

## LEVEL II MEMORANDUM

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**DATE:** February 3, 2012

**TO:** Chief Academic Officers, Montana University System

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

**RE:** Level II Submission Items

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The campuses of the Montana University System have proposed new academic programs or changes under the Level II approval process authorized by the Montana Board of Regents. The Level II proposals are being sent to you for your review and approval. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, you need to raise those concerns at the Chief Academic Officer's conference call on **February 8, 2012**. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on **Friday, February 10**. That notification should be directed to Summer Marston, Assistant to the Deputy Commissioners. If Summer does not hear from you, in writing, by noon on February 10, OCHE will assume that the proposals have your approval.

### **The Level II submissions are as follows:**

#### **Montana State University-Northern:**

- Associate of Applied Sciences in Manufacturing [ITEM #154-2802-R0312](#) | [Request Form](#) | [Curriculum Proposal](#)

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

- Accelerated Masters in Athletic Training [ITEM #154-1001-R0312](#) | [Request Form](#) | [Curriculum Proposals](#)
- Technology in Education Permissive Special Competency Notation [ITEM #154-1011-R0312](#) | [Request Form](#) | [Curriculum Proposals](#)

**March 1-2, 2012**

**ITEM 154-2802-R0312**  
**Associate of Applied Sciences in Manufacturing**

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**THAT**

Montana State University – Northern seeks approval to offer an Associate of Applied Sciences in Manufacturing.

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**EXPLANATION**

The proposed Manufacturing A.A.S. degree would allow MSU-Northern to combine currently offered coursework in welding, machining, design-drafting, and computer aided manufacturing to produce the highly qualified graduates that industry has demanded.

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**ATTACHMENTS**

Level II Request Form  
Curriculum Proposal Form, Program/Degree Revision Form; and Course Revision Form

**Montana Board of Regents**  
**LEVEL II REQUEST FORM**

Item Number: 154-2802-R0312 Meeting Date: March 1-2, 2012  
Institution: Montana State University -Northern CIP Code: 150613  
Program Title: Associate of Applied Sciences in Manufacturing

Level II proposals require approval by the Board of Regents.

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

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

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

**Specify Request:**

Montana State University – Northern seeks approval to offer an Associate of Applied Sciences in Manufacturing. The proposed degree would allow MSU-Northern to combine currently offered coursework in welding, machining, design-drafting, and computer aided manufacturing to produce the highly qualified graduates that industry has demanded.

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**CURRICULUM PROPOSALS**

**1. Overview**

Montana State University – Northern seeks approval to offer an Associate of Applied Sciences in Manufacturing. The proposed degree would allow MSU-Northern to combine currently offered coursework in welding, machining, design-drafting, and computer aided manufacturing to produce the highly qualified graduates that industry has demanded.

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

The proposed degree enhances instruction currently offered in the MSU-Northern welding certificate with coursework in machining and lower division coursework in the Industrial Technology BS degree, providing an intermediate credential for students with interest in Industrial Technology and manufacturing. Coursework in advanced technology in welding will be developed and incorporated.

**3. Need**

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

Students have indicated the desire for more training within computer aided manufacturing and employers have requested an increase in the number of graduates.

Although the current Certificate of Applied Science in Welding Technology has been a good fit for supplying certified welders for many years, upgrades in equipment, technology, and welding processes have necessitated a change in requirements to produce qualified graduates that can program and operate computer aided manufacturing and automated welding processes. The expansion of the Certificate program in welding to an Associate of Applied Science Degree in manufacturing will allow instructors to address topics in automating Welding Technology and Computer Aided Manufacturing. The addition of the Associate of Applied Science Degree will be a natural expansion of offerings in Northern's Industrial Technology program.

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

The recent purchase of a welding robot with offline programming software and a donation from Lincoln Electric of a computer monitored semiautomatic welder has provided Northern with the opportunity to train on the latest and most advanced welding automation technologies. State of the art Haas CNC Mills and Lathes or provides the opportunity for Northern faculty to teach processes, techniques, and equipment operation for CAD/CAM operations.

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

Currently roughly half of the students in the Welding Certificate program express a desire to continue to complete an associate degree. This would result in 5-10 students per year continuing into the second year of the AAS degree from the Welding Certificate alone. Essentially all the potential students and parents have asked about the ability to continue after completion of the Welding

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Certificate degree, this represents a significant recruiting option for the proposed degree and provides a pathway to a Bachelors degree in the Industrial Technology area. The demand is therefore considered to be strong. This was determined by discussions with current and prospective students. A concerted effort will be made to articulate other Welding Certificate programs from MUS schools into the Manufacturing AAS degree.

**4. Institutional and System Fit**

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

The AAS degree in Manufacturing will enhance the currently offered certificate program in welding technology and allow an articulation pathway to the current Industrial Technology degree.

