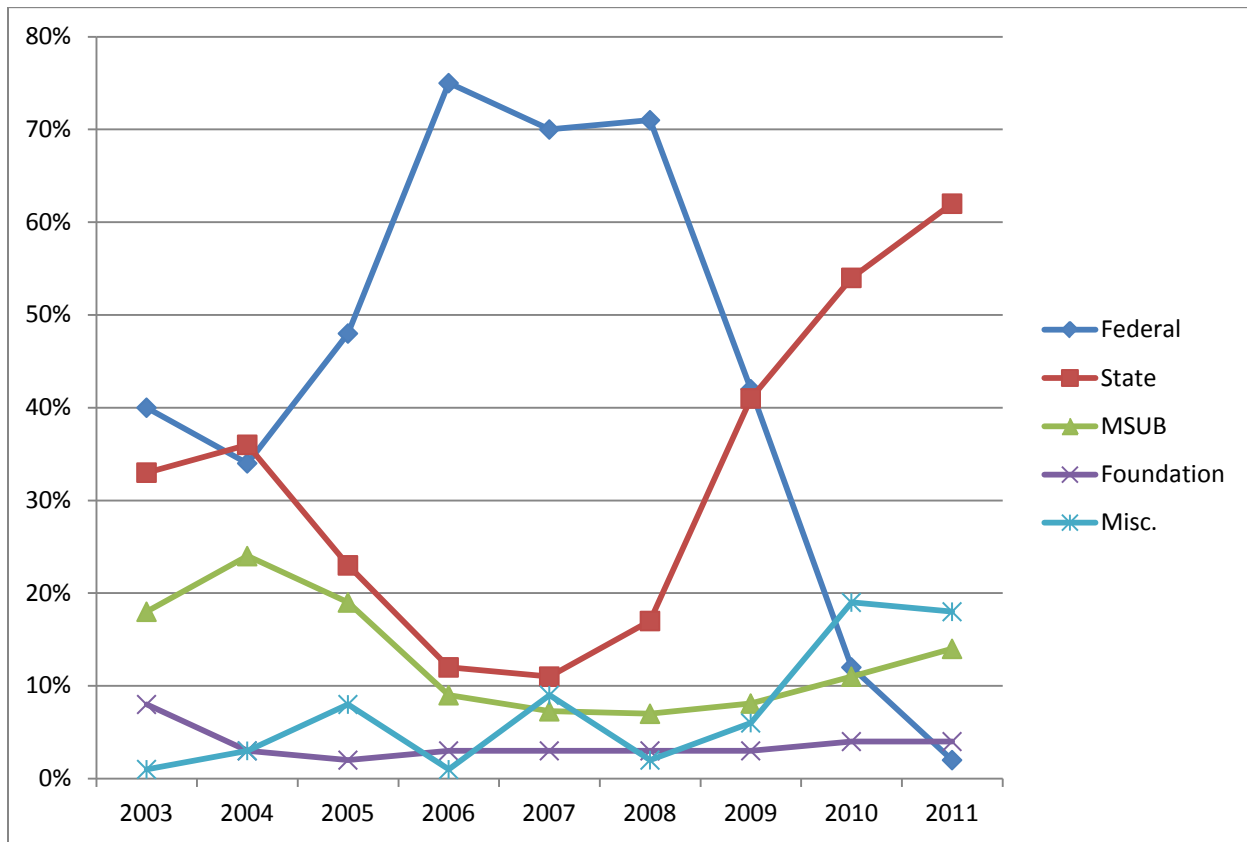
Federal grants were funded by the Dept. of Education, Social Security, and Dept. of Justice.

State funding consisted of contracts with the MT Office of Public Instruction and the MT Dept. of Public Health and Human Services.

Montana State University Billings funds the Montana Center on Disabilities (MCD) state account. The funding represents a portion of funds appropriated to the Montana University system by the Legislative Assembly and allocated by the Board of Regents. Funds are used for the general operations of the Montana Center on Disabilities. MCD also receives funds from grant indirect cost agreements.

Montana State University Billings Foundation through the Montana Center on Disabilities Endowment provides interest which is used to fund scholarships, pilot projects and other approved activities.

Other funding consisted of contracts with various Foundations, American Council on Rural Special Education, MT Coalition Against Domestic and Sexual Violence, Bridger Public Schools, workshop registrations, and fee for service.

January 19-20, 2011

ITEM 154-2901-R0112
Veterinary Technician Associate of Applied Science

THAT

The Montana Board of Regents approves Montana State University-Great Falls to offer a fully online Veterinary Technician Associate of Applied Science.

EXPLANATION

Montana State University-Great Falls (MSU-Great Falls) requests approval from the Board to offer a fully online Veterinary Technician (Vet Tech) Associate of Applied Science program. The common Vet Tech program curriculum was developed through a collaboration using an inter-campus Academic Implementation Team (AIT), two program consultants, and a shared Program Advisory Board consisting of veterinarians (represented through the Montana Veterinary Medical Association, or MVMA), veterinarian technicians (represented through the Big Sky Veterinary Technician Association, or BSVTA), industry partners, and post-secondary educators. The common curriculum can be offered completely online or face-to-face, thus the program theme of "One Program: Two Delivery Methods."

ATTACHMENTS

Level II Request Form
Curriculum Proposal
Attached Materials:

- Letters of Support
- Course Descriptions
- Proposed Budget
- Inventory and Validation of Fees

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **154-2901-R0112**   Meeting Date: **January 19-20, 2011**

Institution: **MSU-Great Falls**   CIP Code: **51.0808**

Program Title: **Veterinary Technician 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__ and __submit with completed Curriculum Proposals Form__):*

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;

 X **3.   Establish new degrees and add majors to existing degrees; and**

    4.   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 (MSU-Great Falls) requests approval from the Board to offer a fully online Veterinary Technician (Vet Tech) Associate of Applied Science program. The common Vet Tech program curriculum was developed through a collaboration using an inter-campus Academic Implementation Team (AIT), two program consultants, and a shared Program Advisory Board consisting of veterinarians (represented through the Montana Veterinary Medical Association, or MVMA), veterinarian technicians (represented through the Big Sky Veterinary Technician Association, or BSVTA), industry partners, and post-secondary educators. The common curriculum can be offered completely online or face-to-face, thus the program theme of "One Program: Two Delivery Methods."

Montana Board of Regents
CURRICULUM PROPOSALS

1. **Overview**

   Montana State University-Great Falls (MSU-Great Falls) requests approval from the Board to offer a fully online Veterinary Technician (Vet Tech) Associate of Applied Science program. The common Vet Tech program curriculum was developed through a collaboration using an inter-campus Academic Implementation Team (AIT), two program consultants, and a shared Program Advisory Board consisting of veterinarians (represented through the Montana Veterinary Medical Association, or MVMA), veterinarian technicians (represented through the Big Sky Veterinary Technician Association, or BSVTA), industry partners, and post-secondary educators. The common curriculum can be offered completely online or face-to-face, thus the program theme of "One Program: Two Delivery Methods."

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

   The Veterinary Technician program meets the Associate of Applied Science degree requirements for individuals entering the job market with the skills to perform a variety of functions as veterinary technicians (aka "vet techs"). Besides providing nursing care, veterinary technicians also assist with laboratory procedures, radiology, and provide assistance during surgery. Additionally, vet techs are responsible for the majority of patient education that occurs in a veterinary practice.

3. **Need**

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

   There is no Veterinary Technician program in Montana. Montanans currently have to travel out of state for this important two-year program. Interestingly, Montana is the only state in the Pacific Northwest-Rocky Mountain region and the only agricultural-based state without a Vet Tech program. There is one program each in Idaho, North Dakota, and South Dakota. There are four programs located in Washington and two in Utah. These existing regional programs have more than two times more applicants than they have program capacity (MVMA, 2010).

   Montana veterinarians maintain Montana desperately needs an accredited program that can train veterinary technicians eligible to become certified veterinary technicians (CVTs). Currently, many of our Montana vet techs are either a product of out-of-state programs or are trained on the job. Many Montanans already employed in the field have no access to education that would help them become better qualified to do their jobs and become CVTs.

   Montana's veterinarians, as represented on both the Vet Tech Academic Implementation Team (the AIT, the collaborative program development team) and the Veterinary Technician Program Advisory Board indicated that a lack of a program in the state has hindered their ability to require the certification in their practices. They pointed out, during program development, CVTs are absolutely critical to animal health. Veterinarians, without the aid of vet techs, provide all care to all species. This would be akin to a human medical doctor (MD) serving as a nurse practitioner, RN, LPN, PA, PT, radiological technician, anesthesiologist, laboratory technician and the head of the management team! The industry in Montana requires a competent educated and trained technical workforce (MVMA, 2010).

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This lack of CVTs has had a tremendous impact on the standard of care in Montana and also promotes lower wages for individuals who have no formal training or certification. It makes services harder to come by. The MVMA membership, through their representatives on the previously mentioned planning groups, indicated they wholeheartedly support a well-funded and accessible program in the state. In fact, the MVMA has been advocating for a Montana Veterinary Technician program since 2004.

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

As discussed in section 3A, there is a tremendous need for a Vet Tech program in the state of Montana. The MSU-Great Falls' program will be delivered in a fully online format, thus extending access to place-bound, non-certified, on-the job trained Montana veterinary technicians currently employed in the field but unable to leave their positions to attend school.

There are currently 172 accredited Vet Tech programs in the nation. Nine of those are online programs. Although MSU – Great Falls is moving forward the fully online program at this time, the common curriculum was developed collaboratively by the AIT under the "One Program: Two Delivery Methods" theme and can also be extended to any Montana campus wishing to offer it. Two campuses, the University of Montana Western and Flathead Valley Community College are still exploring the face-to-face delivery of the program in the future.

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

Nationally, Veterinary Technician is a growing field with a 36% growth projected through the year 2019. Salary and benefits are generous for a two-year degree (30,500 to 36,210 nationally). A majority of veterinary technicians earning certification qualify for health insurance, continuing education benefits, paid vacation and sick leave, overtime compensation, and a pension plan (MVMA, 2010). Montana data regarding job projections for the period of 2008-2019 is as follows:

Montana Job Projections 2008-2018
Montana Department of Labor and Industry
Veterinary Technologists & Technicians Med. Wage: $25,066

Region	2008 Jobs	2018 Jobs	Annual Openings
Montana	**283**	**351**	**16**
Region1	115	140	7
Region2	98	122	5
Region4	35	45	2

http://www.ourfactsyourfuture.org/admin/uploadedPublications/2912_Proj_2016.pdf

4. Institutional and System Fit

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

MSU-Great Falls offers more health care programs than any other campus in the Montana University System. We are leaders in online delivery of healthcare programs as well as a variety of technical

Montana Board of Regents
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programs, the MUS core and the AA and AS for transfer. We have experience developing common curriculum in a collaborative fashion as evidenced by our work on the Sustainable Energy Technician program, currently available on four MUS campuses.

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

A Veterinary Technician program will not require changes to any existing programs at our institution. We expect the program to enhance opportunities for students interested in health sciences careers by providing them with an additional career option. And, we are excited to offer the access to vet techs currently employed in the field through accessible and high quality online programming.

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

There are no other Veterinary Technician programs at MSU-Great Falls or in the state of Montana. The fully online delivery of this program is, as stated above, an innovative way to provide access to a critically needed high quality educational program to Montanans. This unique opportunity for the College to partner with state veterinarians, who will supply practicum opportunities and clinical sites, is a win-win situation, bringing Montana into the 21st Century in the delivery of superior veterinary technician education.

Great effort was made for the AIT to hear from a consultant, Dr. Margi Salois, an expert in the online delivery of veterinary technician programming for Penn-Foster University. Dr. Salois visited the MSU-Great Falls' campus and did an extensive overview of the basics of the curriculum as well as a thorough investigation of quality and student success and completion. A full consultation report was reviewed with the AIT.

As stated previously, because MSU-Great Falls has a strong track-record of successful delivery of a variety of online programs in healthcare and other technical fields, an initial implementation of a program in this mode addresses the need in the state and provides access to Montanans who desperately need this training.

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

The MSU - Great Falls' Strategic Plan espouses the value of Responsiveness. We recognize and act upon opportunities to be innovative, flexible, and adaptable to our students' and communities' needs.

One of the goals for the Health Science Division at MSU-Great Falls is to address community healthcare needs by investigating specific healthcare disciplines. The veterinary technician discipline will be the fourth program to have been investigated in this academic year. We are proud to be able to address this critical need in our community, our region, and the state. And, we look forward to collaborating with other institutions who served on our AIT to offer the program on their campuses. Working together up front, in the development phase, has resulted in a common curriculum that can be implemented on any Montana campus. This is important work to advance not only the strategic goals of our campus and all the AIT affiliates, but the Montana Board of Regents as well.

E. Describe the relationship between the proposed program and any similar programs within the

Montana Board of Regents

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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 Veterinary Technician programs offered in Montana. This program was developed collaboratively with the help of seven institutions involved at various stages throughout the process. Initially, a group of Chief Academic Officers discovered, during a casual interaction at a Board of Regents meeting in 2010 that they were each considering development of the same program. And, each of the seven had the program on their program development list. That group of seven wondered if they might work together to not only develop the curriculum, but to determine where and how the program should be offered. Since it was clear that Montana doesn't need seven Vet Tech programs, that group hypothesized, through collaboration, they could come to consensus on the latter and learn a great deal by sharing resources on the former.

To "jump-start" the development process, MSU-Great Falls held the first of a series of AIT meetings, fondly called Vet Tech Summits, in February 2011. Over the course of a just about a year, five summits were held. The first joint Advisory Board/Academic Implementation Team meeting was held in October 2011. At that meeting the curriculum was finalized. It is the AIT's hope the current Advisory Board will continue to guide the program.

Letters and emails of support have been attached to this document for the perusal of the Board.

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.**

Veterinary Technician Associate of Applied Science

Program Description

The Veterinary Technician program meets the Associate of Applied Science degree requirements for individuals entering the job market with the skills to perform a variety of functions as veterinary technicians (VT).

Besides providing nursing care, veterinary technicians also assist with laboratory procedures, radiology, and provide assistance during surgery. Additionally, Vet Techs are responsible for the majority of patient education that occurs in a veterinary practice. Thus, this is a profession that requires excellent communication skills.

Career opportunities for veterinary technicians vary. To name a few, opportunities for employment exist in small animal hospitals, large animal hospitals, research and educational facilities, the pharmaceutical industry, and the military.

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Note: The Vet Tech program meets BOR policy 301.12 in regard to the Associate of Applied Science. It is a program of study between 60 and 72 credits that combines applied and academic course work designed to prepare students for career entry into the veterinary technician occupational area. It takes no more than two academic years to complete, including a summer session between the academic years. It has an occupational emphasis with a minimum of 2/3 of the total credits devoted to technical course work in the discipline specific to the profession. The related education courses meet accreditation requirements and align with the amount similar to programs of its type in the state of Montana, e.g., healthcare. And, as per regional accreditation standards, there is an identified body of communication, computation, and human relations coursework required.

Program Outcomes

Upon completion of the Veterinary Technology Associate of Applied Science, graduates are prepared to:
- Utilize knowledge and interpersonal skills to educate clients and communicate with colleagues.
- Obtain process, analyze, and record accurate multi-modal diagnostic information.
- Ensure compliance with State and Federal regulations and act in a professional and ethical manner in accordance with American Veterinary Medical Association (AVMA) and National Veterinary Technician Association (NVTA) Guidelines.
- Identify and understand the pharmacology and effects of drugs and therapeutic substances in various animal species.
- Operate and maintain veterinary equipment and facilities.
- Provide proficient animal husbandry, medical, and surgical care.
- Apply organizational principles and practices that permit a facility to provide quality patient care and client service.

Graduates of the Veterinary Technology program will be proficient in the following skills:
a) Caring for hospitalized animals
b) Anesthesiology/Surgical Assisting
c) Clinical Pathology
d) Dental Prophylaxis
e) Hospital Management/Client Education

Veterinary Technician Associate of Applied Science

Montana Board of Regents

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Fall Semester (First Year)	Spring Semester (First Year)	Summer Semester	Fall Semester (Second Year)	Spring Semester (Second Year)
VET 2-- Animal Anatomy and Physiology I 4 credits	VET 2-- Animal Anatomy and Physiology II 4 credits	VET 2-- Practicum 1 2 credits (90 Hrs)	VET 2-- Clinical Pathology I 3 credits	VET 2-- Vet Tech Examination Review 1 credit
M 121 College Algebra 3 credits	VET 1-- Animal Diseases, Pathology, and Immunology 3 credits	VET 1-- Veterinary Pharmacology 3 credits	VET 2-- Surgical Procedures 3 credits	VET 2-- Clinical Pathology II 3 credits
CHMY 121 Intro to Chemistry 4 credits	VET 1-- Veterinary Office Management 2 credits	VET 2— Bovine Management 2 credits	VET 2-- Anesthesiology 3 credits	VET 2-- Animal Nutrition, Reproduction, Genetics, and Aging 3 credits
VET 100 Introduction to Veterinary Technology 2 credits	VET 1-- Diagnostic Imaging 3 credits		VET 2-- Animal Parasitology 3 credits	VET 2-- Laboratory Animal Science 3 credits
WRIT 101 College Writing Or Business Writing 3 credits	COMM 120 Interpersonal Skills in the Workplace 1 credit		VET 2-- Practicum II 4 credits (180 Hrs)	VET 2-- Practicum III 4 credits (180 Hrs)
	VET 2— Animal Care and Management 3 credits			
16 credits total	**16 credits total**	**7 credits total**	**16 credits total**	**14 credits total**

Total: 69 Semester Credits
450 hours – Clinic

Note: A complete list of all courses and competencies is attached.

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

The program will enroll 20 students in the first year with an increase in enrollment in subsequent years. Because Montana has approximately 504 practicing veterinarians, it is believed there should be no issues placing students in practicums and clinicals. The proposed implementation timeline is as follows:

- January 2012   Submit request for approval to the Board of Regents
- March 2012   Gain approval from the Board of Regents
- April-July 2012   Recruit program director, faculty, and students
- August 2012   Begin student intake
- May 2014   Graduate first class

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.

MSU-Great Falls will seek program accreditation by the American Veterinary Medical Association (AVMA) Committee on Veterinary Technician Education and Activities (CVTEA). Accreditation requires that two faculty members be on staff. One faculty member must be a veterinarian and one faculty member must be a certified veterinary technician. The veterinarian FTE may be comprised of part-time instructors, which allows for a greater variety of practitioner expertise to help the College better leverage resources. There has been great interest from area veterinarians and vet techs in working as part-time instructors and clinical supervisors, instructors, and preceptors in the program.   A proposed program budget has been attached for the Board's consideration. The AIT has had tremendous support from the MVMA and the BSVTA.

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.

A program fee will be assessed to the students upon formal acceptance and approval by the Board. This fee will focus on the cost of the students' certification exams with the goal for the students to complete the appropriate examinations upon completion of the program. Additionally, as mentioned, the program is online and the veterinary clinics and hospitals will provide practicum experiences, clinical sites, and preceptors as needed. Again, there are over 500 practitioners in the state of Montana. Many of the uncertified, on-the-job trained vet techs currently working in the field will be able to pursue their formal course work while still employed – using their employers as clinical sites and practicum experiences as appropriate. This is a tremendous benefit to both the uncertified techs and the veterinarians who employ them because they can continue to provide services while learning and working toward their AAS.

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

There will be a number of tools used to measure the success of students and, thus, the success of the program. The information from these data gathering resources will be reviewed by the Vet Tech Program Director, the institution's Internal Program Review Committee, the regional accrediting body, and the program's accrediting body. The program will begin the accreditation process immediately upon Board approval. Examples of the assessment data and tools that will be used include:
- Student enrollment
- Retention analysis
- Student satisfaction surveys
- Employer surveys
- Graduate surveys
- Student employment rates
- Student passing rates on their national exam

Additionally, as per regional and program accreditation, there will be on-going student learning outcomes assessment that will measure if course objectives, program outcomes, and institutional abilities are being met.

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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.

   As discussed previously, this program was collaboratively developed by a group of MUS campuses, dubbed the AIT. The AIT shared a common Program Advisory Board. Following is a brief recap of each of the summit meetings, held at each one of the partner campuses. Even though not every campus will offer the program, they all played a vital role, contributing expertise and resources to the process. This allowed the AIT to work to develop a "One Program: Two Delivery Method" theme focused on the best use of state of Montana resources. At present, MSU-Great Falls moves forward the online delivery method and seeks approval for that method of delivery.

   A brief overview of the AIT Summits is presented below with full meeting agendas and recaps available upon request:

   Vet Tech Summit #1 was held on February 7, 2011 at MSU-Great Falls. Colleges represented in the summit included MSU-Northern, Flathead Valley Community College, UM Western, UM-Helena, MSU-Great Falls and Gallatin College. Expressing interest but not able to participate was MSU-Billings.

   Vet Tech Summit #2 was held on April 18, 2011, at UM Western in Dillon. Dr. Rick Scherr and Dr. Marc Mattix, doctors of veterinary medicine (DVMs), joined the group to share a history of veterinary technicians in Montana; the history of the Montana Veterinary Medical Association's (MVMA) most recent (2004-present) efforts to get a two-year vet tech program started in the state; specific metrics/data on Montana agriculture, animal health, veterinary techs, and veterinarians - needs justification; national vet tech data and trends; and detailed documentation of resource requirements—funding, facilities, equipment & staffing. They also shared several handouts outlining the MVMA's work in moving the vet tech program forward.

   Vet Tech Summit #3 was held on May 17, 2011, at Flathead Valley Community College in Kalispell. The main focus of this meeting was to obtain input from the Big Sky Vet Tech Association and solidify the Academic Implementation Team. Also discussed were potential candidates for the Advisory Board and key industry partnerships.

   Laura Hoerner, CVT, joined this meeting representing the BSVTA, to share the following key summary points and recommendations:
   - Montana needs a vet tech program, and BSVTA supports program development;
   - There are 100 CVTs in MT, and more than 500 veterinarians;
   - Vet tech program needs to be accredited;
   - BSVTA would like to see some options for specializing;
   - There is also a large need for continuing education (CE) opportunities for CVTs; and
   - Currently the distinction between certified versus uncertified vet techs in the state may not be too different in terms of pay rates. In general, CVTs are usually paid more for equal years of experience when compared to uncertified vet techs.

   Vet Tech Summit #4 was held on June 20, 2011, at Gallatin College Programs – MSU-Bozeman. The focus was to conduct the first meeting of the Academic Implementation Team Meeting. Dr. Sue Wedam, a consultant to the AIT, from Yakima Valley Community College was the keynote speaker. Her overview of

Montana Board of Regents
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their program curriculum set the stage for the interactive meeting and created a foundation for the next step for the AIT.

Also joining the meeting was Dr. John Cech.

The AIT explored sustainability options such as staggering the start dates of the programs; tailoring admissions so that graduate numbers are not entering the job market all at one time; and utilizing common courses that can be delivered on a rotating basis. Ideas will be discussed at home campuses with further discussion at the work session.

Online Program Consultation was held on June 27, 2011, at MSU-Great Falls. Dr. Margi Sirois, Vet Tech Program Director at Penn Foster College, visited MSU-Great Falls as a consultant on the implementation of an online program. The results of that meeting was shared electronically with the AIT and explored in subsequent AIT/Program Advisory Board meetings focused on the online delivery of the program.

Vet Tech Summit #5 was held on July 25, 2011, at MSU-Great Falls. The meeting was a work session designed to accomplish the following tasks:
- Create Program Description and Outcomes
- Identify major skills area – using the curriculum grid
- Review relevant courses needing to be developed
- Implement a rough draft of the AAS Program
- Finalize Advisory Board Deadlines

Vet Tech AIT/Advisory Board Meeting #1 was held on October 4, 2011, at MSU-Great Falls. The meeting focused on obtaining input from BSVTA and MVMA members sitting as Industry Advisory Board members. Input was provided to UM Western and MSU-Great Falls of the Academic Implementation Team (AIT). As such, this was the first meeting between the Industry Advisory Board and the AIT. Input and discussion were based on proposed program materials provided prior to the meeting for everyone to review. Materials included proposed program description for Veterinary Technology Associate of Applied Science degree (aka Vet Tech Program), program outcomes, program proficiencies, draft curriculum sequence, and draft course descriptions.

Program Concept: One Program – Two Delivery methods. The primary outcome of the collaboration process produced a common theme: One Program – Two Delivery Methods. The process started with seven MUS colleges collaborating, four continuing to engage as the process evolved into program development, and two colleges (MSU-Great Falls and UM Western) proposing to deliver the new proposed Vet Tech Program, if approved by MUS Board of Regents (BOR). Through our collaboration, the AIT believes the program can meet industry needs and accreditation requirements with these two delivery methods and with the help of our Advisory Board and Key Partners.

Discussion also included: 1) effectiveness of the proposed delivery methods, 2) facilities needs and issues - to start the proposed Vet Tech Program at these two MUS colleges, 3) USDA IACUC requirements and considerations for animal handling under the proposed delivery methods, 4) draft program outcomes, 5) draft program proficiencies, and 6) draft curriculum sequence.

In November 2011, MSU-Great Falls was notified by UM Western that they would not be moving forward with a January 2012 proposal for the on campus delivery of the Vet Tech program. Rather, they will be moving forward an articulation agreement and/or a pathway for students to do what they can at UM

Montana Board of Regents
CURRICULUM PROPOSALS

Western and then tag on to our eLearning program to complete the credential. UM Western will continue to work toward full implementation and will focus on a start date of fall 2013.

M♥MA
EST. 1907
Montana Veterinary Medical Association

December 5, 2011

To whom it may concern:

The Montana Veterinary Medical Association (MVMA) fully endorses the approval of a 2-year AAS degree program in Veterinary Technology.

1. What. An accredited 2-year AAS Veterinary Technology degree program in the State of Montana, matriculating Certified Veterinary Technicians (CVTs). The Certified Veterinary Technician holds a critical position in the veterinary profession: radiology technician, laboratory technician, physician's assistant, animal behavior and restraint expert, nutritionist, nurse and office administrator rolled into one. The MVMA endorses approval of a program that will be developed in accordance with the accrediting body for Veterinary Technology programs, the American Veterinary Medical Association (AVMA).

2. Why. Montana is one of only three states without a Veterinary Technology program, and is the only state with an agricultural economic base lacking a CVT program. A Veterinary Technology program directly supports and impacts Montana's number one industry- agriculture. A well-trained veterinary technical workforce will improve the efficiency and capacity of Montana's rural veterinarians. There is currently no pipeline training CVTs in Montana. The low density of veterinarians in the state increases the demand for a highly educated and trained technical workforce. Cattle and calves are the number one agriculture commodity in Montana, responsible for >\$1.3 billion in sales (49% of all farm sales). An in-state CVT program will uniquely focus training to best support this economic base.

3. Who. The Montana Veterinary Medical Association represents the interests of Montana's 504 practicing veterinarians as well as the agriculture and animal health industries within Montana. MVMA members have participated from the beginning in the collaborative MUS Academic Implementation Team and Advisory Board for Veterinary Technology.

4. When. The MVMA has been repeatedly unsuccessful over a decade working with the MUS in creating a Veterinary Technology program. The profession currently has no means of training veterinary technicians within Montana. The need for an accredited program in Veterinary Technology is not only immediate, it is long past due.

MARC E. MATTIX, DVM, MSS, DACVP
Past President, MVMA

MSU Great Falls College of Technology
2100 16th Avenue South
Great Falls, MT 59405
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Fax: [406] 771-4317
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ITEM #154-2901-R0112
MSU-Great Falls College of Technology
ASCC--Academic Senate Curriculum Committee
Action Item
Summary Cover

"To advance the profession of the veterinary technician through continuing education, dissemination of information and the promotion of integrity and compassion in our field."

To Whom It May Concern,

I am representative of Big Sky Veterinary Technician Association and technicians who live and work here in Montana. Up until recently very few veterinary clinics have had the opportunity to employ graduate veterinary technicians because of the unavailability of them. In the past several years we have seen an increase in the numbers of technicians moving to the state or attending nearby colleges, year to date, we have recorded ten new technicians working in Montana, which brings us to the reason for this letter. Out of the ten newly certified technicians this year, four graduated from nearby out of state colleges.

For the past seven years or longer there have been many attempts in pursuit of starting a veterinary technology program in Montana. To give Montana veterinary clinics a larger pool of qualified veterinary technicians to choose from and also keep advancing veterinary medicine in the state, we feel the need for a program.   Having a veterinary technology program in the State of Montana will prevent students from having to pay the great expense of out of state tuition.

We would welcome any input, suggestions or assistance that you may need to pursue such program. We would like to also thank, Dr. Gregory P. Paulauskis for efforts and interest in trying to make this possible.

Regards,

Mikki Cook, BS, LVT, CVT
Big Sky Veterinary Technician Association, President

MONTANA STATE UNIVERSITY
NORTHERN

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ITEM #154-2901-R0112
Letter and Signature

Dr. Heidi Pasek
Associate Dean/CAO
MSU-Great Falls
2100 16th Avenue South
Great Falls, MT 59405

Dear Dr. Pasek:

Montana State University – Northern would like to extend its support for your request to add the Associate of Applied Science Veterinary Technology Program to the program offerings of MSU-Great Falls. We understand that the majority of this program is to be offered as an online program.

