## ACADEMIC & STUDENT AFFAIRS SUB Kelley Steward Room

Wednesday, September 27, 2006

#### 12:30 – 3:30 p.m.

See additional Supplementary Materials at: <u>http://mus.montana.edu/asa/SupplementalMaterials.htm</u>

12:30 P.M. ROLL CALL and APPROVAL OF THE MINUTES (Link)

## **ACTION**

12:35 P.M. a. Revisions to Board of Regents' Policy 301.12, dealing with undergraduate degree requirements <u>ITEM 132-101-R0906</u>

Level II items

- b. Minor in Genetics, Montana State University-Bozeman
- c. B.S. in Criminal Justice, Montana State University-Billings
- d. B.S. in General Science, Montana State University-Billings
- e. B.S. in General Science with a teaching option, Montana State University-Billings <u>ITEM 132-2703-R0706</u>
- f. A.A.S. in Computer Programming and Application Development, Montana State University-Billings College of Technology
- g. B.S. in Business Administration, with a General Business option, Montana State University-Billings <u>ITEM 132-2706-R0706</u>
- h. B.S.Ed. in Reading and Elementary or Secondary Education, Montana State University-Billings <u>ITEM 132-2707-R0706</u>
- i. B.S.Ed in Mathematics, and a non-teaching major, Montana State University-Northern <u>ITEM 132-2801-R0706</u>
- j. B.S. and Minor in Restoration Ecology, The University of Montana-Missoula <u>ITEM 132-1001-R0706</u>
- k. Center for Biomolecular Structure and Dynamics, The University of Montana-Missoula <u>ITEM 132-1002-R0706</u>
- I. School of Public and Community Health Sciences, The University of Montana-Missoula <u>ITEM 132-1003-R0706</u>

- m. The Montana Safe Schools Center, The University of Montana-Missoula <u>ITEM 132-1004-R0706</u>
- n. Department of Media Arts, The University of Montana-Missoula
- Certificates in Applied Science in Bookkeeping, Medical Receptionist, Network Technician, Drafting Technician, Computer Assistant and Office Assistant, Montana Tech of The University of Montana College of Technology <u>ITEM 132-1501-R0706</u>
- p. Center for Advanced Supramolecular and Nano Systems, Montana Tech of The University of Montana<u>ITEM 132-1502-R0706</u>
- q. Center for Advanced Mineral and Metallurgical Processing, Montana Tech of The University of Montana <u>ITEM 132-1503-R0706</u>
- r. B.A.S. in General Studies, Montana Tech of The University of Montana <u>ITEM 132-1504-R0706</u>
- s. A.A.S. in Music Technology, Dawson Community College

# **INFORMATION**

- 2:30 P.M. a. Report on Egyptian students at MSU-Bozeman David Dooley and Cathy Conover. (*Link*)
  - b. College Preparatory Program report. (Link)
  - c. Additional information on Policy 940.29, post-baccalaureate students. *(Link)*
  - d. Follow-up reports on radiologic tech, MSU-Great Falls College of Technology and electrical engineering, Montana Tech of The University of Montana. (Link)
  - e. Project on remedial coursework Jan Clinard / Tyler Trevor (Link)
  - f. Concept review Discussion about an academic partnership with Xiamen Institute of Technology and a possible branch campus in China The University of Montana-Missoula (Link)
  - g. 2006 ACT and SAT scores in Montana Jan Clinard (Link)
  - h. MUS General Education Core Online Tom Gibson (Link)
  - i. Strategic Plan for UM-Western (Link)

- j. Continuing update on LPN program at Flathead Valley Community College.
- k. Other business.

# **CONSENT**

- 3:05 P.M. a. Level I memorandum. (Link)
- 3:20 P.M. PUBLIC COMMENT
- 3:30 P.M. ADJOURN

#### DRAFT Minutes of The Academic & Student Affairs Committee of the Montana Board of Regents

#### Hensler Auditorium, Applied Technology Building Montana State University-Northern **Wednesday, May 31, 2006** 1:00 – 4:30 p.m.

Committee members: Chair Regent Lynn Hamilton, Regent Mike Foster, Regent Lila Taylor and Regent Heather O'Loughlin

Note: The Board of Regents may take action on any item on the Committee agenda. Public comment is welcome during the meeting.

Regent Lynn Hamilton, Committee chair, called the meeting to order at 1:00 p.m.

- a. Roll Call. All committee members were present.
- b. Review and adoption of the agenda. Regent O'Loughlin moved to adopt the agenda. Motion carried.
- c. Approval of the minutes from the March 1, 2006, meeting of the Committee. Regent Taylor moved to approve the minutes. Motion carried.
- d. Portion of the Meeting Devoted to Topics of Concern to Both Academic and Student Affairs Officers.
  - Discussion of the Board of Regents' Strategic Plan Commissioner Sheila Stearns noted that the Strategic Plan has been under development for over a year. Certain portions of the Plan are being presented to each of the Board committees for guidance today, prior to the full Board meeting tomorrow. Commissioner Stearns, Associate Commissioner Dave Gibson and Director of Institutional Information and Research Tyler Trevor answered questions regarding each of the four goals the Academic and Student Affairs Committee was asked to consider.

**Goal 1.4.2 Outreach to top-achieving students.** There was considerable discussion about this goal, including the reduced number of students taking the ACT last year, the relationship of this goal to P-20 work, and the significance of the "top 10%" in high school classes that vary widely in size. The Committee supported this goal, but asked for increased clarification and monitoring.

**Goal 1.4.3 Increase AP/dual-enrollment participation.** Regent Hamilton said that higher education is too dependent on K-12 cooperation to be able to set target numbers for increasing AP testing, but thinks it is important to make this information part of our data system and to monitor progress. The Committee is comfortable with the 06/07 goals.

**Goal 1.5.2 Expand non-traditional programs.** This goal will be modified prior to the full Board meeting to define non-traditional students (in accordance with the IPEDS

definition), and to increase the number of non-traditional students served, regardless of delivery method.

**Goal 3.2.3 Improve transferability.** These goals are intended to measure progress on the transfer goals adopted in March 2006. Regent Hamilton asked to refine and reorganize the seven items into strategies and measurable goals.

2. Discussion of Distance Education

Director of Distance Learning Business Development Tom Gibson gave an overview of the distance education work to date, identified issues that still need to be addressed, and then invited questions.

Regent Hamilton asked if campuses offer online courses to generate additional revenue. Tom said that this is a problem that needs to be addressed, especially since students can pay more for online courses on certain campuses. At others (MSU-Great Falls), students pay the same fees regardless of delivery method. Tuition and fee structures for distance learning need to be standardized throughout the system, and need to be competitive in the marketplace.

In response to a question about a common platform, Tom replied that students don't see it as issue. However, there could be system-wide cost savings if all campuses are using the same platform—both in terms of license fees and training costs. Beth Krueger noted that a common platform feeding into Banner may not work for the community colleges since they don't use Banner.

Dave Gibson noted that creating the online portal for delivering the MUS Core general education courses will be a huge step. It will create a structure for providing student services system-wide. Once the structure is in place, transferability can be addressed.

3. Discussion of Emergency Preparedness

Disaster Mitigation Coordinator Lowell Goetting reviewed the history of the MUS Disaster Preparedness Survey. The current revision follows a logical sequence of events from pre-disaster mitigation, to disaster response and recovery, and finally post-disaster restoration. A FEMA grant is funding plan development for eight MUS campuses, and may provide implementation funds when the plans are approved by FEMA. In response to a question regarding the national pandemic conversation, Lowell responded that this planning encompasses both natural and manmade disasters.

4. Discussion of <u>Policy 940.29</u>, tuition for post-baccalaureate students. At the March meeting, the Academic and Student Affairs Committee asked what the fiscal impact would be across the four-year campuses if the post-baccalaureate tuition policy was repealed. Associate Commissioner Mick Robinson provided the campuses with a methodology, and the resulting estimated loss in revenue ranged from \$12,800 to \$240,000 annually.

The Committee had many questions and concerns about the policy including postbacc vs. graduate tuition rates, the importance of life-long learning balanced against fiscal concerns, workforce needs vs. enrichment, and the intent of the original policy. Deputy Commissioner Barber said that he thinks this policy is the last remnant of a time when the Board was trying to increase efficiency and help students move through a degree program quickly by setting credit caps and encouraging campuses to establish four year graduation programs.

Regent Hamilton asked the Chief Academic Officers to consider phasing-in the elimination of the super-tuition or eliminating it for programs that are important to Montana's workforce needs, like teacher education. She and Regent Foster also requested data regarding the students who are currently being charged the post-baccalaureate tuition rate.

- e. Portion of Meeting Devoted to Topics of Concern to Chief Academic Officers.
  - 1. Level I memorandum. Deputy Commissioner Barber noted the large number of programs that have been terminated recently. The Program Review policy that the Board adopted last year provides a mechanism for continuing to eliminate obsolete programs. The Committee had no questions or concerns about the memorandum.
  - 2. Level II items.
    - a. Action: <u>ITEM 130-301-R0306</u>: Certificates of Applied Science, Flathead Valley Community College.

Deputy Commissioner Barber recommended an accelerated process for campuses changing program names from Certificate to Certificate of Applied Science. Flathead Valley Community College is the first campus to make this change to its certificate programs. This item will be forwarded to the full Board with a recommendation for approval.

- b. Action: <u>ITEM 130-2851-R0306</u>: A.A.S. degree in Radiologic Technology, MSU-Great Falls College of Technology. Questions and concerns regarding program duplication, the break-even point, and the proposed number of credits were expressed. The Committee decided not to recommend the program to the full Board for approval until 1) the total number of credits in the program complied with Board policy and 2) the campus explored collaboration with existing radiologic tech programs in the Montana University System.
- c. Action: <u>ITEM 130-2852-R0306</u>: Certificate of Practical Nursing, MSU-Great Falls College of Technology.
- d. Action: I<u>TEM 130-2804-R0306:</u> Civil Engineering Technology program in Great Falls, MSU-Northern. Regent Foster asked about program duplication. MSU-Bozeman offers a Civil Engineering degree, but this is different from the Civil Engineering Technology degree that is proposed.
- e. Action: ITEM 130-1018-R0306: Irish Studies minor, UM-Missoula.
- f. Action: <u>ITEM 130-1503-R0306</u>: Bachelor and Master's degree in Electrical Engineering, Montana Tech. Dan Trudnowski and Susan Patton answered questions regarding transferability. This is generally not an issue because Engineering accreditation is so strict. The issue of program duplication was raised regarding this proposal, too. Dave Dooley said that they have been in conversation with Montana Tech as the program developed. He doesn't think this change will impact their long-standing

engineering programs, and Montana Tech's rationale regarding producing a better result for students is sound. Dave appreciated the spirit of cooperation that the Board fosters here in Montana.

By consensus, action items c-f will be forwarded to the full Board with a recommendation for approval.

3. Action: <u>ITEM 131-101-R0506</u>: Additional revisions to the model nursing curriculum. Deputy Commissioner Barber commented that the numerous nursing pathways that we have in Montana make for a complicated set of Operational Rules. These rules are primarily intended for use by nursing program advisors, and something more user-friendly will be developed for students.

MSU-Bozeman nursing staff are working on an articulation agreement for students who have completed the new model and wish to enter the MSU- Bozeman BSN program.

Nursing directors throughout the state have concerns regarding the impact of the new model curriculum. One concern is that the curriculum is very rigorous, and retention might become a problem. Another is that the number of LPNs being produced could decrease significantly. Both of these concerns will need to be assessed over time.

- 4. Review the Scope of the University of Montana-Missoula Paleontology Center and an associated Fort Peck Field Station. Regent Barrett asked for further discussion and review of the scope of the Center to ensure that assurances made when the Board approved the program are being honored. Dr. George Stanley, the Center director, reiterated that his primary interest is invertebrate paleontology. However, it's virtually impossible to avoid dinosaurs when at Fort Peck, so Dr. Stanley works collaboratively with Jack Horner at MSU-Bozeman and has dinosaurs on loan to him. Dave Dooley agreed that this is a synergistic research relationship between the campuses.
- f. Announcements.
  - Delay in Flathead Valley's LPN nursing program. FVCC will take their proposal to the Board of Nursing in July, and expects to bring it to the Board of Regents in September.
  - 2. Academic administrative changes at UM-Western. UM-Western is recruiting for an Assistant Provost for Accreditation, Assessment, and Academic Affairs.
- g. Other business. *There was none.*
- h. Public comment. No additional comments were offered

The meeting adjourned at 4:30 p.m.

Submitted by Cathy Doyle

#### September 27 - 29, 2006

#### ITEM 132-101-R0906: <u>Amendment of Board of Regents' Policy 301.12</u>, Undergraduate Degree Requirements; Associate Degrees

THAT: The Montana Board of Regents adopts the suggested amendments to policy 301.12. The amended language is set out in section I.C.2.(a) and (b) of the attachment. The language that is crossed out will be removed, and the underlined language will be added to the policy. **EXPLANATION:** A workgroup of the Two-Year Council has spent the last year reviewing all two-year and most certificate programs in the Montana University System to determine if they comply with the provisions of Policy 301.12. That policy, which grew out of the performance audit on transferability in the Montana University System, establishes the characteristics of Associate of Arts, Associate of Science, and Associate of Applied Science degrees and the Certificate of Applied Science. Based on that year-long work, the Two-Year Council has recommended two changes to the characteristics of a Certificate of Applied Science: a) the allowable credits should be changed to

- a) the allowable credits should be changed to 30 – 45 credits, which could extend the completion period to a full calendar year; and
- b) a more "generous" definition of general education coursework should be developed.