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

No, the new program was designed to fit with existing programs.

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

Although this program uses courses that are currently part of the Industrial Technology degree, it is a subset of the courses in that degree and is designed to stand alone as a 2-year credential. There is no similar or closely related AAS degree at this institution.

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

This program contributes directly to the mission of MSU-Northern in contributing to economic development of the region and state as well as being responsive to the needs indicated by our constituencies, Core Theme 3, as well as offering high quality programs – Core Theme 1.

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

There is a similar degree at UM-Helena, which was developed in cooperation with faculty and administration at MSU-Northern. The Metals Technology degree at UM-Helena is designed after a model that Northern moved away from several years ago and differs from the proposed program in the incorporation of manufacturing technology elements rather than simply focusing on the processes of metals technology. It is expected that an articulation agreement may be developed with each of the Colleges of Technology to provide a pathway for graduates from the many Welding Certificate programs in the state into a 2-year credential.

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**5. Program Details**

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

See attached program and course revision forms.

Regent's Policy 301.12 requires that the program

- (a) Have between 60 and 72 credits – this program is 66 credits. Require at least four semesters but no more than 2 academic years to complete – This program requires at least four semesters, and can be completed in four semesters with moderate loads of 17 credits, or with a summer to reduce the credit load to roughly 12-14 each term.
- (b) An occupational emphasis with 2/3 credits devoted to technical course work – this degree is comprised of 77% technical coursework, well in excess of the required 66%.
- (c) General Education courses that meet accreditation standards – this program includes computation, composition and human relations general education coursework as required by accreditation standards.

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

The program will be implemented in the fall 2012, with an anticipated retention from the Welding Certificate program providing an initial enrollment of 10. Advertising and recruitment efforts with other welding programs and with recent graduates of the MSUN certificate program will commence fall 2012, with an ongoing goal of 10-20 students in the AAS program each fall.

**6. Resources**

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

This program requires no additional resources.

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

Based on current and potential student input, there is interest and demand for programs of study in manufacturing. Additional promotion and recruiting of students will be required to ensure the success of this program. Internal resources will be utilized to develop promotional materials and to incorporate recruiting in the current efforts of the MSUN admissions staff.

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**7. Assessment**

**How will the success of the program be measured?**

An Industrial Advisory Committee will be established to provide a forum for outcome review and assessment and to make recommendations for continued program improvements. Student performance in specific coursework will be used to document progress in achieving student learning outcomes. Student graduation rates will be evaluated starting in two years and continue to ensure graduation rates increase to an average rate of ten graduates per year. Post-graduation surveys to determine employment, salary, and field of employment to assess success of graduates.

**8. Process Leading to Submission**

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

The program was developed and proposed by welding and IT faculty in the College of Technical Sciences at MSU-Northern in cooperation with potential employers of program graduates. The college faculty then reviewed the proposed curriculum for fit with the mission of the college and with other programs already offered. The proposal was then submitted to the Academic Senate review process which included review by the General Education Committee and Curriculum Committee. The proposal was reviewed and approved by the Academic Senate prior to being submitted to the Provost and Chancellor of MSU-Northern for review and approval prior to submission Montana State University for approval and submission to the Montana Board of Regents.



# Associate of Applied Science in Manufacturing Technology

## Need:

Students have indicated the desire for more training within computer aided manufacturing and employers have requested an increase in the number of graduates.

Although the current Certificate of Applied Science in Welding Technology has been a good fit for supplying certified welders for many years, upgrades in equipment, technology, and welding processes have necessitated a change in requirements to produce qualified graduates that can program and operate computer aided manufacturing and automated welding processes . The expansion of the Certificate program in welding to an Associate of Applied Science Degree in manufacturing will allow instructors to address topics in automating Welding Technology and Computer Aided Manufacturing. The addition of the Associate of Applied Science Degree will be a natural expansion of offerings in Northern's Industrial Technology program.

The recent purchase of a welding robot with offline programming software and a donation from Lincoln Electric of a computer monitored semiautomatic welder has provided Northern with the opportunity to train on the latest and most advanced welding automation technologies. State of the art Haas CNC Mills and Lathes or provides the opportunity for Northern faculty to teach processes, techniques, and equipment operation for CAD/CAM operations.

The addition of the Associate of Applied Science degree will also expand the number of access points students will have to enter and exit a degree in a metals-related field at Northern and complement transfer agreements across the state. The combination of current Certificates of Applied Science in Welding, along with Associate of Applied Science Degrees in Metals Manufacturing could be used to provide students and employers more options in metals-related fields. Northern believes these increased options for students will increase enrollment, student satisfaction, and employer satisfaction.