The need for certified veterinarian technicians in Montana is acknowledged by the Montana Veterinarian Association. The surrounding states have Vet Tech programs, so currently any students interested in pursuing this career path have to go to Wyoming, Idaho or Washington. This program, as an online program, would fulfill the needs for those students who may be place bound or who live in Great Falls or the surrounding area.

MSU-Northern is fully supportive of this additional program and commits to working with MSU-Great Falls to fulfill the career needs of the area students. We look forward to continuing to work with MSU-Great Falls.

Very sincerely yours,

Carol A. Reifschneider, Ph.D.
Interim Dean of the College of Education,
Arts & Sciences and Nursing
reifschneider@msun.edu
406-265-3768

From:	Heidi Pasek
Sent:	Thursday, November 10, 2011 4:56 PM
To:	Bill Brewster; Bob Nose; Bruce Hoffman; Dr. Deb Yarborough; Dr. Martin Zaluski; Kathryn Mariucci; Ron Carlstrom; Dr. Marc E. Mattix; Greg Paulauskis; Heidi Pasek; Iola Else; Joe Schaffer; John Cech; Karl Ulrich; Kristen Bailey; Kristen Jones; Laura Wight; Lisa O'Neil; Lorene Jaynes; Martha Potvin; Mel Lehman; Pete Wade; Rick Scherr; Robert Hietala; Rosalyn Templeton; Ryan Haskins; Sylvia Moore
Cc:	Martha Potvin (mpotvin@montana.edu); Sylvia Moore
Subject:	Vet Tech Proposal Update

| **Importance:** | High |

Dear Advisory Board Members and Academic Implementation Team,

Last week, I travelled to UM-Western to meet with Dr. Ulrich about the Vet Tech program. He informed me that UM-Western will not be moving forward with us on a the January proposal to the Board of Regents with a program start date for UM-W of Fall 2012. Rather, we will move forward an articulation agreement and/or a pathway for students to do what they can at UM-Western and then tag on to our eLearning program to complete the credential. UM-W will continue to work toward full implementation; however, will focus on a start date of Fall 2013.

Our *"One Program: two delivery methods"* approach to offering Vet Tech programing in Montana is still viable and will remain our program theme. With this latest development, full on-campus delivery will be delayed; however, students wishing to take much of the program in a face-to-face format could do that at Montana Western through the articulation agreement/pathway as mentioned above. MSU-Great Falls will present the common Vet Tech curriculum to our campus Curriculum Committee later this month with the intent to move it forward as a Level II approval item for Board of Regents' consideration at their January 2012 meeting with finalization at the March meeting. We will stay in touch on the proposal and let you know what we might need from you as we draft the final documents.

Karl and I look forward to hearing your thoughts and feedback. And, we are happy to answer any questions you might have.

Thanks,

Heidi Pasek and Karl Ulrich

MONTANA
STATE UNIVERSITY
GALLATIN COLLEGE
PROGRAMS

December 6, 2011

Dr. Heidi Pasek, Associate Dean CAO
MSU-Great Falls
2100 16th Avenue South
Great Falls, MT 59405

Dear Dr. Pasek,

It is my pleasure to provide this letter of support for your proposed Veterinary Technology Associate of Applied Science Program. During our participation at the series of Veterinary Technician program development meetings which you facilitated, we clearly heard about the statewide needs for this type of program. As Gallatin College Programs does not intend to initiate this type of program in the near future, we support your program and look forward to seeing it meet the needs of the veterinary community.

Sincerely,

Bob Hietala, Dean of Gallatin College Programs

From: Kristen Jones <kjones@fvcc.edu>
Sent: Tuesday, December 06, 2011 3:27 PM
To: Heidi Pasek
Subject: FVCC and Vet Tech program

Hi Heidi,
Just a quick update from FVCC on the Vet Tech proposal – we've decided we need to secure funding for the program before we move forward with seeking BOR approval. We are supportive of Great Falls taking the proposal for online delivery of the program to the January BOR meeting and will plan to take a proposal for traditional delivery of the program forward in the future if we are able to find funding. We appreciate the opportunity to collaborate with you on this project.
Thanks.

Kristen Jones, Ed.D
Vice President of Instruction and Student Services
Flathead Valley Community College
777 Grandview Drive
Kalispell, MT 59901
406-756-3894

Veterinarian Technician
COURSE DESCRIPTIONS

Course Number:	VET XXX
Course Title:	Animal Anatomy & Physiology I w/Lab

Credits: 4

Description: Structures and function of the animal body with emphasis on the similarities and differences of domestic animals; principles of biology, body organization and metabolism of cells, tissues, and organ systems including the respiratory, digestive, skeletal, muscular, and cardiovascular systems.

Competencies:

Course Number:	M 121
Course Title:	College Algebra
Credits: 3	

Description: This course presents concepts, principles and methods of college-level algebra. Topics to be covered include polynomial, rational, radical, exponential, and logarithmic functions and their graphs, and real and complex numbers.

Competencies:
- Manipulate real and complex numbers.
- Manipulate polynomial, rational, radical, exponential, and logarithmic functions of a real number.
- Graph polynomial, rational, radical, exponential, and logarithmic functions of a real variable.
- Find inverse functions for selected polynomial, rational, radical, exponential, and logarithmic functions of a real variable.
- Find inverse functions for selected polynomial, rational, radical, exponential, and logarithmic functions of a real variable.
- Use polynomial, rational, radical, exponential, and logarithmic functions of a real variable to model real-world phenomena and solve applied problems.

Course Number:	CHMY 121
Course Title:	Intro to General Chemistry w/Lab
Credits: 4	

Description: This course is a survey of the principles of inorganic chemistry with emphasis on scientific measurement; atomic structure; chemical periodicity; chemical bonding and nomenclature; chemical reactions and stoichiometry; gas laws; properties of liquids, solids, and solutions; acid-base chemistry; and some electrochemistry and nuclear chemistry. This course is designed for students entering health science or nursing programs. The laboratory portion of the course provides hands-on experience dealing with the topics covered in the lecture portion. In order to have the greatest success in this course, it is highly recommended that students possess strong algebra skills.

Competencies:

- Learn how to work with laboratory equipment, apparatus, and chemicals in a safe and effective manner.
- Learn to collect data, perform appropriate calculations, and apply the scientific method to experimental situations.
- Apply the dimensional analysis method for the conversion of units, and be able to record and round measurements to the correct number of significant figures.
- Describe matter. Distinguish among the different physical states of matter and the chemical and physical properties of matter.
- Identify the structure of the atom and its components. Describe their physical properties and chemical behaviors. Relate these to the periodic nature of elements.
- Identify, and differentiate between, ionic and covalent bonding.
- Learn to name simple inorganic compounds and predict their formulas from their names.
- Draw Lewis structures of compounds and predict molecular geometry and molecular polarity from the Lewis structures.
- Balance chemical equations, and perform basic stoichiometric calculations involving chemical equations.
- Observe that energy is the driving force of chemical reactions and determine what factors affect reaction rates and equilibrium.
- Apply the gas laws to substances in the gaseous state.
- Define solubility and differentiate among solutions, colloids and suspensions. Apply appropriate concentration units to solutions.
- Define and describe acids, bases, salts, and buffers. Identify and describe their chemical properties. Define pH and compare pH values to hydronium ion concentrations.
- Explore nuclear chemistry and describe the properties of the various forms of radiation.
- Demonstrate knowledge of the application of chemistry to various aspects of their lives.

Course Number:	VET XXX
Course Title:	Introduction to Veterinary Technology
Credits: 2	

Description: Introduction to animal sciences and an orientation to career opportunities in the field of animal care; typical behavior characteristics of animal species with regard to humane restraint and handling the veterinary technician's role in patient history, physical exam, grief counseling, and client education; introduction to medical terminology.

Competencies:

- Describe the role of the veterinary technician and each of the veterinary health care team members in routine veterinary examinations
- Explain the importance, components, and process of taking a good history
- Describe appropriate small-animal restraint for routine physical examination procedures.
- Describe appropriate large-animal restraint for routine physical examination procedures.
- Identify the supplies and equipment required to perform a physical examination
- Describe large and small animal examination techniques
- Identify normal values for temperature, pulse, and respiration of small and large animals
- Explain how to make preliminary observations and recognize problems that require immediate attention

- Describe the SOAP format for recording information in the medical record
- Explain the veterinary technician's role in client education Explain the need for humane restraint of animals in a veterinary setting
- Discuss the fundamentals of animal restraint
- Identify the restraint techniques and equipment used for small and large animals
- Analyze the circumstances to determine and employ the appropriate small- and large-animal handling and restraint
- Name and discuss the personal and professional qualities required in the veterinary field
- Summarize the history of veterinary medicine
- Describe the aspects of veterinary practice that are regulated by law, the bodies that regulate them, and the training, licensing, and certification requirements various veterinary professionals must meet
- List and describe the various types of veterinary practices and the roles the veterinary staff play in each
- List and describe the roles, responsibilities, and certification requirements of the veterinary health care team members
- Describe the different areas and functions of a veterinary practice
- Describe animal care opportunities beyond the veterinary practice
- Define professionalism and professional ethics and describe their implications for the veterinary care field
- Explain the differences between the two major scientific approaches to studying animal behavior
- Identify common pet behavior problems, and techniques for resolving them
- Discuss the veterinary technician's role in resolving animal behavior problems

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Course Number: WRIT 101
Course Title: College Writing I
Credits: 3

Description: College Writing I is designed for transfer-level students or for those who want to develop competence in college level reading and composition. In this course, students read, analyze, discuss, think critically, and write essays within a variety of patterns of writing, including narration, description, example, comparison and contrast, process analysis, causal analysis, and argument. The goal of the course is effective, logical, and precise expression of ideas in writing. Emphasis is placed on pre-writing skills, organizational techniques, development of ideas, narrowing and expanding topics as appropriate, and research and referential skills. Competence in basic sentence structure and writing skills at the paragraph and short essay level is assumed.

Competencies:
- Write, at minimum, five essays (750-1500 words), at least one requiring research
- Engage a variety of texts and their ideas, including popular media, scholarly articles, literature, and reference materials.
- Demonstrate awareness of diverse viewpoints, values, and cultures.
- Identify problems with reasoning, e.g., logical fallacies.
- Practice the process steps for writing (prewriting, drafting, revising, editing).
- Apply various strategies and tools supporting steps of the writing process: journaling, free writing, brainstorming at the prewriting stage; models and patterns at the drafting stage; collaboration at the revision stage; and using a handbook's guidance at the editing stage.
- Participate in collaborative learning activities, including peer-review and peer-editing.

- Conduct a search in an interdisciplinary database (e.g., Academic Search Complete) or Weaver Library catalog.
- Limit searches in databases and the Weaver Library's catalog, e.g., publication date range, full-text.
- Use database features to mark/save/print/email citations.
- Use interlibrary loan services as needed.
- Develop effective, e.g., conceptually rich, logical, and judiciously qualified, thesis statements.
- Develop meaningful conclusions, i.e., provide reflection or commentary on the essay's main ideas
- Synthesize ideas from multiple sources.
- Choose supporting evidence appropriate to the writing task.
- Maintain academic integrity by paraphrasing, summarizing, and citing source material appropriately.
- Integrate quotations, paraphrases, and summaries in research-based writing proficiently.
- Correctly identify, name, and discuss the nature of errors and their correction: parallel structure, conciseness & clarity, word choice, sentence combining
- Self-correct errors with the support of a handbook or textbook.
- Apply MLA documentation style, including parenthetical documentation and Works Cited page, and/or another assignment-appropriate documentation style (APA or Chicago)
- Apply format conventions of a given documentation style (MLA, APA, Chicago) to written work.

--OR--

Course Number: WRIT 122
Course Title: Introduction to Business Writing
Credits: 3

Description: Students of this course develop the skills to generate clear, concise documents for the world of work. Emphasis is placed on format, tone, style, and organization of business letters, memos, and reports. Appropriate conventions for business style, punctuation, and handling of electronic communications are included.

Competencies:
- Apply correct grammar and language arts skills (capitalization and punctuation) in business documents through writing, revising, and proofreading.
- Write effective and appropriate business letters, memos, and emails for different business situations using the processes of drafting and revising written work.
- Identify the audience for business communication and use effective strategies to achieve the writer's purpose in conveying effective messages appropriate to the situation.
- Select the appropriate format, including the use of visual aids and graphics, in writing business documents.
- Use appropriate communication problem solving strategies to construct effective business messages, including being a productive member of a team and/or peer editing.
- Identify the elements of reports in business—formal and informal, short and long.

Course Number: VET XXX
Course Title: Animal Anatomy & Physiology II w/Lab

Credits: 4

Description: Continuation of Anatomy and Physiology I: integumentary, urinary, and endocrine systems; nervous system and sensory organs.

Competencies:

Course Number: VET XXX
Course Title: Animal Diseases, Pathology and Immunology
Credits: 3

Description: Basic disease processes as they relate to various body systems; transmission diagnosis, treatment, and prevention of diseases that affect domestic animals; healing processes; immunological responses and vaccination types and techniques; zoonosis and preventative measures.

Competencies:
- Define disease, pathology, immunology, and occupational safety
- Explain how disease, pathology, and immunology are interrelated
- Describe the processes involved in wound healing and methods of wound management
- List common diseases of animals and describe the causative agents, treatment, and control measures
- Describe occupational safety measures for the veterinary technician

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Course Number: VET XXX
Course Title: Veterinary Office Management
Credits: 2

Description: Veterinary technician's role in practice management; accounting basics; personnel management, leadership skills; stress management; customer relations; practice ethics.

Competencies:
- Describe the communication process, and list the basic elements of communication
- List and explain five personality traits that are essential for interpersonal relations in the veterinary office
- Distinguish between appropriate and inappropriate professional interactions with clients
- Recognize prejudice, insensitivity, and discrimination in interpersonal relations
- List and describe at least five barriers to effective communication
- List three ways you can improve your speech
- Outline the causes of stress and the psychological defense mechanisms used to cope with stress
- List five positive ways to cope with stress
- Describe a pleasing telephone personality and demonstrate how to handle the types of calls commonly received in an animal hospital
- Use an appointment book to efficiently schedule a veterinarian's workday
- Explain how interpersonal skills apply to client and patient reception
- Recognize the process of finding a job in the veterinary field
- Identify and describe the different staff roles within a typical veterinary practice
- Explain the purpose and importance of office manuals, such as personnel, procedures, job description, and instrumentation

- Explain the importance of maintaining a veterinary facility in a clean, safe, and organized fashion, and describe the steps must be taken.
- Explain how to order and maintain office inventory and supplies
- Identify the types of records found in a typical veterinary practice, including laboratory reports, radiographs, and medical records
- Describe the maintenance of the various logs found within a typical veterinary practice, including those for surgery/anesthesia, laboratory tests, radiographs, and controlled substances
- Describe how to admit and discharge patients, take patient histories, maintain records, and prepare appropriate release forms and certificates for signature
- Describe basic concepts of records retrieval and protection of medical and business records
- Identify basic filing systems and filing equipment
- Discuss the importance of advertising a veterinary office practice

Office Management

Skill: Participate in facility management utilizing traditional and electronic media and appropriate veterinary medical terminology and abbreviations.

Tasks:

- Schedule appointments, admit, discharge and triage according to client, patient and facility needs through phone and in-person contact*
  - Recognize and respond to veterinary medical emergencies*
- Create and maintain individual client/patient records, vaccination certificates, and other appropriate forms*:
  - develop computer skills*
  - be able to utilize common management software programs*
  - be familiar with veterinary on-line services*
- Perform basic filing of medical records, radiographs, lab reports, etc.*
- Create and maintain all appropriate facility records and logs in compliance with regulatory guidelines (e.g., radiography, surgery, anesthesia, laboratory, controlled substance)*
- Manage inventory control*
- Recognize roles of appropriate regulatory agencies*
- Maintain appropriate disposal protocols for hazardous materials*
- Establish and maintain appropriate sanitation and nosocomial protocols for a veterinary facility, including patient and laboratory area*
- Handle routine financial transactions*

Decision-making abilities: Taking into account the characteristics of the facility, patients and clients, the veterinary technician will effectively contribute to the professional and efficient operation of the facility in order to provide maximum benefits to clients, patients, and the facility.

Communication

Skill: Communicate in a professional manner in all formats - written, oral, non-verbal, and electronic.

Tasks:

- Apply understanding of interpersonal skills and team dynamics in all aspects of team dynamics*
- Utilize appropriate interpersonal and public relations skills*
- Demonstrate telephone etiquette*
- Recognize the legality of the veterinary-client-patient relationship*
- Develop and provide client education in a clear and accurate manner at a level the client understands (i.e., oral and written form, including educational handouts)*
- Apply crisis intervention/grief management skills with clients*

Decision-making abilities: Taking into account the patient, client, staff and circumstances, the veterinary technician will effectively and accurately acquire and convey information utilizing an appropriate communication mode.

Laws and Ethics

Skill: Follow and uphold applicable laws and the veterinary technology profession's ethical codes to provide high quality care to patients.

Tasks:

- Understand and observe legal boundaries of veterinary health care team members*
- Interact professionally with clients and fellow staff members*
- Demonstrate a commitment to high quality patient care*
- Respect and protect the confidentiality of client and patient information*

Decision-making abilities: Given knowledge of legal limitations and applicable ethical standards, the veterinary technician will carry out her/his duties within appropriate legal boundaries and maintain high ethical standards to provide high quality service to clients, patients, employers and the veterinary profession.

Course Number: VET XXX
Course Title: Diagnostic Imaging
Credits: 3

Description: Radiation and ultrasound; x-ray production, film types and development, equipment operation and care, darkroom and developing procedures; radiation safety and preventative measures; positioning the animal for radiograph production.

Competencies:

- Describe how x-rays are produced.
- Discuss the properties of x-rays,
- Identify the parts of an x-ray machine,
- Describe the dangers of x-rays,
- Describe acceptable safety procedures,

- Recognize how a radiographic image is produced,
- Discuss factors that influence the radiographic image,
- Recognize and adjust radiographic faults,
- Properly position for routine small-animal radiographs,
- Discuss the procedures for developing radiographs,
- Discuss the procedures for performing common contrast studies,
- Explain the principles of large-animal and exotic radiographs

Skill: Safely and effectively produce diagnostic radiographic and non-radiographic images.

Tasks:

- Implement and observe recommended radiation safety measures*
- Implement radiographic quality control measures*
- Develop and properly utilize radiographic technique charts*
- Position dogs, cats, horses, and birds for radiographic studies*
- Demonstrate an understanding of the modifications of diagnostic imaging techniques as they apply to mice, rats, guinea pigs, lizards, and amphibians*
- Utilize radiographic equipment to expose radiograph film (dental, stationary* and portable units*)
- Process exposed films to create diagnostic radiographic images (automatic*, hand, and digital processing)
- Label, file, and store film*
- Complete radiographic logs, reports, files and records*
- Perform radiographic contrast studies — perform one of the following*
- GI Series
- Pneumocystogram
- Intravenous urogram
- Other
- Perform radiographic techniques utilized in screening for canine hip dysplasia*
- Demonstrate proper maintenance of radiographic equipment, including recognition of faulty equipment operation*
- Use ultrasonography equipment
- Use endoscopic equipment

Decision-making abilities:

1. Given the characteristic of the patient and the radiographic study that has been requested, the veterinary technician will properly (1) prepare radiographic and darkroom equipment, (2) measure and position animals using topographic landmarks, (3) choose an appropriate radiographic technique to minimize the need for repeat exposures (4) produce the latent image, (5) process the exposed film, (6) analyze the final radiograph for quality in order to provide maximum diagnostic benefit.
2. Given a radiograph, the veterinary technician will be able to determine if the image is of diagnostic quality. If the image is not diagnostic, the veterinary technician will be able to offer options to correct deficiencies in order to provide maximum diagnostic benefit and minimize personnel radiation exposure from unnecessary repeat exposures.

3. Given knowledge of the health risks associated with radiographic procedures and effective safety procedures, the veterinary technician will exercise professional judgement to minimize risks to personnel and patients during radiographic procedures to ensure safety.
4. Given the characteristics of the patient and the non-radiographic imaging study that has been requested, the veterinary technician will properly (1) prepare the imaging site and equipment and (2) position patients appropriately for the study being conducted.

Course Number: COMM 120
Course Title: Interpersonal Skills in the Workplace
Credits: 1

Description: This course covers the basic elements of communication in the business environment, including listening, speaking, and reading. It also looks at the importance of nonverbal communication, ethics, and professional courtesy. It discusses the importance of internal skills within the business and external skills with customers. Skills of the employment process are also included.

Competencies:
- Develop a positive work ethic.
- Build and maintain positive working relationship with supervisors.
- Work effectively in teams and effectively manage workplace problems and conflict including difficult co-workers, sexual harassment, and personal impairments such as drug and alcohol abuse.
- Work effectively in a culturally diverse environment.
- Listen to, understand, and carry out spoken instructions and give clear instructions to others.
- Read, analyze, and respond appropriately to workplace forms and documents.
- Write clear instructions, memos, and other documents common to the workplace.
- Recognize stress and other adverse responses to the workplace and develop healthy ways of dealing with them.
- Give and receive constructive criticism.

Course Number: VET XXX
Course Title: Practicum I
Credits: 2 (90 hours)

Description: The student will receive an introduction to the requirement of a veterinary technician in a clinical practice. The first of three practicums at a veterinary hospital; be part of the working veterinary team and practice the knowledge and skills acquired from the course material.

Competencies:

The competencies as determined by the American Veterinary Medicine Association and the Committee on Veterinary Technician Education and Activities.

Course Number: VETXXX
Course Title: Practicum II
Credits: 4 (180 hours)

Description: The second of three practicums at a veterinary hospital; be part of the working veterinary team and practice the knowledge and skills acquired from the course material.

Competencies:

The competencies as determined by the American Veterinary Medicine Association and the Committee on Veterinary Technician Education and Activities.

Course Number: VET XXX
Course Title: Veterinary Pharmacology
Credits: 3

Description: Use of drugs in veterinary medicine; introduction to drug testing methodology and the use/handling of prescriptions; calculation of dosages and administration techniques; drug actions, interactions, and adverse reactions.

Competencies:

- Define common terms used in general pharmacology
- Use your judgment in deciding what route of drug administration is best for a particular patient with a particular disease
- Distinguish between hormonal, endocrine, and reproductive drugs
- Describe how drugs affect the nervous system
- Identify examples of respiratory drugs
- List which drugs are used to relieve pain and inflammation
- Summarize the difference between ophthalmic and otic drugs
- Compare and contrast cardiovascular and gastrointestinal drugs
- Describe how antiparasitic drugs work
- Discuss why replacement drugs are often necessary for animal health

Administration

Skill: Safely and effectively administer prescribed drugs to patients.

Tasks:

- Prepare medications; label and package dispensed drugs correctly*
- Read and follow veterinarian's pharmacy orders*
- Recognize groups of drugs, their mechanisms, and clinically relevant side effects*
- Recognize the safe and effective manner in which vaccines must be administered; recognize and explain common side effects*
- Accurately perform appropriate calculations; use weights and measures correctly*

- Safely and effectively administer drugs by common parenteral and enteral routes; be able to explain appropriate routes and methods and when used*
- Monitor therapeutic responses*
- Demonstrate the ability to accurately record medical information*
- Demonstrate understanding of controlled substance regulations*
- Demonstrate compliance with all federal regulatory guidelines for drug purchase, storage, administration, withdrawal, dispensing, disposal, and inventory control (e.g., biologics and therapeutic agents, pesticides, and hazardous wastes)*

Decision-making abilities: Given the characteristics of the patient, the instructions of the veterinarian and the medication to be used, the veterinary technician will calculate the correct amount of medication in the prescribed form and administer it by the prescribed route to maximize therapeutic benefits and minimize the potential for adverse effects. The veterinary technician shall also be able to differentiate between abnormal and normal responses to medication.

Dispensing

Skill: Accurately dispense and explain prescribed drugs to clients.

Tasks:

- Given a drug order, properly prepare medications for dispensing, including performing accurate calculations*
- Demonstrate compliance with regulations governing prescription drugs versus over-the-counter drugs*
- Demonstrate understanding of regulations governing maintenance of controlled substances log book*
- Demonstrate compliance with all federal regulatory guidelines for drug purchase, storage, administration, withdrawal, dispensing, disposal, and inventory control (e.g., biologics and therapeutic agents, pesticides, and hazardous wastes)*
- Relay drug information to clients (e.g., handling, storage, administration, side-effects, drug interactions, safety, reasons for use of drug)*

Decision-making abilities: Given the characteristics of the patient, the instructions of the veterinarian and the medication to be used, the veterinary technician will (1) accurately calculate and dispense the correct form and dose of medication and (2) communicate necessary client information in order to maximize safety, compliance with prescribed therapy and successful treatment of the patient. The veterinary technician should also be proficient at performing inventory control procedures.

Course Number: VET XXX
Course Title: Clinical Pathology I
Credits: 3

Description: Microbiology, histology, cytology, and urinalysis; basics of microbiology; microorganisms and their effect on humans, animals, and the world around us; study of morphology, genetics, virology, and immunology.

Competencies:

- List the components of a comprehensive laboratory safety program
- Describe the parts of the microscope, the function of each part, and methods for care and maintenance of the microscope
- Perform laboratory measurements and dilutions
- Describe methods for use, care, and maintenance of incubators, clinical centrifuges and refractometers
- Describe bacterial morphology based on the shape and arrangement of the cells and list and define the terms used to characterize bacterial requirements for oxygen, temperature, and nutrients
- List and describe specialized structures and organelles that may be present in some species of bacteria
- List the equipment and supplies needed to perform microbiology, cytology, and urinalysis in the practice laboratory
- Describe sample collection for microbiologic samples
- Describe the commonly used types and forms of culture media can be used in the veterinary practice laboratories require just a few types
- Describe tests needed for primary identification of bacteria requires
- Describe the procedures for inoculation of culture media
- List additional biochemical tests that may be needed to confirm identity of bacteria in samples
- Describe the principle of antibiotic sensitivity testing and list the steps needed to perform the testing
- Describe sample collection for fungal samples and procedures used for dermatophyte testing
- Describe the purpose of cytology evaluations
- Describe sample collection procedures for cytology examination of solid masses or surgically obtained tissues
- Describe sample collection procedures for cytology examination of fluid samples
- List and describe methods for preparing smears of cytology samples
- Describe methods for categorizing inflammatory samples
- Describe the characteristics of malignant cells

Specimen management

Skill: Properly package, handle and store specimens for laboratory analysis.

Tasks:

- Prepare specimens for diagnostic analysis*
- Select and maintain laboratory equipment*
- Implement quality control measures*
- Ensure safety of patients, clients and staff*

Decision-making abilities:

1. Given the characteristics of the patient and the requested analysis, the veterinary technician will properly prepare, handle and submit appropriate samples for diagnostic analysis in order to ensure maximum accuracy of results.
2. Given the characteristics of laboratory instruments and equipment, the veterinary technician will determine proper maintenance and quality control procedures necessary to ensure accurate results.

Specimen analysis

Skill: Properly carry out analysis of laboratory specimens.

Tasks:

- Perform urinalysis:
- determine physical properties (e.g., color, clarity, specific gravity)*
- test chemical properties*
- examine and identify sediment*
- Perform CBC:
- hemoglobin*
- packed cell volume*
- total protein*
- white cell count*
- red cell count*
- Perform microscopic exam of blood film:
- prepare film and stain using a variety of techniques*
- perform leukocyte differential – normal vs abnormal*
- evaluate erythrocyte morphology – normal vs abnormal*
- estimate platelet numbers*
- calculate absolute values*
- correct white blood cell counts for nucleated cells*
- Calculate hematolgic indices*
- Coagulation tests – perform one of the following*
- buccal mucosal bleeding time
- activated clotting time (ACT)
- prothrombin time (PT)
- partial thromboplastin time (PTT)
- fibrinogen assay
- Perform blood chemistry tests (BUN, glucose, common enzymes)*
- Perform serologic test (ELISA, slide/card agglutinations)*
- Identify blood parasites:
- Dirofilaria sp/Dipetalonema sp – antigen kit*, direct*, filter, Knotts
- Hemotropic Mycoplasma sp* (formerly Haemobartonella sp)
- Anaplasma sp
- Babesia sp
- Trypanosoma sp
- Eperythrozoan sp
- Ehrlichia sp
- Perform parasitologic procedures for external parasites and identify:
  - mites*
  - lice*
  - ticks*
  - fleas*
  - flies*

- Perform diagnostics procedures for parasites:
  - Antigen kit*, direct*, filter, Knotts
  - floatation solution preparation
  - fecal flotations*
  - fecal sedimentation*
  - direct smears*
  - centrifugation with flotation*
  - adhesive tape retrieval of pinworm ova
- Identify common parasitic forms:
  - Nematodes*
  - Trematodes*
  - Cestodes*
  - Protozoa*
- Perform coprologic tests
- Perform microbiologic procedures/evaluations:
- collect representative samples*
- culture bacteria and perform sensitivity tests*
- identify common animal pathogens using commercially available media and reagents*
- collect milk samples and conduct mastitis testing (e.g., CMT, bacterial culture)*
- perform common biochemical tests*
- perform staining procedures*
- culture and identify common dermatophytes*
- Perform cytologic evaluation
- assist in collecting, preparing and evaluating transudate, exudate and cytologic specimens (joint, cerebrospinal, airway, body cavity)
- perform fine needle tissue aspirates and impression smear preparation (differentiate benign vs. malignant)
- prepare and stain bone marrow specimens
- collect, prepare, and evaluate ear cytology*
- collect, prepare, and evaluate canine vaginal smears*
- evaluate semen
- understand timing and types of pregnancy testing
- assist with artificial insemination
- Perform necropsy procedures:
- perform a postmortem examination or dissection on non-preserved animal*
- collect samples, store and ship according to laboratory protocols*
- explain how to handle rabies suspects and samples safely*
- handle disposal of dead animals
- perform humane euthanasia procedures

Decision-making abilities:

1. Given the characteristics of the patient, the specimen submitted and the results of the analysis, the veterinary technician will be able to recognize accurate vs. erroneous results in order to provide maximum diagnostic benefit.