#### MONTANA BOARD OF REGENTS OF HIGHER EDUCATION

Policy and Procedures Manual

SUBJECT:	ACADEM	IC AFFAIRS	PAGE: 301.12 (1 of 3)
Section	n: 301.12	Undergraduate Degree Requirements; Associate Degrees	Effective: Sept. 24, 1999
		Requirements, Associate Degrees	Issued: Oct. 11, 1999
			Approved:

#### I. Board Policy:

- A. Units of the Montana University System and the publicly-funded community colleges may offer the Associate of Arts and the Associate of Science degrees. They may also offer the Associate of Applied Science degree, and the Certificate of Applied Science, in those academic and occupational areas approved by the Board of Regents.
- B. Degrees Designed for Transfer.
  - The Associate of Arts or the Associate of Science degree is designed for transfer to a fouryear institution. Except as provided in paragraph B.2 below, the degree title carries no designation of field of study and is normally limited to 60 credits, which includes an approved general education program that satisfies the requirements of Board <u>Policy</u> <u>301.10</u>.
  - 2. In rare cases, a compelling, externally imposed requirement may justify more than 60 semester credit hours and/or a designated field of study in the degree title in an Associate of Arts or Associate of Science degree. The unit requesting such a modification of degree requirements should address its request to the Deputy Commissioner for Academic and Student Affairs. Upon receipt of such a request, the Deputy Commissioner shall refer it to the Two-Year Education Council for review and recommendation to the Academic and Student Affairs Committee of the Board of Regents. These designated degree programs may not satisfy Board Policy 301.10 on general education because of the number of specialized courses that make up the degree.
- C. Degree and Certificate Designed for Employment.
  - The Associate of Applied Science degree and the Certificate of Applied Science are designed to prepare students for immediate employment. Except as provided in paragraph I.C. of Board Policy 301.11, which describes the Bachelor of Applied Science degree, the Associate of Applied Science degree or the Certificate of Applied Science does not transfer as a block of coursework meeting lower-division requirements toward a baccalaureate degree. Individual courses within the degree may transfer to meet course requirements at the receiving institution at the discretion of that institution.
  - 2. The Certificate of Applied Science is a program of applied study primarily designed to prepare students for immediate employment in a job indicated by the certificate title. The certificate must ordinarily be approved by the Board of Regents under Board <u>Policy 303.1</u>. With the exceptions noted in paragraph C.3 below, the Certificate of Applied Science is normally distinguished by the following characteristics:

- (a) a short program of study (31-40<u>30-45</u> total credits) that is designed for completion in two semesters or, with the expectation that the certificate can be completed in, at most, one calendar year; and
- (b) a limited number of general education credits, (6-9), coursework that meets accreditation requirements and are ordinarily applied in nature. comprises no more than 1/3<sup>rd</sup> of the total credits in the certificate program.
- 3. When the program of study for a proposed Certificate of Applied Science does not meet the characteristics described in paragraph C.2 above, the institution must request an exception to the requirements for certificate programs through the Deputy Commissioner for Academic and Student Affairs, citing a compelling reason for the variation and/or for culminating the program with a Certificate of Applied Science, rather than an Associate of Applied Science Degree. Upon receipt of such a request, the Deputy Commissioner shall refer it to the Two-Year Education Council for review and recommendation to the Academic and Student Affairs Committee of the Board of Regents.
- 4. The Associate of Applied Science degree combines applied and academic course work in a program of study designed to prepare students for career entry into a specific occupational area, as indicated by the degree title. The program design may combine a Certificate of Applied Science program with additional required courses or may be a distinct curriculum unrelated to any co-existing certificate program. With the exceptions noted in paragraph C.5, below, the Associate of Applied Science degree will have the following characteristics:
  - (a) a program of study (60-72 credits) requiring at least four semesters to complete, but no more than two academic years, including a summer session between the academic years if necessary;
  - (b) an occupational emphasis, achieved through a minimum of 2/3 of the total credits in the degree devoted to technical course work in the discipline specific to the occupational goal;
  - (c) general education or related education courses that meet accreditation requirements and that align with the amount and level of general education required in similar Associate of Applied Science degree programs in Montana.
- 5. When the program of study for a proposed Associate of Applied Science degree does not meet the characteristics described in paragraph C.4, above, the institution must request an exception to the requirements for A.A.S. degree programs through the Deputy Commissioner for Academic and Student Affairs, citing a compelling reason for the variation from the degree requirements. Upon receipt of such a request, the Deputy Commissioner shall refer it to the Two-Year Education Council for review and recommendation to the Academic and Student Affairs Committee of the Board of Regents.
- II. History:

#### Policy 301.12 Undergraduate Degree Requirements; Associate Degrees and Certificates of Applied Science

Action of the Board of Regents to adopt Two-Year Committee recommendations, July 11, 1997; Item 104-105-R0799 amended by action of the Board of Regents July 8, 1998; policy approved September 24, 1999. Revised May 20, 2005 (<u>Item 127-103-R0505</u>), clarified requirements for AAS and created new degree, format change.

Table of Contents or Section 300 Contents

## ITEM 132-2003-R0706 Approval to Establish a Minor in Genetics; Montana State University-Bozeman

- THAT:The Board of Regents of Higher Education authorizesMontana State University-Bozeman to offer a Genetics Minor
- **EXPLANATION:** Montana State University-Bozeman seeks approval from the Montana Board of Regents to offer a Genetics Minor.

The Genetics Minor will utilize existing courses within the curricula of the participating departments. This program will provide students from a broad array of departments an opportunity to distinguish themselves in a cornerstone biological discipline. The minor will also provide a structure that links genetics oriented courses so that they may be rationalized and unneeded duplications reduced.

In addition, this program will better meet the needs of biology and computer science students. Genetics provides one of the cornerstones of biology and bioinformatics. The Minor in Genetics will provide a focus for the development of a wellorganized trans-departmental curriculum that will better serve our students= needs without requiring any additional courses. The course of study links existing courses into a trans-departmental Minor in Genetics. All courses in the proposed curriculum currently exist at MSU-Bozeman and have been approved through the usual faculty course review process.

The minor will be administered within the Departments of Animal and Range Science, Computer Sciences, Ecology, Cell Biology and Neuroscience, Plant Sciences and Plant Pathology and Veterinary Molecular Biology. A steering committee, comprised of representatives from all units involved, will provide curricular oversight and will be responsible for conducting periodic program review.

## LEVEL II REQUEST FORM

Item No.:	132-2003-R0706	Date of Meeting:	July 12-13, 2006
Institution:	Montana State Univer	sityBozeman	
Program Title:	<b>Genetics Minor</b>		

Level II proposals require approval by the Board of Regents.

similar unit.

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

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

#### **Specify Request:**

Faculty of the Colleges of Agriculture, Letters and Sciences, and Engineering request the creation of a Genetics Minor. The minor will be administered within the Departments of Animal and Range Science, Computer Sciences, Ecology, Neurosciences, Plant Sciences and Plant Pathology and Veterinary Molecular Biology. A steering committee, comprised of representatives from all units involved, will provide curricular oversight and will be responsible for conducting periodic program review. The proposed Genetics Minor provides a focal point for curriculum organization without requiring new courses to be taught.

#### ITEM 132-2701-R0706 Approval of Proposal to Offer a Bachelor of Science in Criminal Justice; Montana State University-Billings

THAT:The Board of Regents of Higher Education authorizes<br/>Montana State University-Billings to award a Bachelor of<br/>Science in Criminal Justice degree program.

**EXPLANATION:** As a comprehensive, regional, public university serving the educational needs of Montanans and accessible to all who are qualified, Montana State University-Billings has the primary mission of preparing students of all ages to be productive and responsible citizens, with special focus on the integration of education with service and an applied rather than basic research mission. The purpose of this proposal is to offer an undergraduate degree in Criminal Justice at Montana State University-Billings that would prepare professionals for work in the broad areas encompassed within the diverse American justice systems, including local and state law enforcement, probation and parole, juvenile justice, immigration and border patrol, U.S. federal law enforcement agencies such as marshal service, INS, ATF, drug enforcement, etc. The Criminal Justice program will also provide students with a basic knowledge of human behavior and the operation of the criminal justice system. Most importantly it will allow MSU-Billings to partner with two-year programs in criminal justice at other institutions, entry level partnerships with other programs, mid-level advancements and advanced leadership programs (2+2+2) thus providing educational opportunities for a wide variety of audiences.

# LEVEL II REQUEST FORM

Item No.:	132-2701-R0706	Date of Meeting:	July 12-13, 2006
Institution:	Montana State University-I	Billings	
Program Title:	Bachelor of Science in Cri	minal Justice	

Level II proposals require approval by the Board of Regents.

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

	1.	Change names of degrees (e.g. from B.A. to B.F.A.)
	2.	Implement a new minor where there is no major;
$\boxtimes$	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 describe

5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

#### Specify Request:

Montana State University Billings seeks approval from the Montana Board of Regents to add a Bachelor of Science in Criminal Justice. The purpose of this proposal is to offer an undergraduate degree in Criminal Justice at Montana State University-Billings that would prepare professionals for work in the broad areas encompassed within the diverse American justice systems. These will include local and state law enforcement, probation and parole, juvenile justice, immigration and border patrol, U.S. federal law enforcement agencies such as marshal service, INS, ATF, drug enforcement, etc. Most importantly it will allow MSU-Billings to partner with two-year programs in criminal justice at other institutions, entry level partnerships with other programs, midlevel advancements and advanced leadership programs (2+2+2) thus providing educational opportunities for a wide variety of audiences.

#### ITEM 132-2702-R0706 Approval of Proposal to Offer a Bachelor of Science in General Science; Montana State University-Billings

**THAT:**The Board of Regents of Higher Education authorizes<br/>Montana State University-Billings to offer a Bachelor of<br/>Science in General Science.

**EXPLANATION:** An important element of the mission of Montana State University-Billings is "to ensure that all students are well prepared and competitive in regional, national, and global marketplaces." The Department of Biological and Physical Sciences participates in this mission through a diversity of rigorous, contemporary programs in the sciences. We would now like to expand our programs in a manner consistent with these goals by offering a Bachelor of Science in General Science degree program. As a step towards continued quality improvement and student retention, the proposed programs would enhance the sciences at Montana State University-Billings in several ways.

1) The number of students entering pre-professional programs at MSU-Billings invariably outnumbers students accepted in these programs. The proposed degree in General Science is a mechanism of alternate degree completion for students unable to immediately enter a professional program.

2) The proposed Bachelor of Science degree in General Science will be a broadly-based program encompassing all sciences, offering a balanced menu of courses in Biology, Chemistry, Earth Science and Physics. Broadly based knowledge and skills would be appealing to students desiring to enter the workforce in fields such as environmental consulting firms, conservation organizations and government agencies.

3) The broad field or general science major is considered a highly qualified teacher in science according to NCLB legislation. Students entering this program would be regarded as "highly qualified" according to NCLB standards, and thus quality for teaching opportunities in general science.

## LEVEL II REQUEST FORM

Item No.:	132-2702-R0706	Date of Meeting:	July 12-13, 2006		
Institution:	Montana State University-Billings				
	Bachelor of Science in	n General Science			
Program Title:					

Level II proposals require approval by the Board of Regents.

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

	1.	Change names of degrees (e.g. from B.A. to B.F.A.)
	2.	Implement a new minor where there is no major;
$\square$	3.	Establish new degrees and add majors to existing degrees;
	4.	Expand/extend approved mission; and
$\Box$	5.	Any other changes in governance and organization as descr

5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

#### Specify Request:

Montana State University-Billings would like to offer a Bachelor of Science in General Science, The proposed degree would

- 1) provide an alternative degree program for certain students,
- 2) provide successful undergraduates with a broad-based knowledge in contemporary science
- 3) produce highly qualified teachers in general science.

The proposed degree in General Science is a mechanism of alternate degree completion necessary for certain students. The number of students entering pre-professional programs at MSU-Billings invariably outnumbers students accepted in these programs. The proposed degree would provide an alternative degree program for these students with success measured in terms of student retention beyond the completion of a pre-professional core and completion of this degree program.

The proposed Bachelor of Science degree in General Science will also offer a broad-based exposure to several disciplines in the sciences in contrast to our existing degree programs currently emphasizing biology or chemistry. The proposed degree would offer a balanced menu of courses in Biology, Chemistry, Earth Science and Physics. Broadly based knowledge and skills would be appealing to students desiring to enter the workforce in fields such as environmental consulting firms, conservation organizations and government agencies.

# ITEM 132-2703-R0706 Approval of Proposal to offer a Bachelor of Science in General Science Teaching Certificate Option; Montana State University-Billings

**THAT:**The Board of Regents of Higher Education authorizes<br/>Montana State University-Billings to offer a Bachelor of<br/>Science in General Science degree with Teaching Certificate<br/>Option.

**EXPLANATION:** An important element of the mission of Montana State University-Billings is "to ensure that all students are well prepared and competitive in regional, national, and global marketplaces." The Department of Biological and Physical Sciences participates in this mission through a diversity of rigorous, contemporary programs in the sciences. We would now like to expand our programs in a manner consistent with these goals by offering a Bachelor of Science in General Science degree program as well as a Bachelor of Science in General Science degree with Teaching Certificate Option. As a step towards continued quality improvement and student retention, the proposed programs would enhance the sciences at Montana State University-Billings in several ways.

> The proposed Bachelor of Science degree in General Science will be a broadly-based program encompassing all sciences, offering a balanced menu of courses in Biology, Chemistry, Earth Science and Physics.

The broad field or general science major is considered a highly qualified teacher in science according to NCLB legislation. With additional requirements met for teacher certification (or possibly already met in some cases) students entering this program would be regarded as "highly qualified" according to NCLB standards, and thus quality for teaching opportunities in general science.

## LEVEL II REQUEST FORM

Item No.:	132-2703-R0706	Date of Meeting:	July 12-13, 2006	
Institution:	Montana State University-Billings			
Program Title:	Bachelor of Science i	n General Science with <sup>-</sup>	Feaching Certificate Option	

Level II proposals require approval by the Board of Regents.

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

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

#### Specify Request:

Montana State University-Billings seeks approval from the Montana Board of Regents to add a Bachelor of Science in General Science teaching certification option. The proposed degrees would 1) provide successful undergraduates with a broad-based knowledge in contemporary science 2) produce highly qualified teachers in general science

The proposed Bachelor of Science degree in General Science will also offer a broad-based exposure to several disciplines in the sciences in contrast to our existing degree programs currently emphasizing biology or chemistry. The proposed degree would offer a balanced menu of courses in Biology, Chemistry, Earth Science and Physics.

The broad field science major is considered a highly qualified teacher in science according to NCLB legislation. With additional requirements met for teacher certification (or possibly already met in some cases) students entering this program would be regarded as "highly qualified" according to NCLB standards, and thus quality for teaching opportunities in general science.

ITEM 132-2704-R0706	<u>Approval to Continue the Associate in Applied Science in</u> <u>Computer Programming and Application Development;</u> <u>Montana State University-Billings</u>
THAT:	The Board of Regents of Higher Education authorizes Montana State University Billings College of Technology to offer the Associate in Applied Science in Computer Programming and Application Development
EXPLANATION:	The MSU Billings College of Technology AAS in Computer Programming and Application Development is designed to train the student to function effectively as an integral member of a computer software firm or as a web developer/in-house programmer for small to mid-sized companies with an emphasis in web page and database design as well. The emphasis in the program is leveraging and customizing existing computer technologies to meet business needs. In response to local and regional industry requests, this degree is designed to meet the growing need among businesses to employ in-house programmers to write small applications and/or develop internal data warehousing (i.e. web portals) to improve data organization and communications efficiency. The degree includes coursework in Visual Basic .Net, SQL, Perl, and Java, in addition to intensive study of Microsoft Office Applications such as Word, Excel, and Access. The graduates of this program are well versed to develop small and medium-sized applications for nearly any business need.
	This AAS program focuses on providing students with the skills to serve business and industry through custom programming resulting in the extension of capabilities of application software and database software packages such as Access and Oracle. Graduates from this degree have the option of continuing on to a four year degree if they choose, or they can enter into the business world as valuable candidates to any of the following potential jobs: Computer Programmer, Visual Basic Programmer, Java Programmer, Application Developer, Web Developer, Database Programmer, Access or Excel Programmer.
	Ultimately, the degree maintains a strong position with the possibility to blossom into a powerful and envied program in the future. Computer Software Engineers are still marked as one of the fastest growing occupations in Montana at over 60% increase by 2012. The need for qualified programmers can only be expected to increase. This program addresses this need. Further, this program embraces collaboration with other colleges within the university system and delivers industry-centric content to prepare students for jobs.