COURSE REVISION FORM

NEW  X  DROPPED \_\_\_\_\_ MAJOR REVISION \_\_\_\_\_ FOR INFORMATION ONLY \_\_\_\_\_

College  COTS  Program Area  Manufacturing AAS  Date \_\_\_\_\_

Submitter  Virgil Hawkinson  Dean \_\_\_\_\_ Date \_\_\_\_\_

Please provide a brief explanation & rationale for the proposed revision(s):

New course for new degree

Please provide the following information:

**College:** COTS

**Program Area:** Manufacturing AAS

**Date:** 02/01/11

**Course and Prefix No.:** MACH 2xx

**Course Title:** CNC Machining

**Credits** 3

**Required by:** Manufacturing AAS  
Industrial Technology BS

**Selective in:**

**Elective in:**

**General Education:**

**Lecture:**

**Lecture/Lab:**

**Gradable Lab:**

**Contact hours lecture:** 1 hr

**Contact hours lab:** 4 hr

**Current Catalog Description (include all prerequisites):**

**Proposed or New Catalog Description (include all prerequisites):** An introduction to the fundamentals and applications of Computer Numerical Control in machining. Course content includes machine configurations, CNC process flow, visualization of program execution, coordinate systems, types of motion, tool length compensation, and program formatting. Prerequisites: METL 155 Machining Processes

**Course Outcome Objectives:**

*Learning Outcomes*

By successfully completing this course, students will be able to:

- Define Machine Configurations
- Define the flow of the CNC process
- Describe visualizing the execution of a CNC program
- Define program zero and the rectangular coordinate system

- Summarize the preparations need for programming
- Define motion types.
- Describe tool length compensation
- Summarize program formatting.
- Summarize canned cycles
- Demonstrate mastery of lesson content at levels of 70% or higher.

**Additional instructional resources needed (including library materials, special equipment, and facilities).  
Please note: approval does not indicate support for new faculty or additional resources.**

Updated 09/29/05

March 1-2, 2012

**ITEM 154-1001-R0312**  
**Accelerated Masters in Athletic Training**

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**THAT**

In accordance with Montana University System Policy, the Board of Regents of Higher Education authorizes The University of Montana-Missoula to establish an accelerated Master of Science Degree Program in Athletic Training.

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**EXPLANATION**

The proposed entry-level Masters in Athletic Training program will replace the current undergraduate athletic training education program using an accelerated 3-2 model, whereby each student will complete three years of pre-requisite courses and general education requirements followed by two years in a professional program. This transition is attractive for several reasons. It allows our program to maintain compliance with the Commission on Accreditation of Athletic Training Education (CAATE) requirements, while keeping pace with dynamic athletic training education reform. We will also attract a more diverse student group (student athletes, out of state students, transfer students) as well as provide students with the opportunity to graduate with a Master's degree as they enter the work force. In this model we are also able to collaborate with more institutions throughout the state and possibly the region to allow our students a wider selection of clinical education experience. If this program is approved, The University of Montana would be the second program in the nation to adopt this education model.

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**ATTACHMENTS**

Level II Request Form

Curriculum Proposal

- Appendix A Recommended Course Sequence for First Three Years (Pre-Professional)
- Appendix B Recommended Course Sequence for Entry-Level Master's Degree in Athletic Training
- Appendix C Entry-Level Master's in Athletic Training Budget
- Appendix D Total Cost Savings to Student Comparing 3-2 model to 4-2 model
- Appendix E Collaboration Plan with MSU-Billings

**Montana Board of Regents**  
**LEVEL II REQUEST FORM**

Item Number: 154-1001-R0312 Meeting Date: March 1-2, 2012  
Institution: The University of Montana - Missoula CIP Code: 51.0913  
Program Title: Masters in Athletic Training

Level II proposals require approval by the Board of Regents.

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

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

- 1. Change names of degrees (e.g. from B.A. to B.F.A.)
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- 3. Establish new degrees and add majors to existing degrees; and
- 4. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

**Specify Request:**

The University of Montana-Missoula requests authorization from the Board of Regents of Higher Education to replace the current undergraduate Bachelor of Science in Athletic Training Education program with an accelerated Masters in Athletic Training degree program.

**Montana Board of Regents**  
**CURRICULUM PROPOSALS**

**1. Overview**

The proposed program will allow students to obtain an entry-level Master degree in Athletic Training after completing 3 years of undergraduate prerequisite and general education requirements, followed by 2 years in a professional program, including summers. At the end of the 4<sup>th</sup> year, students will complete their Bachelors of Science in Exercise Science. The entry-level Master's program would replace the current undergraduate BS in Athletic Training Education. The transition to an accelerated entry-level Master's program will enable the program to both continue meeting the Commission on Accreditation of Athletic Training Education (CAATE) requirements, and keep pace with dynamic athletic training educational reform. It will also attract a more diverse student group, including resident and non-resident students and student-athletes, and will provide them with the opportunity to graduate with a master's degree as they enter the workforce. The model will also enable collaboration with institutions in Montana and possibly other states. If this program is approved, The University of Montana will be the eighth program in the nation to adopt this education model.