2. Given the laboratory specimen collected and characteristics of the patient, the veterinary technician will determine appropriate methodology and carry out analytical procedures necessary to provide accurate and precise diagnostic information.
3. Having determined the accuracy of analytical results, the veterinary technician will work with the veterinarian to determine if a need exists for additional laboratory tests that will provide useful diagnostic information.

Course Number: VET XXX
Course Title: Surgical Procedures
Credits: 3

Description: Principles and practices of surgical nursing; methods and mechanics of the process of sterilization, identification, use and maintenance of surgical instruments; common surgical procedures.

Competencies:

- Describe commonly performed surgeries
- Identify the three most common methods of sterilization
- Explain aseptic technique and why it's vital to surgical nursing
- Maintain and identify surgical instruments
- Describe how instruments are sterilized and packed for surgery
- Explain the contents of a typical surgical pack

It is essential that technicians have knowledge of routine surgical procedures and related equipment, including surgeries in these categories:

- o ovariohysterectomy - dogs and cats*
- o cesarean section - all common species*
- o orthopedic procedures*
- o orchiectomy - all common species*
- o tail docking*
- o onychectomy - dogs and cats*
- o laparotomies - all common species*
- o dystocias in common species*
- o dehorning - cattle and goats*
- o prolapsed organs - common types, species, and incidence*

Students must have participated in surgeries in these categories:

- o ovariohysterectomy - dog*, cat*
- o orchiectomy - dog*, cat* and other common species

Patient management

Skill: Understand and integrate all aspects of patient management for common surgical procedures in a variety of animal species.

Task:

- Properly identify patients and surgical procedures*

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will use medical records and patient identification methods to assure that the patient and scheduled procedures are correct.

Task:

- Patient assessment
  - organize medical records/consent forms*
  - review pre-operative evaluation*
  - evaluate current patient status*
  - coordinate anesthesia*

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will obtain the patient's vital signs, note any specific physical abnormalities, ensure pre-surgical tests have been completed and report the patient assessment to the veterinarian.

Task:

- Prepare surgical site using appropriate aseptic techniques*

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will identify the appropriate area of hair to be removed and select appropriate methods to reduce microbial flora on the skin in the area of surgical site in order to decrease the chance of surgical wound contamination.

Task:

- Position patient for common procedures*

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will position the patient appropriately to provide maximum convenience for the surgeon and maximum safety and benefit for the patient.

Task:

- Provide surgical assistance:
  - demonstrate proper operating room conduct and asepsis*
  - assist with care of exposed tissues and organs*
  - properly pass instruments and supplies*
  - operate and maintain suction and cautery machines*
  - understand the principles of operation and maintenance of fiber optic equipment*
  - keep operative records*
  - perform basic suturing techniques

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will understand and utilize appropriate aseptic techniques to assist operative personnel in order to provide maximum safety and benefit to the patient.

Task:

▪ Coordinate pain management with the anesthesia/surgical team*

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will assure that anesthetic and post-operative pain management protocols are appropriate to provide maximum safety and benefit to the patient.

Task:

▪ Provide post-operative care:
  - o pain management*
  - o fluid therapy*
  - o adequate nutrition*
  - o wound management*
  - o bandaging*
  - o discharge instructions*
  - o *suture removal*

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will understand and administer the appropriate methods of post-operative care to assure maximum safety and benefit to the patient.

Procedural management

Skill: Understand and provide the appropriate instruments, supplies and environment to maintain asepsis during surgical procedures.

Tasks:

- ▪ Prepare surgical instruments and supplies*
- ▪ Prepare gowns, masks, gloves, and drapes*
- ▪ Operate and maintain autoclaves*
- ▪ Sterilize instruments and supplies using appropriate methods*
- ▪ Identify and know proper use for instruments*
- ▪ Identify common suture materials, types, and sizes*
- ▪ Provide operating room sanitation and care*
- ▪ Maintain proper operating room conduct and asepsis*
- ▪ Perform post-surgical clean-up (e.g., equipment, instruments, room, proper disposal of hazardous medical waste)*

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will properly select, wrap and sterilize appropriate instruments and supplies and prepare and maintain the surgical environment to ensure maximum safety and benefit to the patient.

Course Number: VET XXX
Course Title: Anesthesiology
Credits: 3

Description: Pharmacology of commonly used anesthetic agents, patient induction, monitoring, and recovery, anesthetic equipment and procedures, dose calculations, and anesthetic emergencies.

Competencies:

- •Take a patient history and perform a physical examination
- •Assign patient status and recommend appropriate anesthetic protocols
- •Plan and execute appropriate preanesthetic care
- •Identify different types of anesthetic machines
- •Describe the care and use of monitoring equipment
- •Maintain a safe working environment
- Discuss the characteristics of different types of anesthetic agents
- •Discuss the characteristics and use of perianesthetic agents

Patient management

Skill: Safely and effectively manage patients in all phases of anesthetic procedures.

Tasks:

- Calculate dosages of appropriate anesthetic-related drugs*
- Administer anesthetic-related drugs by injection, mask, induction chamber or endotracheal tube*
- Place endotracheal tubes in patients when appropriate*
- Utilize clinical signs and appropriate equipment to monitor patient status in all stages of anesthetic procedures (e.g., esophageal stethoscope, Doppler, pulse oximeter)*
- Evaluate patient and implement and evaluate pain management protocols*
- Recognize and respond appropriately to patients in compromised states*
- Perform appropriate resuscitation procedures as needed (e.g., calculate and administer appropriate anesthetic antagonists and emergency drugs as directed)*
- Complete controlled substance log* (does not need to be official controlled substance log; mock logs may be utilized)

Decision-making abilities: Given the characteristics of the anesthetic patient and the procedure being performed, the veterinary technician will work with the veterinarian to:

1. Assess the patient's risk status and determine appropriate anesthetic and perianesthetic protocols to provide effective pain management and maximum anesthetic safety and effectiveness.
2. Choose and utilize appropriate techniques and equipment to accurately and effectively monitor the patient's ongoing status before, during and after anesthesia to provide for adequate anesthesia, analgesia and a safe recovery.

Equipment/facility management

Skill: Safely and effectively select, utilize and maintain anesthetic delivery and monitoring instruments and equipment.

Tasks:

- Maintain and operate anesthetic delivery and monitoring equipment:
- pulse oximeter*
  - esophageal stethoscope*
  - electrocardiograph (e.g., recognize abnormal rhythms/audible sounds, properly apply leads)*
  - anesthetic machines, including rebreathing systems, non-rebreathing systems induction chambers and masks*
  - endotracheal tubes*
  - resuscitation bag*
  - scavenging systems*
  - oxygen sources*
  - respiratory monitors*
  - blood pressure monitoring devices*
  - laryngoscopes*
  - ventilator
  - defibrillator

Decision-making abilities:

1. Given the characteristics of the anesthetic instruments and equipment being used, the veterinary technician will recognize and respond appropriately to equipment malfunctions or inappropriate equipment setup in order to ensure proper function and provide maximum benefit to the patient.
2. Given the requirements of the anesthetic protocol, the veterinary technician will select, evaluate and adjust equipment to ensure proper function and provide maximum benefit to the patient.

Course Number: VET XXX
Course Title: Animal Parasitology
Credits: 3

Description: Common endo- and ectoparasites, their life cycle, identification, treatment, prevention, and effects on animals; zoonotic and public health concerns and how they relate to parasites; fecal examinations.

Competencies:

- List the different types of parasites, and discuss how they differ
- Name the important veterinary parasites
- Explain the diagnostic procedures for veterinary parasites
- Discuss the life cycle of important veterinary parasites

Course Number: VET XXX
Course Title: Practicum III

Credits: 4 (180 hours)

Description: The third of three practicums at a veterinary hospital; be part of the working veterinary team and practice the knowledge and skills acquired from the course material.

Competencies:

The competencies as determined by the American Veterinary Medicine Association and the Committee on Veterinary Technician Education and Activities.

Course Number: VET XXX **Course Title:** Animal Care and Management **Credits:** 3

Description: Veterinary emergency care, first aid, wound and bandage management, dental prophylaxis, general nursing care, and sample collection and treatment techniques.

Competencies:

- Explain the routine care, feeding, medication, and observation procedures for hospitalized patients, including pediatric and geriatric animals
- Identify and describe the requirements, routes, procedures, and concerns of fluid administration
- Identify and describe the most common procedures used in veterinary sample collection
- Explain the principles and procedures of dog and cat dental prophylaxis wound healing
- Describe types and parts of bandages and specify the appropriate bandaging techniques for various animals
- Identify and describe the function of specialty bandages
- Explain the proper way to maintain, change, and remove bandages, splints, casts, and slings
- Identify emergency and critical patients via the telephone and on presentation to the veterinary hospital
- Recognize the signs of common emergency problems and anticipate the needs of the veterinarian in stabilizing those patients
- Describe the general approach to the poisoned patient and be familiar with the clinical signs and management of commonly encountered toxins
- Participate in basic cardiopulmonary resuscitation

Skill: Understand the approach to providing safe and effective care for birds, reptiles, amphibians, guinea pigs, hamsters, gerbils, and ferrets.

Tasks:

- Recognize, understand, and perform restraint techniques of birds*, reptiles, amphibians, and ferrets
- Understand unique husbandry issues for each species (birds, reptiles, amphibians, guinea pigs, hamsters, gerbils, and ferrets) and provide client education*:

- o nutritional needs/diet
- o watering
- o caging (temperature, humidity, light)
- o aquarium care
- o understand reproduction
- o basic grooming (beak, wing, and nail clipping)
- o appropriate transportation methods

- ▪ Demonstrate the ability to obtain objective data: birds*, reptiles, amphibians, and ferrets
- ▪ Perform injections using appropriate sites
    - o subcutaneous
    - o intramuscular
    - o intradermal
    - o intraperitoneal
    - o intravenous
- ▪ Perform oral dosing
- ▪ Administer drugs or medicaments using appropriate sites and routes
- ▪ Understand appropriate sites for catheter placement
- ▪ Understand tube feeding in birds
- ▪ Perform laboratory procedures
- ▪ Anesthetize avian and exotic animals
- ▪ Recognize normal and abnormal behavior patterns
- ▪ Explain inadvisability of keeping wildlife as pets
- ▪ Collect blood samples

Decision-making abilities: Given the unique requirements of these species, the veterinary technician will safely obtain subjective and objective data that will allow evaluation of the patient. The veterinary technician will be able to: 1) identify husbandry issues, 2) discern appropriate from inappropriate nutritional support, and 3) recognize normal from abnormal behavior patterns.

Patient assessment

Skill: Demonstrate and perform patient assessment techniques in a variety of animal species.

Tasks:

- ▪ Recognize common domestic animal species and breeds*
- ▪ Describe and use common animal identification methods*
- ▪ Demonstrate effective and appropriate restraint techniques for various animal species:
    - o properly restrain dogs and cats for procedures*
    - o encage and remove small animals from cages*
    - o apply dog muzzle safely*
    - o apply Elizabethan collar*
    - o use restraint pole and other restraint aids*
    - o halter, tie, and lead horses*
    - o restrain birds*

- - o restrain pocket pets and exotics
    - o restrain cattle and horses*
        - o apply twitch (horses)*
        - o apply bovine tail restraint*
        - o apply bovine halter*
    - o restrain sheep and swine
    - o load large animals
    - o Safely operate cattle chute*
  - Obtain a thorough patient history*
  - Demonstrate the ability to obtain objective patient data:
    - o temperature (dog, cat, horse, cow)*
    - o pulse (dog, cat, horse, cow)*
    - o respiration (dog, cat, horse, cow)*
    - o auscultate heart/lungs* (dog, cat, horse, cow)
    - o assess hydration status
  - Properly collect diagnostic specimens for analysis (ex: urine, blood, feces, specimens for cytology)*
    - Perform venipuncture:
      - o cephalic (dog, cat)*
      - o jugular (dog, cat, horse, ruminant)*
      - o saphenous (dog)*
      - o medial femoral (dog, cat)
      - o sublingual (dog)
      - o ear (swine, rabbit)
      - o coccygeal (cow)
      - o anterior vena cava (pig)
    - Collect urine sample:
      - o catheterize male* and female dogs
      - o catheterize female cat
      - o catheterize male cat*
      - o collect voided urine sample (small animal)*
      - o perform cystocentesis (small animal)*
      - o catheterize large animal
    - Prepare diagnostic specimens for shipment*

Decision-making abilities: Given the characteristics of the patient, the veterinary technician will safely and efficiently obtain subjective and objective patient data that will allow accurate evaluation of the patient's physical status with minimum stress and maximum safety.

Course Number: VET XXX
Course Title: Clinical Pathology II
Credits: 3

Description: Hematology, clinical chemistry, and immunology; theoretical basis for analysis of body chemicals, urinalysis, hematologic, serologic, and cytologic evaluations; familiarization of equipment, reagents, and techniques required to utilize blood as a diagnostic aid; clinical laboratory safety, record keeping, quality control, necropsy sample collection, and storage. This course is a continuation of Clinical Pathology I

Competencies:

- Describe the components of both the blood-forming system and the blood coagulation system
- Describe various hematological principles and procedures
- List and describe normal and commonly seen abnormal erythrocyte and leukocyte types in the peripheral blood of mammalian species
- Describe various aspects of blood cell counts
- Discuss the tests commonly used for hemostatic evaluation and the significance of abnormal hemostatic test results
- Discuss the collection and processing of blood samples for clinical chemistry evaluations
- Discuss the significance of normal and commonly seen abnormal clinical chemistry test results
- Describe the types of immunological tests available for use in the veterinary practice laboratory, including testing principles and interpretation of test results

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Course Number: VET XXX
Course Title: Animal Nutrition, Reproduction, Genetics, and Aging
Credits: 3

Description: Science of nutrition and its application to feeding practices of domestic, farm, and companion animals; basic nutrients and nutritional requirements of individual species, approximate food analysis, interpretation of food and feed labels, and types of animal foods; physiology of reproduction, aging, and genetics.

Competencies:

- Describe the six basic classes of nutrients
- Differentiate between energy-producing and non-energy-producing nutrients
- Calculate animals' energy requirements
- Assess the different types of pet food
- Discuss various feeding principles and methods
- Recognize the diseases that affect aging animals
- Discuss the principles of animal reproduction

Patient care

Skill: Understand and demonstrate husbandry, nutrition, therapeutic and dentistry techniques appropriate to various animal species.

Tasks: Husbandry

- Grooming:
    - Demonstrate understanding of therapeutic bathing, basic grooming, and dipping of small animals*
    - trim nails (dogs, cats, birds, exotic/special species)*
    - trim hooves (ruminant, horses)
    - apply equine tail and leg wraps*
    - express canine anal sacs*

- o clean and medicate ears (dog, cat)*
- o clean sheath (horse)
- Perform microchip scanning and implantation
- Environmental conditions: implement sanitation procedures for animal holding and housing areas*
- Demonstrate understanding of permanent identification*
- Demonstrate understanding of breeding/reproduction techniques*
- Demonstrate understanding of care of orphan animals
- Demonstrate understanding of nursing care of newborns*

Decision-making abilities: Given the characteristics of the patient, the veterinary technician will implement appropriate husbandry techniques to enhance wellness and reduce risk of disease, injury and stress.

Tasks: Nutrition

- Understand life stage energy and nutrient requirements of well animals (dog, cat, horse, cow)*
- Identify common grains and forages
- Understand key nutritional factors in disease conditions*
- be familiar with therapeutic foods*
- Understand current developments in nutritional supplements and additives including benefits and potential toxicities*
- Understand and identify substances that when ingested result in toxicity:
- identify common poisonous plants*
- be familiar with substances (organic and inorganic) that cause toxicity*
- Develop and communicate hospital nutrition protocols*

Decision-making abilities: Given the characteristics of the patient, the veterinary technician will understand appropriate and inappropriate dietary components for various life stages and therapeutic regimens (e.g., therapeutic foods) in order to promote optimal health, enhance recovery and manage chronic disease conditions. The veterinary technician will also explain nutritional recommendations to clients and reinforce owner compliance.

Tasks: Therapeutics

- Administer parenteral medications:
- o subcutaneous*
- o intramuscular*
- o intradermal
- o intraperitoneal
- o intramammary (mastitis therapy only)
- o intravenous*
- Administer enteral medications:
- o balling gun (ruminant)*
- o dose syringe (ruminant, horse)*
- o gastric intubation (small animal)***[GROUP]**
- o hand pilling (dog, cat)*
- o gastric lavage (dog)
- o dose syringe (pig)
- o oral speculum and stomach tube (ruminant)

- o nasogastric intubation (small animal, horse)
- Administer topical medications (including eye meds)*
- Perform ocular diagnostic tests (including tonometry, fluorescein staining and Schirmer tear test)*
- Administer enemas*
- Collect/evaluate skin scrapings*
- Fluid therapy:
  - o administer subcutaneous fluids*
  - o place intravenous catheters (cephalic*, saphenous*, jugular)
  - o maintain and care for catheters*
  - o determine/maintain fluid infusion rate*
  - o monitor patient hydration status*
  - o develop familiarity with fluid delivery systems*
- Apply and remove bandages and splints*
- Remove casts
- Develop understanding of wound management and abscess care*
- Perform physical therapy:
  - o hydrotherapy
  - o post-operative
  - o orthopedic
  - o neurological
  - o explain care of recumbent patient*
- Perform critical care:
  - o maintain chest, tracheostomy, esophagostomy tubes
  - o collect and crossmatch blood for transfusion*
  - o blood typing
  - o give blood transfusions (autotransfusions may be considered)
- Apply established emergency protocols:
  - o maintain emergency medical supplies/crash cart*
  - o perform first aid and cardiopulmonary resuscitation (simulation acceptable)*
  - o use resuscitation bag*
  - o apply emergency splints and bandages*

Decision-making abilities: Given the directions of the veterinarian and the characteristics of the patient, the veterinary technician will carry out appropriate therapeutic techniques in order to achieve maximum health benefits for the patient.

Tasks: Dentistry

- Perform routine dental prophylaxis (manual and machine)*
- Understand client education regarding home care*
- Float teeth
- Clip teeth
- Perform routine dental radiographic imaging techniques

Decision-making abilities: Given the characteristics of the patient, the veterinary technician will recognize a patient's dental health status and perform techniques, as prescribed by a veterinarian, appropriate to the species and its condition in order to promote and maintain dental health.

Course Number: VET XXX
Course Title: Laboratory Animal Science
Credits: 3

Description: Biomedical research and the ethical considerations centering on the use of laboratory animals in research; state, federal, and local animal welfare regulations; biology, care, utilization, and diseases of commonly used laboratory animals.

Competencies:

- Describe techniques used to restrain laboratory animals for injections
- Describe techniques used to restrain laboratory animals for clinical procedures
- Describe methods for determining the gender of laboratory animals
- Describe blood collection procedures for laboratory animals
- Explain common disease signs

Skill: Safely and effectively handle common laboratory animals used in animal research.

Tasks: Mice, rats, and rabbits (the skills in italics below in this section must be performed on mice, rats and rabbits unless otherwise indicated)

- Recognize and restrain*
- Determine sex and understand reproduction*
- Perform and/or supervise basic care procedures:
  - handling*
  - nutritional needs/diet*
  - watering*
  - feeding*
  - identification*
- Perform methods of injection:
  - subcutaneous*
  - intramuscular (rabbit)
  - intradermal (rabbit)
  - intraperitoneal (rats,mice)*
  - intravenous
- Collect blood samples
  - Retro-orbital (mice, rats)
  - Intravenous (rats*, rabbits*)
- Perform oral dosing*
- Have working knowledge of anesthetic and recovery procedures*
- Explain common disease signs*
- Perform necropsy and collect specimens
- Clean and medicate ears (rabbit)
- Anesthetize mice, rats, and rabbits

Tasks: Non-human primates

- Understand restraint of non-human primates
- Demonstrate knowledge of zoonotic diseases and modes of transmission

Decision-making abilities: The veterinary technician will be familiar with the basic principles of animal research and understand the utilization of laboratory animals in animal research. The veterinary technician will also have a working knowledge of federal, state, and local animal welfare regulations.

Course Number: VET XXX
Course Title: Vet Tech Examination Review
Credits: 1

Description: Comprehensive review to assist the student in preparation for state and national certifying examinations for the veterinary technician; reviews basic science, clinical practices, diagnostics, and ethical concerns; covers birds, reptiles, laboratory animals, and large and small animal species

Competencies:

- The student will be prepared to take a state and national certificate examination.

Course Number: VET XXX
Course Title: Bovine Management
Credits: 2

Description: to advance health oriented bovine production management in the herd context and increase the competency of those who practice in this field.; to provide expert care for cattle; animal husbandry, obstetrics and reproductive management, as they relate to the epidemiology, pathogenesis, diagnosis, therapy, prevention, and control of diseases directly or indirectly affecting bovine.

Competencies:

- The competencies as determined by the American Veterinary Medicine Association and the Committee on Veterinary Technician Education and Activities.

PROPOSED PROGRAM BUDGET

Program Name: Veterinary Technician
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 (semester estimates)*	20		30		40					
Estimated Incremental **REVENUE**										
State Funding	59,160		88,740		118,320		-		-	
Tuition Revenue										
A. Gross Incremental Tuition Revenue	60,480		90,720		120,960		-		-	
B. Reductions to Incremental Tuition										
C. Net Tuition Revenue (A-B)	60,480		90,720		120,960		-		-	
Program Fees ($300/student)			8,000		8,000				-	
External Funds**										
Other Funds (please specify)										
TOTAL Estimated Incremental Revenue	119,640		187,460		247,280		-		-	
Estimated Incremental **EXPENDITURES**										
Personal Services	**FTE**	**Cost**	**FTE**	**Cost**	**FTE**	**Cost**	**FTE**	**Cost**		
Faculty***	1.5	81,900	2.5	140,595	2.5	144,813				
Staff										
Operating Expenses		12,670		11,870		12,170				
Indirect Expenses		1,014		950		974				
Start-up Expenditures		10,000		5,000						
TOTAL Estimated Incremental Expenditures		105,584		158,415		157,956				
Estimated Revenues Over/(Under) Expenditures		14,056		29,045		89,324				

Include both pre- and program accepted students in these estimates. Where applicable, consider more unfilled capacity in early years as program ramps up towards later years.

*** Include any external, non-public, non-tuition dollars that may be contribued to the program's operating budget.*

New Fees Only

THE MONTANA UNIVERSITY SYSTEM
Inventory and Validation of Fees -- Fiscal Years 2012 and 2013
Non-Mandatory Fees -- Rates per Semester

Unit Name:	**MSU - Great Falls COT**			**PROPOSED RATES**						
NAME OF FEE	**RUBRIC**	**BOR AUTHORIZATION**	**CURRENT FY11 FEE**	**FY 12 FEE**	**% CHANGE**	**FY 13 FEE**	**% CHANGE**	**FUND**	**DESCRIPTION**	**JUSTIFICATION**
Veterinary Technician - AAS		Upon Board Approval	NEW	345.00	100.0%	345.00	0.0%	33XXXX	Program Fee	Certification Exam Completion as follows: The Veterinary Technician National Exam (VTNE) has a cost of $300 and the VTNE practice exam is $45.

January 19-20, 2012

ITEM 154-2902-R0112
<u>**Certificate - General Studies**</u>
<u>**MSU-Great Falls**</u>

THAT

Montana State University – Great Falls College of Technology requests approval to add a Certificate in General Studies. The College currently awards Associate of Arts and Associate of Science degrees to students intending to complete a general education credential prior to transferring to a four-year degree program at another college or university.

EXPLANATION

The Certificate-General Studies is a formal academic program aligned with the Montana University System (MUS) General Education Core. It is a 31-32 credit certificate that a student can earn through successful completion of the MUS General Education Core course requirements. The program is intended to provide a formal, Regents-approved postsecondary credential for students who are seeking general education coursework prior to transferring to a four-year degree program.

ATTACHMENTS

Level II Request Form
Curriculum Proposal
Attached Materials: Program Details

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **154-2902-R0112**   Meeting Date: **January 19-20, 2012**

Institution: **MSU – Great Falls COT**   CIP Code: **24.0102 General Studies**

Program Title: **Certificate in General Studies**

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for all that apply and submit with completed Curriculum Proposals Form):*

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.)**

X 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; and**

_____ **4. 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 approval to add a Certificate in General Studies. The College currently awards Associate of Arts and Associate of Science degrees to students intending to complete a general education credential prior to transferring to a four-year degree program at another college or university.

Montana Board of Regents
CURRICULUM PROPOSALS

1. Overview

Montana State University – Great Falls College of Technology is requesting approval from the Montana Board of Regents of Higher Education to add a Certificate in General Studies to their general education offerings. The College currently awards Associate of Arts and Associate of Science degrees to students intending to complete a general education credential prior to transferring to a four-year degree program at another college or university. The certificate has been designed in collaboration with Gallatin College programs and is for students who intent only to complete one year of general studies coursework at a two-year college prior to transferring to complete the baccalaureate.

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

The Certificate in General Studies is a formal academic program that is aligned with the Montana University System (MUS) General Education Core. It is a 31-32 credit certificate that a student can earn through successful completion of the MUS General Education Core course requirements. The program is intended to provide a formal, Regents-approved postsecondary credential for students who are seeking general education coursework prior to transferring to a four-year degree program.

3. Need

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

Currently, many students in Montana are utilizing two-year institutions as a first step in their pursuit of a bachelor's degree. Although a significant number of these students pursue and earn an Associate of Arts or Associate of Science degree, far too many have no intention of completing more than a select number of general education courses prior to transferring. Thus, when they leave the institution, their successful completion of a coherent collection of general education is not celebrated, nor is it reported as a successful completion. This phenomenon is a national issue amongst community colleges and it is a major factor in the low graduation rates reported in national data. Thus, this certificate program provides an opportunity for students to be formally recognized through traditional commencement and college completion processes, and it also provides a mechanism for institutions to formally capture the outcome as a successful completion.

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

As stated above, students will have a formalized program of study and the ability to earn a college-recognized, system-recognized postsecondary credential for the completion of the MUS General Education Core. This will allow the MUS to celebrate a significant milestone, or momentum-point, in the student's progress towards his/her bachelor's degree. Research has shown that recognizing and celebrating these momentum-points can have considerable impact on a student's ability to persist to the achievement of his/her educational goal.

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

Currently there are 582 students (as of census Fall 2011) enrolled in general education programs as

Montana Board of Regents
CURRICULUM PROPOSALS

defined by those seeking the Associate of Arts or Associate of Science degree with the intention to transfer. Many of these students claim those degree programs to qualify for financial aid. Unfortunately, many have no intention of completing the degree, and past student behavior suggests more than 50% of these students earn a substantial number of credits, but then leave the institution prior to achieving their degree. Approximately 10% of those who leave each year had earned 31 or more credits; so theoretically we could see 25 or more of these certificates per year.

Data show that about 10% of those who leave our institution each year had earned 31 or more credits; so theoretically we could see 25 or more of these certificates per year.

4. **Institutional and System Fit**

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

Stated previously, all of the coursework proposed as part of this program is currently being taught within the Associate of Arts and Associate of Science degree programs in existence. This certificate program mirrors the MUS General Education Core requirements, and thus is a natural fit within existing academic offerings. Essentially, this certificate could be offered at any of the two-year institutions currently providing the comprehensive community college mission as outlined by Strategy One of the College!Now initiative.

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

No.

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

This program is not differentiated from other programs in that it is simply establishing a formal academic credential for the completion of a Regents-approved collection of general education coursework defined as the MUS General Education Core. As stated above, Gallatin College Program will be submitting a similar proposal and the Certificate was developed collaboratively.

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

It will allow for the formal recognition and celebration of a significant momentum point towards the achievement of a student's educational goal, primarily the bachelor's degree. Thus, it will help with student persistence. In addition, it will all for the recording and reporting of a formal postsecondary completions and better representing the productivity of the institution.

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

Montana Board of Regents
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This program is being collaboratively proposed by MSU-GF and Gallatin College Program. Although it may be looked upon as duplication, in reality this certificate program represents coursework that is currently being taught at all of these institutions, and in fact most of the two-year institutions across Montana. The Regent's establishment of the MUS General Education Core suggests offering of this coursework is intended to be available across the system, and thus may be considered purposeful duplication. Again, this certificate could be offered at any of the two-year institutions currently providing the comprehensive community college mission as outlined by Strategy One of the College!Now initiative.

5. **Program Details**

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

    Please see attached materials for description of the MUS core requirements and the curriculum for the MSU-GF certificate.

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

    The program would be implemented immediately, and it is expected that similar numbers as those currently enrolled (identified in section 3.C. above) will continue to completion of the certificate for a spring graduation.