## LEVEL II REQUEST FORM

Item No.:	132-2704-R0706	Date of Meeting:	July 12-13, 2006
Institution:	Montana State University-	Billings College of	Technology
Program Title:	Computer Programming a	nd Application Deve	elopment

Level II proposals require approval by the Board of Regents.

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

1. 2. 3. 4. 5.	Change names of degrees (e.g. from B.A. to B.F.A.) Implement a new minor where there is no major; Establish new degrees and add majors to existing degrees; Expand/extend approved mission; and 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
	division, school, department, institute, bureau, center, station, laboratory, or similar unit.

#### **Specify Request:**

Montana State University--Billings College of Technology requests approval to offer an Associate in Applied Science in Computer Programming and Application Development. The AAS degree was approved as a Level I in 2004. Montana State University-Billings College of Technology is requesting the AAS degree be a approved as a permanent degree.

ITEM 132-2706-R0706	Approval of Proposal to add the Bachelor of Science in Business Administration General Business Option Online; Montana State University-Billings College of Business
THAT:	Montana State University-Billings College of Business seeks approval from the Montana Board of Regents to offer a General Business Option for Online students as part of the Bachelor of Science in Business Administration degree
EXPLANATION:	Over a year ago the College of Business at MSU-Billings sought and obtained Level I approval to offer a general BS in Business Administration degree via on line delivery. We initiated the on line curriculum in summer 2005, and in the short time since over 76 students have enrolled. We subsequently learned that we had approval to offer the BSBA degree with specific emphasis areas (marketing, management, management information systems, finance, or accounting), but did not have approval to offer a BSBA degree with a general business focus. As a result, we are requesting approval to offer an option in general business as part of our BSBA degree. The general business option will be fully available on line, thus enabling students to complete a BS degree in Business Administration via distance delivery. The on line general business option is interdisciplinary and is well suited to potential students interested in degree completion; additional education beyond the Associate degree level; obtaining pre-requisites necessary to enter the MBA program; or obtaining knowledge and skills to support small business enterprises. Approval of this request to offer a general business emphasis will ensure that we can continue to serve our on line constituency.

# LEVEL II REQUEST FORM

Item No.:	132-2706-R0706	Date of Meeting:	July 12-13, 2006
Institution:	Montana State University Billings		
Program Title:	Bachelor of Science in Business Administration, General Business Option Online		

Level II proposals require approval by the Board of Regents.

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

	1.	Change names of degrees (e.g. from B.A. to B.F.A.)
	2.	Implement a new minor or certificate where there is no major or no option in a major;
$\boxtimes$	3.	Establish new degrees and add majors to existing degrees; [add degree option]
	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:**

Over a year ago the College of Business at MSU-Billings sought and obtained Level I approval to offer a general BS in Business Administration degree via on line delivery. We initiated the on line curriculum in summer 2005, and in the short time since over 76 students have enrolled. We subsequently learned that we had approval to offer the BSBA degree with specific emphasis areas (marketing, management, management information systems, finance, or accounting), but did not have approval to offer a BSBA degree with a general business focus. As a result, we are requesting approval to offer an option in general business as part of our BSBA degree. The general business option will be fully available on line, thus enabling students to complete a BS degree in Business Administration via distance delivery. The on line general business option is interdisciplinary and is well suited to potential students interested in degree completion; additional education beyond the Associate degree level; obtaining pre-requisites necessary to enter the MBA program; or obtaining knowledge and skills to support small business enterprises. Approval of this request to offer a general business emphasis will ensure that we can continue to serve our on line constituency.

# ITEM 132-2707-R0706 Approval of Proposal to Offer a Bachelor of Science in Education, Double Major in Reading with Elementary or Secondary Education; Montana State University-Billings

THAT: The Board of Regents of Higher Education authorizes Montana State University-Billings to offer a Major in Reading added to the Elementary or Secondary Education – BSED double major.

### **EXPLANATION:** Montana State University--Billings Department of Special Education, Counseling, Reading and Early Childhood proposes that its existing minor in Reading presently leading to the K-12 Reading Endorsement be expanded to a Reading Major. Current programming allows students to minor in Reading as a part of studies leading to the Initial Teaching Certificate. The Reading Major proposal requires students to add a prescribed set of courses to the foundational Minor configuration to complete the Major. Individuals obtaining the Reading Major will still gualify for the K-12 O.P.I. Reading Endorsement and will, in addition, achieve Highly Qualified Teacher Status. The Reading Major will improve candidate marketability and provide Montana's K-12 schools with more thoroughly prepared specialists in reading education. The existing sets of elective courses serving both the Undergraduate Reading Minor and the M.Ed. Reading Option, when combined with required coursework in both programs, constitute comprehensive reading preparation programs that meet the specifications for Reading Majors suggested by the International Reading Association and the National Association for the Education of Young Children.

The Reading Major at MSU-B requires no additional full time faculty, proposes no changes in fees for clinics and can be fielded with few add-on operational costs, principally those that attach to increases in enrollments in existing offerings. Undergraduate students electing the Reading Major will follow a double major program design in which an <u>existing set</u> of Reading Minor elective courses are *required* in the Major. The curricular configuration of the proposed Reading Major conforms to the U.S. Department of Education's

requirements for Highly Qualified Teacher, the recommended preparation standards of the International Reading Association and includes components suggested for P-3 literacy development by the National Association for the Education of Young Children. With one exception, these courses are already available to students as electives and represent valuable teacher competencies and important developments in the field. Students currently elect from this list to fill out their Minor programs, and consequently are not exposed to the full range of available content and experience.

Reading is an expanding field: study in Reading in conjunction with elementary education preparation and secondary subject matter specialization is becoming more common. Emphasis on providing all teachers with additional and/or advanced training in Reading has emerged as a national educational mandate. The expansion of the Reading Minor to the Reading Major will offer students an opportunity to develop a more comprehensive understanding of the nature of literacy, of effective programs and practices in reading education, and to considerably improve their competencies in a variety of professional settings.

The proposed Reading Major does not *replace* the Minor; rather, it offers students an opportunity for continued study leading to HQT status. Students electing to complete the Minor to qualify for the K-12 Endorsement in Reading may still do so with no further requirement. Teachers who hold K-12 Endorsements in Reading may elect to return to the university to supplement existing Minor programs to obtain the Major and HQT.

## LEVEL II REQUEST FORM

Item No.:	132-2707-R0706	Date of Meeting:	July 12-13, 2006
Institution:	Montana State UniversityBillings		
Program Title:	Bachelor of Science in Education, Double Major in Reading with Elementary Education or Secondary Education		

Level II proposals require approval by the Board of Regents.

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

1. 2. 3. 4. 5.	Change names of degrees (e.g. from B.A. to B.F.A.) Implement a new minor or certificate where there is no major or no option in a major; Establish new degrees and add majors to existing degrees; Expand/extend approved mission; and 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
	division, school, department, institute, bureau, center, station, laboratory, or similar unit.

#### Specify Request:

Montana State University--Billings College of Education, Department of Special Education, Counseling, Reading and Early Childhood requests the expansion of an existing Minor in Reading to a Major. The present Reading Minor exists as the initial certificate minor available to Elementary and Secondary Education Majors. The Reading Major requires the addition of 15 credits of coursework beyond the minor at the undergraduate level.

ITEM 132-2801-R0706	Approval of Proposal to Offer a Major in Mathematics with a 5-12 Teaching Option and a Non-Teaching Option; Montana State University-Northern
THAT:	The Board of Regents of Higher Education authorizes Montana State University-Northern to offer a major in Mathematics with a 5-12 teaching option and a non-teaching option.
EXPLANATION:	The proposed major with 5-12 teaching option will prepare students who also complete the professional education core with an endorsable major in math for employment as secondary school teachers. The proposed major with teaching option meets all state of Montana requirements for initial secondary (grades 5-12) endorsement in mathematics, and also satisfies federal definitions of the content major in mathematics for "highly qualified" secondary teachers.
	The proposed major with non-teaching option shares a common core of required courses with the teaching option. This option will provide opportunities for students in Northern's Biology, Civil Engineering Technology and Business programs to improve their math qualifications, and opportunity for students who may want to pursue post baccalaureate studies in mathematics to prepare for those studies.

# LEVEL II REQUEST FORM

Item No.:	132-2801-R0706	Date of Meeting:	July 12-13, 2006
Institution:	Montana State University - Northern		
Program Title:	Mathematics Major, Teaching and Non-Teaching Options		

Level II proposals require approval by the Board of Regents.

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

	1.
	2.
	major;
$\boxtimes$	3.
	4.
	5.

Change names of degrees (e.g. from B.A. to B.F.A.)

Implement a new minor or certificate where there is no major or no option in a

- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
  - 5. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

#### Specify Request:

The Montana Board of Regents of Higher Education authorizes Montana State University-Northern to award the major in Mathematics with a 5-12 teaching option and a non-teaching option.

The proposed major with a 5-12 teaching option will prepare students who also complete the professional education core with an endorsable major in math for employment as secondary school teachers. The proposed major with teaching option meets all state of Montana requirements for initial secondary (grades 5-12) endorsement in mathematics, and also satisfies federal definitions of the content major in mathematics for "highly qualified" secondary teachers.

The proposed major with non-teaching option shares a common core of required courses with the teaching option. This option will provide opportunities for students in MSU-Northern's Biology, Civil Engineering Technology and Business programs to improve their math qualifications, and opportunity for students who may want to pursue post baccalaureate studies in mathematics to prepare for those studies.

ITEM 132-1001-R0706	New Major and Minor in Restoration Ecology
THAT:	The Board of Regents authorizes The University of Montana- Missoula to offer a Bachelor of Science degree in Restoration Ecology
EXPLANATION:	The College of Forestry and Conservation requests approval of a new undergraduate major leading to a Bachelor of Science degree in Restoration Ecology administered through the Department of Ecosystem and Conservation Sciences. This major would provide students with the knowledge and skills needed to apply a broad spectrum of biological, physical, and social sciences to ecological restoration. Ecological restoration is the fastest growing area of focus and employment in natural resource management. Students completing a major in Restoration Ecology at The University of Montana will be qualified to work in a number of fields concentrating on restoration or ecologically-based management of forest, grassland, riverine, and riparian ecosystems in both the private and public sector. A minor in Restoration Ecology is also requested.

## LEVEL II REQUEST FORM

Item No.:	132-1001-R0706	Date of Meeting:	July 12-13, 2006
Institution:	University of MontanaMissoula		
Program Title:	Restoration Ecology		

Level II proposals require approval by the Board of Regents.

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

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 3. X Establish new degrees and add majors to existing degrees;
- 4. 
  Expand/extend approved mission; and

#### Specify Request:

The College of Forestry and Conservation requests approval of a new undergraduate major leading to a Bachelor of Science degree in Restoration Ecology administered through the department of Ecosystem and Conservation Sciences. This major would provide students with the knowledge and skills needed to apply a broad spectrum of biological, physical, and social sciences to ecological restoration. Ecological restoration is the fastest growing area of focus and employment in natural resource management. Students completing a major in Restoration Ecology at The University of Montana will be qualified to work in a number of fields concentrating on restoration or ecologically-based management of forest, grassland, riverine, and riparian ecosystems in both the private and public sector. A minor in restoration ecology is also requested.

ITEM 132-1002-R0706	Approval of Center for Biomolecular Structure and
	Dynamics

- THAT:The Board of Regents authorizes The University of<br/>Montana—Missoula to establish a Center for Biomolecular<br/>Structure and Dynamics
- **EXPLANATION:** The University of Montana Missoula requests approval to establish the Center for Biomolecular Structure and Dynamics to promote the activities of the recently approved Ph.D. Program for Biomolecular Structure and Dynamics. The Center is to be created to coalesce and enhance the research and teaching expertise of various faculty and units within several scientific disciplines. By bringing together faculty from various disciplines and providing additional support to core facilities with instrumentation and personnel that will facilitate studies of biomolecular structure and dynamics, the Center will become a regional resource, not only to the research efforts on the University of Montana campuses, but to the Rocky Mountain Laboratory in Hamilton and other units of the Montana University System.

# MONTANA BOARD OF REGENTS LEVEL II REQUEST FORM

# Item No.:132-1002-R0706Date of Meeting:July 12-13, 2006Institution:The University of Montana - MissoulaProgram Title:Center for Biomolecular Structure and Dynamics

Level II proposals require approval by the Board of Regents.

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

1.	Change names of	degrees (e.	g. from B.A. to B.F.A.)
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2. Implement a new minor where there is no major;

- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
  - 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:

5.

The University of Montana - Missoula requests approval to establish the Center for Biomolecular Structure and Dynamics to promote the activities of the recently approved interdisciplinary Ph.D. Program for Biomolecular Structure and Dynamics. The Center is to be created to coalesce and enhance the research and teaching expertise of various faculty and units within several scientific disciplines, including structural biology, biophysical chemistry and biochemistry. By bringing together faculty from these and various related disciplines and supporting core facilities with instrumentation and personnel that will facilitate collaborations and studies of biomolecular structure and dynamics, the Center will become a regional resource, not only to the research efforts on the University campuses, but to the Rocky Mountain Laboratory in Hamilton and other units of the Montana University System.

# ITEM 132-1003-R0706 Approval of Proposal to form a School of Public and Community Health Sciences

- **THAT:**The Board of Regents authorizes The University of Montana<br/>– Missoula to form a School of Public and Community Health<br/>Sciences.
- **EXPLANATION:** The University of Montana Missoula requests approval to form a School of Public and Community Health Sciences within the College of Health Professions and Biomedical Sciences. This school would house the new programs of study leading to the Master of Public Health (M.P.H.) degree and a Certificate of Public Health that were approved by the Montana Board of Regents in March of 2005.

# MONTANA BOARD OF REGENTS LEVEL II REQUEST FORM

Item No.:	132-1003-R0706	Date of Meeting:	July 12-13, 2006
Institution:	The University of Montana - Missoula School of Public and Community Health Sciences		
Program Title:			

Level II proposals require approval by the Board of Regents.

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

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

#### Specify Request:

The University of Montana – Missoula requests approval to form a new academic subunit (School of Public and Community Health Sciences) within the College of Health Professions and Biomedical Sciences. This school would house the new program of study leading to the Master of Public Health (MPH) degree and a Certificate of Public Health. These new programs of study were approved by The Montana Board of Regents in March of 2005.

# ITEM 132-1004-R0706 Approval of the new Montana Safe Schools Center in the Division of Educational Research and Service at The University of Montana

THAT: In accordance with Montana University System Policy, the Board of Regents of Higher Education authorizes The University of Montana-Missoula to create The Montana Safe Schools Center.

#### **EXPLANATION:** The efforts of the Montana Safe Schools Center will build upon, expand, and help sustain the nationally recognized work of the DERS team on critical issues surrounding school safety and youth wellness. The Center will focus its activities on issues such as emergency response and disaster preparedness in schools, abduction prevention, bullying prevention, positive behavioral supports, suicide prevention, peer mediation, conflict resolution training, and enhancing collaboration with law enforcement agencies and School Resource Officers (SROs). In addition, the Center will maintain close collaboration with the Montana Office of Public Instruction (OPI) and the U.S. Department of Education's Office of Safe and Drug Free Schools (OSDFS). These proposed activities stem from previously successful programs at DERS, including: the Ravalli County School Preparedness Project, the Montana Safe Schools Project, and the Schools and Communities Coming Together Project. The Montana Safe Schools Center will continue its work in schools across Montana, and in particular, with schools on the Rocky Boy, Flathead, and Blackfeet Reservations.