6. **Resources**

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

    No

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

    No

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

    Success will be measured by the changes to the total number of general education completions, as well as tracking of students who complete this certificate program and successfully transfer to a four-year degree program at a college or university.

8. **Process Leading to Submission**
    Describe the process of developing and approving the proposed program. Indicate, where appropriate,

Montana Board of Regents
CURRICULUM PROPOSALS

involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

This proposal emanated from campus-wide conversations centered on recognizing and assessing student success at MSU-Great Falls. The concept for the certificate program first arose in focused conversations about student success and institutional effectiveness in the early stages of operational planning at the institution. Further conversations ensued amongst the four affiliated campuses of Montana State University, and the proposal was vetted and adopted by the curriculum committees at MSU-GF and Gallatin College Programs prior to coming forward to the Board of Regents.

MSU-Northern and MSU-Billings COT declined to move the certificate forward at this time; however, as mentioned above, it could be easily moved forward at their institutions at any time in the future.

About the Montana University System Core Curriculum

The Montana University System Core Curriculum (MUS Core), described in Policy 301.10, represents an agreement among community, tribal, and publicly-funded colleges and universities in the State of Montana. It assures the transfer of up to 30 semester credits for those students enrolled in courses prescribed within each of six areas at a participating host institution. The six areas are:

Natural Science **-- at least one of the classes must have a laboratory experience**	6 credits
Social Sciences/History	6 credits
Mathematics	3 credits
Communication **--Written communication and oral communication**	6 credits
Humanities/Fine Arts	6 credits
Cultural Diversity	3 credits
TOTAL	**30 credits**

Students may be required to take additional coursework at the upper division level that is part of an approved general education program at the receiving campus.

A General Education Council was established in December 2005 to oversee the provisions of Policy 301.10, including the MUS Core. With the assistance of the Council, each campus of the Montana University System has developed a list of courses that satisfy the MUS Core. Those lists can be found here.

The General Education Council of the Montana University System believes that the purpose of general education, and its importance in undergraduate education, is best articulated by the "The Essential Learning Outcomes" statement developed by the Association of American Colleges and Universities. The Council formally adopted that statement, in February 2008, as the rationale for the Montana University System General Education Core.

"The Essential Learning Outcomes" statement is set out below:

The Essential Learning Outcomes

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

- Knowledge of Human Cultures and the Physical and Natural World
- Intellectual and Practical Skills
- Personal and Social Responsibility
- Integrative Learning

Information from: http://mus.edu/Transfer/MUScore.asp.

- Natural Science
- Social Sciences/History
- Math
- Communication
- Humanities/Fine Arts
- Cultural Diversity

⭐ Knowledge of Human Cultures and the Physical and Natural World

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

Focused by engagement with big questions, both contemporary and enduring

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⭐ Intellectual and Practical Skills, including

• Inquiry and analysis
• Critical and creative thinking
• Written and oral communication
• Quantitative literacy
• Information literacy
• Teamwork and problem solving

Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

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⭐ Personal and Social Responsibility, including

• Civic knowledge and engagement—local and global
• Intercultural knowledge and competence
• Ethical reasoning and action
• Foundations and skills for lifelong learning

Anchored through active involvement with diverse communities and real-world challenges

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⭐ Integrative Learning, including

Information from: http://mus.edu/Transfer/MUScore.asp.

• Synthesis and advanced accomplishment across general and specialized studies

Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems

Note: This listing was developed through a multiyear dialogue with hundreds of colleges and universities about needed goals for student learning; analysis of a long series of recommendations and reports from the business community; and analysis of the accreditation requirements for engineering, business, nursing, and teacher education. The findings are documented in previous publications of the Association of American Colleges and Universities: *Greater Expectations: A New Vision for Learning as a Nation Goes to College* (2002), *Taking Responsibility for the Quality of the Baccalaureate Degree* (2004), and *Liberal Education Outcomes: A Preliminary Report on Achievement in College* (2005). Liberal Education Outcomes is available online at www.aacu.org/leap.

Building on "The Essential Learning Outcomes" statement and its rationale, the General Education Council has adopted the following learning outcomes for the six (6) areas established in the MUS Core:

⭐ Natural Science

Science is a creative human endeavor devoted to discovering the principles that rule the physical universe, including the biological world. The natural world is law-driven and science is the method of investigating by asking and answering questions about processes that can be observed and measured, to help us understand nature and the physical universe.

Natural Science core courses will:

- Demonstrate the experimental basis of science and how scientists accumulate new knowledge;
- demonstrate the methods scientists use to gather, validate, and interpret data within the broad area of the specific discipline being studied;
- demonstrate important scientific facts and how those facts help us understand our observations and the laws that govern the natural world;
- explore the goals and limitations of science.

Upon completion of the Natural Science core, students will be able to:

- Identify and solve problems using methods of the discipline;
- use logical skills to make judgments;
- demonstrate thinking, comprehension, and expression of subject matter;
- communicate effectively using scientific terminology;
- use quantitative skills to solve problems;
- integrate through analysis;
- demonstrate the relationship between actions and consequences;
  - discuss the role of science in the development of modern technological civilization.

⭐ Social Sciences/History

Social Sciences

Information from: http://mus.edu/Transfer/MUScore.asp.

Students will study people, movements, institutions, and forces which play a major role in human history and development in order to understand the present and implications for the future. The perspectives and methods of social sciences and history provide a basic foundation for understanding, evaluating, and decision-making relating to the human experience. These courses support upper level courses.

Social Sciences core courses will:

- Introduce the diversity of purpose, focus, and methodology among social sciences;
- illuminate the role and impact of major social institutions (family, education, business, government, and religion) on the daily existence of individuals, and on social and cultural groups, societies, and nations;
- describe the nature, structure, and historical development of human organization and the extent to which individuals (in contrast to physical or social forces) are able to influence events.

Upon completion of the Social Sciences core, students will be able to:

- Analyze how institutions and traditions develop, evolve, and shape the lives of individuals, social and cultural groups, societies, and nations;
- analyze human behavior, ideas, and social institutions for historical and cultural meaning and significance;
- gather information, analyze data, and draw conclusions from multiple hypotheses to understand human behavior;
- synthesize ideas and information with regard to historical causes, the course of events, and their consequences, separated by time and place;
- use factual and interpretive data to support hypotheses based upon appropriate inquiry methodology.

History

Most broadly, history is about recognizing, analyzing, and interpreting changes in human activity and interaction within and between humans and between humans and their environments over time and space, using primary and secondary print, visual and material resources, as well as historiographical resources. The study of history may also inform contemporary analyses of interaction between humans and between humans and their environments.

History core courses will:

- Develop in students habits of historical analysis sensitive to context, interrelations among humans, and interactions between humans and their environments, on local, national, and international scales;
- familiarize students with the uses – and the limitations – of historical comparison as an analytic tool;
- enable students to recognize and interpret multiple forms of evidence (visual, oral, statistical, artifacts from material culture);
- enable students to critically analyze and construct historical narratives.

Upon completion of the History core, students will be able to:

- Analyze historical phenomena in appropriate context;
- weigh and interpret the evidence available to them and present a narrative argument supported by historical evidence;

Information from: http://mus.edu/Transfer/MUScore.asp.

- recognize the distinction between primary and secondary sources, understand how each are used to make historical claims;
- recognize and interpret multiple forms of evidence (visual, oral, statistical and material, and print);
- understand the historical construction of differences and similarities among peoples within and across groups, regions, and nations;
- interpret other societies in comparative context and one's own society in the context of other societies.

(These criteria were developed with aid from the American Historical Association, Tennessee State University, University of California, Merced, and University of Baltimore web sites.)

⭐ Mathematics

Every day we are inundated with numerical information, often in the form of graphical representations, statistical summaries, or projections from mathematical models. Comprehension of elementary quantitative concepts, development of quantitative reasoning skills, and the ability to reasonably ascertain the implications of quantitative information are goals of mathematics courses.

Mathematics core courses will:

- Expose students to the methods employed in the mathematical sciences;
- demonstrate the application of mathematical or statistical models to complex problems, which can lead to greater understanding of, and potential solutions to, these problems;
- enable students to develop skills leading to an understanding of quantitatively-based problems of importance to contemporary society;
- provide practical applications that relate to students' personal and future professional lives as consumers of quantitative information.

Upon completion of the Mathematics core, students will be able to:

- Apply the acquired skills to other courses
- reason analytically and quantitatively;
- think critically and independently about mathematical situations;
- understand the quantitative aspects of current events;
- make informed decisions that involve interpreting quantitative information;
  - make informed decisions about their personal and professional lives.

⭐ Communication

Written Communication

Skill in Written Communication is essential in today's information age: a necessity in all academic areas, as well as a means to empower students in their career, social, and civic responsibilities. Courses that satisfy the written communication requirement of the MUS CORE will focus on rhetorical knowledge, knowledge of conventions, and critical thinking, reading, research and writing process skills. Composition, Journalism, Business Writing and Technical Writing generally satisfy the written communications component.

Written Communication core courses will:

Information from: http://mus.edu/Transfer/MUScore.asp.

- Facilitate competence in the use of the conventions of language and forms of discourse, including; sentence structure, mechanics, organization, and spelling;
- demonstrate multiple, flexible strategies for writing, particularly inventing, drafting, copyediting;
- facilitate research as a process of gathering, assessing, interpreting, and using data from multiple sources to compose texts;
- demonstrate a variety of technologies to facilitate research and drafting.

Upon completion of the Written Communication core, students will be able to:

- Use writing as a means to engage in critical inquiry by exploring ideas, challenging assumptions, and reflecting on and applying the writing process;
- formulate and support assertions with evidence appropriate to the issues, positions taken, and audiences;
- use documentation appropriately and demonstrate an understanding of the logic of citation systems;
- give and receive feedback on written texts;
- read texts thoughtfully, analytically, and critically in preparation for writing tasks.

Oral Communication

Study in oral communication helps students rationally and systematically cope with the diverse listening, speaking, and presenting opportunities they will encounter in their lives. Courses that satisfy the oral communication requirement of the MUS CORE will focus on listening, speaking, interpersonal, and/or media skills. Public speaking, interpersonal communications and broadcast media may satisfy the oral communications component.

Oral Communications core courses will:

- Enable an individual to speak with clarity, accuracy, and fluency in a variety of public contexts;
- facilitate competence in the use of the conventions of language and forms of discourse, including sentence structure, mechanics, organization, and spelling;
- facilitate research as a process of gathering, assessing, interpreting, and using data from multiple sources to express ideas orally;
- demonstrate a variety of technologies to facilitate research and drafting.

Upon completion of the Oral Communications core, students will be able to:

- Use oral communication as a means to engage in critical inquiry by exploring ideas, challenging assumptions, and reflecting on and applying the oral communications process;
- demonstrate multiple flexible strategies for inventing, drafting, and editing oral presentations;
- deliver thoughtful oral presentations with clarity, accuracy and fluency;
- listen actively in a variety of situations and speak effectively about their ideas;
- adapt content and mode of presentation to fit a given audience and medium;
- give and receive feedback on oral presentations.

⭐ Humanities/Fine Arts

Humanities

Information from: http://mus.edu/Transfer/MUScore.asp.

Study of the Humanities cultivates an understanding and appreciation of the ways in which we gain and apply knowledge. To study the Humanities is to explore societies, cultures, ideas, and art and to examine the forces that shape and connect them. Through the Humanities, we become informed critical thinkers, integrating information, ideas, and opinions from local to global societies and cultures. A study of the Humanities often includes classics, languages, literature, philosophy, history and religion. Some campuses include Fine Arts within the category.

Humanities core courses will:

- Develop an individual's ability to think critically, analytically and synthetically about how others perceive and express the human condition;
- improve ability to communicate through the development of reading, thinking, writing, and speaking skills;
- increase an individual's understanding of how others make and express meaning in their lives;
- create opportunities for positive human interactions through understanding and acceptance;
- encourage personal reflection and values identification;
- promote respect for others with differing means of expressing core values.

Upon completion of the Humanities core, students should be able to:

- Explore the human search for meaning and value in one or more time period(s) and cultures;
- recognize, interpret, and respect concepts of values and beliefs in a global society;
- communicate in writing and in speech, thoughtful and critical assessments of multiple value systems;
- construct and articulate a set of beliefs and values;
- utilize respectful inquiry to understand global concepts, values, and beliefs;
- incorporate humanities perspectives in other areas of study.

Fine Arts

The Fine Arts create communities committed to the study of how people reveal and express feelings, emotions, and beliefs. Through the Fine Arts, students explore understanding about the creative process as they construct expressions of their own creativity, talent, and passion. The Fine Arts promote understanding and appreciation of how different cultures value the arts.

Fine Arts core courses will:

- Enable students to produce expressions of their creativity and talent;
- examine the place of arts in cultural and intellectual history;
- demonstrate an appreciation for the complexity of human nature and society;
- explore the influence of the arts on individuals and society.

Upon completion of the Fine Arts core, students will be able to:

- demonstrate the processes and proficiencies involved with creating and/or interpreting creative works;
- reflect upon, analyze, and articulate their personal responses to artistic works and the processes involved in creating them;
- demonstrate an understanding and appreciation of artistic expressions in various past and present cultures;
- connect periods and expressions of art to changes in societies and cultures.

Information from: http://mus.edu/Transfer/MUScore.asp.

⭐ Cultural Diversity

Cultural Diversity embraces differences in race, ethnicity, gender, sexual orientation, class, disability status, language, national origin, and religion within and across peoples and nations. Understanding of the value of cultural diversity is fundamental to national and global citizenship and is therefore an essential foundation to the undergraduate and graduate curriculum, regardless of specific intellectual field or focus. While curricula should contain courses specifically addressing one or more dimensions of cultural diversity, cultural diversity content should also substantially suffuse curricula.

Cultural Diversity core courses will:

- Facilitate an awareness of how historical events, institutionalized differences in power, and long-standing customs have shaped cultural diversity and thus contemporary political, social, and economic relations within and across peoples and nations;
- identify and discuss indicators of discrimination within and across specific institutions and groups and demonstrate how discriminatory practices and attitudes create barriers for some and opportunities for others;
- an appreciation of how cultural diversity affects the ways in which individuals and peoples perceive, understand, and live in the world.

Upon completion of the Cultural Diversity core, students will be able to:

- Demonstrate an awareness of the centrality of cultural diversity to their own and other human societies;
- demonstrate an awareness of the negative impacts upon cultural diversity of economic, social, and other forms of institutional and interpersonal discrimination;
- demonstrate competence and effectiveness in interacting with culturally diverse people by understanding cross- and inter-cultural interaction and communication;
- demonstrate the ability to advocate for non-discriminatory policies and behaviors on their own behalf and on behalf of others, including peers, clients, and colleagues.

Information from: http://mus.edu/Transfer/MUScore.asp.

MONTANA UNIVERSITY SYSTEM CORE

In our world of rapid economic, social, and technological change, students need a strong and broadly-based education. General education helps students achieve the intellectual integration and awareness they need to meet challenges in their personal, social, political, and professional lives. General education courses introduce great ideas and controversies in human thought and experience. A solid general education provides a strong foundation for the life-long learning that makes career goals attainable. The breadth, perspective, and rigor provided by the core curriculum helps students become educated people.

Montana State University-Great Falls College of Technology's General Education Core reflects the Montana University System's General Education Core. As students work on the Montana University System General Education Core, they should attempt to select classes that are also required in their major. That efficient use of coursework could help students complete their degrees more quickly, since the classes could be used to satisfy both the requirements of the major and the requirements of the MUS General Education Core. After completion of core requirements students will be able to:

- Demonstrate understanding of major findings and ideas in a variety of disciplines.
- Demonstrate understanding of methods, skills, tools and systems used in a variety of disciplines, and historical, theoretical, scientific, technological, philosophical, and ethical bases in a variety of disciplines.
- Use appropriate technologies to conduct research on and communicate about topics and questions; to access, evaluate and manage information; to prepare and present their work effectively, and to meet academic, personal, and professional needs.
- Demonstrate critical analysis of arguments and evaluation of an argument's major assertions, its background assumptions, the evidence used to support its assertions, and its explanatory utility.
- Understand and articulate the importance and influence of diversity within and among cultures and societies.
- Understand and apply mathematical concepts and models.
- Communicate effectively, through written and oral communication and through other forms as appropriate.

STUDENT LEARNING OUTCOMES FOR MSU–GREAT FALLS CORE:

COMMUNICATION
(ENGLISH COMPOSITION AND ORAL COMMUNICATION):

- Demonstrate an understanding of writing as a series of tasks, including finding, evaluating, analyzing, and synthesizing appropriate sources, and as a process that involves composing, editing, and revising.
- Demonstrate critical reading and analytical skills, including understanding an argument's major assertions and assumptions and how to evaluate its supporting evidence.
- Demonstrate research skills, integrate one's own ideas with those of others, and apply the conventions of attribution and citation correctly.
- Use Standard Written English and edit and revise one's own writing for appropriateness.
- Enhance the fluency and range of vocabulary and syntax with which to meet the requirements of different rhetorical situations.
- Develop proficiency in oral discourse.
- Produce and deliver a clear, well organized verbal presentation.
- Interact in a collaborative, synergistic manner within a small-group problem-solving meeting.
- Use appropriate technologies to conduct research on and communicate about emerging issues and to access, evaluate, and manage information to prepare and present one's work effectively.
- Demonstrate understanding of the interconnections of knowledge within and across disciplines.

MATHEMATICS:
- Interpret mathematical modes given verbally, or by formulas, graphs, tables, or schematics, and draw inferences from them.
- Represent mathematical concepts verbally, and where appropriate, symbolically, visually, and numerically.
- Use arithmetic, algebraic, geometric, technological, or statistical methods to solve problems.
- Use mathematical reasoning with appropriate technology to solve problems, test conjectures, judge the validity of arguments, formulate valid arguments, check answers to determining reasonableness, and communicate the reasoning of the results.
- Recognize and use connections within mathematics and between mathematics and other disciplines.

HUMANITIES/FINE ARTS:
- Investigate the role and values of art in human life and demonstrate an understanding of the significance of specific art forms to the cultures that create and adopt them.
- Describe specific processes by which works of painting, sculpture, architecture, music, dance, theater, film, multi-media, or environmental art are created.
- Demonstrate the dependence of meaning upon cultural and historical context when analyzing works of art.
- Compare and contrast one work of art with another or one medium with another to illuminate both.
- Investigate the variety of human culture and demonstrate an understanding of the ways in which cultures have changed.
- Understand and employ a wide range of humanistic, qualitative, quantitative, theoretical, or philosophical methods for recording and explaining human experience.
- Identify and assess one's own and others' values; identify the underlying premises in one's own and others' arguments.
- Investigate the role and value of literature in human life and demonstrate an understanding of the significance of specific literary works or genres to the cultures that create them and adopt them.
- Identify and use a variety of arts materials, techniques and resources while creating works of art.

NATURAL SCIENCE:
- Use quantitative information and/or mathematical analysis to obtain sound results and recognize questionable assumptions.
- Demonstrate understanding of the broad principles of science and the ways scientists in a particular discipline conduct research.
- Make observations, understand the fundamental elements of experimental design, generate and analyze data using appropriate quantitative tools, use abstract reasoning to interpret the data and formulae, and test hypotheses with scientific rigor.
- Understand the role that human diversity plays in the practice and history of science.
- Demonstrate proficiency in the collection, interpretation, and presentation of scientific data.

SOCIAL SCIENCES/HISTORY:
- Demonstrate knowledge of findings and theories in the social and behavioral sciences.
- Demonstrate an understanding of investigative methods used in the social and behavioral sciences.
- Demonstrate critical thinking about arguments in the social and behavioral sciences and evaluate an argument's major assertions, its background assumptions, the evidence used to support its assertions, and its explanatory utility. Demonstrate knowledge of important findings and theories in social and political history.
- Demonstrate an understanding of investigative methods used in social and political history.

CULTURAL DIVERSITY:
- Investigate major issues and scholarly approaches related to diversity.
- Analyze concepts and implications of diversity.
- Demonstrate an understanding of historical, cultural, social, or political conditions and the ways in which they influence the status, treatment, or accomplishments of various groups.
- Articulate how diversity helps shape the role of the individual and the interconnections and relationships within and among groups across societies and cultures

+ A grade of "C-" or above is required for graduation   * Indicates prerequisites needed   **Placement in course(s) is determined by placement assessment   **2011-2012 Catalog** ■

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CULTURAL HERITAGE OF AMERICAN INDIANS:
Courses include significant content related to the cultural heritage of American Indians.

ESTIMATED RESIDENT PROGRAM COST*:

Tuition and Fees	$	3,069
Application Fee	$	30
Lab Fees	$	110
Books	$	660
TOTAL:	**$**	**3,869**

*MUS Student Health Insurance Premium approx. $851/semester if needed. Students will be charged an additional fee of $20 per credit for online/hybrid courses.

MONTANA UNIVERSITY SYSTEM CORE COURSES
OFFERED ONLINE AND ON CAMPUS.

COMMUNICATION--6 CREDITS (Need 3 writing & 3 verbal credits)

COURSE	NO.	TITLE	CREDITS	GRADE
WRIT	101**	College Writing I	3†	_____
		AND 1 of the following		
COMM	130	Public Speaking	3†	_____
COMM	135	Interpersonal Communication	3†	_____

MATHEMATICS--3 CREDITS

COURSE	NO.	TITLE	CREDITS	GRADE
M	116**	Math for Health Careers	3†	_____
M	121**	College Algebra	3+	_____
M	145**	Math for Liberal Arts	3†	_____
M	152**	Precalculus Algebra	4†	_____
M	153**	Precalculus Trigonometry	3†	_____
M	171**	Calculus I	4†	_____
STAT	216**	Introduction to Statistics	4†	_____

HUMANITIES/FINE ARTS--6 CREDITS

COURSE	NO.	TITLE	CREDITS	GRADE
ARTH	160	Global Visual Culture	3†	_____
ARTZ	101	Art Fundamentals	3†	_____
ARTZ	105	Visual Language - Drawing	3†	_____
DE	161	Introduction to Design	3†	_____
ENGL	217	Creative Writing	3†	_____
LIT	110	Intro to Literature	3†	_____
LIT	231*	Ancient to Ren World Lit	3†	_____
LIT	232*	Modern World Lit	3†	_____
LIT	291	Special Topics - Literature	3†	_____
HUM	242	Gender & Equality	3†	_____
MUSI	101	Enjoyment of Music	3†	_____
MUSI	105	Music Theory I	3†	_____
MUSI	203	American Popular Music	3†	_____
MUSI	207	World Music	3†	_____
PHL	101	Introduction to Philosophy	3†	_____
PHL	110	Introduction to Ethics	3†	_____

NATURAL SCIENCE--7 CREDITS (Must include 1 lab course)

COURSE	NO.	TITLE	CREDITS	GRADE
BIOB	101**	Discover Biology	4†	_____
BIOH	104**	Basic Human Biology/Lab	4†	_____
BIOB	160*	Principles of Living Systems/Lab	4†	_____
BIOB	170*	Principles of Biological Diversity/Lab	4†	_____
CHMY	101*	Chemistry for the Consumer	3†	_____
CHMY	121*	Intro to General Chemistry/Lab	4†	_____
CHMY	141*	College Chemistry I/Lab	4†	_____
CHMY	143*	College Chemistry II/Lab	4†	_____
GEO	101	Introduction to Physical Geology/Lab	4†	_____
NUTR	221	Basic Human Nutrition	3†	_____
PHYS	110	Survey of Natural Sciences	3†	_____
PHYS	130	Fund Physical Science w/Lab	4†	_____

SOCIAL SCIENCES / HISTORY--6 CREDITS

COURSE	NO.	TITLE	CREDITS	GRADE
ECNS	201	Principles of Microeconomics	3†	_____
ECNS	202	Principles of Macroeconomics	3†	_____
HSTA	101N	American History I	3†	_____
HSTA	102N	American History II	3†	_____
HSTA	255N	Montana History	3†	_____
HSTR	101	Western Civilization I	3†	_____
HSTR	102	Western Civilization II	3†	_____
PSCI	210	Intro to American Government	3†	_____
PSYX	100	Introduction to Psychology	3†	_____
PSYX	230	Developmental Psychology	3†	_____
SOCI	101	Introduction to Sociology	3†	_____
SOCI	121	Introduction to Criminal Justice	3†	_____

CULTURAL DIVERSITY--3 CREDITS

COURSE	NO.	TITLE	CREDITS	GRADE
ANTY	101	Anthropology – The Human Experience	3†	_____
BUS	249	Global Marketing	3†	_____
NASX	240N	Native American Literature (equiv to 390)	3+	_____
HUM	244	American Cultural Values	3†	_____
NASX	232N	Montana Indians: Cultures, Hist, & Issues	3†	_____
NASX	204N	Intro to Native American Beliefs & Phil	3†	_____
SIGN	101	Intro to American Sign Lang	3†	_____

CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS

Courses with an "N" behind the course title or with the subject NASX will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

TOTAL CREDITS – 31

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

As students work on the MUS general education core, they should attempt to elect classes that are required in their major. That efficient use of coursework could help students complete their degree more quickly, since the classes could be used to satisfy both the requirements of the major and the requirements of the MUS General Education Core.

Students should consult with the intended receiving institution to determine whether or not additional core courses may be required to satisfy that institution's General Education Core. Upon completion of the General Education Core, please notify the Registrar to have the core indicated on your transcript. A form requesting that the MUS Core be transcribed is available in Student Central and on the web site at http://www.msugf.edu/admissions_records/forms.html. This will need to be turned in to the Registrar's Office upon completion of the program.

+ A grade of "C-" or above is required for graduation   * Indicates prerequisites needed   **Placement in course(s) is determined by placement assessment   **2011-2012 Catalog ∎**

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Montana State University - Great Falls

COMMON GROUND
"Progress towards a decade of student success"

MONTANA STATE UNIVERSITY – GREAT FALLS
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changing lives – *achieving* dreams
2011 - 2016 OPERATIONAL PLAN

Montana State University - Great Falls

COMMON GROUND
"Progress towards a decade of student success"

MSU – Great Falls is midway through a decade of transformative change, centering the College on the common ground of student success. We will finish this decade guided by a strong operational plan, appropriately titled *Common Ground.*

What is Common Ground?

Common Ground is a campus-wide effort designed to elevate every student who walks through the doors of the College and to strengthen the 21st Century learning experience by bringing about deep change in the beliefs, norms, and structures of interactions between faculty, staff, and students. We will accomplish this by setting measurable goals and targets; creating and utilizing interdisciplinary project teams; and cultivating a safe climate for innovation. Common Ground articulates this effort into six primary goals and accompanying tasks. Interdisciplinary teams of faculty, staff, and students are responsible for accomplishing the goals and tasks identified in this plan.

Background

In the spring of 2006, MSU – Great Falls began its transformation towards an institution designed, and focused, on the success of our students. From 2006 to the present, the College's faculty, staff, and community have made many accomplishments towards that end.

Over the next five years, we must continue this momentum and firmly establish MSU – Great Falls as a high-performing institution in regards to student success. The Community College Research Center's (CCRC) *Assessment of Evidence Series*[1] builds the foundation for our continued efforts. The CCRC's work provides four general recommendations to guide us.

1. Colleges should ensure broad **engagement** of all faculty becomes the foundation for policies and practices to increase student success, including active faculty involvement in student support programs and services.

2. Colleges should work to **simplify** the structures and bureaucracies that students must navigate.

3. Colleges should be encouraged to align course curricula, define common learning **outcomes** and assessments, and set high standards for those outcomes.

4. Colleges should collect and use **data** to inform a continuous improvement process.

Operational Plan: 2011-2016

Jenkins' (2011) research identified seven practices of highly effective organizations.

MSU – Great Falls is currently underway in many of these regards, and yet more work is necessary to ensure we are employing all seven of these practices in a concerted and coherent manner.

To realize the transformational power of these practices, and to be effective, they must be implemented in concert, not isolation, and at scale.

1. **Strong Leadership**
   Inclusive leaders, across the organization, who are results oriented

2. **Functional Alignment**
   "Institutional program coherence" or interrelation of programs for students (curriculum, instruction, assessment, climate, etc.)

3. **Focus on the Customer**
   Student Centeredness

4. **Process Improvement**
   Continued analysis of organizational processes to ensure programs and services improve over time

5. **Use of Measurement**
   Measurable goals, assessment, evaluation at all levels to inform process improvement and management decisions

6. **Employee Involvement and Professional Development**
   Employee understanding of organizational goals, and developed to lead the necessary reforms

7. **External Linkages**
   Connections to K12 and four-year colleges and universities

Works Cited

[1]Bailey, T., Smith-Jaggars, S., & Jenkins, D. (2011). Introduction to the CCRC assessment of evidence series. New York, NY: Columbia University, Teachers College, Community College Research Center.

Jenkins, D. (2011). *Redesigning community colleges for completion: Lessons from research on high performance organizations.* New York, NY: Columbia University, Teachers College, Community College Research Center.

Montana State University - Great Falls
COMMON GROUND
"Progress towards a decade of student success"

Our Charge . . .

We must now turn our efforts towards an aggressive approach to accelerating our progress in becoming a high-performing institution with regards to student success. We have established the foundation, structured the organization, and now we have identified the work remaining in the following six areas.

Goal 1.

Set and Achieve Institutional and Student Success Goals

We will establish clear, measureable goals for improved student success and institutional effectiveness. These will be communicated broadly and measured consistently.

Task A. Establish a new indicator that directly measures students' success through the analysis of successful course completion, looking at the percent of students who earned a C- or higher in all coursework.

Task B. Using historical data, comparative peer data, and aspirational targets, establish FY12 goals for the College's Core Indicators of Institutional Effectiveness. Communicate these via a special focus IR newsletter during early fall term, with continued communication through a variety of modes (blurb in Weekly News, video screens, Facebook, etc.).

Task C. Identify the "Top 10 Underperforming Courses" with the smallest percentage of successful student completions, and the primary gatekeeper courses with below-average rate of student success (institutional average in FY10 is 77%), and establish multi-year goals for improvement in these rates.

Task D. Create and maintain a SharePoint site where institutional reports (e.g., core indicator reports, enrollment reports, survey reports, etc.) can be shared with the campus community. Institutional Research will also start a documentation process for all reports so that any data used in reports can be replicated.

Goal 2.

"Close the Loop" on the Assessment of Student Learning

We will systematically align institutional/ instructional expectations, instructional activities, and the assessment of student learning, and institutionalize a process for capturing and analyzing student learning data.

Task A. Finalize/verify the establishment of common student learning outcomes (course objectives) for all courses at the College (e.g., all ANTH 100 courses have common outcomes regardless of instructor or modality of delivery).

Task B. Identify and/or design common assessment protocols for measuring student learning on the established learning outcomes (e.g., all ANTH 100 courses would employ the same assessment protocols for measuring student achievement of the common learning outcomes within that course).

Task C. Utilizing an institutionally adopted format (e.g., Phase IV Form), create rubrics for assessing the various levels of student learning on common learning outcomes for every course and program offered at the College.

Task D. Research, identify, and employ a college-wide system for storing student learning outcomes data and longitudinally tracking those data to guide instructional improvement and target needed interventions to improve student learning and success.

Task E. Implement the process for conducting assessments, recording student achievement of learning outcomes, and reporting those results.

Goal 3.

Strengthen Student Support Services and Programs

We will establish intrusive student support mechanisms that will (1) create social relationships for students, (2) help students clarify aspirations and enhance their commitment, (3) develop the "College Know-How" in students, and (4) help make college life feasible for our students.

Task A. Catalyzed by the establishment of a new advising center, redesign the advising process so that it is intrusive, streamlined, and personalized. The new advising process should be designed to utilize all campus resources, including faculty, as well as be tied to a student early alert system.

Task B. Building from the COLS 102 Pilot Course, design and implement a mandatory student success course, tied to orientation and advising, for all students new to the College. This course should include components modeled after best practices such as the development of an academic and career plan to be utilized in the advising process.

Task C. Improve the "front door" experience through innovations including a mandatory, extended, and expanded student orientation, tied to advising and the student success course that includes such things as orientation, placement testing, financial literacy education.

Montana State University - Great Falls

COMMON GROUND

"Progress towards a decade of student success"

changing *lives* – achieving *dreams*
2011 - 2016 OPERATIONAL PLAN

Goal 4.

Enhance and Strengthen the Learning Process through Curricular and Pedagogical Reforms

Teaching is central to our mission, and thus it plays the largest role in whether or not our students succeed. We will reform and innovate in those areas with the greatest need and potential for increases student success.

Task A. Building from current research, reform and redesign the developmental education offerings to increase the percent of students who are successfully remediated for college-level coursework and at the rate in which they succeed in this process.

Task B. Implement enhanced instruction/learning models and other reforms, including, but not limited to Supplemental Instruction, learning communities, paired courses, and/or contextualized learning, to increase the rate of student success in gatekeeper and "Top 10 Underperforming Courses."

Task C. Establish mechanisms for predictive analysis of student success and to target intervention. This includes the establishment of a common grade reporting system, mandatory student attendance reporting/tracking, and frequent student progress feedback (e.g., quarterly grades or academic progress reports).

Task D. Increase student preparedness for online and technical courses through the development of a systematic means to evaluate incoming students' basic computer skills, a remedial basic computer skills course, and by evaluating the current Introduction to Computer course (CAPP 120) in order to modify its curricula based upon program needs.

Task E. Research and Develop a Certificate of General Studies credential and curriculum, and shepherd it through the approval process for implementation.

Task F. Research and Develop a Certificate program or credential to recognize the completion of pre-requisite coursework for Health Sciences Programs.

Goal 5.

Strengthen External Linkages with K12 and University Partners

We will work to improve the relationships and interconnectivity between the College and our primary partners in the K12 and four-year university sectors.

Task A. K12 - through partnership with the Great Falls Public Schools, hire and deploy pathways advisors to: (1) offer college placement test orientation and testing in the high schools; (2) assist with college and financial aid applications and literacy; and (3) provide orientation and support services to college, college planning, and dual credit.

Task B. Universities - establish more formalized articulation agreements to provide opportunities for general education students intending to transfer that lead them effectively into a program of study early on.

Goal 6.

Identify Key Points of Success and Challenge Our Students Face

We will establish interdisciplinary teams to track cohorts of entering students (first-time and transfers) along the continuum of initial engagement to student success to identify where students face irrevocable challenges in their educational journey.

Task A. Utilizing AACC's Voluntary Framework of Accountability (VFA), identify key success points along the continuum of student success (e.g. completing developmental education, completing the first college-level course, achieving 15, 30, etc. college credits). Create cohort data sets of key student types (e.g. pre-health students, students of color, transfer students, traditional and non-traditional, etc.) and have teams follow their progress to identify areas where students struggle.

Task B. Taking the findings from above, make recommendations for improvements to services, processes or protocols to the appropriate individual or areas. Implement changes to improve student outcomes along the continuum of student success.

MONTANA STATE UNIVERSITY – GREAT FALLS

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[406] 771.4300 or [800] 446.2698 FAX: [406] 771.4317 **www.msugf.edu**

Common Ground: Towards A Decade of Student Success

Enhance & Strengthen the Learning Process through Curricular & Pedagogical Reforms: General Studies Certificate

Team Leaders
Pam Christianson
Heidi Pasek

Overview

MSU-Great Falls is midway through a decade of transformative change, centering the College on the common ground of student success. We will finish this decade guided by a strong operational plan, appropriately titled *Common Ground*. *Common Ground* is a campus-wide effort designed to elevate every student who walks through our doors and strengthen the 21st Century learning experience by bringing about deep change in the beliefs, norms, and structures of interactions between faculty, staff, and students. We will accomplish this by setting measureable goals and targets; creating and utilizing interdisciplinary project teams; and cultivating a safe climate for innovation. *Common Ground* articulates this effort into six primary goals and accompanying tasks. Interdisciplinary teams of faculty, staff, and students are responsible for accomplishing the goals and tasks identified in the plan.   This project is one component of the *Common Ground* plan.

Goal IV. Enhance and Strengthen the Learning Process through Curricular and Pedagogical Reforms

Teaching is central to our mission, and thus it plays the largest role in whether or not our students succeed. We will reform and innovate in those areas with the greatest need and potential for increases student success.

One primary task further focuses this project:

> E.   Research and Develop a Certificate of General Studies credential and curriculum, and shepherd it through the approval process for implementation.

Project Team

1. Pam Christianson	2. Heidi Pasek
3. Susan Gassaway	4. Lanni Klasner
5. Tim Obressley	6. Donna Eakman
7. Adam Wenz	8. Add Team Member
9. Add Team Member	10. Add Team Member
11. Add Team Member	12. Add Team Member
13. Add Team Member	14. Add Team Member
15. Add Team Member	16. Add Team Member

Project Components

1

Common Ground: Towards A Decade of Student Success

1. Research General Education Certificates and Programs of Study offered by the MUS and other Community Colleges in the region and nation.
2. Collaborate via a work session with the MSU campuses (MSU-Bozeman, Gallatin College Programs, MSU-Northern, MSU-Billings, MSU-Billings COT) to identify a strategy for collaboration on the development of a General Education Certificate.
3. Develop curriculum proposal for the General Education Certificate.
4. Submit the General Education Certificate curriculum proposal to Curriclum Committee at MSU-Great Falls.
5. Submit General Education Certificate curriculum proposal to Montana BOR.
6. Submit General Education Certificate curriculum proposal to NWCCU.

Deliverables

To develop a General Education Certificate for approval as outlined above. This certificate will be collaboratively created and moved forward for consideration by the Montana Board of Regents at the March 2012 meeting.

Resources/Training/Consultation Needed

To accommodate the need for collaboration with the other MSU campuses, it may be necessary to host a work session to finalize a common General Studies certificate. The General Studies Implementation Team requests $500 to host such a meeting on the Great Falls campus.

Timeline

DATE	MILESTONE/DELIVERABLE
August 24, 2011	Fall Convocation and Common Ground Launch
Sep 15, 2011	Team Members Identified and Formed
Oct. 1, 2011	Convene Team, Establish Name and Complete Project Plan Template
Oct. 31, 2011	MSU Collaboration Work Session
Nov. 30, 2011	Rough Draft of Curriculum Proposal
Dec. 5, 2011	MSU-GF/MUS Curriculum Committee Submissions in time for BOR Level II submissions.
March 2012	Montana Board of Regents Submission Approval
March 2012	NWCCU Prospectus submitted upon BOR Approval
Insert Date	Insert milestone and/or deliverable
Insert Date	Insert milestone and/or deliverable
Insert Date	Insert milestone and/or deliverable
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Insert Date	Insert milestone and/or deliverable
Insert Date	Insert milestone and/or deliverable

2

January 19-20, 2012

ITEM 154-1001-R0112

Approval to create a program leading to a minor in Wildland Fire Sciences and Management in the Department of Forest Management of the College of Forestry and Conservation.

THAT

In Accordance with Montana University System Policy, the Board of Regents of Higher Education grants approval for The University of Montana-Missoula to create a program leading to a minor in Wildland Fire Sciences and Management in the Department of Forest Management of the College of Forestry and Conservation.

EXPLANATION

Wildfire is one of the big challenges of the 21st century in the West and the Montana University System (MUS) is uniquely poised to be national leader in it. A new program of academic study at The University of Montana-Missoula leading to a minor in Wildland Fire Sciences and Management will be administered in the Department of Forest Management in the College of Forestry and Conservation. It will be an important force-multiplier for existing baccalaureate degrees across campus and addresses well-documented workforce development challenges facing state and federal fire management agencies. The program achieves efficiency and financial responsibility by organizing existing course offerings intelligently around the needs of fire sciences and management resulting in the addition of an important academic endorsement for students at low cost. It is the only program of its kind in the state. It is necessary because fire strongly impacts Montana's economic, environmental, and human health. With the amount of fire occurring on the land expected to increase in coming decades concurrent with a dwindling workforce and increasing expectation for sophisticated fire management, Montana's needs and interests are best met by developing the next generation of fire managers within its own educational system. The program capitalizes on our unique environment and location to build a well-educated and well-trained workforce that understands the role of fire on the land, is adept at applying complex tools and technology, and that will provide leadership in natural resource decision-making. The program will produce forward-looking fire professionals from many disciplines who are creative, practical, responsive to change, and who recognize that fire is integral to all aspects of land management.

ATTACHMENTS

Level II Request Form
Curriculum proposal

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **154-1001-R0112**   Meeting Date: **January 19-20, 2012**

Institution: **University of Montana-Missoula**   CIP Code: **43.0206**

Program Title: **Minor in Wildland Fire Sciences and Management**

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for __all that apply__ and __submit with completed Curriculum Proposals Form__):*

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.)

  X **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; and

    4.   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 constitutes a request for approval of a new program of academic study at The University of Montana leading to a minor in Wildland Fire Sciences and Management. The program will be housed in the Department of Forest Management in the College of Forestry and Conservation.

Montana Board of Regents
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1. **Overview**

   Wildfire is one of the big challenges of the 21st century in the West, and the Montana University System (MUS) is uniquely poised to be national leader in confronting it. This proposal constitutes a request for approval of a new program of academic study at The University of Montana leading to a minor in Wildland Fire Sciences and Management. The program will be housed in the Department of Forest Management in the College of Forestry and Conservation (CFC). It will be an important force-multiplier for existing baccalaureate degrees within the CFC and across campus and addresses well-documented workforce development challenges facing state and federal fire management agencies. The program achieves efficiency and financial responsibility by organizing existing course offerings intelligently around the needs of fire sciences and management resulting in the addition of an important academic endorsement for students at low cost. It will be the only program of its kind in the state. It is necessary because fire strongly impacts Montana's economic, environmental, and human health. With the extent of fire occurring on the land expected to increase in coming decades concurrent with a dwindling workforce and increasing expectation for sophisticated fire management, Montana's needs and interests are best met by developing the next generation of fire managers within its own educational system. The proposed program capitalizes on our unique environment and location to build a well-educated and well-trained workforce that understands the role of fire on the land, is adept at applying complex tools and technology, and that will provide leadership in natural resource decision-making. The program will produce forward-looking fire professionals from many disciplines who are creative, practical, responsive to change, and who recognize that fire is integral to all aspects of land management.

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

   The minor in Wildland Fire Sciences and Management will be administered by the Department of Forest Management in the College of Forestry and Conservation. It is made up of four parts: a fire core with courses in fire ecology and management, statistics, weather/ climate, and ecology, along with two elective areas, in natural and management sciences, and social sciences (Table 1). Two courses are required (FORS230 Forest Fire Management and FORS333 Basic and Applied Fire Ecology), while students elect the remaining courses in topical areas. The total number of credits required to complete the minor is 23. This number is comparable with other minors in the college, notably Wildland Restoration (24-25), Wildlife Biology (24), and Wilderness and Civilization (24). An arbitrary sample of majors in other colleges and programs reveals a range of required credits from 20-24. A noteworthy element of our program is the requirement that students take at least one applied field course, obliging them to spend a substantial amount of time planning and carrying out real-world projects related to fire. Courses listed within the latter requirement are drawn from many departments within the CFC in order to make the minor equally accessible to all of the CFC's majors. Students majoring in offerings within the CFC will need to take only 6-12 credits beyond what they might have otherwise taken, because they will already be fulfilling many of the program's electives in their majors. This allows the minor to draw predominantly on upper division courses, many with pre-requisites, and deliver an exceptionally professional product. Students from other disciplines will likely need additional course work in natural resources to meet the expectations of the program. Realistically, students not majoring in a natural science field will have difficulty completing the minor without adding one year to their academic programs. Given the rapidly changing workforce

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requirements in fire management, it is not unrealistic to expect that some fraction of non-natural science majors will find the minor worth the additional time and cost. The minor will be administered through the Department of Forest Management for the purposes of course substitutions, petitions, and interactions with student clubs, in consultation with the Vice President for Student Affairs. It will be relatively resilient to change because its teaching requirements are not overly reliant on a single faculty member and nearly all of the course work is offered within the CFC. Implementation of the program requires the addition of one 3-credit upper division course in Basic and Applied Fire Ecology. A course request for this class was approved by the Faculty Senate. Additionally, the Prescribed Fire Practicum and Advanced Prescribed Fire Practicum, two courses offered experimentally since 2008 as experiential learning opportunities, are being proposed as permanent courses for this minor (undergraduate/graduate co-convened). Two course requests for a permanent number were approved by the Faculty Senate.

3. Need

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

Like water, fire is fundamental to Montana's natural and cultural heritage. Our landscapes are shaped by fire, our natural resources depend on fire, and fire provides jobs in places where jobs are scarce. However, fire also threatens landscapes and livelihoods, and the specter of hotter, drier fire seasons combined with population growth in the wildlands, high suppression costs, and changing societal expectations for land use make for highly complex and controversial decision-making in fire management. Add to this a national crisis in workforce development caused by demographic shifts and exacerbated by a proliferation of safety/accountability-driven requirements for training and education and the stage is set for large and unsettling changes in management. These issues are the backdrop for development of a new program of undergraduate study at The University of Montana-Missoula, leading to a proposed minor in Wildland Fire Sciences and Management. Based in the Department of Forest Management in the College of Forestry and Conservation, this program addresses the challenges of developing capable future leaders in fire management, adds value to existing baccalaureate degrees, serves as an important academic endorsement for students in the CFC and across campus, and provides a locus for the development of an integrated MUS fire program that transcends traditional administrative boundaries.

The proposed academic program will be the only one of its kind in the state. Not coincidentally, its genesis occurs at a time when fire is one of the dominant issues in natural resource management in the western US, when climate change models predict more significant fire seasons ahead and when an inefficient fire bureaucracy is struggling to develop a well-educated and well-trained workforce that understands the role of fire within ecosystems, is adept at applying sophisticated tools and technology, and that will provide leadership in natural resource decision-making. The state of Montana needs a responsive academic fire management program to ensure that future leaders in fire possess these capacities, are attendant to local needs, and make wise decisions to benefit rural communities in Montana and beyond. The University of Montana-Missoula is uniquely positioned to deliver such a program.

The program will develop home-grown competency in the workforce to meet the challenges of fire management and provide opportunities for Montana-educated individuals to work in rural

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communities across the state and beyond. Its success relies on the fact that fire is fundamental to Montana landscapes and culture, impacting economic, environmental, and human health. With the extent of fire occurring on the land expected to increase in coming decades concurrent with a dwindling fire management workforce and increasing expectation for sophisticated land management, Montana's needs and interests are best met by developing the next generation of fire managers within its own educational system.

The program will contribute to economic development in Montana by producing grounded, forward-looking fire professionals from many disciplines who are creative, practical, responsive to change, and who recognize that fire is integral to all aspects of land management. We note that fire management is expensive, and current trajectories of funding are probably unsustainable. In an active fire season, hundreds of millions of dollars will be spent on suppression in Montana alone. Nearly half of the US Forest Service budget is spent on fire suppression in the same years. In part, then, the health of Montana's economy depends on the size of future fire expenditures plus the losses and gains incurred by fire. These factors will be managed (or mismanaged) by fire professionals using sophisticated tools and technology, predictive models, and new conceptions of risk. Developing competent fire managers will provide new opportunities for economic growth in rural communities, while not developing them will hurt economic development through implementation of uninformed or misguided policies and practices. Further, if forecasts for increasing fire activity in the coming decades are realized, fire management opportunities will grow. Even today, fire provides some of the few decent jobs in rural communities – jobs that provide entry into a profession with a career ladder, as well as professional opportunities.

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

A minor in Wildland Fire Sciences and Management program builds on, and adds substantial value to all of the baccalaureate degrees offered within the CFC (e.g., Forestry, Resource Conservation, Wildlife Biology, Wildland Restoration, and Parks, Tourism, and Recreation Management). It also provides the many firefighting students from other UM colleges with access to a credentialed program, with important implications for professional employment following graduation. Offering a minor is beneficial in two important ways. First, for federal agencies require fire professionals to possess credentials such as a baccalaureate degree or substantial coursework in forestry, biology, natural resources or related fields. However, because many students in the MUS work in fire but study in other disciplines such as law, journalism, business, and health sciences, they lose access to professional opportunities in the field of fire following graduation. The program makes available to all students an academic credential that enhances professional opportunities in the field of fire. This increases the likelihood that the field of fire will gain access to a larger, more diverse pool of talent while providing students with additional career options at graduation. Second, the minor provides an important academic endorsement to students in natural resources by supplementing our traditional, widely-acclaimed undergraduate degrees in forestry, resource conservation, wildlife, and recreation management, which have been producing highly capable, grounded professionals for decades. Because fire integrates across disciplines, it is well-suited to being offered as a minor.

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

Development of this program is driven primarily by student interest, and based on the number of inquiries, there appears to be a growing expectation for access to academic credentials in the field of fire on campus. For what it is worth, nearly all other natural resource programs at colleges and universities in the West have new endorsements in fire-related disciplines. Our proposed minor in Wildland Fire Sciences and Management program's structure is modeled on the CFC's minor in Wildland Restoration, which was established in 2007. That program grew from 4 participants to 25, 35, and 48 in 2008, 2009, and 2010, respectively. The strong enrollment numbers in the Wildland Restoration minor are, in part, attributable to the fact that the minor dovetails with existing majors in the College, allowing many students to obtain the minor with focused advising and 6-9 additional credits of coursework. Additionally, wildland restoration is an emerging academic market, along with fire and wilderness studies. The proposed minor in Wildland Fire Sciences and Management program shares many of the characteristics of the Wildland Restoration minor, and we anticipate similar demand.

4. **Institutional and System Fit**

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

   As noted previously, the minor in Wildland Fire Sciences and Management supplements existing majors in the CFC and across campus with enough integration in majors such as forestry, wildlife, and resource conservation that many students will be able to obtain the minor without onerous requirements for additional credits. Beyond tailoring the program around existing CFC majors, there is no formal connection between the proposed program and existing programs on campus.

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

   No.

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

   N/A. The program is unique at UM.

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

   With respect to the UM Strategic Plan, this program capitalizes on our unique environment and location to lead and innovate in a key area. Like water, fire is one of the big challenges of the 21st century in the West, and UM is uniquely poised to be national leader in it. In the short term, the program is an important force-multiplier for existing baccalaureate degrees across the UM campus and addresses well-documented workforce development challenges facing state and federal fire management agencies. Program efficiency and fiscal responsibility are gained by organizing and aligning existing coursework on campus. More broadly, the program will serve as a locus for an

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interdisciplinary and collaborative fire initiative that capitalizes on the intellectual and real-world mix of fire science, culture, and art that exists collectively within the College of Forestry and Conservation, the School of Journalism, the College of Health Professions/Biomedical Sciences, the School of Law, the School of Business Administration, the College of Arts & Sciences, the College of Technology, the School of Extended and Lifelong Learning, and the Missoula community at large. Our long-term vision is a fire initiative that expands the intellectual capacity of the MUS and increases research and learning opportunities for its faculty, staff, and students. The development of an initiative that cuts across colleges, campuses and programs could only occur in Missoula with leadership from the CFC.

The program also fits the three goal areas of the Board of Regents by adding substantial value to existing baccalaureate degrees across campus without adding unnecessary coursework and cost. It achieves efficiency and financial responsibility by organizing existing course offerings intelligently around the needs of fire sciences and management. It directly addresses the challenges facing workforce and economic development in the natural resources by providing focused education and a sanctioned credential in a recognized area of need.

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 academic program will be the only one of its kind in the state. There are no similar programs within the MUS.

5. **Program Details**

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

Minor in Wildland Fire Sciences and Management

The minor in Wildland Fire Sciences and Management is an undergraduate program designed to provide students with focused expertise in fire sciences and management. Fire is a dominant issue in natural resource management with climate change models predicting more significant fire seasons ahead. There is a concurrent need for individuals who understand the role of fire within ecosystems, who are adept at applying sophisticated tools and technology to manage fire, and who can provide leadership and possess decision-making skills in natural resource management. The minor in Wildland Fire Sciences and Management is intended to supplement existing majors to prepare students for careers in fire-related natural resource management and for graduate school in fire sciences. The minor requires 23 credits in four subject areas. It capitalizes on Missoula's unique environment and location to educate and train in the natural and physical sciences, in applied fire management, and in

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the human dimensions of fire. Students are required to complete a fire core of courses in ecology, weather and climate, fire management, and a field-based practicum, in addition to electives in measurements, natural/management sciences, and human dimensions. The program is especially complementary to majors in natural resource and natural science related fields but is accessible to students from across campus. It relies heavily on upper division credits and classes with pre-requisites, which means that students from non-natural science majors should consider the minor early in their academic careers.

Course Number	Description (Prerequisites)	Credits
WILDLAND FIRE CORE		
FORS230	Forest Fire Management	2
FORS333	Basic and Applied Fire Ecology (FORS230; one course in ecology, botany, general biology, dendrology, or biogeography)	3
FORS495 *or*	Prescribed Fire Practicum (C/I)	3
NRSM495 *or*	Ecological Restoration Practicum (Sr. in WLR; NRSM444)	3-6
PRTM485 *or*	Recreation Planning (PTRM217S, 300)	3
FORS440 *or*	Forest Stand Management (FORS302, 341, 347)	3
WILD 480	The Upshot: Applied Wildlife Management (Sr. in WBIO)	3
FORS330 *or*	Forest Ecology (BIOO105N or BIOB170N/171N; ENSC245N)	3
BIOE370 *or*	General Ecology (BIOB272; one year of college math including STAT216 or equiv.)	3
NRSM462	Range Ecology (NRSM360; one course in plant ecology)	3
FORS430 *or*	Forest Meteorology (C/I)	3
ERTH303N	Weather & Climate (GPHY111N or C/I)	3
MEASUREMENTS & ANALYSIS ELECTIVES (3 CREDITS FROM THE FOLLOWING):		
FORS350	Geographic Information Systems and Applications (FORS250)	3
GPHY381	Principles of Digital Cartography (GPHY112 or C/I; coreq GPHY382)	3
FORS351	Photogrammetry and Remote Sensing (M151)	3
FORS302	Mensuration (FORS201)	3
NATURAL/MANAGEMENT SCIENCE ELECTIVES (3 CREDITS FROM THE FOLLOWING):		
If elective chosen is also required for the student's major, a second elective must be taken.		
FORS331	Wildland Fuels Management (FORS230)	3
WILD370	Wildlife Habitat Conservation and Management (Jr. standing in WBIO; an ecology class; or C/I)	3
ERTH317	Geomorphology (GPHY111N or equiv.)	3
NRSM385	Watershed Hydrology	3
NRSM335	Environmental Entomology (BIOB170N or equiv.)	3
FORS347	Multiple Resource Silviculture (FORS330; BIOE370 or equiv.)	3
BIOE449	Plant Biogeography (C/I)	3
NRSM365	Restoration Ecology (Jr. or Sr. standing; at least one 300-level ecology course; NRSM265)	3
SOCIAL SCIENCE ELECTIVES (3 CREDITS FROM THE FOLLOWING):		

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If elective chosen is also required for the student's major, a second elective must be taken.		
NRSM422	Natural Resource Policy and Administration	3
NRSM379	Collaboration in Natural Resource Decisions	3
PTRM482	Wilderness and Protected Areas Management (PTRM217S)	3
NRSM489E	Ethics, Forestry and Conservation	3
NASX303E	Ecological Perspectives in Native American Traditions	3
FORS320	Forest and Environmental Economics (M162; ECNS201S)	3
Total Credits		23

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

The program is intended to be launched in Fall 2012, with marketing and advising students into the minor occurring from that point forward. As noted previously, there appears to be strong interest in a fire program from students within the CFC. We anticipate enrollment following a trajectory similar to that of the minor in Wildland Restoration, with 4-6 students participating in the first year, growing to approximately 40 students in year four. Initially, most of these students are expected to come from majors within the CFC.

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 of Forestry and Conservation can meet the needs of the program with existing faculty resources.

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

The success of the program can be met with existing resources, which is one of its primary strengths.

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

Initially, success of the program will be documented by the number of students enrolled and growth in enrollment. Additionally, we propose to track progress of student employment and conduct surveys of alumnae. Lastly, we will conduct impact assessments with employers.

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 2010, Associate Professor Carl Seielstad organized an informal emphasis in fire management in the CFC's Resource Conservation Program, one of nine such areas of study in that major. In 2011, fire

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management was identified as one of six areas of focus by College of Forestry and Conservation Dean James Burchfield. Seielstad subsequently proposed the minor in Wildland Fire Sciences and Management, in consultation with CFC professors Ronald Wakimoto, Lloyd Queen, and Beth Dodson. Verbal approval of the program was obtained from Dean Burchfield and from the Program Chairs of Forestry, Resource Conservation, Wildlife Biology, Parks, Tourism, and Recreation Management, and Geography in the last week of August, 2011. Biology professor Richard Hutto was consulted regarding the proposed new course in Basic and Applied Fire Ecology in the context of his existing graduate level course in fire ecology (BIOE519) on August 30, 2011.

This proposal was reviewed and approved by the affected departments as follows:

Department Name: <u>Forest Management</u>   Date: <u>September 27, 2012</u>

In addition the deans of the following Schools/Colleges reviewed and approved the proposal:

Dean of: <u>College of Forestry and Conservation</u>   Date: <u>September 27, 2012</u>

The proposal was reviewed and approved by the Faculty Senate at the University of Montana

Date: <u>December 2011</u>

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

January 19-20, 2012

ITEM 154-1003-R0112

Approval to establish an interdisciplinary minor in Global Public Health; The University of Montana–Missoula

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THAT

In accordance with Montana University System Policy, the Board of Regents of Higher Education authorizes The University of Montana to establish an interdisciplinary minor in Global Public Health.

EXPLANATION

The proposed undergraduate minor in Global Public Health at The University of Montana will focus learning on existing and emerging public health issues in a transnational context. The proposed minor will enrich the education each student receives within their chosen major and provide opportunities for participating students to advance their knowledge regarding health policy and the science of and skill in interacting within an increasingly diverse population and illness base. Students who pursue the interdisciplinary minor will develop critical-thinking, research-based learning, and community-outreach skills as they engage the social/cultural, economic, political, and scientific dimensions of global public health. Students who pursue the Global Public Health minor will also enhance their major field of study by preparing for a broad range of professions and graduate programs where they can promote global, local, and tribal public health knowledge, research, and practice. The 21-credit minor will build upon the expertise of our faculty by utilizing the rich array of courses and other learning opportunities (e.g., in Anthropology, Biology, Health and Human Performance, Political Science, Sociology, Public Health) related to global public health currently available at The University of Montana.

ATTACHMENTS

Level II Request form
Curriculum Proposal
Appendices

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LEVEL II REQUEST FORM

Item Number:	**154-1003-R0112**	Meeting Date:	**January 19-20, 2012**
Institution:	**The University of Montana-Missoula**	CIP Code:	**51.2210**
Program Title:	**Minor in Global Public Health**		

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for __all__ that apply and __submit with completed Curriculum Proposals Form__):*

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.)