#### MONTANA BOARD OF REGENTS LEVEL II REQUEST FORM

Item No.:	132-1004-R0706	Date of Meeting:	July 12-13, 2006
Institution:	The University of Montana - Missoula		
Program Title:	The Montana Safe Scho	ools Center	

Level II proposals require approval by the Board of Regents.

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

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

#### Specify Request:

The Division of Educational Research and Service (DERS) at The University of Montana-Missoula is pleased to request Board of Regents' approval for the creation of the Montana Safe Schools Center. The efforts of this Center will build upon, expand, and help sustain the nationally recognized work of the DERS Team on Critical issues surrounding school safety and youth wellness. The Center will focus its activities on issues such as bullying prevention, emergency response and disaster preparedness in schools, abduction prevention, positive behavioral supports, suicide prevention, peer mediation, conflict resolution training, and enhancing collaboration with law enforcement agencies and School Resource Officers (SROs). In addition, the Center will maintain close collaboration with the Montana Office of Public Instruction (OPI) and the U.S. Department of Education's Office of Safe and Drug Free Schools (OSDFS). These proposed activities stem from previously successful programs at DERS, including: The Ravalli County School Preparedness Project, the Montana Safe Schools Project, and the Schools and Communities Coming Together Project. Similarly, the Center will collaborate closely with the Montana Center for the Investigation and Treatment of Childhood Trauma (MCITCT, also housed in DERS). The MCITCT, which was approved by the Board of Regents in 2004, is actively working in schools across Montana, and in particular, with schools on the Rocky Boy, Flathead, and Blackfeet Reservations. The Montana Safe Schools Center's collaboration with this initiative will focus on effective mental health recovery in schools who are dealing with the aftermath of a school or community tragedy.
### ITEM 132-1005-R0706 Approval to change status of Media Arts Program to Department of Media Arts

- **THAT:**In accordance with Montana University System Policy, the<br/>Board of Regents authorizes The University of Montana—<br/>Missoula to grant permission to change the status of the<br/>Media Arts Program to a Department of Media Arts.
- **EXPLANATION:** The University of Montana Missoula requests approval to change the status of the Media Arts Program to a Department of Media Arts. Media Arts has grown to serve each year some 20 M.F.A. candidates, 160 minors and nearly 600 undergraduate students through its general education classes.

## MONTANA BOARD OF REGENTS

### LEVEL II REQUEST FORM

Item No.:	132-1005-R0706	Date of Meeting:	July 12-13, 2006
Institution:	titution: The University of MontanaMissoula		
Program Title:	Media Arts		

Level II proposals require approval by the Board of Regents.

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

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

#### **Specify Request:**

The University of Montana-Missoula requests permission to change the status of the Media Arts Program to a Department of Media Arts.

### ITEM 132-1501-R0706 Authorization to Change the names of approved Certificates to Certificates of Applied Science; Montana Tech of The University of Montana, College of Technology

**THAT:** The Board of Regents of Higher Education authorizes Montana Tech of The University of Montana to change the names of the following programs from Certificates to Certificates of Applied Science:

> Bookkeeping Medical Receptionist Network Technician Drafting Technician Computer Assistant Office Assistant

EXPLANATION: Montana Board of Regents' Policy 301.12, <u>Undergraduate Degree</u> <u>Requirements: Associate Degrees and Certificates of Applied</u> <u>Science,</u> adopted by the Board in May 2005, creates a Certificate of Applied Science as a new degree in the Montana University System. Before the adoption of that new policy, a Certificate was the only name available for such a credential. A name change for a degree program (i.e., from Certificate to Certificate of Applied Science) ordinarily requires a Level II document with all of the supporting paperwork and information. This Level II request is being submitted, without the documentation. All of the Certificates of Applied Science listed above will remain the same. The name of the program and the number of credits in the program will remain the same. The only change that is requested is the name of the degree, which will become a Certificate of Applied Science.

### MONTANA BOARD OF REGENTS

### LEVEL II REQUEST FORM

Item No.:	132-1501-R0706	Date of Meeting:	July 12-13, 2006
Institution:	titution: Montana Tech of The University of Montana		
Program Title: Certificates of Applied Science			

Level II proposals require approval by the Board of Regents.

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

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

### Specify Request:

Montana Board of Regents' Policy 301.12, <u>Undergraduate Degree Requirements:</u> Associate Degrees and <u>Certificates of Applied Science</u>, adopted by the Board in May 2005, creates a Certificate of Applied Science as a new degree in the Montana University System. Before the adoption of that new policy, a Certificate was the only name available for such a credential.

A name change for a degree program (i.e., from Certificate to Certificate of Applied Science) ordinarily requires a Level II document with all of the supporting paperwork and information. This Level II request is being submitted, without the documentation, to change the following Certificates to Certificates of Applied Science:

Bookkeeping Medical Receptionist Network Technician Drafting Technician Computer Assistant Office Assistant

All of the Certificates of Applied Science listed above will remain the same. The name of the program and the number of credits in the program will remain the same. The only change that is requested is the name of the degree, which will become a Certificate of Applied Science.

### ITEM 132-1502-R0706 Authorization to Establish the Center for Advanced Supramolecular and Nano Systems (CASANS): Montana Tech of The University of Montana THAT: The Board of Regents of Higher Education authorizes the establishment of the Center for Advanced Supramolecular and Nano Systems (CASANS) at Montana Tech of The University of Montana in collaboration with The University of Montana. **EXPLANATION:** The Center for Advanced Supramolecular and Nano Systems (CASANS) at Montana Tech of The University of Montana will initiate a long-term and multidisciplinary program in collaboration with The University of Montana to continue, as well as develop new activities involving supramolecular and nano systems. The goals are fourfold. First is to provide the infrastructure for improved research and development activities in supramolecular and nano systems. Second is to enhance existing activities and initiate new ones in order to study, research, and advance these systems. Third is to apply supramolecular and nano systems to bioengineering, biomedical, homeland security, functional and composite materials, coatings, catalysts, sustainable development, smart and recognition technology, circuits and sensors, environmental remediation, resource recovery, and energy. Fourth and foremost is to expand existing, attract outside, and initiate new businesses.

#### MONTANA BOARD OF REGENTS

#### LEVEL II REQUEST FORM

# Item No.:132-1502-R0706Date of Meeting:July 12-13, 2006Institution:Montana Tech of The University of Montana MissoulaProgram Title:Center for Advanced Supramolecular and Nano Systems (CASANS)

Level II proposals require approval by the Board of Regents.

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

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor where there is no major;
- 3. Establish new degrees and add majors to existing degrees;
- 4. Expand/extend approved mission; and
- X 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, <u>center</u>, station, laboratory, or similar unit.

**Specify Request:** The University of Montana, Missoula in collaboration with Montana Tech of The University of Montana, Butte request the establishment of a new research center involving the Departments of Science and Engineering on both campuses for the purposes of furthering the development of new materials for application in medicine, construction and communications. The Center will collaborate with State industries in these developments and direct the research towards their needs.

ITEM 132-1503-R0706	Proposal to establish The Center for Advance Mineral
	and Metallurgical Processing Center of Excellence at
	Montana Tech of The University of Montana

- THAT: The Board of Regents of Higher Education authorizes Montana Tech of The University of Montana to establish the Center for Advanced Mineral and Metallurgical Processing (CAMP) Center of Excellence to advance the mission of the Montana University System by increasing knowledge and improving the economy of the State of Montana in specialty mineral and material processing.
- **EXPLANATION:** The Center for Advanced Mineral and Metallurgical Processing at Montana Tech (CAMP) was originally formed as a Montana Center for Excellence initiated through the now defunct Montana Science and Technology Alliance (MSTA). It was established in 1989. The state funding was distributed through the center in the form of research funding via a formal RFP process. The governing board was responsible for inviting and reviewing proposals and disbursements of funds. With the loss of state funding, the Center evolved into a research center for process engineering, development and testing focusing predominantly on applied projects funded by industrial clients and federal programs throughout the world.

This request is to formalize the Center as a Board of Regents-approved, self funded Montana Tech Center of Excellence. The Center for Advanced Mineral and Metallurgical Processing will facilitate cooperation between the university and industry by supporting, developing and adding value to the global mineral, metallurgical, and materials industry. Economic enhancement may be encouraged through added value processing of minerals, materials and wastes and developing processes that minimize waste generation.

### MONTANA BOARD OF REGENTS LEVEL II REQUEST FORM

Item No.:	132-1503-R0706	Date of Meeting:	July 12-13, 2006	
Institution:	Montana Tech of The	University of Montana		
Program Title:	Center for Advanced	Mineral and Metallurgica	I Processing	

Level II proposals require approval by the Board of Regents.

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

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

### Specify Request:

The Center for Advanced Mineral and Metallurgical Processing at Montana Tech (CAMP) was originally formed as a Montana Center for Excellence initiated through the now defunct Montana Science and Technology Alliance (MSTA). It was established in 1989. The state funding was distributed through the Center in the form of research funding via a formal RFP process. The governing board was responsible for inviting and reviewing proposals and disbursements of funds. With the loss of state funding, the Center evolved into a research center for process engineering, development and testing focusing predominantly on applied projects funded by industrial clients and federal programs throughout the world.

This request is to formalize the Center as a Board of Regents approved, self funded Montana Tech Center of Excellence. The Center for Advanced Mineral and Metallurgical Processing will facilitate cooperation between the university and industry by supporting, developing and adding value to the global mineral, metallurgical, and materials industry. Economic enhancement may be encouraged through added value processing of minerals, materials and wastes and developing processes that minimize waste generation.

ITEM 132-1504-R0706	<u>Proposal to offer a Bachelor of Applied Science Degree</u> in General Studies at Montana Tech of The University of <u>Montana.</u>
THAT:	The Board of Regents of Higher Education authorizes Montana Tech of The University of Montana to offer a Bachelor of Applied Science (BAS) Degree in General Studies.

**EXPLANATION:** Montana Tech of The University of Montana has had success in graduating students in its BAS in Business program. The College believes that it will be able to serve additional students by offering a BAS in General Studies. The degree is especially designed for individuals already in the workforce who hold an AAS degree and who need a direct avenue to obtain a Bachelor's degree.

### MONTANA BOARD OF REGENTS

#### LEVEL II REQUEST FORM

Item No.:	132-1504-R0706	Date of Meeting:	July 12-13, 2006
Institution:	Montana Tech of The Univ	ersity of Montana	
rogram Title: Bachelors of Applied Science in General Studies		es	

Level II proposals require approval by the Board of Regents.

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

	1.	Change names of degrees (e.g. from B.A. to B.F.A.)
	2.	Implement a new minor where there is no major;
$\boxtimes$	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, de	epartment, institute, bureau, center, station, laboratory, or similar unit.

#### **Specify Request:**

Montana Tech of The University of Montana has had success in graduating students in its BAS in Business program. The College believes that it will be able to serve additional students by offering a BAS in General Studies. The degree is designed for individuals already in the workforce who hold an AAS degree and who wish to obtain a Bachelor's degree.

### ITEM 132-202-R0706 Associate of Applied Science Music Technology

- THAT:The Board of Regents of Higher Education authorizes<br/>Dawson Community College to offer a two year Associate of<br/>Applied Science degree in Music Technology.
- **EXPLANATION:** Dawson Community College requests approval to offer a two year Associate of Applied Science degree in Music Technology. This proposal represents the effort of Dawson Communty College to fulfill the employment and educational needs of residents and business within the service area by providing an avenue for training in technical fields.

### MONTANA BOARD OF REGENTS **LEVEL II REQUEST FORM**

Item No.:	132-202-R0706	Date of Meeting:	July 12-13, 2006
Dawson Community College			
Program Title:	Associate of Applied S	cience Music Techno	ology

Level II proposals require approval by the Board of Regents.

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

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- 2. Implement a new minor where there is no major;
- Establish new degrees and add majors to existing degrees; 3.
- $\boxtimes$ 4. Expand/extend approved mission; and
  - Any other changes in governance and organization as described in 5. 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:**

Dawson Community College requests approval to offer a two year Associate of Applied Science degree in Music Technology. This proposal represents the effort of Dawson Community College to fulfill the employment and educational needs of residents and business within the service area by providing an avenue for training in technical fields.

The curriculum will provide students with the essential training and skills to earn a two year music technology degree without leaving the state.

A briefing paper on the August 2006 exchange program between Montana State University and Mansoura University in Egypt

Sept. 1, 2006

Prepared by MSU Communications and Public Affairs

In January 2006, Mansoura University in Cairo, Egypt, invited several U.S. universities to prepare summer program proposals. MSU's submission was selected as the best of the group. MSU and Mansoura University then entered into a contractual agreement regarding the month-long program, scheduled for the end of July until August 28, 2006.

Mansoura University selected 17 students, all males between the ages of 17 and 22, to participate in the program. (MSU did not choose the students.) The Egyptian students and their families paid for the program, which cost roughly \$2,000 per student plus airfare.

All of the Egyptian students were undergraduates studying for degrees in a variety of disciplines at Mansoura University (<u>http://www.mans.edu.eg/english/</u>), which has about 13,000 students.

Following selection by their university, the Mansoura students applied for visas from the U.S. Embassy in Cairo, Egypt. Each was individually interviewed by embassy officials, and then granted an F-1 student visa. In all, the visa process took about two months to complete.

The students were also screened by U.S. immigrations and customs officials upon their arrival in the U.S. This process included visa and passport inspections, biometric registry (including fingerprinting, iris scan, photo), luggage inspections and interviews with Homeland Security officials.

All 17 students were expected in Bozeman July 29, 2006. Six arrived at MSU by July 31. On that date, the university notified Mansoura University, the Homeland Security Office in Helena, Mont., and the Homeland Security Office and Immigration and Customs Office at JFK airport that the 11 students had not arrived in Bozeman.

MSU also sent e-mails to the missing students on Aug. 2, informing them that they must arrive at MSU within 24 hours or they would be reported as "no shows" to the Department of Homeland Security's Student and Exchange Visitor Information System, known as SEVIS. After receiving no response from the students on Aug. 3, MSU reported the students to SEVIS. Though federal requirements for reporting "no shows" allow 30 days, the university decided to act quickly in notifying the proper authorities.

International students coming to attend educational programs at U.S. universities normally travel on their own without supervision. The 11 students who did not arrive did not communicate with MSU about their reasons for not coming to Bozeman.

Such "no shows" among foreign students are rare, although having students arrive late due to immigration processing delays is common.

The 32-day program at MSU included English as a Second Language classes plus lectures on various cultural topics, including U.S. and Montana history. In addition to academic work, the program included a number of recreational activities, including a trip to Yellowstone National Park and white-water rafting.

The exchange program with Mansoura University was set up as a one-year program, and no decisions have yet been made regarding continuing it in subsequent years. Also, there currently is no reciprocal arrangement for MSU students to visit Mansoura University.

MSU has nearly 400 international students on campus and has exchange programs with 39 different universities in 19 countries. Exchange students are one of the most important sources of diversity on the MSU campus. Many MSU students study at international universities for the same price they would pay to study at MSU.