 X **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; and

    4. 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 is a request to establish an interdisciplinary minor in Global Public Health at The University of Montana. Students who pursue the program will learn about existing and emerging public health issues in a transnational context. The proposed minor will enrich the education each student receives within their chosen major, and will help students develop critical-thinking, research-based learning, and community-outreach skills as they explore the social/cultural, economic, political, and scientific dimensions of global and local public health. The 21-credit minor will utilize the expertise of core faculty from the departments of Anthropology, Biology, Communication Studies, Health and Human Performance, Health Sciences, Philosophy, Political Science, Public Health, Social Work, and Sociology.

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1. Overview

This proposal, initiated by interested faculty, staff, and students at The University of Montana, calls for the introduction of an interdisciplinary minor in Global Public Health (GPH). Undergraduates who elect to minor in Global Public Health at The University of Montana will confront some of the big global issues facing the world community that will require insight and problem-solving leadership from future generations. From a remarkable cross-campus team of highly qualified instructors, University of Montana students will learn about such transnationally interconnected challenges to public health as parasitic and vector-borne diseases, HIV/AIDS prevention and treatment, tuberculosis, climate-change impacts, trauma and violence, cancer prevention, obesity, maternal and child illnesses, nutrition, and the role of indigenous healers. The 21-credit curriculum for the proposed minor is structured to ensure that students develop enduring understanding of determinants of illness, healing, and health from an interdisciplinary and comparative perspective. Core faculty will explore public health issues utilizing insights available from disciplinary approaches that include epidemiology, anthropology, biology, political science, community-health planning, communication studies, and ethics. Students who pursue the Global Public Health minor will become more informed and engaged citizens and will enhance their major field of study by preparing for a broad range of professions and graduate programs where they can promote global, local, and tribal public health knowledge, research, and practice. The proposal identifies on-going local, state, national, and international workforce development needs in the area of public health, reports on the high level of interest in the proposed minor expressed by current University of Montana students, and shows how the proposed minor fits within the mission and strategic planning of The University of Montana without duplicating existing programs in the Montana University System. Instructors for all core courses have been consulted and have confirmed their willingness to include their course in curriculum for the minor. The modest necessary resource commitments have been secured. The proposal has been the subject of careful review and has been approved at all stages of the Level II process on the campus of The University of Montana.

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

The proposed undergraduate minor in Global Public Health at The University of Montana focuses learning on existing and emerging public health issues in transnational contexts. The proposed interdisciplinary minor is intended to enrich the education each student receives within their chosen major and provide opportunities for participating students to advance their knowledge regarding the big questions of health policy and science and to develop skills in interacting within an increasingly diverse population, illness, and professional base. Students who pursue the Global Public Health minor will develop critical-thinking, evidence-based learning, and community-outreach skills as they engage the social/cultural, economic, political, and scientific dimensions of global public health. Students who pursue the interdisciplinary minor also will enhance their major field of study by preparing for a broad range of professions and graduate programs where they can promote global, local, and tribal public health knowledge, research, and practice. The 21-credit minor, which includes required introductory courses in science and social issues and policy (six credits), nine credits of additional core courses selected from 18 options, and six credits of content courses selected from a wide array of options, builds upon the expertise of University of Montana faculty by utilizing the rich array of courses and other learning opportunities (e.g., in Anthropology, Biology, Communication Studies, Health and Human Performance, Health Sciences, Political Science, Public Health, Sociology) related to global public health currently available at The University of Montana.

3. Need

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

Across the United States and internationally, "academic global health programs are growing rapidly in scale and number" because "students of many disciplines increasingly desire global health content in their curricula"[1] and because global public health has emerged as an urgent social concern. The upsurge of student interest in global health at the undergraduate level is evidenced around the country as a part of the increased "internationalization of higher education."[2] As of 2008, 16 percent of member schools of the Association of American Colleges and Universities offered majors or minors in public health[3] and students pursuing undergraduate degrees in public health are showing an increasingly global orientation.[4] The Fogarty International Center at the National Institutes of Health provided funding for 18 new Framework Programs for Global Health at U.S. academic institutions between 2006 and 2007,[5] and the minor in Global Health Studies at Northwestern University is the institution's fastest growing academic program.[6] It is timely for The University of Montana to provide undergraduate education in global public health.

Growing academic interest in global health reflects a greater feeling of international connectedness and increased international opportunities for students along with a growing awareness regarding the inequalities in disease burden observed among the industrialized countries, most low-income countries, and our tribal reservation communities.[7] One study on trends in global health education recommended that "the primary place for global health education is at the undergraduate level where every student can be exposed to all aspects of globalization and to domestic and international health disparities, the organization of international health responses, and prepared to work collaboratively with international partners whether at home or abroad."[8] These educational objectives are consistent with the Institute of Medicine (IOM)'s 2003 recommendation that "all undergraduates should have access to education in public health."[9] In 2006, the Consensus Conference on Undergraduate Public Health Education convened by the Healthy People Curriculum Task Force of representatives from seven health professions educational associations and cosponsored by the Council of Colleges of Arts and Sciences (CCAS) and the Association of Schools of Public Health (ASPH) agreed to encourage the development of minors in public health and global health that "build on a coherent interdisciplinary core, provide choices for students based on the strengths

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[1] Crump, JA., and Sugarman, J. (2010). Ethics and Best Practice Guidelines for Training Experiences in Global Health. *American Journal of Tropical Medicine and Hygiene* 83, 1178.

[2] *Ibid.,* 391.

[3] *Ibid.,* 390

[4] Gaare Bernheim, R., Botchwey, N.,& Dillingham, R. (2008). Intentionality and Integration in Undergraduate Global Public Health Education. *Association of American Colleges and Universities Peer Review,* 16.

[5] Macfarlane, S., Jacobs, M., and Kaaya, E. (2008). In the Name of Global Health: Trends in Academic Institutions. *Journal of Public Health Policy,* 390.

[6] http://www.ipd.northwestern.edu/global_health/index.html

[7] Macfarlane, 389; US Commission on Civil Rights (2003). *A Quiet Crisis: Federal Funding and Unmet Needs In Indian Country.* Washington, DC: US Commission on Civil Rights.

[8] Macfarlane, 394.

[9] Gebbie, K., Rosenstock, L., Hernandez, LM. (2003). *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century.* Washington, D.C.: National Academies Press, 144.

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of particular institutions …, [and] meet their institutional goals."[10]

The Institute of Medicine defines global health as "`health problems, issues, and concerns that transcend national boundaries, may be influenced by circumstances or experiences in other countries, and are best addressed by cooperative actions and solutions.'"[11] The program description for the University of California San Diego's global health minor affirms that "global health is at once an increasingly popular new field of study, an urgent social concern, and a powerful interdisciplinary intellectual synthesis aimed at understanding and productively intervening in processes of health, illness, and healing across the globe." Within the multidisciplinary framework provided by these definitions, The University of Montana seeks to respond to a variety of needs at the institutional, local, state, tribal, national, and international levels through the proposed minor in Global Public Health.

Health disparities facing our region occur most frequently within our tribal reservation communities. Native Americans in Montana face multifaceted and considerable health disparities that occur within the context of poverty and institutional causal factors underlying differential access to quality healthcare, educational, and economic opportunities for Native American populations.[12] Native Americans living in Montana have a lower life expectancy (67.2 years) than both the United States average (75.8 years) and Native Americans nationwide (71.1 years)[13] and as a group are more likely to experience significant health problems, including obesity, hypertension, and Type II diabetes.[14] Native Americans in Montana are significantly more likely to die of traumatic causes (accidents, suicide, or homicide) than whites (19-20 percent compared to 8 percent).[15] Although Native Americans in Montana face significant disparities in health status, poverty, and access to quality care and opportunities, Native communities also possess unique cultural, political, and sociological strengths and protective factors. Traditional knowledge and practices among the tribal communities in Montana comprise the backbone of healing practices for Native peoples. Recently, the scientific and medical communities have increasingly recognized the significance and sophistication of traditional healing practices in improving health status.[16] The GPH minor would advance knowledge in areas related to public health prevention, intervention, and science within the context of tribal nations. Native Americans are significantly underrepresented in health professions and underserved within a variety of public health domains. The minor would provide important advancements in the University's knowledge and ability to respond to public health concerns within Native American populations.

The introduction to public health understanding, issues, and skills that will be provided to students through the proposed minor also would constitute a preliminary step in addressing the workforce needs of the state

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[10] Riegelman, RK., Albertine, S. (2008). *Recommendations for Undergraduate Public Health Education*. Washington, D.C.: Association of American Colleges and Universities, 16. Among the Task Force's options for selecting "competencies/learning outcomes" for a minor program (p. 18), our proposed curriculum concentrates on competencies 1-5, 7, 9, & 12.

[11] *Ibid*., 385.

[12] Jones C. (2000). Levels of racism: a theoretic framework and a gardener's tale. *Am J Public Health* 90(8):1212-1215.

[13] Andersen SR, Belcourt GM, Langwell KM. (2005) Building healthy tribal nations in Montana and Wyoming through collaborative research and development . *American Journal of Public Health* 95(5):784-789.

[14] Indian Health Service I. Trends in Indian Health; 2002-2003 Edition. In: Services USDoHaH, ed. Rockville, MD2009.

[15] MTDPHHS. Montana Vital Statistics Annual Reports. In: Services MDoPHaH, ed. Helena, MT: mt.gov; 2004-2008.

[16] Rhoades ER, Rhoades DA. (2000). Traditional Indian and modern western medicine. In: Rhoades ER, ed. *American Indian Health: Innovations in healthcare, promotion, and policy*. Baltimore, MD: Johns Hopkins University Press.

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of Montana. In assessing the need for a Master of Public Health program in 2004, investigators found that, with the aging of the current public health workforce, many of the state's approximately 1400 public health workers will soon be retiring. Additionally, the majority of Montana's counties have been designated as medically underserved, indicating that residents do not have access to healthcare, a major public health issue. The same assessment showed that 58 percent of the state's public health workforce holds a baccalaureate degree, indicating that an undergraduate minor in public health at the University in Montana will be able to introduce students to public health issues at a time in their education when they could take the necessary steps for a career in public health that will meet Montana's workforce needs.[17]

Further, the proposed minor in Global Public Health is designed to meet the growing need for university graduates who are prepared to help communities, professions, and societies address domestic and global infectious, chronic, and migration health challenges that transcend borders. Thus, the program description for Emory University's undergraduate minor in Global Health, Culture, and Society recognizes that "future leaders need to know about the range of serious health problems facing people at home and around the globe and the intersecting economic, political and cultural factors that determine them."

The "vision" for The University of Montana embedded in its 2012-2020 Strategic Plan[18] affirms that this university "will lead as a globally focused public research university that serves the state, nation, and world." From a remarkable cross-campus team of highly qualified instructors, University of Montana students will learn about such interconnected challenges to global public health as parasitic and vector-borne diseases, HIV/AIDS prevention and treatment, tuberculosis, climate-change impacts, trauma and violence, cancer prevention, obesity, maternal and child illnesses, nutrition, and the role of indigenous healers. The curriculum for the proposed minor is structured to ensure that students develop understanding of determinants of illness, healing, and health from an interdisciplinary and comparative perspective. Core faculty will explore public health issues utilizing insights available from different disciplinary approaches, including epidemiology, anthropology, biology, political science, community-health planning, and ethics. The curriculum also addresses transnational, cultural, and ethical diversity and the interplay of biological, genetic, environmental, and societal forces that underlie individual and population health and illness, global health governance, and health policy within a cross-cutting exploration of ways to promote healthy behaviors and health equity.

B. How will students and any other affected constituencies be served by the proposed program?
A variety of constituencies—individual, institutional, local, tribal, statewide, national, and international—will be served by the proposed minor. Courses taken in the proposed minor will complement the major fields of study of enrolled students and enhance their competitiveness for attractive positions in today's global economy. Graduates with a GPH minor from The University of Montana will be competitive for a wide range of professional and higher education opportunities. For instance, graduates from the minor in Global Public Health program at The University of Virginia were tracked and found to be in Master of Public Health Programs, medical school, international development, the Peace Corps, and careers with community-service organizations.[19] Additionally, skills and global understanding that will be gained

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[17] The University of Montana. Proposal to Initiate a Master of Public Health Program.
[18] Final draft, accessed 22 April 2011.
[19] Gaare Bernheim, 17.

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through the proposed curriculum are in demand in health professions,[20] health management, social work, and medical journalism.

For some undergraduates who build a solid foundation in global public health and are inspired by the minor, the preferred career path will include completion of the online Master of Public Health (MPH) degree at The University of Montana. The programmatic theme of the MPH degree is "rural and global health." The Montana Healthcare Workforce Advisory Committee (MHWAC), at the request of the Montana Office of the Commissioner of Higher Education, prepared a comprehensive analysis of the healthcare workforce needs in the state of Montana that was released in the spring of 2007. MHWAC documented that "1) healthcare is the largest private sector employer in Montana, 2) much of the state is classified as medically underserved with substantial state and regional professions shortages, and 3) that the need is only going to increase with the aging population and natural attrition of providers." Based on this growing need, the MHWAC recommended establishing programs that will "increase the pipeline of health professionals in Montana." The continual need for increased public health training in Montana is summarized in the UM School of Public and Community Health Sciences (SPCHS) *Master of Public Health Accreditation Self-Study*.[21] This work in part relies on a survey undertaken in 2006 by the Public Health System Improvement Task Force based on multiple public health constituencies in Montana (state health department, local health departments, local non-governmental agencies and with the SPCHS representing the University). The SPCHS self-study also references a recently conducted regional workforce development survey carried out in Alaska, Washington, Oregon, Idaho, Montana, and Wyoming by the Center for Public Health Practice at the University of Washington School of Public Health. The ongoing need for increased public health training in Montana is noted in all of these surveys.

In sum, there is a need for a workforce with a greater understanding of the factors that determine the health of populations here in Montana and around the world. In its 2003 report entitled *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century,* the Institute of Medicine lists globalization, environmental changes, scientific and technological advances, and demographic changes as the major challenges facing this century's public health professionals. An interdisciplinary minor in Global Public Health that draws on the strengths of The University of Montana's liberal arts curriculum and facilitates linkages across campus to provide learning from each of the departments whose academic perspectives contribute to and enhance an understanding of public health will address the growing need for workforce transnational competency in an effective way. As the committee who authored the Institute of Medicine report states, "public health literacy, entailing a recognition and basic understanding of how health is shaped by the social and physical environment, is an appropriate and worthy social goal."[22] By providing a minor in Global Public Health, the opportunity arises for The University of Montana to contribute to this goal by meeting the needs of undergraduate students seeking to learn more about exciting careers in global health, the needs of a world confronted by the increasingly complex challenges of public health issues, and the needs of a workforce committed to resolving these issues.

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[20] The Institute of Medicine defines a public health professional as "a person educated in public health who is employed to improve health through a population focus." IOM, 1.

[21] Humphries, K., et al. (2011) *Master of Public Health Accreditation Self-Study*. The University of Montana School of Public and Community Health Sciences.

[22] Gebbie, Rosenstock, Hernandez, *Who Will Keep the Public Healthy?* 20.

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The Institute of Medicine views public health as "what we, as a society, do collectively to assure the conditions in which people can be healthy."[23] By educating students to be both professionals and citizens who understand how to work to achieve this mission from the angles of the disciplines constituting the GPH minor, "both learners and institutions gain from a greater awareness of global health issues, since that helps improve thinking about local issues in their institutions and communities, both of which are becoming more global as the population continues to diversify."[24]

Finally, the University envisions that UM graduates with a minor in Global Public Health will serve important international constituencies. A GPH minor opens transnational career pathways in well-funded global health projects for graduates who have expertise in business, law, economics, community health, social work, pharmacy, nursing, environmental sciences, and the basic sciences.[25] Some graduates will advocate for the healthcare needs of distant disadvantaged populations through service in the Peace Corps, non-governmental organizations, foundations, and international organizations. Others will utilize their awareness of global health issues to pursue careers in research, health education and management, international economics, medicine, international business, immigrant health, philanthropy, diplomacy, public policy, and international public service.

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

To gauge student demand for the proposed minor, a survey was conducted of one First-Year Interest Group course at the end of fall semester 2010 and 16 introductory courses at the start of spring semester 2011. The spring courses surveyed were:

- Intro to Native American Studies (2 sections) – Professor Price
- Intro to Social Welfare – Professor Baumgartner
- Intro to Comparative Government – Professor Koehn
- Geography of World Regions – Professor Fluck
- Nature and Society – Professor Spencer
- Intro to Sociology (2 sections) – Professor Willms/Ellestad
- Intro to Anthropology (2 sections) – Professor Sattler/Kerr
- Human Form and Function II – Professor Davis
- Intro to Organic and Biochemistry – Professor Thompson
- College Chemistry II – Professor Cracolice
- Foundations of Health and Human Performance – Professor Burns
- Use and Abuse of Drugs – Professor George
- Intro to International Relations – Professor Adams

The survey results indicated that substantial interest in a minor in GPH exists among students already enrolled at The University of Montana. Fully 44 percent (446) of the 1012 students (73 percent of whom were freshmen or sophomores) who responded to the survey indicated at least some interest in the

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[23] Gaare Bernheim, 19.

[24] Kanter, SL. (2008). Global Health Is More Important in a Smaller World. *Academic Medicine* 83, 115.

[25] Macfarlane, 389.

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proposed minor in GPH. Eleven percent of the respondents reported that they would be "very interested" in completing a minor in GPH and another 33 percent reported "some interest." Given the anticipated 2012-13 launch of the proposed minor, it is particularly encouraging that 43 percent of the freshmen respondents and 48 percent of the sophomores indicated at least some interest in the proposed minor (see tables in Appendix A). In addition, 93 students indicated that they have a UM friend who would be interested in the GPH minor.

The top five majors represented by students who indicated they were "very interested" in the GPH minor are Nursing (30 percent), Social Work (26 percent), pre-medical sciences (22 percent), Health and Human Performance (17 percent), and Political Science (14 percent). Other majors with 50 percent or more of students indicating at least some interest in the GPH minor are Anthropology, Chemistry, and Psychology (see tables in Appendix A).

Consistent with national trends, these findings indicate that a strong demand can be anticipated for the proposed minor in Global Public Health. Enrollments in the minor are likely to include students from a wide variety of majors and academic backgrounds, which will enrich discussion and learning in core courses. It is worth noting that these survey results (covering less than 10 percent of the undergraduate student body) occurred without any promotional effort. With program promotion, additional students, both those on campus and those considering study here, are likely to be interested in enrolling in the GPH minor at The University of Montana.

4. Institutional and System Fit

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

On an institutional level, departments whose courses are offered within the curriculum of the proposed minor, the School of Public and Community Health Sciences, the College of Arts and Sciences, the School of Education, and The University of Montana as a whole will all be served by the proposed interdisciplinary, unattached minor in Global Public Health. Major programs in the disciplines of Anthropology, Biology, Communication Studies, Economics, Environmental Studies, Geography, Health and Human Performance, Health Sciences, Philosophy, Political Science, Native American Studies, Psychology, Sociology, and Social Work will benefit from bringing the multidisciplinary perspectives of the students enrolled in the Global Public Health minor into their courses. The fit will be particularly enriching for majors in Community Health, Nursing, and pre-medical sciences students with international interests and students interested in completing the new Peace Corps Prep Program specialization in health. Appendix D presents a list of identified and confirmed faculty expertise and interest in critical aspects of public health.

Students enrolled in the minor also will be able to avail themselves of internship and other practical experience opportunities through the University's IE3 program. IE3 offers outstanding internships in global health working in low-income contexts.

For some undergraduates who build a solid foundation in and are inspired by the minor in Global Public Health, the preferred career path will include completion at The University of Montana of the online Master of Public Health degree, the M.Sc. in Community Health, the M.A. in Medical Anthropology, or the Intercultural Youth and Family Development master's degree. For new MPH students, undergraduate GPH preparation will provide a head start in understanding the "intersection of rural and global health issues,"

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the overarching programmatic theme of the MPH degree.

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

No.

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

The interdisciplinary minor in GPH is distinct from other undergraduate programs at The University of Montana in its concentration on health issues in transnational perspective. Some students who choose to minor in International Development Studies (IDS) will be interested in health challenges involving populations living in low-income countries. However, IDS students are required to complete a different range of multidisciplinary core courses. A few IDS students might elect to complete the health track as part of the IDS Peace Corps Prep Program along with the minor in GPH. Thus, the GPH minor, the IDS minor, and the Peach Corps Prep Program would complement, not compete with, one another. Another closely related program is the major in Community Health. This major exclusively offers courses that are U.S.-focused. However, a number of Community Health majors are interested in working overseas. A minor in Global Public Health would nicely complement the major in Community Health and knowledge of community health would be an asset for students who elect to minor in GPH.

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

The Mission Statement of the University of Montana reads as follows:

"The University of Montana-Missoula pursues academic excellence as demonstrated by the quality of curriculum and instruction, student performance, and faculty professional accomplishments. The University accomplishes this mission, in part, by providing unique educational experiences through the integration of the liberal arts, graduate study, and professional training with international and interdisciplinary emphases. The University also educates competent and humane professionals and informed, ethical, and engaged citizens of local and global communities; and provides basic and applied research, technology transfer, cultural outreach, and service benefiting the local community, region, State, nation and the world."

The proposed minor in GPH advances the mission of The University of Montana by its international and interdisciplinary emphasis and its focus on educating graduates who will serve the Missoula community, the state of Montana and its tribal reservations, the region, the nation, and the world through their academic preparation and ethical commitment to advancing human health. Further, this minor would nicely complement other internationally focused minors as The University of Montana strives to continue to attract highly motivated students by providing a rich array of respected concentrations on the key cross-cutting global issues of our time (international development, climate change, public health).

The proposed curriculum supporting a minor in Global Public Health specifically incorporates "big ideas" that involve global issues and, therefore, would advance the University's strategic objectives embodied in its core theme of "education for the global century" by promoting "global engagement and leadership at the baccalaureate level" through exposure to "grand challenges that we face as a world society" (UM Strategic Plan 2012-2020, final draft). The GPH minor further addresses President Royce Engstrom's call (Montanan, Winter 2010, p. 7) for enhancing the University's undergraduate curriculum by "incorporating

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greater exposure to the `big questions'" and by "developing more interdisciplinary problem solving."

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 MUS website and each school's curricula were reviewed to ascertain any similar program offerings. The MUS programs listed below include somewhat similar coverage, but the proposed minor in Global Public Health in no way substantially duplicates these programs.

MSU Billings – Bachelor Degree in Health Administration, Master of Science in Health Administration:
The mission of the Health Administration Program at Montana State University Billings is to educate and prepare individuals to be health care leaders who can meet the challenges of health care in our region, advance the quality of care delivered to all, and meet anticipated workforce needs in a variety of positions in health administration.
Analysis: Neither the Bachelor Degree in Health Administration or the Master of Science in Health Administration offered at MSU Billings offers global health coverage.

MSU Billings – Bachelor of Science in Health Promotion:
The health promotion curriculum will prepare students to: develop a strong background in human behavior and behavior modification; effectively plan, implement, and evaluate health promotion programs; increase leadership skills; and become familiar with the latest research and developments within the field.
Analysis: The Bachelor of Science in Health Promotion at MSU Billings has a narrow focus on health promotion and no global perspective.

MSU-Northern – Bachelor of Science and Minor offered in Health Promotion:
Our health Promotion program prepares you for a career as a healthcare professional capable of implementing the disease preventing wellness programs sought after by today's healthcare delivery system. The program offers a Bachelor's degree and a minor for students interested in working in the health and fitness field, but do not wish to seek a physical education teaching endorsement. The focus is on providing students with an educational background in health, fitness, and business with an emphasis on corporate, rather than scholastic situations.
Analysis: The MSU-Northern Bachelor of Science in Health Promotion and Minor in Health Promotion offer a narrow focus on health, fitness, and wellness programs with no global perspective.

MSU-Great Falls – Health Information Coding Specialist and Health Information Technology:
Health information coding is the transformation of verbal descriptions of diseases, injuries and procedures into alphanumeric designations used for data retrieval, analysis, and claims processing. Upon completion of the Certificate in Health Information Coding Specialist, students will be prepared to begin a successful career as a health information coding specialist.
Analysis: The MSU-Great Falls certificate offerings for Health Information Coding Specialists and Health Information Technologies have a narrow focus on health information and technology and no global perspective.

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MSU-Bozeman – Community Health:
Graduates of the Community Health major are employed in entry-level positions conducting planning, administration, evaluation, research, and teaching in community health settings. The undergraduate program is concerned with improving health and well-being for all through the promotion of healthful lifestyles, healthy family functioning, community actions for health, and conditions that make it possible to live healthful lives. The program draws on public health, education, psychology, sociology, family science, and other social and behavioral sciences. Students are prepared to work in a variety of settings including family planning agencies, nonprofit agencies, state and federal health agencies, schools, and community health centers.
Analysis: The Community Health major at MSU Bozeman does not include a global perspective.

MSU Bozeman – Nursing:
The MSU-Bozeman College of Nursing also offers the only public generic baccalaureate nursing program in the state of Montana. Faculty members are assigned to a campus where they live, work and supervise students in a variety of healthcare agencies. The first and second years are a mixture of nursing preparatory courses and the core curriculum—courses in the arts, sciences and humanities that are required of all MSU students. During the junior and senior years students participate in clinical work in a variety of hospital and healthcare facilities in their upper division community area.
Analysis: The MSU-Bozeman Nursing program does not include a global perspective. Discussions on ways to collaborate initiated with Michele Sare, instructor, who has international experience and academic interests. Michele has been invited to serve on the GPH external Advisory Committee.

UM-Missoula – IDS, Community Health: SEE ABOVE. Both programs have been deeply involved with planning the proposed minor in GPH and see numerous opportunities for mutually rewarding collaboration.

Montana Tech – Associate and Bachelors in Health Care Informatics:
Health Care Informatics is an emerging specialization in the health care industry that joins the disciplines of information technology, communications, and health care. Learn to bridge the technology transfer gap between those professionals entrusted to provide clinical care and those who manage the complex information systems required to operate today's healthcare system. Become trained in a career that marries the technical world of computer applications and the varied environment of the health care provider.
Analysis: The Montana Tech Associate and Bachelor Degrees in Health Care Informatics provide a narrow focus on informatics with no global perspective.

Montana Tech – Minor in Occupational Safety and Health:
The Safety, Health and Industrial Hygiene Department has four degree programs: (1) B.S. in Occupational Safety and Health; (2) B.S. in Occupational Safety and Health -- Applied Health Science option; (3) M.S. in Industrial Hygiene; and (4) On-line M.S. in Industrial Hygiene.
Analysis: The Montana Tech programs focus on occupational safety, health, and industrial hygiene and do not provide a global perspective.

Dawson Community College
Preparation for Occupational Safety & Health at Montana Tech:
Analysis: This program is a preparatory course for a four-year degree offered by Montana Tech with a narrow focus on occupational safety and health and no global coverage.

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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.

   Proposed Catalog copy:

Students who pursue the Global Public Health minor will enhance their major field of study by preparing for a broad range of professions and graduate programs where they can promote global, local, and tribal public health knowledge, research, and practice. The 21-credit minor builds upon the expertise of University of Montana faculty by utilizing the rich array of courses and other learning opportunities (e.g., in Anthropology, Biology, Health and Human Performance, Political Science, Sociology, Psychology, Public Health) related to global public health available at The University of Montana.

The proposed curriculum is based on the review of syllabi (all core courses) and catalog descriptions (content courses) and, in some cases, extended discussion with course instructors. Course instructors consented to include all proposed core courses as part of the GPH curriculum.

The GPH minor requires completion of 21 credits, at least nine of which must be at the upper-division (300+) level. Students must complete one required social science course (PSCI 227, Introduction to Global Health Issues) and one required science course (BIOM 227, Epidemiology of Vector-Bourne and Parasitic Diseases) (Appendix D includes the departmentally approved ASCRC course forms for both courses). Students must complete a minimum nine credits or three additional "core" courses from the following list of 18 courses, some of which are offered biannually (see Appendix B for course titles and catalog descriptions and Appendix C for core course syllabi and current instructors):

ANTY 349	COMM 425	HS 430	PSCI 463
ANTY 426	ECNS 310	PHARM 320(2 cr)	PUBH 102 online
BIOM 400	HHP 330	plus PHAR 395(1 cr)	PUBH 515/PHAR 415 online
BIOM 427	HHP 488	PHIL 321	SW 465
			SOCI 355

Students also must complete a minimum of six credits or two additional "content" courses from the following list (see Appendix B for course titles and catalog descriptions):

ANTY 227	BIOL 130N	HHP 415	SW 300
ANTY 333	BIOH 112	NASX 303	SW 310
ANTY 391	BIOH 113	NASX 304	SW 323
ANTY 402	BIOH 462	NASX 388	SW 324
ANTY 418	BIOM 250N	NUTR 221N	SW 410E
ANTY 422	BIOM 402/MICB 412	PSCI 324	SW 455S
ANTY 431	BIOM 435	PSCI 326	SW 475
ANTY 435	COMM 251X	PSCI 348	SOCI 332
ANTY 491	COMM 451S	PSCI 431	SOCI 371

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COMM 485	PSYC 362	SOCI 443
ECNS 217X	PUBH 4xx/595	WGS 263S

Students must take all core courses from The University of Montana's curriculum, but can receive content credit for relevant practicum and internship experience and for relevant courses taken at other universities if approved by the program director.