MSU is one of many U.S. universities that hosts Middle Eastern students. In fact, 31,248 Middle Eastern students studied in the United States in 2004/2005, according to the Institute of International Education. The Atlas of Student Mobility reports 1,822 students from Egypt studied in the United States in 2004.

TO:	Montana Board of Regents
FROM:	Roger Barber Deputy Commissioner for Academic and Student Affairs
RE:	The College Preparatory Program Report
DATE:	September 27 - 29, 2006

Two reports, concerning the College Preparatory Program, are attached to this memorandum.

The first report is prepared, in response to Montana Board of Regents' Policy 301.7. which states that "(i)n order to improve students' preparation for college-level work, the Board of Regents of Higher Education requires. . .(a) College Preparatory Program for students who wish to enter a (four-year) campus of the Montana University System. . ."

The policy goes on to say that ". . .each of the six campuses of the Montana University System is granted discretionary exemptions for in-state applicants who have not completed the College Preparatory Program not to exceed 5 percent of the in-state enrollment of first-time, full-time first year students. Institutions will be obligated to provide appropriate annual reports indicating the numbers of students enrolled as exemptions and their academic progress in comparison to those students regularly admitted."

Hopefully, the Report is self-explanatory. The first table describes the "first-time, full-time" student pool, and the number of students in that pool who were admitted by exemption because they had not completed the College Preparatory Program in high school. The second table describes the academic performance of the "first-time, full-time" students, at the end of their first year of college; and the third table describes the academic performance of the academic performance of the students who were admitted by exemption at the end of their first year of college.

The second report provides information on the academic performance of first-time, full-time students who were admitted in the 2004 – 2005 academic year. Historically, the College Preparatory Program report to the Board of Regents has only followed students during their first year of postsecondary education. The Board asked the campuses to continue to follow the students in the 2004 – 2005 cohort, however, and the second report provides information on those students following two years of postsecondary education. The information in the report is similar to the first report, except two years of follow-up data are included.

I would be happy to discuss the information in the report.

### MONTANA UNIVERSITY SYSTEM COLLEGE PREPARATORY PROGRAM EXEMPTIONS (POLICY 301.7) ACADEMIC PROGRESS OF EXEMPTED IN-STATE STUDENTS

ACADEMIC YEAR 2005-2006								
	UM	<u>TECH</u>	<u>UM-W</u>	MSU	<u>MSUN</u>	<u>MSUB</u>	<u>SYSTEM</u>	
Total number of In-State First-Time, Full-								
Time, First-Year students <sup>a</sup> :	1213	233	175	1265	159	403	3448	
# of In-state, First-time, Full-Time, First-Year								
Students Admitted Under the 5% College								
Prep Exemption Policy:	73	1	16	64	8	2	164	
% of College Prep Exemptions of In-State,								
First-Time, Full-Time, First-Year Students:	6.0%	0.4%	9.1%	5.1%	5.0%	0.5%	4.8%	
<b>Academic Progress</b> <sup>b</sup> Distribution by College GPA of <b>ALL</b> In-State, First-time, Full-time, First Year Students	<u>UM</u>	<u>TECH</u>	<u>UM-W</u>	<u>MSU</u>	MSUN	<u>MSUB</u>		
% with 3.0 or greater:	50.2%	37.3%		43.1%		40.0%		
% with 2.50 - 2.99:	16.1%	19.3%		19.9%		16.0%		
% with 2.00 - 2.49:	12.8%	14.2%		14.4%				
% below 2.00:	17.5%	24.0%	12.6%	13.0%	27.0%	14.0%		
% of All In-State, First-Time, Full-Time, First-								
Year Students with no reported GPA <sup>c</sup> :	3.4%	5.2%	8.6%	9.6%	0.0%	15.0%		
Academic Progress <sup>b</sup>								
Distibution by College GPA of In-State, First-	UM	TECH	UM-W	MSU	MSUN	MSUB		
Time, Full-time, First-Year Students								
Receiving the Exemption								
% with 3.0 or greater:	30.1%	0.0%	18.8%	25.0%	0.0%	0.0%		
% with 2.50 - 2.99:	19.2%	100.0%	18.8%	21.9%	50.0%	50.0%		
% with 2.00 - 2.49:	17.7%	0.0%	18.8%	12.5%	25.0%	50.0%		
% below 2.00:	28.7%	0.0%	18.8%	25.0%	25.0%	0.0%		
% of Exemptions with no reported GPA <sup>c</sup> :	4.1%	0.0%	25.0%	15.6%	0.0%	0.0%		

<sup>a</sup> Based on admissions during the 2005-2006 Academic Year

<sup>b</sup> Overall GPA at the end of the reporting period

<sup>c</sup> No longer in attendance at the end of the reporting period

### **Definitions**

**First-Time, First-Year:** An entering freshman who has never attended any college or who entered with advanced standing (college credits earned before graduation from high school). **Full-Time:** A student taking eight or more credits in a semester.

### MONTANA UNIVERSITY SYSTEM COLLEGE PREPARATORY PROGRAM EXEMPTIONS (POLICY 301.7) ACADEMIC PROGRESS OF EXEMPTED IN-STATE STUDENTS

ACADEMIC YEAR 2005-200	6 For t	he 200	)4-200	5 Stud	lent Co	hort
	UM	TECH	UM-W	MSU	MSUN	MSUB
Total number of In-State First-Time, Full-Time,						
First-Year students <sup>a</sup> :	1306	239	182	1388	150	412
# of In-state, First-time, Full-Time, First-Year						
Students Admitted Under the 5% College Prep						
Exemption Policy:	80	7	9	70	8	1
% of College Prep Exemptions of In-State, First-						
Time, Full-Time, First-Year Students:	6.1%	2.9%	4.9%	5.0%	5.3%	0.2%
Academic Progress <sup>b</sup>						
Distribution by College GPA of ALL In-State, First-time,		TEOU		MOU		
Full-time, First Year Students	<u>UM</u>	TECH	<u>UM-W</u>	MSU	<u>MSUN</u>	<u>MSUB</u>
% with 3.0 or greater: (AY 2004-2005)	42.8%	48.1%	38.0%	51.2%	37.3%	42.0%
% with 3.0 or greater: (AY 2005-2006)	30.5%	35.6%	33.5%	34.6%	32.0%	29.0%
% with 2.50 - 2.99: (AY 2004-2005)	18.2%	18.8%	18.4%	20.7%	20.0%	17.0%
% with 2.50 - 2.99: (AY 2005-2006)	13.7%	13.4%	17.6%	17.3%	15.0%	14.0%
% with 2.00 - 2.49: (AY 2004-2005)	13.8%	7.5%	13.8%	10.5%	12.0%	15.0%
% with 2.00 - 2.49: (AY 2005-2006)	9.0%	13.0%	9.3%	9.9%	11.0%	5.0%
% below 2.00: (AY 2004-2005)	23.6%	19.6%	14.9%	17.2%	28.0%	18.0%
% below 2.00: (AY 2005-2006)	14.3%	5.0%	4.9%	4.4%	9.0%	4.0%
% of All In-State, First-Time, Full-Time, First-Year						
Students with no reported GPA <sup>c</sup> : (AY2004-2005)	1.5%	4.2%	14.9%	0.5%	2.7%	8.0%
% of All In-State, First-Time, Full-Time, First-Year						
Students with no reported GPA <sup>c</sup> : (AY2005-2006)	31.0%	33.0%	34.6%	33.8%	33.0%	48.0%
Academic Progress <sup>b</sup>						
Distibution by College GPA of In-State, First-Time, Full-	UM	TECH	UM-W	MSU	MSUN	MSUB
time, First-Year Students	<u></u>	<u></u>	<u> </u>	<u></u>	<u></u>	<u></u>
Receiving the Exemption						
% with 3.0 or greater: (AY 2004-2005)	23.8%	30.0%	22.3%	25.7%	12.5%	100.0%
% with 3.0 or greater: (AY 2005-2006)	13.8%	50.0%	11.1%	11.4%	25.0%	100.0%
% with 2.50 - 2.99: (AY 2004-2005)	22.5%	40.0%	11.2%	22.9%	50.0%	0.0%
% with 2.50 - 2.99: (AY 2005-2006)	16.6%	0.0%	33.3%	15.7%	0.0%	0.0%
% with 2.00 - 2.49: (AY 2004-2005	16.2%		22.3%			0.0%
% with 2.00 - 2.49: (AY 2005-2006)	7.6%				12.5%	
% below 2.00: (AY 2004-2005	35.0%	30.0%	44.2%	38.6%	37.5%	0.0%
% below 2.00: (AY 2005-2006)	16.6%	50.0%	0.0%	7.1%	12.5%	0.0%
% of Exemptions with no reported GPA $^{\circ}$ : (AY 2004-						
2005)	2.5%	0.0%	0.0%	2.9%	0.0%	0.0%
% of Exemptions with no reported GPA <sup>c</sup> : (AY 2004-						0.0%
2005)	44.8%				50.0%	

<sup>a</sup> Based on admissions during the 2005-2006 Academic Year

<sup>b</sup> Overall GPA at the end of the reporting period

<sup>c</sup> No longer in attendance at the end of the reporting period

#### **Definitions**

**First-Time**, **First-Year**: An entering freshman who has never attended any college or who entered with advanced standing (college credits earned before graduation from high school).

Full-Time: A student taking eight or more credits in a semester.

TO:	Montana Board of Regents
FROM:	Roger Barber Deputy Commissioner for Academic & Student Affairs
RE:	Additional Information on Post-Baccalaureate Students
DATE:	September 27-29, 2006

At the May 2006 Board of Regents' meeting, the Academic and Student Affairs committee members discussed Regent policy 940.29, which requires Montana residents to pay "super tuition" if they enroll in additional classes after earning a baccalaureate degree. The conversation at that meeting focused on the fiscal impact to the campuses if the policy was repealed.

The committee members decided to continue their discussion at this meeting. In preparation for that discussion, they asked for additional information concerning:

- the number of students who are affected by this policy; and
- the career plans of those students.

That information, from Fall Semester 2005, is attached to this memorandum. In addition, the fiscal impact information is included again.

Montana University System Enrollment of Post-Baccalaureate Students Fall Semester 2005

MUS Institutions	# Enrolled	Credit Hours Attempted	Average Credit Load
Montana State University – Billings	38	299	7.9
Montana State University – Northern	33	319	9.7
Montana State University – Bozeman	347	3819	11.0
University of Montana – Missoula	416	3956	9.5
University of Montana – Montana Tech	46	407	8.8
University of Montana – Western	51	368	7.2
<b>Total</b>	<b>931</b>	<b>9168</b>	<b>9.8</b>

### Fall Semester 2005

Major	#	Major	<u>#</u>	Major	<u>#</u>
AAS Equine St-Equine Mgmt Opt	1	Environmental Engineering	2	Post Bacc - Non Degree	2
AAS Natural Horsemanship	1	Environmental Studies	2	Pre-Education	14
Accounting BSBA	12	Fine Arts	19	Pre-English	2
Agricultural Business	1	Forestry	3	Pre-Forestry	2
Agricultural Operations Tech	1	French	3	Pre-Graphic Design	3
Animal Science	3	General and Undecided	16	Pre-Law	1
Anthropology	1	General Engineering	1	Pre-Medical Sciences	6
Art	11	General Science Broadfield	4	Pre-Nursing	73
BA Enviro Sciences Option	2	General Studies	1	Pre-Nursing ADN	2
Bach Liberal Stds A/S BSLS	1	Geography	2	Pre-Pharmacy	8
Biological Sciences	12	Geology	2	Pre-Prof-Phys Therapy	2
Biology	25	Geophysical Engineering	1	Pre-Sec Ed: Business Education	1
Biotechnology	2	Health & Human Performance	9	Pre-Studio Arts	6
BS Early Childhood Education	1	Health Administration BS	1	Pre-Wildlife Biology	3
BS Natural Horsemanship	1	Health and Human Development	18	Pre Prof Dental Hygiene	1
BS: Bus-Business	1	Hist Ext BSED Provisional	1	Pre Prof Medicine	1
Business	22	History-Political Science	3	Pre Prof Nursing	4
Business & Information Tech	2	History	23	Pre Prof Physical Therapy	1
Business Administration	43	Horticulture	5	Pre_Elementary Education (K-8)	1
Business Education	1	Industrial Arts/Technology ED	1	Pre_Sec Ed: English (5-12)	1
Business Technology	2	Industrial Technology	1	Pre_Sec Ed: Social Sci (5-12)	1
Cell Biology and Neuroscience	12	Japanese	1	Psychology	13
Chemistry	11	Journalism	1	Range Science	1
Civil Engineering	12	Land Resource Sciences	1	Recreation Management	2
Classics	1	Liberal Studies	5	Resource Conservation	3
Communication Studies	1	Mathematics	14	Sec Ed: Business Education	1
Community Service	1	Mechanical Engineering	4	Sec Ed: English (5-12)	1
Composition & Music Technology	2	Media and Theatre Arts	2	Secondary Education	11
Computer Engineering	1	Medical Technology	2	Social Science Brdfld	3
Computer Information Systems	2	Microbiology	5	Social Work	4
Computer Science	18	Modern Languages & Literatures	12	Sociology	4
Construction Engineering Tech	4	Music	3	Span Tchg Cert Opt Provisional	1
Design Drafting Technology	2	Native American Studies	2	Spanish	1
Diesel Technology	2	Non Degree	24	Spanish BA	1
Earth Sciences	5	Nursing	61	Teacher Education Recertify	3
Economics	4	OCC Safety & Health	2	Technology Education	1
Education	14	Pharmacy-Exter	11	Transition Nursing BSN	4
Electrical Engineering	4	Pharmacy	52	Undeclared	81
Elementary Education	33	Philosophy	1	University Studies	7
Eng Tech: Civil Engineer Tech	1	Physics	2	Wildlife Biology	10
English	14	Plant Science	1	Total	931
Environmental Design	20	Political Science	10		

### POLICY 940.29

Board of Regents' Policy 940.29 requires Montana residents to pay so-called "super tuition" if they already hold a baccalaureate degree and they return to the Montana University System to take additional coursework. The four-year campuses were asked to estimate the loss in revenue if the policy was repealed, and the following table sets out those estimates. A copy of Policy 940.29 is set out below the table.

UM-Missoula	\$200,000
MT Tech	\$12,800
UM-Western	\$23,000
MSU-Billings	\$49,500
MSU-Bozeman	\$240,000
MSU-Northern	\$25,000

#### **Board Policy:**

Residents of Montana who take additional courses after earning a baccalaureate degree will be charged 120% of the resident undergraduate rate at the four-year campuses. The exceptions to this policy will be granted for post-baccalaureate students who enroll for courses offered by the colleges of technology or post-baccalaureate students at The University of Montana-Western and Montana State University-Northern when it can be documented that a student is pursuing an associate degree. Nonresident students will pay the resident assessment plus a nonresident fee equivalent to nonresident graduate tuition.

TO:	Montana Board of Regents
FROM:	Roger Barber Deputy Commissioner for Academic and Student Affairs
RE:	The Radiologic Technology Programs at Montana State University-Great Falls College of Technology
DATE:	September 27 – 29, 2006

At its May 2006 meeting, the Montana Board of Regents approved a new Associate of Applied Science degree in Radiologic Technology at Montana State University-Great Falls College of Technology. The program exceeded the 72-credit cap for Associate of Applied Science degrees, however, so the Board's approval was contingent on compliance with the provisions of Regent Policy 301.12, Undergraduate Degree Requirements: Associate Degrees. Montana State University-Great Falls College of Technology was asked to come to this meeting with evidence of its compliance.

The Radiologic Technology program has been reworked, and now contains 72 credits. The attached table sets out the courses and credits in that program.

In addition to the specific program change at MSU-Great Falls College of Technology, the Board of Regents asked for a review of all of the Radiologic Technology programs in the Montana University System to determine their similarities and articulation possibilities. A summary of those programs is also attached to this memorandum; and a more comprehensive document, including the summary, can be found in the appendix materials. Additional alignment work on the radiologic technology programs should be assigned to a work group of the Two-Year Committee.

### **MSU – GREAT FALLS COLLEGE OF TECHNOLOGY**

Associate of Applied Science Degree (AAS) - Radiologic Technology Requested Curriculum Revision

	Health Care Core Courses	
	(to be taken prior to entrance into the program)	1
Course No	Title	Credits
ENGL 121	English Composition I	3
MATH 161	College Algebra with Science Applications	3
BIO 213	Anatomy & Physiology I	4
BIO 214	Anatomy & Physiology II	4
	TOTAL CREDITS	14
	First Year – Fall Semester	
Course No	Title	Credits
RAD 120	Radiobiology / Rad. Prot.	3
RAD 105	Intro Radiologic Technology	2
RAD 110	Radiographic Procedures I	2
RAD 115	Radiographic Principles I	3
RAD 140	Clinical Education I	6
	TOTAL CREDITS	16
	First Year – Spring Semester	
Course No	Title	Credits
RAD 111	Radiographic Procedures II	3
RAD 116	Radiographic Principles II	3
RAD 130	Patient Care in Radiology	2
RAD 141	Clinical Education II	6
	TOTAL CREDITS	14
	Summer Session	
Course No	Title	Credits
RAD 240	Radiographic Internship	3
	TOTAL CREDITS	3
	Second Year – Fall Semester	•
Course No	Title	Credits
RAD 210	Radiographic Imaging III	4
RAD 220	Radiological Procedures III	2
RAD 241	Radiographic Clinical Ed III	6
	TOTAL CREDITS	12
	Second Year – Spring Semester	L
Course No	Title	Credits
RAD 215	Radiological Procedures IV	2
RAD 242	Radiographic Clinical Ed IV	6
RAD 270	Registry Review	2
COMM 135	Interpersonal Communications	3
-	TOTAL CREDITS	13
<b>Total Program Credit</b>		72

### COMPARISON of AAS DEGREE PROGRAMS in RADIOLOGIC TECHNOLOGY

In May 2006, Montana's Board of Regents of Higher Education was asked to approve a new Radiologic Technology AAS degree program in the state, bringing the number of such programs in the state to five. The Regents approved the program, proposed by MSU – Great Falls College of Technology, under several conditions. One condition was that directors of the five programs be convened to identify similarities and differences in the programs and to consider how they might be better aligned.

As the CEO of MSU – Great Falls, Dean Mary Sheehy Moe facilitated the process of convening the program directors and analyzing the curricula of the five programs. The following similarities and differences among the programs have now been identified.

#### COMPLIANCE with BOR POLICY 301.12

- Four of the 5 programs require no more than 72 credits. FVCC's program requires 83 credits.
- Only Montana Tech's AAS degree can be completed in two academic years.
  - The remaining four programs can be completed in two academic years *after* the prerequisite courses are completed.
    - Missoula's prerequisites can be completed in one semester.
    - The remaining three programs have sequential science prerequisites that would require at least two semesters to complete.
- All 5 programs meet the policy requirement of at least 2/3 of the total credits dedicated to technical coursework.
- All 5 programs meet the requirements of Northwest Commission on Colleges and Universities for related instruction in computation, communications, and human relations. In an effort to reduce credits, FVCC's human relations component is embedded, rather than a discrete course.
- Total general education credits range from 15 at MSU Great Falls to 23 at UM Missoula. Similar requirements include:
  - Anatomy & Physiology I and II
  - One composition course
    - English Composition
    - Technical Writing/Comm.
    - Business Writing
  - One math course
    - College Algebra
    - Intermediate Math/Algebra
    - Math for Tech/ Contemp Math
  - One human relations course

Differences in general education requirements include:

- o Anatomy & Physiology course not always equivalent
- Math and composition courses not always core-level
- o Human relations requirement is met through a different course on each campus
- UM-Missoula requires one more science course and one more human relations course than the other programs

#### CURRICULUM

#### **General Education**

- Strong similarity in the amount and types of courses required
- More general education than the norm at UM Missoula; less at MSU Great Falls

1

- 5 programs Tech, FVCC, GF Billings, Missoula Billings 5 programs
- MSU-GF
  - Butte, FVCC, Missoula
- Billings 4 programs

5 programs

#### **Didactic Coursework**

- Four programs require 26-28 credits of didactic coursework. UM-Missoula requires 22 credits.
- All 5 programs require a registry review/transition to workplace course as a capstone to the curriculum. (At MSU-Billings this is a 1-credit course; at all others, it is 2 credits.)
- Some programs include computer literacy, medical ethics, and medical terminology in their technical course work. All program directors recognize the value of these courses, but cannot offer them and comply with the 72-credit cap on the degree.

#### **Clinical Coursework**

- Four programs require 26 or 27 credits of clinical coursework. FVCC requires 37 credits of clinical coursework.
- Credit per clinical hour are calculated as follows:
  - o 1 credit:4 clinical hours Tech, Missoula, Great Falls
  - 1 credit: 3 clinical hours Billings, FVCC

Billings is exploring recalculating its clinical hours at the 1:4 level. FVCC's clinic hours are under-reflected by credits. Students put in 40-hour weeks in the program, either in class or in clinic, so total clinical hours may be as high as 3700 hours.

• Four program directors (with Montana Tech as the exception) find that the credits dedicated to clinical course work do not adequately reflect the need for clinical hours required to be prepared for the profession.

#### DELIVERY

- Three programs Montana Tech, FVCC, and Missoula and offer at least some of the didactic course work online either as "hybrid" course delivery or totally online.
- Enrollment capacity in the programs varies:
  - Montana Tech 22 students this year (online format)
  - Missoula
     16 students ideal
  - Billings 16 students now, but 14 ideal
  - FVCC 12 students maximum
  - MSU Great Falls
     16 students maximum
- Partnerships with healthcare providers play an important role in the programs' quality resources:
  - Montana Tech Not underwritten by healthcare provider
  - o Missoula Minor donations of space, funding by hospital
  - Hospital volunteers clinical staff
    - Billings Hospitals underwrite clinical faculty salaries
      - Hospitals supplement program director salary
  - FVCC
     FVCC
     Clinical sites
     Hospital assists with clinical space
  - MSU Great Falls
     Didactics delivered by faculty funded by Benefis
    - Clinical instruction funded by Benefis, GF Clinic
      - Clinical sites provided by Benefis, GF Clinic

### OUTCOMES

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- Three of the 4 programs with a graduate history have 100% pass rates on licensure exam
- Montana Tech COT has one year of graduates with an 86% pass rate.

TO:	Montana Board of Regents
FROM:	Roger Barber Deputy Commissioner for Academic and Student Affairs
RE:	Articulation Agreements for Electrical Engineering

DATE: September 27 - 29, 2006

In May 2006, the Montana Board of Regents approved a new Bachelor of Science degree in Electrical Engineering at Montana Tech of The University of Montana. During the discussion that preceded the approval, Regent Barrett said that he was concerned about students and their ability to transfer between this new electrical engineering program and its long-time counterpart at Montana State University-Bozeman.

As part of its approval, the Board of Regents asked both institutions to return to the September 2006 Board of Regents' meeting with an articulation or transfer plan in place. Those plans are attached to this memorandum. I.E., a transfer plan for students who move from the Montana State University-Bozeman program into the Montana Tech of The University of Montana program, and vice versa.

If you have any questions, my academic colleagues from Montana Tech of The University of Montana and Montana State University-Bozeman would be more than happy to answer them.

Freshman year				Credit
CHEM 1056 Gen Chem I	3		CHEM 121 Conorol Chamietry	5
CHEM 1136 Chem Lab I	1		CHEM 131 General Chemistry I	Э
MATH 1520 Calc I	3		MATH 181 Calculus & Analytic Geometry I	4
MATH 1530 Calc II	3		MATH 182 Calculus & Analytic Geometry II	4
ENGR 1010 Intro Engr Calc&Problems	3			
ENGL 1046 Engl Comp (C)	3		ENGL 121 College Writing I	3
ENGR 1050 Intro to General Engring	1			
PHYS 1046 Gen Phys	3		PHYS 211 General & Modern Physics I	4
CHEM 1066 Gen Chem II	3		CHEM 131 General Chemistry I	4
Social Science Elective	3			
*Approved Electives	3			
**Computer Programming Elective 1	3		To be evaluated on an individual basis	
Sophomore year	<u> </u>			
ENGR 2050 Engr Mechanics-Statics	3	1	EM 251 Statics & Particle Dynamics	3
MATH 3256 Matrices and Linear Alg.	3		MATH 333 Linear Algebra	3
MATH 2510 Calc III	4		MATH 224 Calculus Functions Several	4
PHYS 2076 Gen Phys	3			4
PHYS 2006 Phys Lab	1		PHYS 212N General & Modern Physics II	4
	3		To be evaluated on an individual basis	
**Computer Programming Elective 2				_
ENGR 2150 CAD and problem solving	2		To be evaluated on an individual basis	
ENGR 2060 Engr Mechanics-Dynamics	3		EM 252 Rigid Body Mechanics	3
MATH 2236 Differential Equations	3		MATH 225 Intro to Differential Equations	3
ENGR 2530 Electric Circuits	3		EE 206 Circuits I Note 1	4
ENGR 2550 Electric Circuits Lab	1			
PHYS 2086 Gen Phys	3		PHYS 213 General & Modern Physics III	4
PHYS 2106 Phys Lab	1			
Junior year	-			
MATH 3316 Statistics	3		STAT 332 Stats Scientists/Engineers	3
ENGR 3210 Technical Writing	3		ENGL 223 Technical Writing	3
ENGR 3260 Fluid Mechanics	3		EM 335 Mechanics of Fluids	3
ENGR 3270 Digial Circuit Design	3		EE 262 Logic Circuits Lab	1
PHYS 3036 Electronics	3		EE 261 Intro to Logic Circuits	3
ENGR 3540 Electric Machines	3		To be evaluated on an individual basis	
ENGR 3550 Circuits II	3		To be evaluated on an individual basis	
ENGR 3570 Electronic Design	4		EE 317 Electronics	4
ENGR 3580 Signals and Systems ****	3		EE 308 Signals and Systems	3
PHYS 4056 Electricity and Magnetism	3		EE 334 Electromagnetic Theory	3
***Professional Electives	2		To be evaluated on an individual basis	
Humanities Elective	3			
Senior year			L	
ENGR 4440 Communication Systems	3		EE 445 Telecommunications Systems	3
ECON 2600 Economics	3		ECON 101 Econ Way of Thinking	3
ENGR 4410 Control Systems Theory	3		EE 321 Control Systems	3
ENGR 4280 Intro. Microprocessors	3		To be evaluated on an individual basis	
ENGR 3340 Thermodynamics	3		ME 320 Thermodynamics I	_
Humanities Elective	3			-
MEC 3630 Engr Economy	3		I&ME 325 Engineering Economy	3
ENGR 4040 Professional Engineering	1		To be evaluated on an individual basis	3
ENGR 4940 Professional Engineering	1			+
			To be evaluated on an individual basis	
ENGR 4920 Engineering Design (W)	3		To be evaluated on an individual basis	-
***Professional Electives	9		To be evaluated on an individual basis	
**Computer Programming Elective select two from: C				
***Professional Electives must be selected from: EN				
ENGR 4500, ENGR 4510, ENGR 45 graduate level Electrical Engineering				
graduate level Electrical Engineering ****A Tech student must take ENGR 3580 or GEOP 44		585,		

\*\*\*\*A Tech student must take ENGR 3580 or GEOP 4460 Note 1: To receive credit for EE 206 at MSU, a student must complete ENGR 2530 and 2550 at Tech.

Note 2: To receive credit for EE 262 and 261 at MSU, a student must complete ENGR 3270 and PHYS 3036 at Tech.



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August 29, 2006

Dr. David Dooley, Provost Dr. Robert Marley, COE Dean Montana State University

*Ref.: letter, Peterson to Trudnowski, 6/7/06, reporting on transfer equivalencies between Tech's EE option and MSU BSEE degree programs* 

Dear Drs. Dooley and Marley:

In response to the request to review again the equivalency of Montana Tech courses in the BSEE program with requirements in the MSU Electrical Engineering program, I have completed this review with results presented below. As reported in the referenced letter, there is opportunity for students to transfer between these two duplicate degree programs.

This current review focuses on the courses required by Tech in their recently approved BSEE degree program, which are the same as previously published for their General Engineering degree, EE option, with only one minor exception regarding a computer course. The results reported herein include consideration of additional information provided by Dr. Dan Trudnowski in his correspondence with me within the past month. He brought to my attention updated courses at Tech: ENGR 3550 Electric Circuits II (2 cr lecture plus lab) and ENGR 3580 Signals & Systems Analysis (2 cr lecture plus lab). Also Dr. Susan Patton, Vice Chancellor at Tech, has provided sets of suggested equivalencies among courses in the Tech and MSU BSEE programs.

The additional information from Dr. Trudnowski regarding topics now included in ENGR 3550 Electric Circuits II, although the catalog description in the new 2006-07 Tech catalog has not changed, allows ENGR 3550 to meet the intent of the MSU course EE 207 Circuits II. Since this Tech course is 3 credits and the MSU course is 4 credits, the shortage of one credit is added to the EE professional electives for students transferring into the MSU BSEE program.

The new description and course number ENGR 3580 Signals & Systems Analysis provides a stronger match with the MSU course EE 308 Signal and System Analysis. These two courses are considered equivalent.

There are credit differences between the calculus sequences at Tech and MSU, as shown in the table below. The more thorough coverage of mathematical calculus principles at MSU, reflected in

the heavier credit load, is somewhat mitigated by Tech's requirement for MATH 3256 Matrices and Linear Algebra (3 cr). Similarly, comparing Physics courses shows there is 1 credit more in the Physics courses at MSU than at Tech.

• Mathematics calculus courses

MSU		Tech	
Math 181	4 cr	Math 1520	3 cr
Math 182	4 cr	Math 1530	3 cr
Math 224	4 cr	Math 2510	4 cr
Math 225	4 cr	Math 2236	3 cr
TOTALS	16 cr		13 cr

• Physics courses

MSU		Tech	
Physics 211	4 cr	Phys 1046	3 cr
Physics 212	4 cr	Phys 2076/2096	4 cr
Physics 213	4 cr	Phys 2086/2106	4 cr
TOTALS	12 cr		11 cr

As identified in the table of EE courses below, there is a shortage of 11 credits in required EE courses for Tech students who would choose to transfer to the MSU EE program, due to several Tech classes being 1 credit less than corresponding MSU EE courses and some EE courses not being available at Tech. In addition as listed above, there is a 3 credit shortage in Tech mathematics courses relative to the MSU calculus sequence of courses, and 1 credit short in Physics course credits. Considering these various credits, a summary of the remaining requirements to obtain the MSU BSEE degree after transferring from Tech is as follows.