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

Implementation Timeline

Spring 2011: Collect most recent syllabi. Complete survey of student interest. GPH Minor planning committee completes work on Level II proposal. Approval by participating faculty. Designate program director. Inform Provost and President. Place on Board of Regents' list. Secure needed resources. Complete BOR Level II Request Form and Item Template. Secure approvals by affected departments and deans. Submit to Provost's Office for initial review and submission to ASCRC.

Fall 2011: Approval by ASCRC and Faculty Senate.

Spring 2012: Approval by Board of Regents. Handful of students enroll in core and content courses in anticipation that minor will be approved.

AY 2012-13: Advising begins. New courses (PSCI 227 and BIOM 227) offered. An estimated 20 students enroll in the minor. Handful of students graduate with minor in GPH in spring.

AY 2013-14: Advising continues. An estimated 25 (additional) students enroll in the minor. An estimated 12 students graduate with minor in GPH.

AY 2014-15: Advising continues. An estimated 30 students enroll in the minor. An estimated 20 students graduate with minor in GPH.

AY 2015-16: Advising continues. An estimated 40 students enroll in the minor. An estimated 25 students graduate with minor in GPH.

AY 2016-17: Advising continues. An estimated 40 students enroll in the minor. An estimated 30 students graduate with minor in GPH.

AY 2017-18: Advising continues. An estimated 40 students enroll in the minor. An estimated 40 students graduate with minor in GPH. First program review conducted.

6. Resources

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

No additional faculty resources will be required. With the exception of PHIL 421 (lecturer), the 18 proposed core courses all are or will be staffed by tenure-track faculty members as part of their regular teaching

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responsibilities. The vast majority of the content courses also are staffed by tenure-track faculty members as part of their regular teaching responsibilities.

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.

Interdisciplinary and unattached academic minors are advising-intensive operations. Student interest and success rests upon the availability of a knowledgeable faculty advisor. The amount of faculty time required for academic advising and program leadership can be covered by a one-course (three-credit) reduction in the program director's teaching load. This release requires backfill for the affected department. The Political Science Department and the CAS Dean have agreed to this arrangement. The Office of International Programs (OIP) has agreed to support backfill for a one-course reduction in Professor Koehn's upper-division teaching responsibilities to support academic advising and program leadership. The CAS Dean has agreed to backfill the lower-division course that Professor Koehn will replace with the required core GPH course PSCI 227, Issues in Global Health.

An extra-compensation stipend for the program director and advisor is needed to attract highly qualified faculty participation given the level of additional responsibility involved. OIP has agreed to provide the requisite stipend.

These funds will be provided annually through the Office of International Programs and will have no fiscal impact on The University of Montana's operating budget:
Backfill for the Program Director (3-credit upper-div course per annum); salary & fringe: $6900
Program Director's stipend (including low-risk fringe): $3550

Total: $10,450

Administrative operation of the minor, including maintaining evaluation data and other records in advance of program review as well as a database of current and graduated minors; budgeting; supervision of interns and work-study students; computer and internet access; required core course support; and communicating with program faculty and students requires roughly 10 hours per week. These resources will be provided the GPH program director through staff-time assignments and practicum service within the MPH program of the College of Health Professions and Biomedical Sciences.

A small operating budget of $1400 is required to cover costs of copying, printing fliers, mailing, the annual reception, and a work-study student. These funds will be provided annually through the College of Education and Human Sciences (HHP Department), which will also make office space available.

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

The program will use a number of methodologies in order to assess the effectiveness of the Global Public Health minor based on the requirements of the institutional program review process. Each student graduating with the minor will fill out an exit interview form requesting information on the strengths and weaknesses students found in the program as well as which classes they found to be most useful. In addition, the exit interview form will ask students about the effectiveness of advising available through the Global Public Health minor. Efforts will be made to keep in contact with graduates so that longitudinal data on program utility and career progress can be secured.

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Further, instructors will submit student evaluations for all core classes taught in the Global Public Health minor. In addition to student evaluations, faculty will receive a yearly assessment form requesting information regarding their research, creative activities, recent achievements, service activities, and methods of keeping up with the trends in Global Public Health as well as examples of assessment tools used to evaluate student knowledge. Furthermore, the annual faculty assessment form will include a request for information regarding their oversight of student participation in research and internship opportunities. The data collected through the student exit interview, student evaluations, faculty IPRs, and the faculty assessment form will provide a solid foundation for yearly reviews of program effectiveness as well as for the institutional reviews required every five years.

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

The genesis of this proposal to establish a minor in Global Public Health can be traced to deliberations of the SPCHS Steering Committee. At an early fall 2010 meeting of the SPCHS Steering Committee, Professor Peter Koehn was asked to chair and convene a planning committee to develop a proposal for a minor in Global Public Health. The SPCHS Steering Committee made this request in response to outcomes reached at the MPH program retreat held September 16 and 17, 2010 at Montana Island Lodge. Participants at the retreat identified the establishment of a minor in Global Public Health as a priority for The University of Montana campus based on growing widespread interest in the field, strategic planning considerations, and an abundance of existing UM resources (faculty, courses, and administrative support).[26] Professor Koehn convened the first meeting of the planning committee in November 2010. The committee included eleven faculty members, four staff members, and two students from across campus representing a wide range of disciplines and interests. They are:

Faculty
Peter Koehn (C), Ph.D., Professor, Political Science
Annie Belcourt, Ph.D., Assistant Professor, Pharmacy/SPCHS
Laura Dybdal, Ph.D., Professor, Health and Human Performance
Amanda Golbeck, Ph.D., Professor, SPCHS
Bill Granath, Ph.D., Professor of Biological Sciences
Kimber Haddix, Ph.D., Associate Professor, Anthropology
Craig Molgaard, Ph.D., M.P.H., Professor and Chair, SPCHS
Mark Pershouse, Ph.D., Associate Professor, Biomedical and Pharmaceutical Sciences
Gilbert Quintero, Ph.D., Associate Professor, Anthropology
Annie Sondag, Ph.D., Professor, Health and Human Performance
Tony Ward, Ph.D., Research Assistant Professor, Biomedical and Pharmaceutical Sciences

Staff
Annē Linn, MPH, Continuing Education Program Coordinator, Western MT AHEC
Jamie Ryan Lockman, MA, Administrative Associate/Program Coordinator, SPCHS

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[26] SPCHS Strategic Planning Meeting Notes – final version, January 24, 2011.

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Tenly Snow, UM Peace Corps Representative
Delyla Wilson, Program Coordinator, International Programs

Students
Kayla Hoggatt, Political Science Undergraduate Student Assistant
Seamus McCulloch, Political Science Undergraduate Student Assistant

The planning committee formed subcommittees for two areas of inquiry: (1) institutional fit/needs assessment and (2) curriculum to develop focus and identify existing courses suitable to each area. Subcommittee members met every three to four weeks from November 2010 through February 2011. After that, members met as committee of the whole. Several undergraduate and graduate students read the proposal and offered input. Additionally, the planning committee surveyed over 1000 undergraduate students to determine the level of interest on campus for such a minor.

Dr. Koehn consulted with Kearsley Stewart, Ph.D., Senior Lecturer in Medical Anthropology at Northwestern University (NWU) to understand the growing demand and to gain curriculum ideas for minor programs in global public health. NWU's minor in global health is now its most popular undergraduate minor.

Committee members also researched other programs and professional association findings. Information on existing and developing UM partnerships focusing on global outreach has been pursued for the development of potential internships, as well as anticipated knowledge, skills, training, and career opportunities that would be useful for graduates of this program. This information indicated that students, the public health workforce, and communities on a local, tribal, state, national, and global level will benefit from this minor due to the enhanced interdisciplinary knowledge and skills provided. Global Public Health was shown to be a career path in itself, with opportunities in health professions, government health departments, and on funded global health projects. Additionally, the skills and knowledge gained through the study of global public health provide the background for the many different career paths or fields of advanced study that require nuanced understanding of the issues determining public health on a global level.

The curriculum subcommittee developed a list of core and content courses based on a review of the most current (AY 2010-11) UM catalog and interviews with faculty and students. All faculty teaching courses identified as core courses for the minor were contacted to obtain permission to include their course in the minor and to obtain a copy of their syllabi. The committee used catalog descriptions to identify, review, and select content courses. The committee secured approval of the proposal, along with the proposed core and content curriculum, from involved departments and deans.

The planning committee pursued and identified essential resource commitments with program heads, department chairs, deans, and the Associate Provost for International Programs.

The planning committee agreed that a core faculty member should serve as program director and that the term should be three years (renewable by core GPH faculty for one additional three-year term). The planning committee designated Peter Koehn as the initial GPH program director.

Given the interdisciplinary, unattached, and cross-unit structure of the GPH minor, the program director will report to the academic deans where core faculty are located – currently Arts and Sciences, Education, and Health Sciences – and to the Provost. An annual report detailing program accomplishments and needs will be submitted to these deans and to the Provost. The Associate Provost for International Programs will be copied on the annual report, frequently consulted, and budget accounting will be submitted to the International

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Programs office.

The planning committee decided that the GPH minor program should have an External Advisory Committee. The recommended initial composition of the External Advisory Committee would include Tom Bulger (MD), Peggy Schlesinger (MD), Tom Schwan (interest confirmed), Michele Sare (MSU nursing program, interest confirmed), Joe Knapp (MD), Brian Sippy (MD; interest confirmed), Sandy Shepard (MD, interest confirmed), and David Cate, (Director, Missoula Medical Aid). These individuals will be formally invited to serve following regents approval of the GPH minor.

The final result is this proposal for an interdisciplinary minor in Global Public Health that integrates multiple disciplines. Accrediting agency review and approval is not appropriate for this proposed program.

This proposal was reviewed and approved by the affected departments as follows:

Department Name: Political Science   **Date**: 8 May 2011

Department Name: Public Health   **Date:** 8 May 2011

Department Name: Health and Human Performance   **Date:** 8 May 2011

In addition the deans of the following Schools/Colleges reviewed and approved the proposal:

Dean of: College of Arts and Sciences   **Date:** May 2011

Dean of: College of Education and Human Sciences   **Date:** May 2011

Dean of: College of Health Professions and Biomedical Sciences **Date:** May 2011

The proposal was reviewed and approved by the Faculty Senate at the University of Montana:

                                                            Date: **Nov/Dec** 2011

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

Appendix A

Student's interest in GPH minor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very interested	115	11.4	11.4	11.4
	some interest	331	32.7	32.7	44.1
	not interested	473	46.7	46.7	90.8
	no ans, but friend interested	93	9.2	9.2	100.0
	Total	1012	100.0	100.0	

Student's year in class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Frosh	454	44.9	44.9	44.9
	Sophomore	286	28.3	28.3	73.1
	junior	185	18.3	18.3	91.4
	senior	83	8.2	8.2	99.6
	not indicated	4	.4	.4	100.0
	Total	1012	100.0	100.0	

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Student's major collapsed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Social Sciences	35	3.5	3.5	3.5
	Political Science	35	3.5	3.5	6.9
	General	131	12.9	12.9	19.9
	Other Programs	64	6.3	6.3	26.2
	Arts and Humanities	32	3.2	3.2	29.3
	Sciences	95	9.4	9.4	38.7
	Psychology	44	4.3	4.3	43.1
	Education	51	5.0	5.0	48.1
	Business	50	4.9	4.9	53.1
	Sociology	37	3.7	3.7	56.7
	Social Work	35	3.5	3.5	60.2
	Journalism	35	3.5	3.5	63.6
	Pharmacy	83	8.2	8.2	71.8
	Biology	55	5.4	5.4	77.3
	HHP	114	11.3	11.3	88.5
	Nursing	74	7.3	7.3	95.8
	Chemistry	16	1.6	1.6	97.4
	Pre-Med	9	.9	.9	98.3
	Anthropology	17	1.7	1.7	100.0
	Total	1012	100.0	100.0	

Student's year in class * Student's interest in GPH minor Crosstabulation

| | | | Student's interest in GPH minor | | | | |
			very interested	some interest	not interested	no ans, but friend interested	Total
Student's year in class	Frosh	Count	40	154	218	42	454
		% within Student's year in class	8.9%	33.9%	48.0%	9.2%	100.0%
	Sophomore	Count	41	95	121	29	286
		% within Student's year in class	14.3%	33.2%	42.3%	10.1%	100.0%
	junior	Count	24	55	92	14	185
		% within Student's year in class	13.0%	29.7%	49.7%	7.6%	100.0%
	senior	Count	9	26	40	8	83
		% within Student's year in class	10.8%	31.3%	48.2%	9.6%	100.0%
	not indicated	Count	1	1	2	0	4
		% within Student's year in class	25.0%	25.0%	50.0%	.0%	100.0%
Total	Count		115	331	473	93	1012
	% within Student's year in class		11.4%	32.8%	46.7%	9.1%	100.0%

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Student's major collapsed * Student's interest in GPH minor Crosstabulation

Majors		Student's interest in GPH minor				Total
		very interested	some interest	not interested	no ans, but friend interested	
social sciences	Count	1	6	27	1	35
	% within Stdent's major collapsed	2.9%	17.1%	77.1%	2.9%	100.0%
political science	Count	5	18	7	5	35
	% within Stdent's major collapsed	14.3%	51.4%	20.0%	14.3%	100.0%
general	Count	10	44	64	13	131
	% within Stdent's major collapsed	7.6%	33.6%	48.9%	9.9%	100.0%
other professional programs	Count	5	13	37	9	64
	% within Stdent's major collapsed	7.8%	20.3%	57.8%	14.1%	100.0%
arts and humanities	Count	1	14	12	5	32
	% within Stdent's major collapsed	3.1%	43.8%	37.5%	15.6%	100.0%
sciences	Count	8	27	47	13	95
	% within Stdent's major collapsed	8.4%	28.4%	49.5%	13.7%	100.0%
psychology	Count	5	19	15	5	44
	% within Stdent's major collapsed	11.4%	43.2%	34.0%	11.4%	100.0%
education	Count	3	10	35	3	51
	% within Stdent's major collapsed	6.0%	20.0%	70.0%	4.0%	100.0%
business	Count	0	9	37	4	50
	% within Stdent's major collapsed	.0%	18.0%	74.0%	8.0%	100.0%
sociology	Count	2	14	15	6	37
	% within Stdent's major collapsed	5.4%	37.8%	40.5%	16.3%	100.0%

Majors		very interested	some interest	not interested	no ans, but friend interested	Total
social work	Count	9	9	14	3	35
	% within Stdent's major collapsed	25.7%	25.7%	40.0%	8.6%	100.0%
journalism	Count	2	12	19	2	35
	% within Stdent's major collapsed	5.7%	34.3%	54.3%	5.7%	100.0%
pharmacy	Count	10	28	41	4	83
	% within Stdent's major collapsed	12.5%	33.7%	50.6%	4.8%	100.0%
biology	Count	7	17	27	4	55
	% within Stdent's major collapsed	12.7%	30.9%	49.1%	7.3%	100.0%
HHP	Count	19	48	41	6	114
	% within Stdent's major collapsed	16.7%	42.1%	36.0%	5.2%	100.0%
nursing	Count	22	27	21	4	74
	% within Stdent's major collapsed	29.7%	36.5%	28.4%	5.4%	100.0%
chemistry	Count	2	6	6	2	16
	% within Stdent's major collapsed	12.5%	37.5%	37.5%	12.5%	100.0%
pre-med	Count	2	2	3	2	9
	% within Stdent's major collapsed	22.2%	22.2%	33.4%	22.2%	100.0%
anthropology	Count	2	8	5	2	17
	% within Stdent's major collapsed	11.8%	47.0%	29.4%	11.8%	100.0%
Total	Count	115	331	473	93	1012
	% within Stdent's major collapsed	11.4%	32.7%	46.7%	9.1%	100.0%

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Discipline	Core	Content
Anthropology (ANTY)	**U 349 (ANTH 329) Social Change in Non-Western Societies 3 cr.** Offered intermittently. Prereq., ANTY 220S (ANTH 220S) or consent of instr. Study of the processes of change, modernization and development. **UG 426 (ANTH 444) Culture, Health and Healing 3 cr.** Offered autumn. Cross-cultural comparisons of theories and concepts and health and illness. Examination of the impact of these concepts upon health practices and treatment of disease around the world.	**U 227 (ANTH 201) Human Sexuality 3 cr.** Offered autumn. Same as WGS 201. Biological, behavioral, and cross-cultural aspects of human sexuality to help students place their own sexuality and that of others in a broader perspective. Includes sexual anatomy, physiology, development, reproduction, diseases, sex determination, as well as gender development and current issues. **U 333 (ANTH 343) Culture and Population 3 cr.** Offered autumn. The relationship between population processes and culture to the human condition; survey data, methodologies, theories of demographic and culture change. **U 391 (ANTH 395) Special Topics Variable cr.** (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. (Haddix) **UG 402 (ANTH 448) Quantitative Ethnographic Field Methods 3 cr.** Offered autumn odd-numbered years. This course is designed to enhance student understanding of field methods that generate quantitative data describing human behavior. The toolkit of a student completing this course will include knowledge of basic methods that will get you from observing behavior to discussing your research and findings in a professional manner in oral or written formats. **UG 418 (ANTH 418) Ecology and Genetic Variation in Human Populations 3 cr.** Offered autumn even-numbered years. Prereq., ANTY 210N (ANTH 210N) Human genetic variation examined from an ecological perspective. Emphasis on the role of infectious disease as a selective factor in human evolution and exploration of the implications of these associations for human genetic variation. **UG 422 (ANTH 422) Mind, Culture & Society 3 cr.** Offered autumn even-numbered years. Prereq., ANTY 220S (ANTH 220S) or consent of instr. The study of socialization, personality, cognition, and mental health cross-culturally. **UG 431 (ANTH 431) Ethnographic Field Methods 3 cr.** Offered spring. Prereq., ANTY 220S, 401 (ANTH 220S, 401), or consent of instr. Introduction to socio-cultural anthropological methods including participant observation, interviewing and narrative techniques and analysis of qualitative data. **UG 435 (ANTH 445) Drugs, Culture and Society 3 cr.** Offered intermittently. Drug use in a cross-cultural perspective. The role of drugs in cultural expression and social interaction.

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Discipline	Core	Content
		Examination of the prehistory of drug use, drug use in traditional non-Western and Western societies, and drug use in the context of global sociocultural change. **UG 491 (ANTH 495) Special Topics Variable cr.** (R-9) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. (Haddix and Bulger)
Biology (BIOL)		**U 130N Evolution and Society 3 cr.** Offered spring. A focus on relationships between evolutionary biology and important social issues, including the evolution of drug-resistant diseases, the construction and use of genetically-modified organism, human evolutionary biology, and experimental laboratory evolution.
Biology - Human (BIOH)		**U 112 (BIOL 112) Introduction to Human Form and Function I 3 cr.** Offered autumn. Explores the fundamentals of structure and function at basic cellular and tissue levels, in addition to the anatomy and physiology of the integumentary, musculoskeletal, and nervous systems. **U 113 (BIOL 113) Introduction to Human Form and Function II 3 cr.** Offered spring. Explores the fundamental structures and functions of the endocrine, cardiovascular, respiratory, digestive, urinary and reproductive systems. **UG 462 (BIOL 460) Principles of Medical Physiology 3 cr.** Offered spring. Prereq., C (2.00) or better in BIOH 365, 370 (BIOL 312, 313), one year college chemistry or consent of instr. An advanced course in human physiology for students preparing for careers in health care.
Biology - Microbiology (BIOM)	**U 227 Epidemiology of Vector-Borne and Parasitic Diseases 3 cr.** Offered spring. Prereq., college level general biology class is recommended but not required. An introduction to the major groups of parasites and arthropod-borne pathogens infecting humans worldwide. The class will stress the biology, transmission dynamics, prevention and control of these organisms. **UG 400 (MICB 302) Medical Microbiology 3 cr.** Offered autumn. Microbial structure and functions, pathogenic microorganisms, virology, immunology. Credit not allowed toward a major in microbiology. **UG 427 (BIOL 400) General Parasitology 2 cr.**Offered autumn. Prereq., BIOB 275 (BIOL 223). Parasitism as a biological phenomenon, origin of parasitism, adaptations and life cycles, parasite morphology, fine structure, physiology, parasites and their environment.	**U 250N (BIOL 106N) Microbiology for Health Sciences 3 cr.** Offered spring. Infectious diseases, including concepts of virulence, resistance, prevention and control of microbial diseases in the individual and in the community. If laboratory experience is desired, the student may enroll concurrently in BIOM 251 (BIOL 107). Credit not allowed toward a major in microbiology. **UG 402 (MICB 412) Medical Bacteriology and Mycology 3 cr.** Offered spring. Prereq., BIOM 360, 361 (MICB 300, 301). A study of the pathogenic bacteria and fungi and the diseases they produce. **UG 435 (420 Virology) 3 cr.** Offered spring. Prereq., BIOB 410 (MICB 410). The general nature of viruses, with emphasis on the molecular biology of animal and human viruses.
Communication Studies (COMM)	**UG 425 Communication in Health Organizations, 3 cr.** Survey course provides an overview of key issues at the intersection of health communication and organizational communication by considering communication processes that	**U 251X International and Development Communication 3 cr.** Offered yearly. International Communication is concerned with information exchange across national borders while Development Communication focuses on the historical, current, and

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Discipline	Core	Content
	occur in a number of distinct contexts including health care organizations and occupational safety. Introduces theory, research, and contemporary concerns in the area of health communication.	prospective role of communication in social change, improving living conditions, and enhancing life prospects-mainly in developing countries. **UG 451S Intercultural Communication 3 cr.** Offered autumn and spring. Communication principles and processes in cross-cultural environments. Non-Western cultures are emphasized by contrasting them to Western communication norms. **UG 485 Communication and Health** 3 cr. This course focuses on how communication in social relationships facilitates the maintenance, enhancement, and deterioration of human health and well-being across the lifespan. Topics include the impact of social support, emotional expression and disclosure, affection expressions, gratitude, forgiveness, love, humor, and conflict on health outcomes. Discussions will be contextualized with historical, cultural, and gendered perspectives on health.
Economics (ECNS)	**UG 310 (ECON 320) Health Economics 3 cr.** Offered intermittently. Prereq., economics course. Survey of market forces that govern the production and consumption of medical care in the U.S. market; uncertainty, asymmetric information, and concentrations of market power resulting in inefficient outcomes. Topics include cost escalations, role of medical insurance, and problems of an aging population.	**UG 217X (ECON 350) Economic Development 3 cr.** Offered intermittently. Prereq., ECNS 201S, 202S (ECON 111S, 112S). Study of the processes of economic growth and development in the less developed world.
Health and Human Performance (HHP)	**U 330 Overview of Health Education and Health Promotion 3 cr.** Offered spring. Prereq., HHP 181. History, philosophy, and theory related to health education and health promotion. Includes the application of health promotion strategies to wellness programs and community health programs. **UG 488 Program Planning for Community Health 3 cr.** Offered Spring, Prereq., 330. Overview of the issues, approaches, and techniques community health educators and professionals utilize in planning and implementing programs to assist communities in improving health status and reducing risky behaviors and their determinants.	**U 236N Nutrition 3 cr.** Offered autumn and spring. The principles of science as applied to current concepts and controversies in the field of human nutrition. **UG 415 Health and the Mind/Body/Spirit Relationship 3 cr.** Offered spring even-numbered years. Prereq., Junior standing. Overview of how the mind/body/spirit relationship affects health. Examination of current research exploring how thoughts, emotions, attitudes, and beliefs influence and mediate health outcome. Exploration of the theoretical applications of mind/body/spirit in health and healing used in contemporary society.
Health Sciences (HS)	**UG 430 Health Aspects of Aging 3 cr.** Offered spring. Same as HHP and SW 430. Overview of the health aspects of aging in the United States including biological theories of aging, normal physiological changes associated with aging systems, common pathological problems associated with aging, cultural and ethnic differences in the health of elders, health promotion and healthy aging, and the health care continuum of care for older persons.	

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Discipline	Core	Content
Native American Studies (NASX)		**U 304E (NAS 301E) Native American Beliefs & Philosophy 3 cr.** Offered Autumn and Spring. Same as RLST 300 (RELS 301E). A study of selected ethical systems; origins, world views; religious beliefs and the way they have been affected by western civilization. **U 303E (NAS 303E) Ecological Perspectives in Native American Traditions 3 cr.** Offered Autumn and Spring. An examination of Native American environmental ethics and tribal and historical and contemporary use of physical environmental resources. **U 388 (NAS 388) Native American Health and Healing 3 cr.** Offered alternate years. Examination of traditional and contemporary uses of medicine in Native American societies. Issues covered will include current health conditions of American Indians, and the relationship from a cultural perspective on health, healing and medicine.
Nutrition (NUTR)		**U 221N (HHP 236N) Basic Human Nutrition 3 cr.** Offered autumn and spring. The principles of science as applied to current concepts and controversies in the field of human nutrition.
Pharmacy (PHAR)	**U 320 American Indian Health Issues 2 cr.** Offered spring. Same as HS 320. An overview of the health issues, health care delivery and payment that affect American Indians. (combined with PHAR 395). **U 395 Native American Medicine 1 cr.** Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. (Combined with PHAR 320)	
Philosophy (PHL)	**U 321E (PHIL 421E/PHL 421E) Philosophy and Biomedical Ethics 3 cr.** Offered intermittently. Prereq., upper-division standing or consent of instr. An examination of ethical problems raised by the practice of medicine and by recent developments in medically-related biological sciences.	
Political Science (PSCI)	**U 227 Introduction to Global Health Issues 3 cr.** Issues in Global Health treats current public-health challenges in industrialized and low-income countries, including chronic and infectious illnesses. Issues covered will include HIV/AIDS, the obesity epidemic, the "fatal flow of expertise," transnational and indigenous health care (including medical tourism), migrant health care, conflict and health, quarantines and isolation, optimism/fatalism, and academic preparation for emerging transnational challenges. In comparative perspective, the course will explore the individual, environmental, resource, and governance context of public-health policy, interventions, and outcomes and address questions of human rights and ethics, health equity and justice, regional problematics and contributors, and the concerns of vulnerable populations along with possibilities for health advocacy. Through individual and group projects, students will prepare to work collaboratively with future transnational partners.	**U 324 Sustainable Climate Policies: China and USA 3 cr.** Offered summers. Prereq., CCS 203 or consent of instructor. Explores historic, current, and future greenhouse-gas emissions of the United States and China, reasons why both are the two largest CO_2 emitters, and prevailing national and subnational government policies and nongovernmental actions that affect emissions mitigation and adaptation. Health implications figure prominently. **UG 326 (PSC 326) Politics of Africa 3 cr.** Offered autumn. Prereq., junior standing or consent of instr. Development of the political systems of sub-Saharan Africa. Analysis of the interaction between African and Western social, political, and economic forces. Special focus on HIV/AIDS and other health issues. **UG 431 Politics of Global Migration 3 cr.** Prereq., junior standing or consent of instr. Exploration of the elective and forced migration of peoples within countries and across national boundaries. Geographical coverage includes Asia, North and Central America,

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Discipline	Core	Content
	G 463 Development Administration 3 cr. Offered autumn. Prereq., junior standing or consent of instr. Study of the functions and processes of public administration in the Third World. Focus on alleviating poverty and underdevelopment. Includes project design and development planning activities.	Africa, and Europe. Attention to policy and gender issues surrounding economic and political migration. **U 348 Multicultural Politics 3 cr.** Offered intermittently. Examines the politics of diversity in the U.S., including national community, identity, citizenship, immigration, assimilation, and racial issues such as voting rights, affirmative action, segregation and integration, and public opinion.
Pscychology (PSYX)		**U 362 (PSYCH 352) Multicultural Psychology 3 cr.** Offered autumn even numbered years. Current theories and research on culture, race, and ethnicity, and how the sociocultural context influences psychological processes.
Public Health (PUBH)	**U 102– History and Theory of Epidemiology 3 cr**. Offered spring. This course covers the development and evolution of epidemiology, the basic science of public health. Major schools of epidemiology from both the Italian and English traditions will be compared and contrasted, and basic concepts and terminology will be introduced. Online. **G 515 Public Health Genetics 3 cr.** Offered autumn. Basic principles of genetics and genomics, application to public health practices and research. Includes issues in public health genetics such as informed consent, screening for genetic susceptibility, and ethical, legal and social implications. Online.	**UG 4XX/595 – Global Health** 3 cr. Global Health is designed to introduce students to the principles of International Health; and to assist students in obtaining an understanding of the practice of International Health. This course will examine: the Definition of International Health, History and Progress of Disease, and the Role of the Public Health in promoting health and preventing disease in the international arena.
Social Work (S W)	**UG 465 Social Work in a Global Context 3 cr.** Offered spring even-numbered years. Prereq., upper-division or graduate standing. Examination of globalization, human rights, poverty, international aid, and gender issues; their relationship to social work and social justice, and strategies for action.	**UG 300 Human Behavior and Social Environment 4 cr.** Offered autumn and spring. Prereq., SW 200. Prereq. or coreq., PSYX 230S (PSYC 240S), junior standing. Using the ecological-social systems framework, the integration of knowledge and concepts from the social and behavioral sciences for analysis and assessment of problems and issues relevant to professional social work practice. **UG 310 Social Welfare Policy and Services 3 cr.** Offered autumn and spring. Prereq., SW 200. Social welfare history, program planning and analysis with review of selected policies on the national level. Includes international comparisons. Upper-division writing course. **U 323 Women and Social Action in the Americas 3 cr.** Offered autumn odd-numbered years. Prereq., one of SW 100, SOCI 101S (SOC 110S), or ANTH 101H or consent of instr. Same as WS 323. Focus on women's experiences of and contributions to social change in North, South and Central America in the mid to late-20th century. Through case studies, testimonials, discussions with activists and Internet connections examine social constructions of gender, compare forms of social action in diverse cultural, political and historical contexts, link practice to theories of social participation, and reflect on lessons learned from women's experiences. **U 324 Gender and the Politics of Welfare 3 cr.** Offered autumn even-numbered years. Prereq., SW 100 or consent of instr. Same as WS 324. Exploration of the relationship

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Discipline	Core	Content
		between gender ideologies and the development of social welfare policies. Examination of historic and contemporary social welfare policies, practices and debates in the United States through a gender lens.
		UG 410E Ethics and the Helping Professions 3 cr. Offered spring. Prereq., completion of twelve credits in social work or a related discipline or consent of instructor. Analysis of specific ethical dilemmas from personal, professional and policy perspectives. Focus on ethical issues common to the helping professions and utilizing codes of ethics as guides to decision-making. The relationship between professional ethical issues and the development of social policy.
		UG 455S Social Gerontology 3 cr. Offered autumn. Examination of the field of social gerontology, including an examination of the major bio/psycho/social/cultural/spiritual theories of aging, the service system, social and health issues, family and care giving dynamics, social policy, and end of life concerns.
		UG 475 Death, Dying and Grief 3 cr. Offered intermittently. Examination of death, dying and grief from an ecological perspective, focusing on the processes of dying and theories of grief. Emphasis on physical, social, psychological, spiritual, and cultural influences that surround death and grief. Consideration of cultural norms, attitudes toward death, medical, legal and ethical issues of dying. Focus on normal and complicated grief.
Sociology (SOCI)	**U 355 Population and Society 3 cr.** Offered spring. Prereq., SOCI 101S (SOC 110S). An introduction to contemporary world population problems including population growth, trafficking, fertility, mortality, population policy, and the relationship between population and environment. Emphasizes gender issues in international context.	**UG 332 (SOC 300) Sociology of the Family 3 cr.** Offered autumn. Prereq., SOCI 101S (SOC 110S). Same as WGS 300. Historical, cross-cultural, and analytical study of the family. Emphasis on ideology, social structures, and agency affecting family composition and roles.