- Mathematics and Physics
  - The 3 credit shortage in the mathematics sequence is satisfied with the Tech mathematics required course MATH 3256 Matrices & Linear Algebra;
  - The 1 credit shortage in Physics courses is added to the general professional electives (either EE or non-EE elective, from approved list in the catalog);
- Remaining MSU EE courses required:
  - o Professional electives
    - § 11 credits remain to be taken in approved EE electives
    - § The non-EE professional electives of 5 credits plus the 1 credit from the Physics shortage are satisfied from the Tech courses ENGR 3260 Fluid Mechanics (3 cr) and ENGR 3340 Thermodynamics (3 cr)
  - o Remaining to be taken: EE 409 Semiconductor Materials, 3 cr
  - o Remaining to be taken: EE 446 Telecommunications Lab, 1 cr
- Other required courses remaining for a transfer student from Tech to complete at MSU:
  - o CS 160 Intro to Programming, 4 cr
  - 0 I&ME 350 Engineering Data Analysis, 2 cr

Transfer equivalencies for courses from Tech to fulfill requirements in EE courses as part of the MSU BSEE program are shown in the table below.

MSU Electrical Engineering program, BSEE	Tech General Engineering program, EE option
EE 101 Intro to EE Fundamentals; 2 cr	* no match; add 2 credits to EE professional electives
EE 206 Circuits I; 3 cr lec., 1 lab	ENGR 2530 Intro to Elec. Circuits; 3 cr lec. ENGR 2550 Circuits Lab; 1 cr lab
EE 207 Circuits II; 3 cr lec., 1 lab	* partial match: ENGR 3550 (2 cr lec plus lab); add 1 cr to EE professional electives requirements
EE 261 Intro to (digital) Logic; 3 cr lec. EE 262 Logic Circuits Lab; 1 cr lab	** part of PHYS 3036 Elem. Electronics; 2 cr lec., 1 lab ** ENGR 3270 Digital Circ. Design; 2 cr lec., 1 lab
EE 308 Signals and Sys Analysis; 3 cr lec.	* ENGR 3580 Signals and Sys. Analysis; 2 cr lec, 1 lab; short 1 lecture credit: add 1 cr to prof. electives requirements
EE 317 Electronics; 3 cr lec., 1 lab	ENGR 3570 Electronic Design; 3 cr lec., 1 lab
EE 334 Electromagnetic Theory I; 3 cr lec.	PHYS 4056 Electricity & Magnetism; 3 cr lec.
EE 371 Microprocessor Systems; 3 cr lec., 1 lab	* ENGR 4280 Intro to Microproc.; 2 cr lec., 1 lab; Add 1 cr to EE professional electives
EE 321 Control Systems I; 3 cr lec.	ENGR 4410 Control Sys Theory & Design; 3 cr lec.
EE 355 Energy Conversion; 3 cr lec., 1 lab	* ENGR 3540 Electric Machines; 2 cr lec., 1 lab; Add 1 cr to EE professional electives
EE 391 Design I; 1 cr lec.	* no match; add 1 credit to EE professional electives
EE 445 Telecommunications Systems; 3 cr lec.	ENGR 4440 Communications Sys., 3 cr lec.
EE 446 Telecommunications Lab; 1 cr lab	* no match; needs to be taken
EE409 Material Science; 3 cr lec.	* no match; needs to be taken
EE 492R Design II; 1 cr. seminar, 2 lab	ENGR 4920W Engineering Design; 1 cr lec., 2 lab
EE 495 Prof., Ethics & Engr Practice; 1 cr lec.	ENGR 4940 Engineering Seminar; 1 cr lec
EE professional electives; 4 credits	ENGR 4450 Process Instru. & Control; 3 cr lec. ENGR 4460 Process Instru. & Control Lab; 1 lab
EE professional electives; 4 credits	* no match; needs to be taken from approved list

\* These courses are short one or more credits, relative to the MSU EE program

\*\* The two courses PHYS 3036 and ENGR 3270 as a set count for EE261 and EE262, but not individually

Sincerely,

James n. Deterson

James N. Peterson, Professor and Head Electrical and Computer Engineering Department

### Admission, Placement and Remediation in the Montana University System

prepared by Jan Clinard, Director of Academic Initiatives

### Introduction

Admission policy and the placement of students into college-level or remedial coursework are intertwined. Although the Board of Regents has set policy on admission and revisited admission issues periodically, introducing the Regents' College Preparatory Core in 1990 and Mathematics and Writing Proficiency Policies in 2003 and 2005, the absence of Board policy on placement and remediation is glaring. When students are admitted to college, but not yet ready to tackle college-level work, who has the responsibility to help them succeed? Can more stringent admission standards reduce the need for remediation? How are admission, placement, and remediation practices related to retention? How can policy help us collect accurate data that will help improve the system for all students? These pages provide a context for these issues in the Montana University System and offer recommendations for developing policy.

### **Board of Regents Items and Policy**

The impetus for developing proficiency admission standards can be traced to ITEM 89-003-R1195 (November 17, 1995) *Proficiency Admission Requirements and Developmental Education in the Montana University System*, part of Restructuring of the Montana University System Phase Two. This item called for the elimination of remedial education from the MUS and charged the Commissioner of Higher Education to appoint a task force to recommend proficiency admission standards, including minimum levels of achievement required for full admission to the MUS. Students who lacked the requisite proficiencies would have the opportunity to participate in developmental education programs through the community colleges, tribal colleges, colleges of technology, "private vendors," and units of the MUS where the "needs for developmental education are not being met in the immediate region." This item stipulated that developmental courses "will not be eligible for state support" and "will not meet degree requirements." Each segment of this item concluded that the recommendations would be put into place by January of 1997. Proficiency Admissions Committees for Mathematics and Writing were convened in 1997 and 1998.

In 2000, James R. Mingle and Associates published an *Evaluation of the Montana University System's Progress on Restructuring Goals*. This report indicated that changes in response to Board policy may have been "merely cosmetic" and that the mandate for two-year institutions to assume responsibility for "remediation may be meaningless when, in locations like Bozeman, there is no physical presence of a two-year institution." This report reinvigorated the Office of the Commissioner of Higher Education to pursue the goals of proficiency-based admission standards. In October of 2000, a Special Projects Director was hired to restart the proficiency committees. After several meetings and studies by representatives of K-12 and higher education, the Board of Regents adopted a Mathematics Proficiency Standard (Policy 301.15) in 2003 and a Writing Proficiency Policy (301.16) in 2005.

Although the 1995 recommendation for Proficiency Admission Requirements were eventually established in policy, recommendations for elimination and/or oversight of remedial education did not become policy. There is no Board Policy clearly defining remedial education or how these courses are provided, counted, and funded. Lacking policy, the *Registrar's Manual*, published by the Office of the Commissioner of Higher Education and last updated in 2003, has been used as a guide for numbering and counting courses

and student FTEs. As OCHE staff began to study remediation rates in order to track the impact of admission policy, the lack of policy on remediation made the collection of data cumbersome.

### **Remediation**

In order to identify remedial courses and collect data on enrollment within the system, OCHE staff and mathematics and writing work groups settled on a definition. Remedial courses are those courses in mathematics, composition, and reading designed to develop basic skills that will enable students to successfully enroll in and complete college-level courses that satisfy general education requirements.

Policy 301.5, Transfer of Credits, defines "college level courses as those courses that are applicable toward an associate of arts, associate of science or baccalaureate degree at their respective institution....In all cases, such courses shall not include remedial or developmental courses." Courses that are not college-level are, therefore, remedial.

### Current Policy:

The 1995 BOR Item pointed out that there was no "clear, consistent, and well-articulated definition of remedial education" and no "consistent way that students are assessed to determine their need for remedial education." In 2003, the Mathematics Proficiency Committee began to identify remedial mathematics courses in the MUS, community colleges and tribal colleges to determine how students who had not initially met the standard could transfer into a four-year program of the MUS. This threshold was set at "a C- grade or better in a college course entitled Intermediate Algebra or Algebra for College Students, or in a college course that is the prerequisite to any of the courses that satisfy the general education program requirements" (Policy 301.15). Board Policy 301.10 indicates that campuses will exclude any courses from their general education program that are remedial or developmental in nature. In 2005, the Writing Proficiency Committee accomplished a similar task, identifying remedial and general education courses.

The identification of remedial coursework, the threshold courses (those courses that are the prerequisites to the courses that satisfy the general education program requirements), and the courses that satisfy general education, also led to the identification of certain technical courses in mathematics and composition—courses that are neither remedial (not designed to bring students' skill levels up to the college level) nor general education, but rather designed to meet the needs of a certificate or AAS degree. A course such as "Math for Food Production" falls into this category.

### **Current Practice:**

Conflicting imperatives, guidelines, and philosophies about remedial education have led to inconsistent numbering and reporting of remedial coursework. Although there is some agreement about the definition of remedial coursework, course numbers range from 0001 to 120. This practice may be the result of an item in the Registrars' Manual, which indicates that "classes numbered below 100 (remedial) may be counted by the Colleges of Technology and by four-year campuses which do not have an associated College of Technology." Remedial courses numbered above 100 have, therefore, been eligible for state support.

Although the words "basic," "fundamental," "essentials," or "developmental" in the course title may alert the student to the remedial nature of the course, "Algebra for College Students" is a remedial course, whereas "College Algebra" is college-level. Some four-year units report their remedial FTE to the affiliated two-year campus. Others do not.

Recommendation:

The Commissioner of Higher Education should convene a Workgroup to study remedial education and to recommend policies on the subject. Those policy suggestions could clarify how to define, provide, count, and fund remedial education. Topics may include:

- Numbering mathematics, composition, and reading courses that do not satisfy a campus's general education program or the MUS Core as 0-level courses;
- Clarifying differences in admission and placement policy;
- Determining how remedial coursework is funded and which campuses get student FTE for that coursework;
- Labeling with a "T" technical courses designed specifically to fulfill the requirements of a certificate program or AAS degree and which may not be used to satisfy a general education program; and
- Clarifying that pre-college level courses required in AAS programs may not be transferred.

The Workgroup should have representatives from the Mathematics and Writing Proficiency Steering Committees.

### **Placement**

Writing and Mathematics Steering Committees should continue their work by focusing on additional placement issues.

### **Mathematics**

To set cut scores for admission to the four-year programs of the MUS based on ACT and SAT scores in mathematics, the Mathematics Proficiency Committee examined current placement practices, K-12 Content and Performance Standards, ACT's Standards for Transition, and the test scores of students entering each of the units of the MUS, and heard input from the education field. Based on these parameters, the committee set very low thresholds that will gradually increase until 2007. However, the final scores are still significantly lower than the scores used for placement into core-level mathematics courses on all of the MUS campuses.

### **Current Practice:**

While the Mathematics Proficiency Standard's admission score for mathematics on the ACT will settle at 18 in 2007, placement into general education-level mathematics is 23 at MSU Bozeman, MT Tech, MSU-Billings, and UM-Missoula; and 22 at MSU-Northern and UM-Western. The SAT placement thresholds are 40-90 points higher than the admission score of 440. Therefore, the four-year campuses can admit students whose mathematics skills require remediation. For nontraditional students, campuses use ASSET, COMPASS, and CLEP scores to place students. In addition, MSU, UM, and MT Tech have departmental tests. For Fall 2005, the COTs reported 1,763 enrollments in remedial math courses and the four-year units reported 1,635 enrollments.

### Recommendation:

The Mathematics Proficiency Steering Committee will study these placement issues and make a policy recommendation to the Workgroup. They will consider a recommendation such as the following: *Students who meet the Mathematics Proficiency Admission Standard but do not place into college-level* 

mathematics must complete the required remedial course in mathematics or otherwise test out of that course and into college-level mathematics before earning over 30 credits at the institution.

### Writing

To set cut scores for admission to the four-year programs of the MUS in writing, the Writing Proficiency Committee studied five years of research based on the actual writing samples of nearly 30,000 high school students who have taken the Montana University System Writing Assessment (MUSWA), input from hundreds of writing instructors and assessment scorers, and results from the new ACT and SAT writing tests. Based on these experiences, examination of scoring rubrics and anchor papers, and the K-12 Writing Content and Performance Standards, committee members determined that a score of 3.5 on the MUSWA (or 7 on the ACT or SAT essays) would demonstrate proficiency. As with the mathematics standard, the Writing Proficiency Policy is phased-in, beginning with low cut scores in 2007. During the two-year phase-in period, the four-year programs can admit students who are not yet at the proficient level of 3.5 and should be placed into remedial composition courses However, by 2009, the threshold for full admissions and college-level writing should match. According to the policy, students are provisionally admitted until they earn a C- or higher on the (remedial) composition course that is the prerequisite for the course that satisfies the general education core.

### **Current Practice:**

MSU-Bozeman and UM-Missoula administer writing tests during freshman orientation and exempt students who earn above certain thresholds on the ACT writing or SAT English sections. In most cases, both the four-year and two-year campuses offer developmental courses in composition. For nontraditional students, campuses use ASSET, COMPASS, and CLEP scores to place students. In Fall 2005, the COTs reported remedial composition enrollments of 482 students and the four-year campuses reported 779 remedial composition students.

### Recommendation:

The Writing Proficiency Steering Committee will study these placement issues and make a policy recommendation to the Workgroup. They may consider a recommendation such as the following: *During the phase-in period, campuses will adopt placement tests that mirror the MUSWA (similar prompts, scoring rubric, and scoring protocols) and accept the MUSWA, SAT, or ACT essay scores of 3.5 or above to place students into college-level composition courses.* 

#### Conclusion

Although not addressed in Board Policy, remediation and placement issues are very important to the system and to student success. Clear expectations about these issues will benefit both the providers and users of remedial education. Policy can establish the type and quality of data that can be collected; and conversely, data can be used to guide the development of effective policy. By adopting policy that defines remediation and ensures that remedial courses can be easily identified by students and researchers, we can use data strategically to answer questions about the relationship between admission, placement, remediation and retention.

#### **Baseline Data**

Graphs on the following page(s) provide baseline data to begin this study of remediation in the Montana University System. This information is part of a presentation scheduled for the Academic and Student Affairs meeting on September 27, 2006.