UG 371 (SOC 370S) Social Change and Global Development 3 cr. Offered autumn even-numbered years. Prereq., SOCI 101S (SOC 110S). Same as WGS 360. Introduction to the global roots and dimensions of social change. Broad perspective on the forces that have transformed how "development" has shifted from a process of economic growth and welfare assistance organized nationally to a process of globally organized economic, political and cultural change.

UG 443 (SOC 322) Sociology of Poverty 3 cr. Offered autumn. Prereq., SOCI 101S (SOC 110S). An examination of the roots, prevalence and social characteristics of the poor. Analysis of policies intended to end poverty. |
| **Women's and Gender Studies (WGS)** | | **U 263S Introduction to Women's and Gender Studies 3 cr.** Offered autumn. Broad overview of gender and women's issues from a social science perspective. Relevant topics related to the sociological and psychological aspects of gender across culture are explored, including masculinity, femininity, violence, reproductive health, cultural diversity in the expression of gender, issues in sexual orientation, and media contributions to these issues. |

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Course Number	Course Title	Current Instructor
Required Core Courses		
BIOM 227	Epidemiology of Vector-Borne and Parasitic Diseases	Willard Granath, Ph.D., & Tom Schwan, Ph.D.
PSCI 227	Introduction to Global Health Issues	Peter Koehn, Ph.D.
Core Course Options		
ANTY 349	Social Change in Non-Western Societies	Kimber Haddix McKay, Ph.D.
ANTY 426	Culture, Health, and Healing	Gilbert Quintero, Ph.D.
BIOM 400	Medical Microbiology	Ralph C. Judd, Ph.D.
BIOM 427	General Parasitology	Willard Granath, Ph.D.
COMM 425	Communication in Health Organizations	Joel Iverson, Ph.D.
ECNS 310	Health Economics	Ranjan Shrestha, Ph.D.
HHP 330	Overview of Health Education and Health Promotion	K. Annie Sondag, Ph.D.
HHP 488	Program Planning for Community Health	Laura Dybdal, Ph.D.
HS 430	Health Aspects of Aging	Ann K. Williams, Ph.D.
PHAR 320	American Indian Health Issues	Annie Belcourt, Ph.D.
PHAR 395	Native American Medicine	Rustem Meddora, Ph.D.
PHL 321E	Ethical Issues in Medicine	Mark J. Hanson, Ph.D.
PSCI 463	Development Administration	Peter Koehn, Ph.D.
PUBH 102	History and Theory of Epidemiology	Craig Molgaard, Ph.D., M.P.H.
PUBH 515	Public Health Genetics	Elizabeth Putnam, Ph.D.
SW 465	Social Work in a Global Context	Janet Finn, Ph.D.
SOCI 355	Population and Society	Teresa Sobieszczyck, Ph.D.

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Identified Faculty Expertise at The University of Montana

Anthropology (ANTH)
Kimber Haddix McKay, Ph.D., Associate Professor, University of California, Davis, 1998
Gilbert Quintero, Ph.D., Associate Professor, University of Arizona, 1997

Division of Biological Sciences (DBS)
Bill Granath, Ph.D., Professor, Wake Forest University, 1982
Ralph C. Judd, Ph.D., Professor, The University of Montana, 1979
Mike Minnick, Ph.D., Professor, Washington State University, 1987

Climate Change Studies (CCS) (College of Forestry and Conservation)
Dr. Dane Scott, Director, Center of Ethics, Associate Professor, Vanderbilt University, 1999

Department of Communication Studies (COMM)
Steve Schwarze, Ph.D., Associate Professor, The University of Iowa, 1999 (Chair)
Steve Yoshimura, Ph.D., Associate Professor, Communication Studies, Arizona State University, 2002
Joel Iverson, Ph.D., Associate Professor, Communication Studies, Arizona State University, 2003
Phyllis Ngai, Ed.D., University of Montana, 2004, Adjunct Assistant Professor

Economics (ECNS)
Ranjan Shrestha, Ph.D., Assistant Professor, Ohio State University, 2007

Environmental Studies (EVST)
Daniel Spencer, Ph.D., Master of Divinity, Associate Professor, Union Theological Seminary, New York, 1994, 1983

Health and Human Performance (HHP)
Laura Dybdal, Ph.D., Professor, University of New Mexico, 1996
K. Ann Sondag, Ph.D., Professor, Southern Illinois, Carbondale, 1988

Native American Studies (NAS)
Kate Shanley, Ph.D., Professor, Ph.D., University of Michigan, 1987

Pharmacy (PHAR)
Dr. Rustem Medora, Ph.D., Emeritus Professor, University of Rhode Island, 1965
Dr. Elizabeth Putnam, Ph.D., Associate Professor, Ph.D., University of Texas-Houston, 1989

Philosophy
Mark Hanson, Ph.D., Lecturer, University of Virginia, 1993

Physical Therapy
Ann Williams, Ph.D., Emeritus Professor, Portland State University, 1985; P.T., Montana

Political Science (PSCI)
Peter Koehn, Ph.D., Professor, University of Colorado, 1973
Robert P. Saldin, Ph.D., Assistant Professor, University of Virginia, 2008

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Psychology (PSYCH)

Gyda Swaney, Ph.D., Associate Professor, University of Montana, 1997

Public Health (PUBH)

Craig Molgaard, Ph.D., Professor and Chair, University of California at Berkeley, 1979
   (Anthropology/Health and Medical Sciences); M.P.H. University of California at Berkeley, 1982 (Epidemiology);
   M.A., University of California at Berkeley, 1976 (Anthropology) (Chair)
Annie Belcourt, Ph.D., Assistant Professor, The University of Montana, 2006 (Pharmacy Practice and
   School of Public and Community Health Sciences)
Tony Ward, Ph.D., Assistant Professor, The University of Montana, 2001 (Biomedical and
   Pharmaceutical Sciences and School of Public and Community Health Sciences)

Sociology (SOCI)

Teresa R. Sobieszczyk, Ph.D., Associate Professor, Cornell University, 2000

Social Work (SW)

Janet Finn, Ph.D., Professor, University of Michigan, 1995

Other

Tom Bulger, MD, Davidson Honors College

Lisa Pascopella, Ph.D., Albert Einstein College of Medicine, 1993; M.P.H., University of California at Berkeley, 1999 (Research Administrator and Faculty, FJ Curry National Tuberculosis Center, University of California-San Francisco)

Tom G. Schwan, Ph.D., University of California at Berkeley, 1983 (Chief and Senior Investigator, Laboratory of Zoonotic Pathogens, Rocky Mountain Laboratories, National Institute of Allergies and Infectious Diseases, National Institutes of Health).

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January 19-20, 2012

ITEM 154-1006-R0112

Minor in Arabic Studies in the Department of Anthropology and Center for Central and Southwest Asian Studies; The University of Montana–Missoula

THAT

In accordance with Montana University system Policy, The University of Montana–Missoula seeks approval to create a Minor in Arabic Studies.

EXPLANATION

Arabic is a Semitic language that is spoken by approximately 300 million people, and it is also the liturgical language of 1.4 billion Muslims worldwide. Arabic has been identified by the US government as a "critical language" to US national security and is currently offered in more than 170 higher institutions in the US. In addition, undergraduates at The University of Montana–Missoula have requested that Arabic be offered as a minor to provide those students a credential demonstrating their proficiency in the language and knowledge of culture. In Spring 2009, petitions gathered more than 400 signatures at rallies, and more than 150 letters of support from alumni were sent to ASUM in support of creating a minor in Arabic studies. Therefore, The University of Montana requests permission to formalize its current offerings in Arabic language and culture as a Minor in Arabic Studies program.

ATTACHMENTS

Level II Request Form
Curriculum Proposal

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **154-1006-R0112**   Meeting Date: **January 19-20, 2012**

Institution: **The University of Montana - Missoula**   CIP Code: **16.1101**

Program Title: **Minor in Arabic Studies**

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for __all__ that apply and __submit with completed Curriculum Proposals Form__):*

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.)

 X **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; and

    4. 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 seeks permission to create a Minor in Arabic Studies. The minor will be offered through the Department of Anthropology in collaboration with the Center for Central and Southwest Asian Studies. The minor will provide a credential for students who pursue proficiency in Arabic and knowledge of Arab cultures.

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CURRICULUM PROPOSALS

1. Overview

The University of Montana-Missoula requests permission to create a Minor in Arabic Studies based on existing courses.

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

The University of Montana-Missoula requests approval to establish a Minor in Arabic Studies based on currently offered courses. The minor will give students the opportunity to develop the linguistic skills and gain the cultural knowledge that are necessary to communicate with speakers of Arabic. Students will become acquainted with the cultures, peoples, history, and political contexts of the 22 Arabic-speaking countries in Asia and Africa. The Minor in Arabic Studies is proposed by the Department of Anthropology (its academic base) and administered through the Central and Southwest Asian Studies Center (its administrative base).

3. Need

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

Arabic is a Semitic language that is spoken by approximately 300 million people. It is also the liturgical language of 1.4 billion Muslims worldwide. Arabic instruction was introduced at Harvard University in the mid-17th century; at Yale in 1700; at Dartmouth and Andover in 1807; and at Princeton Theological Seminary in 1822. Arabic has been identified by the US government as a "critical language" to US national security and is currently offered in more than 170 institutions of higher learning in the US. Enrollment in Arabic classes in US higher education has been consistently increasing since the 1960s. Below are statistics showing this increase based on data collected by the Modern Language Association.

Selected Year	Number of College Students
1960	541
1970	1,333
1980	3,466
1990	3,475
1995	4,444
1998	5,505
2002	10,584 – with an increase of 92.3% from 1998
2006	23,974 – with an increase of 126.5% from 2002

The University of Montana-Missoula (UM-M) has been offering courses in Arabic for more than a decade. Six stable Arabic language courses are currently offered: ARAB 101, 102, 201, 202, 301, and 302. ARAB 101 and 102 each have two sections. Three culture courses are offered: ARAB 391 (The Arab World), ARAB 307 (Model Arab League: Delegates) and ARAB 317 (Model Arab League: Staff). ARAB 392 (Independent Study) has attracted students who finish three years of Arabic to focus on language and culture topics of their interests. Enrollment in Arabic studies over the last four years stands at over 100 students, and interest continues to rise. The chart below shows enrollment numbers in the Autumn semesters from 1999 to 2009 in Arabic language classes at UM-M.

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Students of Arabic from Fall 1999 to Fall 2009
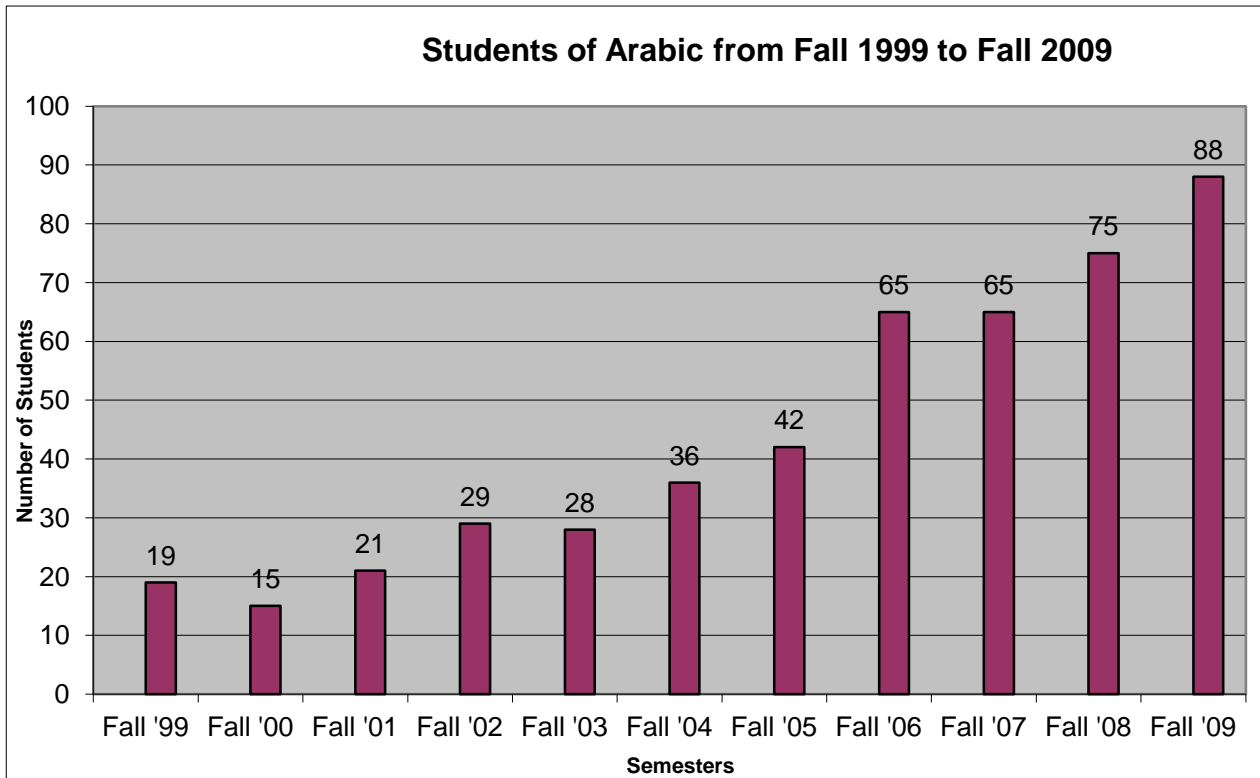
Part of the increased enrollment can be credited to targeted introduction of Arabic Language studies to Missoula high school students. The Central and Southwest Asian Studies Center ran four summer programs sponsored by STARTALK grants from 2008 to 2011 to offer intensive Arabic to high school students. The summer programs, Montana Arabic Summer Institute (MASI), graduated about 100 students, most of whom showed interest in taking college-level Arabic courses at UM-M after finishing high school. STARTALK MASI has also received positive evaluations from students, parents, guardians, school administrators and STARTALK site visitors.

UM students have requested that Arabic be offered as a minor. In Spring 2009, petitions gathered more than 400 signatures at rallies, and more than 150 letters of support from alumni were sent to ASUM in support of creating a minor in Arabic studies. Support is particularly strong now, in connection with the undergraduate degree in Central and Southwest Asian Studies approved in 2009.

As enrollment in Arabic courses continues to rise, sustained student interest provides an excellent opportunity to establish a minor in Arabic Studies in response to students' interests, needs, and career opportunities. The minor will also attract students from the entire Northwest Region which will result in greater out-of-state enrollment at UM-M, further bolstering the Arabic Studies program and the university as a whole.

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

The University of Montana's Mission Statement reads:

> The University of Montana-Missoula pursues academic excellence as indicated by the quality of

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curriculum and instruction, student performance, and faculty professional accomplishments. Through its graduates, the University also seeks to educate competent and humane professionals and informed, ethical, and engaged citizens of local and global communities. Through its programs and the activities of faculty, staff, and students, The University of Montana-Missoula provides basic and applied research, technology transfer, cultural outreach, and service benefiting the local community, region, state, nation and the world.

The Minor in Arabic Studies addresses this mission as it provides a unique educational and cultural experience to learn about the Arabic language and the Arab world in response to the needs of US citizens in general and Montanans in particular. In short, the areas covered by the Minor in Arabic Studies (i.e., language, cultures, religions, history, geography, and politics) will equip students with the skills, knowledge and critical thinking to face the challenges of the 21st century. It will enhance learning opportunities for students in a wide variety of disciplines, including the natural sciences and professional schools, but especially disciplines in related regional studies, humanities, and social science, including, but not limited to, Central and Southwest Asian Studies, Anthropology, History, Political Science, and Geography.

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

We anticipate that shortly after implementation, there will be 30 to 40 students enrolled in the Arabic Studies Minor. This calculation is based on current enrollment in Arabic courses and on the feedback provided by previous students. For instance, more than 70 students show interest in taking ARAB 101 every autumn semester, which resulted in creating two sections of ARAB 101 and 102 with a maximum number of 25 students in each section. In autumn 2009, 84 students enrolled in ARAB 101, 201, 301 and 392 (previously 396) (see chart above). Given this high interest in Arabic language courses despite the lack of an existing minor or major in Arabic Studies, we expect that our anticipated number will be met. Over the past years, Islamic Civilization courses had an enrollment average that exceeded 150 students every semester. The Model Arab League program which has been in place for more than 15 years has an annual enrollment average of 30 to 40 students.

4. Institutional and System Fit

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

As mentioned above, UM currently offers Arabic language courses (such as ARAB 101, 102, 201, 202, 301, and 302), courses that focus on the cultures and politics of the Arab world (such as ARAB 391 [The Arab World], ARAB 307 [Model Arab League: Delegates], ARAB 317 [Model Arab League: Staff], HIST 283 [Islamic Civilization: The Classical Age], HIST 284 [Islamic Civilization: The Modern Era]), as well as ARAB 392 [Independent Study]. The Minor in Arabic Studies builds on such existing courses.

The Minor in Arabic Studies will also be an important addition for the Major in Central and Southwest Asian Studies.

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

No.

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

The Minor in Arabic Studies will be a new program and will not overlap with any related programs at UM.

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

Academic Strategic Goals: The recent strategic planning process has a central concern to internationalize the curriculum at the University of Montana-Missoula, and to provide students of all majors with more opportunities to study languages. The new General Education requirements include one year of language study (other than English), and the goal for undergraduate education is to integrate that language study with the broader curriculum.

The proposed Minor in Arabic Studies will accommodate students beyond the current offerings and provide the certification rewarding their interest, hard work, and dedication. The Minor is proposed to begin in the spring semester, 2012, with cross-listed courses in several departments, including, anthropology and history. These courses will combine language, culture, politics, religion, literature, history and geography of the Arab world.

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

There are no similar programs to the Minor in Arabic Studies within the Montana University System.

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.**

   5.1. Coverage

   a) Students study courses in Arabic language: its orthographic, phonological, morphological, syntactic and sociolinguistic systems.
   b) The four language skills (i.e., listening, speaking, reading, and writing) are covered.
   c) Students achieve a linguistic proficiency level in Arabic to enable them to engage in discussions in topics related to their majors.
   d) Students learn about the literature, history, politics, geography, religions, economy and cultures of the Arab world.

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5.2. Standards

Students study the Arabic language and cultures formally and structurally and learn about the Arab world and Islam, one of the major world religions. The curriculum will reflect the Standards for Learning Arabic K-16 in the United States as documented in the Standards for Foreign Language Learning in the 21st Century (2006). Thus, the goals of the curriculum will be:

1. Communication – to communicate in Arabic

1.1. Students engage in conversations and correspondences in Arabic to provide and obtain information, express feelings and emotions, and exchange opinions.

1.2. Students understand and interpret written and spoken Arabic on a variety of topics.

1.3. Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

2. Cultures – to gain knowledge and understanding of the cultures of the Arab world

2.1. Students demonstrate an understanding of the relationship between the practices and perspectives of the various cultures of the Arab world.

2.2. Students demonstrate an understanding of the relationship between the products and perspectives of the various cultures of the Arab world.

3. Connections – to use Arabic to connect with other disciplines and acquire information

3.1. Students reinforce and further their knowledge of other disciplines through Arabic.

3.2. Students acquire information and recognize viewpoints that are only available through the Arabic language and culture.

4. Comparisons – to develop insight into language and culture

4.1. Students demonstrate understanding of the nature of language through comparisons between Arabic and their own language.

4.2. Students demonstrate understanding of the concepts of culture through comparisons between the cultures of the Arab world and their own.

5. Communities – to participate in multicultural communities at home and in the world

5.1. Students use Arabic both within and beyond the school setting.

5.2. Students show evidence of becoming lifelong learners by using Arabic for personal enjoyment and enrichment.

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5.3. Required Credits

Thirty credits will be required to obtain a Minor in Arabic Studies. At least 9 credits must be in upper division courses, i.e., 300-level or higher. A minimum grade of C is required in all the courses taken to fulfill the minor requirement.

The number of credits varies with a student's high school preparation or credits transferred from another college or university. For example, if a student has already studied Arabic formally and demonstrates the mastery of the language skills and cultural knowledge equivalent to 102, she/he need not take 101 and 102. This will be decided through a placement test and the recommendation from the advisor of the academic minor.

Studying in an Arabic-speaking country is not required for the minor. However, students are encouraged to spend one semester in an Arabic-speaking country and will be able to transfer credits into the minor with the approval of their advisor of the Minor in Arabic Studies.

The curriculum of the minor is designed to help students (a) achieve the Advanced level in Arabic based on the ACTFL's standards of foreign language proficiency, and (b) learn about the history, geography, politics, religions, and diversity of the Arabic-speaking peoples.

Core Courses (27 credits)

Below is an outline of the courses for the minor.

Students must take the following courses to enable them to establish the linguistic and cultural backgrounds of the Arabic language and the Arab world. The courses are offered in Arabic and build the foundation of the four language skills: listening, speaking, reading and writing. Upon completion of these courses, students will have established the necessary Arabic literacy skills, grammar rules, literary skills, and cultural knowledge to help students achieve an advanced proficiency level.

Course	Name	Semester(s)	Credits
ARAB 101	Elementary Arabic 1	Autumn	5
ARAB 102	Elementary Arabic 2	Spring	5
ARAB 201	Intermediate Arabic 1	Autumn	4
ARAB 202	Intermediate Arabic 2	Spring	4
ARAB 301	Advanced Arabic 1	Autumn	3
ARAB 302	Advanced Arabic 2	Spring	3
ARAB 391	The Arab World	Autumn	3

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All the courses above are currently offered. The following changes are part and parcel of the Minor proposal:

- ARAB 201: Change number of credits from 5 to 4
- ARAB 202: Change number of credits from 5 to 4
- ARAB 391 is offered experimentally in Autumn 2011. It will be converted to a regular course number.

Electives (3 credits)

Students must select at least 3 credits from the following courses. The diverse topics covered in these courses equip the students with in-depth knowledge of the Arab world and Middle East. All the courses are offered in English, and no previous knowledge of Arabic is required.

Course	Name	Semester(s)	Credits
ARAB 307	Model Arab League: Delegates	Spring	3
ARAB 317	Model Arab League: Staff	Spring	3
HIST 262/ANTY 283	Islamic Civilization: The Classical Age	Autumn	3
HIST 264/ANTY 284	Islamic Civilization: The Modern Era	Spring	3
HIST 386/ANTY 386	Nationalism in the Modern Middle East	Autumn	3

All the courses above are currently offered.

Upon consent of the advisor of the academic minor, up to three credits (either taken at The University of Montana or transferred from another college or university) may be counted as part of the electives if at least 75% of the content is related to the Arab world.

Independent Study: Students may count up to 3 credits from an independent study taken with a faculty member in the Arabic program. The consent of the advisor of the academic minor as well as the course instructor are required.

ARAB 392	Independent Study	Autumn/Spring	1-6

FACULTY AND STAFF REQUIREMENTS: Please indicate, by name and rank, current Faculty who will be involved with the program proposed herein.
        Professor: KIA, Mehrdad – tenured
        Assistant Professor: HUTHAILY, Khaled – tenure-track
        Lecturer: BITAR, Samir

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

Admissions: The Minor in Arabic Studies is designed for and open to non-native speakers of Arabic as well as heritage students who lack literacy skills in Arabic. Upon the instructors' consent, native speakers of Arabic may take independent studies in Arabic as well as ARAB courses offered in English. However, only students who take 30 approved credits in Arabic Studies and related courses can receive a minor.

Proficiency Requirements: No previous knowledge of the Arabic language is required to enroll in the Minor in Arabic Studies.

Administrative and Academic Units & Organization: The proposed Minor in Arabic Studies will be housed within in the Central and Southwest Asian Studies Center and Department of Anthropology in the College of Arts and Sciences. An academic advisor will be appointed by the Director of the Center and the Chair of Anthropology to serve in two-year term.

Curriculum Responsibilities: The faculty members in the Arabic program will work together as a team to create the curriculum for the minor.

Facilities and Space: Office facilities and space (including computers, printers, copiers, desks, telephones, and a meeting room) for the faculty of the Minor in Arabic Studies are provided by Central and Southwest Asian Studies Center and Department of Anthropology. The faculty's mail boxes are in the Department of Anthropology.

Planned Enrollment: Enrollment numbers for the past ten years, the anticipated enrollment in the first semester of offering the Minor in Arabic Studies to be at least 50 students in ARAB 101 (sections 01 and 02). We anticipate at least 75% of the incoming students to pursue a Minor in Arabic Studies.

6. Resources

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

No additional faculty resources are needed to launch a Minor in Arabic 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.

No additional resources are required to ensure the success of the proposed program.

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

The success of the program will be measured based on:

a) Proficiency Level: At least 80-90% of the students will achieve the proficiency levels of Advanced Mid based on the guidelines of the American Council on the Teaching of Foreign Languages (ACTFL).

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Evaluation will be conducted by faculty members in the program.

b) Curriculum and program breadth, depth and efficacy. The curriculum will reflect the Standards for Learning Arabic K-16 in the United States as documented in the Standards for Foreign Language Learning in the 21st Century (2006). Thus, the curriculum will address the following areas:
   1. Communication – to communicate in Arabic
   2. Cultures – to gain knowledge and understanding of the cultures of the Arab world
   3. Connections – to use Arabic to connect with other disciplines and acquire information
   4. Comparisons – to develop insight into language and culture
   5. Communities – to participate in multicultural communities at home and in the world

The curriculum will be evaluated by the faculty members every year based on current research findings in applied linguistics, foreign language instruction/learning, students' evaluation forms, and needs analysis.

c) Goal: At least 90% of the students who obtain the Minor in Arabic Studies will provide positive feedback about the program from linguistic and cultural perspectives. This will be measured by an anonymous exit review.

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 core language courses for the Minor in Arabic Studies will be taught by UM faculty who are members of both Central and Southwest Asian Studies Center and the Department of Anthropology.

The Mount of Olives Arabic Language and Culture Club is an ASUM student group whose members include native speakers as well as learners of Arabic. Students of the Minor in Arabic Studies, regardless of their levels in the program, will have the opportunity to meet on a weekly basis to learn from one another about the Arab world and its cultures and practice their language skills through language tables. The club also provides a wonderful opportunity for students of Arabic to meet UM faculty, staff or students as well as members of the community who have visited or are interested in the Arab world.

The US government considers Arabic as a critical language for US national security. This interest is evident in the amount of federal funding available for projects that involve the Arabic language and the Arab world, as well as in the increasing number of job opportunities that give preference to American graduates who have been introduced to the Arabic language and its cultures. This enthusiasm in Arabic studies is a trend evident nationwide. A number of governmental agencies, including the U.S. Department of State's Bureau of Educational and Cultural Affairs and the Council of American Overseas Research Centers (CAORC), offer scholarships for the study of this foreign language deemed of critical importance. This comes as a response to the National Security Language Initiative (NSLI) to increase the number of Americans learning and becoming proficient in Arabic.