Remediation Rate					
	•	ool graduates enrolli immediately followir	•		
MUS Hig	h School Captu	re Rate & Remed	iation		
-	2002-03 Grads Enrolling Fall 03	2003-04 Grads Enrolling Fall 04	2004-05 Grads Enrolling Fall 05		
# Graduating from High School (public & private high schools)	10,978	10,864	10,713		
# Enrolling in MUS (doesn't include CC's)	3,416	3,357	3,518		
Capture Rate	31.1%	30.9%	32.8%		
# Enrolling in at least one remedial course	1,183	1,117	1,126		
Remediation Rate	34.6%	33.3%	32.0%		
source: MUS Data Warehouse			7		







### **CONCEPT REVIEW**

### Submitted by The University of Montana-Missoula

Concept:	Establishment of an academic partnership between The University of Montana-Missoula and Xiamen Institute of Technology in China that hopefully will result in joint degree programs at a branch campus of The University of Montana-Missoula.
Explanation:	In terms of demand for higher education, particularly a U.S. style undergraduate degree, China represents the world's largest underserved market. With this in mind, and with an eye for creating a robust international student and faculty exchange program as well, The University of Montana has been exploring the concept of opening a branch campus in China. Working with a group of Chinese and American venture capital entrepreneurs, consultants, and officials from the Chinese Ministry of Education, discussions have progressed from the proof-of-concept stage to the point where formal planning is warranted.
Discussion Needed:	The University of Montana-Missoula needs some discussion and direction from the Montana Board of Regents about this project, as the institution prepares to undertake a substantive and comprehensive planning process with the Chinese Ministry of Education.

### **National Test Data Summaries**

### ACT Summary: August 2006

In 2006, 6,033 students took the ACT, representing 56.7% of Montana's graduates. The composite score (English, mathematics, reading, and science) was 21.9 overall (compared to a national average of 21.1). Students who took core courses (4 yrs English, 3 yrs math, 3 years social studies, 3 years science) averaged 23.1; and those with less than core averaged 20.8.

The average for English was 21.0; for math 21.7; for reading 22.5; and for science, 21.8. The Optional Writing Test was taken by 2,119 students, whose average score was 7.6 on the Essay and 22.2 for the English/Writing Combined Score. Results and predictive analyses indicate that 74% of the students are ready for college composition; 49% are ready for college algebra; 33% are ready for college biology; and 61% are ready for college social studies. From another perspective—considering scores used for admissions:

- 31% of the test takers earned composite scores below the MSU-N and UM-W standard of 20;
- 49% earned composite scores below the MSU, MSU-B, UM, and MT Tech standard of 22;
- 14% earned mathematics scores below the 2006 Math Proficiency Standard;
- 4.7% of the 2005 test takers (this 2006 data is not yet available) earned Combined English/Writing scores below the 2007 Writing Proficiency Standard of 16; and
- 2.7% of the 2005 test takers (this 2006 data is not yet available) earned Writing Subscores below the 2007 Writing Proficiency Standard of 5.

Montana's 269 American Indian students who took the ACT earned an average composite score of 17.5; though the 34% who took core courses earned an average of 18.6 (17.7 without core). In 2005, 43% of the American Indian students took core or more. (Among Caucasian students, 50% took core or more in 2006; 53% in 2005.) Their averages were 15.9 in English; 17.4 in math; 17.9 in reading; and 18.1 in science. All these scores are about one point higher than in 2005.

ACT also offers assessments as early indicators of colleges readiness: EXPLORE for grades 8 and 9 and PLAN for grade 10. Of the 2,684 students who took PLAN, 82% are likely to be ready for College English; 46% ready for College Algebra; 66% ready for college social sciences; 36% ready for college biology; and 28% met all four benchmark scores.

### **College Board Summary: August 2006**

### SAT

In Montana, 3,024 college-bound seniors took the SAT Reasoning Test, representing 28% of Montana's seniors. That is a 3% decrease in SAT test-takers from 2005.

The SAT changed in March of 2005 with the addition of skills from the second year of algebra and the elimination of the quantitative comparisons on the math section, the elimination of

analogies and adding short reading passages to the verbal section (now called Critical Reading), and the addition of a writing section requiring students to answer multiple choice questions and write an essay. Montana's mean score on the Verbal portion of the SAT was 540 in 2005. In 2006, the mean score for Critical Reading was 538 and for Writing, 524. Montana's mean score on the Mathematics portion was 545, up five points from 2005. Nationally, the Critical Reading mean was 503; Writing was 497; and Mathematics was 518. In 2005 the national means were 508 Verbal and 520 Mathematics.

Students who have taken core or more averaged 551 in Critical Reading, 534 in Writing, and 560 in Mathematics. Students with less than core preparation scored 508 in Critical Reading, 498 in Writing, and 516 in Mathematics.

The mean Critical Reading score for American Indians (n = 33) was 495; Writing was 459; and Mathematics, 505, up 3 points from 2005. Since 2003, American Indian scores have improved by 19 points in Mathematics.

Considering scores used for admissions:

- 25% of the test takers earned composite scores below the MSU-N and UM-W standard of 1440;
- 40% earned composite scores below the MSU, MSU-B, UM, and MT Tech standard of 1540;
- 9% earned mathematics scores below the 2006 Math Proficiency Standard of 420;
- 6% earned Combined Writing scores below the 2007 Writing Proficiency Standard (390); and
- 3.5% earned Essay Subscores below the 2007 Writing Proficiency Standard (5).

### SAT II

Montana students took 574 SAT II Subject Area tests, often required by highly-selective universities. Subjects taken most were Math, Literature, and U.S. History.

### PSAT/NMSQT

Many Montana students take the PSAT—5,125 juniors and a 838 sophomores—in part because National Merit Scholarships are awarded based on these test scores. The mean Math score for juniors was 50.9, compared to a 49.2 national mean; 48.6 in Critical Reading, compared a 47.5 national mean; and 49.6 in writing, compared to a 49.3 national mean. Sophomore means were 50.8 in math; 49.7 in reading; and 50.8 in writing.

### **AP** (Advanced Placement)

2,204 Montana students took 3,288 AP tests, of which 2,244 had scores of 3 or above, meaning scores may be used to waive or earn credit for college courses. The number of test-takers was up (0.7%), and the number of scores of 3 or above increased 6.1% since 2005. 30 American Indian students took AP tests (an increase of 43% from 2005) and 14 of those students earned scores of 3 or above. 834 English Literature and Composition tests (70% with scores of 3 or above); 415 US History tests (71% with scores of 3 or above); 423 English Language and Composition tests (66% with scores of 3 or above) and 356 Calculus AB tests (62% with scores of 3 or above) made up 62% of the tests taken.

### MUS ON-LINE GENERAL EDUCATION CORE PLAN

**GOAL (by June, 2007):** The MUS General Education Core on-line offerings of all campuses of the MUS will be available through a single gateway website. The website will provide easily accessible information for the potential on-line learner to:

- View, at one site, all general education core courses available at any MUS campus;
- Understand the cost (to the student) of enrolling in any particular course;
- View information on how to apply to and enroll in a particular course;
- Select an MUS "Home" campus;
- Get an assignment of an academic advisor by the MUS Home campus (for a new student who currently does not have an advisor);
- Receive a suggested academic program matriculation guide to enable selection of a meaningful course or courses to compliment a chosen path towards a certificate or degree;
- Understand the responsibilities of both the student's MUS "Home" institution and of the student.

### **MILESTONES**

In September 2006 a full menu of all on-line MUS Gen Ed Core offerings from the campuses and community colleges will be assembled, by Core area, and shared with all campuses so that campuses may choose to respond to gaps in program offerings by developing additional new or collaborative courses for the Core.

By November 2006 the MUS will prepare and present a proposal for a new approach to assessing tuition and fees for fully on-line students of the MUS campuses. The fully on-line student tuition will be unique to each campus, just as on-site tuition is currently. Non-resident tuition rates will represent a percentage of the campus resident rates (e.g. 200% of resident tuition) that will allow for direct delivery cost recovery, while still being competitive in the national on-line marketplace. Fees for the fully on-line student will be bundled in a manner that allows each campus to recover its share of the cost for infrastructure licensing and delivery support, academic support, and bond debt service, but in a greatly simplified manner for students. The use of this type of a tuition and fee matrix will eliminate a complex and confusing set of site-specific matrices for some of the campuses and allow for a more uniform presentation of tuition and fee matrices to the Regents and to the public.

By March 2007 the MUS will have identified a site to host and maintain the new MUS web gateway, including identifying the on-going sources of funding. In addition, the MUS will have developed the home web page and the associated underlying linked

pages for the gateway. A recommendation will be made regarding the application of a common pricing scheme versus a campus-based pricing scheme for the Core offerings. Minimum and maximum enrollments per on-line course guidelines will be developed and we will have clearly identified the menu of fully on-line student services that are available at each home campus.

### After June 2007.

After successful implementation of the "on-line general education core," the MUS online implementation group will address other, more complicated issues, that will not be solvable by June 2007 but that could lead to more cost-effective delivery and a better learning experience for the student. Several issues that have already been identified are:

- Using a single application allowing student ease-of-access to the on-line academic MUS Core courses of all campuses;
- Creating a single tuition and fee statement from the "Home" campus for all on-site and on-line courses being taken from all campuses, so that the student can more easily attain the tuition & fee "flat spot" and also qualify for available financial aid;
- Developing a business model that rewards institutional successes, that is financially sustainable, and that allows the revenues to easily follow the associated costs;
- Providing better and more consistent support for faculty for on-line education course development and delivery;
- Improving multi-campus collaboration in cost-effective course and program development and delivery;
- Evaluating use of a common course management system platform for all campuses, versus the five separate platform licenses now being used by the MUS campuses.

### THE UNIVERSITY OF MONTANA WESTERN

### STRATEGIC PLAN FOR ACTION

### A Pathway to Academic Excellence and National Prominence

2006-2012

### INTRODUCTION

Our collective goal at Montana Western is to provide students with the finest undergraduate experience possible. Our mission is teaching, learning and discovery. Specifically, the following strategic plan will further improve our academic program under the successful block plan we uniquely call Experience One.

This action plan provides a roadmap, a blueprint, to greater excellence through 2012. It becomes our guide for action and decision-making, organizes how we envision a growing public university can best fulfill its mission and strengthens our intellectual engagement with the community and indeed the world.

During development of this plan, we have focused our campus and community conversations on the things that unite and challenge us as a public university. We asked tough questions of ourselves. Together, we have determined how we can improve and better support teaching, learning and the pursuit of discovery on our campus, more effectively tell our story, and increase enrollment. There is continued emphasis on accountability and innovation while stretching ourselves and meeting challenges we deem important for our success.

We place a high priority on collegiality, mutual respect and a unified vision for Montana Western's academic excellence. Ultimately, we want to be more accessible and affordable to good-fit, dedicated students who wish to learn and succeed in a unique, challenging and rewarding university environment and, upon completion, to live the life of the educated mind and productive, contributing citizen.

Our action plan is divided into five connected strategic goals:

- 1. Improve undergraduate education.
- 2. Increase enrollment through enhanced affordability, access, success and retention and increase graduation rates.
- 3. Employ, retain and support an excellent faculty and staff.
- 4. Enhance successful development, maintenance and improvement of the campus in support of long-range development plans.
- 5. Strategically position the university for maximum efficiency and long-range success.

Each goal contains two or more specific objectives we plan to achieve. Under each objective are example action steps. The plan is intended to be pliant and allow us to adapt to the ever-changing world of American higher education and the needs and academic wishes of our students and the state of Montana.

We take great care in assessment of our actions and in measuring our successes. The Strategic Plan Steering Committee has formulated, and will continue to refine, various time frames for action and strategies and tools for assessment of outcomes.

Montana Western has a culture of risk-taking and commitment. We expect no less than the best from our faculty, staff and students and have been described as the little university with a big heart.

The University has never been financially stronger or academically better. Through the excellent work of our predecessors and current faculty and staff, we are positioned to achieve our goals and be the best at what we do – educate students.

Charles F. Kettering once said, "My interest is in the future because I am going to spend the rest of my life there." We are dedicated innovators with a bright future.

Richard Storey Chancellor July 31, 2006

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### MEMORANDUM

DATE:	September 27 - 29, 2006
то:	Montana Board of Regents
FROM:	Roger Barber, Deputy Commissioner for Academic & Student Affairs
SUBJECT:	Level I Approvals and Announcements

This memorandum is intended to inform you of the Level I changes in academic programs that have been approved in the Office of the Commissioner of Higher Education since the May 2006 meeting of the Board of Regents. It also includes final degree termination announcements.

### Montana State University-Bozeman:

- Montana State University-Bozeman filed a Notice of Intent to terminate its Bachelor of Arts degree in Hotel and Restaurant Administration. ITEM 132-2007+R0906
- Montana State University-Bozeman filed a Notice of Intent to terminate its Minor in Health Science. ITEM 132-2008+R0906
- Montana State University-Bozeman filed a Notice of Intent to terminate its Minor in Dance. ITEM 132-2009+R0906

### Montana State University-Billings:

- Montana State University-Billings asked for authority to add a Teaching Option to its Bachelor of Arts degree in Sociology. ITEM 132-2705+R0706
- Montana State University-Billings asked permission to change the name of its Minor in Health Education (5-12) to *Health Education*. ITEM 132-2702+R0906
- Montana State University-Billings College of Technology filed a Notice of Intent to terminate its Certificate program in Automobile Collision Repair and Refinishing Technology at the May 2006 meeting of the Board of Regents. All of the steps for terminating a degree program have been completed, including the 60-day notice period. The Certificate is, therefore, eliminated from Montana State University-Billings College of Technology's degree and program inventory. ITEM 131-2703+R0506
- Montana State University-Billings College of Technology filed a Notice of Intent to terminate its Certificate program in Computer Assistant at the May 2006 meeting of the Board of Regents. All of the steps for terminating a degree program have been completed, including the 60-day notice period. The Certificate is, therefore, eliminated from Montana State University-Billings College of Technology's degree and program inventory. ITEM 131-2704+R0506

Level I Memorandum, cont.: Page 2

> Montana State University-Billings College of Technology filed a Notice of Intent to terminate its Certificate program in Human Resource Management "Essentials" at the May 2006 meeting of the Board of Regents. All of the steps for terminating a degree program have been completed, including the 60-day notice period. The Certificate is, therefore, eliminated from Montana State University-Billings College of Technology's degree and program inventory. ITEM 131-2705+R0506

### Montana State University-Great Falls College of Technology:

 Montana State University-Great Falls College of Technology filed a Notice of Intent to terminate its Associate of Applied Science degree in Bioscience Technology, along with its options in Research Lab Technician, Animal Lab Technician and Instrumentation Technician. ITEM 132-2852+R0906

### Montana Tech of The University of Montana:

- Montana Tech of The University of Montana College of Technology has revised its coursework in the Licensed Practical Nursing Certificate program and the Associate of Science Nursing program to comply with the approved curriculum in those two programs. ITEM 132-1501+R0906
- Montana Tech of The University of Montana College of Technology requested permission to change the name of the Administrative Assistant Option, in its Associate of Applied Science degree in Office Technology, to *Administrative Computer Specialist*. The next item also changes the name of the Associate of Applied Science degree. ITEM 132-1502+R0906
- Montana Tech of The University of Montana College of Technology requested permission to change the name of the Associate of Applied Science degree in Office Technology to *Business Technology*. ITEM 132-1504+R0906
- Montana Tech of The University of Montana filed a Notice of Intent to terminate its Certificate program in Behavioral Health Nurse Assistant at the May 2006 meeting of the Board of Regents. All of the steps for terminating a degree program have been completed, including the 60-day notice period. The Certificate program is, therefore, eliminated from Montana Tech of The University of Montana's degree and program inventory. ITEM 131-1501+R0506