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

Students who enroll in this program will have the opportunity to become certified athletic trainers and will advance their studies in the profession. The accelerated 3-2 model involves three years of prerequisite courses and general education requirements followed by two years in an entry-level professional program. While in the professional program, students will also complete a substantial number of clinical hours in allied medical settings that include colleges, high schools, physician clinics, and physical therapy clinics. Upon completion of the proposed program, students will possess a Master in Athletic Training.

**3. Need**

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

The need to transition the current undergraduate BS in Athletic Training Education program to a graduate level MS in Athletic Training program has been noted in a number of different ways. Currently, there are only 22 accredited entry-level Athletic Training master's programs in the country; however, many programs are in the process of transitioning from undergraduate to graduate programs. Advanced levels of education in the profession of athletic training are warranted, since a master's degree is preferred in a majority of related professional occupations, and over 70% of practicing certified athletic trainers possess a master's degree (according to the National Athletic Trainers Association (NATA)). The athletic training profession is at the front end of its market curve, and NATA and Certified Athletic Trainers/Licensed Athletic Trainers (ATC's/LATs) are now recognizing that trainers' professional skills have value outside athletic departments.

Fitness and recreation sports centers will provide new jobs, as these establishments grow and continue to need additional ATCs/LATs to provide support for their clients. The need for ATCs/LATs in positions related to sports will remain constant, as most professional sports clubs and colleges and universities already have complete athletic training staffs

Hospitals, clinics, physician offices and industrial workplaces are also beginning to recognize trainers' value. Because market penetration in the designated primary target markets is so small, it is likely that

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faster and higher growth than normal will occur, at least from a percentage standpoint. Employment of athletic trainers is projected to grow 37 percent from 2008 to 2018, much faster than the average for other occupations, because of their role in preventing injuries and reducing healthcare costs (<http://www.bls.gov/oco/ocos294.htm>). Many of these positions will be created in the healthcare industry, including hospitals and offices of health practitioners, as greater emphasis is placed on preventive care and reducing healthcare costs for an aging population. Increased licensure requirements and regulation has led to a greater acceptance of athletic trainers as qualified healthcare providers. As a result, third-party reimbursement is expected to continue to grow for athletic training services. Athletic trainers will benefit from this expansion because they provide a cost-effective way to increase the number of health professionals in an office or other setting. (At the state level, Montana employs 100 certified athletic trainers. The projected annual percent change is 1.9. Overall, health care services have a projected percentage change of 21 over the next ten years. (Data taken from the Montana Labor Market Statistics, 2010.)

The expansion and growth of athletic training into a variety of clinical settings warrants further education and experience. Athletic trainers can be found not only in the traditional high school and college settings, but also in medical clinics, physician's offices, hospitals, business industries, the performing arts and federal agencies (i.e. US Military and US Forest Service). As a result, the need to expand our clinical education offerings to students is evident.

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

The development of this program will increase the competitiveness of our athletic training students in clinical settings for a number of reasons. Graduate students are given priority for rotations at these clinical sites and our undergraduate students often are eliminated from rotations or minimally integrated into these rotations. In addition, we anticipate that a graduate level program will improve the quality and maturity of students attracted to the program, including both residents and non-residents. This program will also provide an opportunity for student athletes who are interested in becoming certified athletic trainers. Historically, while many student athletes have desired to major in athletic training, time commitments to their sports conflicted with the undergraduate athletic training clinical education rotations.

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

The current athletic training education program has approximately 80 pre-professional students and 27 professional students. The average class size admitted into the current professional program is between 8 and 10 students (data collected from previous enrollments in the athletic training education program). With the development of the new program, and an increased potential for attracting and recruiting more students, it is estimated that the graduate program will admit/accept 12-15 graduate students per year.

## **4. Institutional and System Fit**

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

The existing program at The University of Montana is an accredited entry-level undergraduate program offering a BS degree in Athletic Training. This proposal will move this program to an entry-level graduate program offering a Masters' in Athletic Training.

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**CURRICULUM PROPOSALS**

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

With the approval of the proposed program, the undergraduate program in athletic training would be phased out and eliminated. The proposed plan is to market the new program nationwide (e.g., brochures, emails) if it is approved and begin accepting applications as soon as possible. The graduate program would officially begin summer of 2013. The undergraduate program would be phased out with the final group of professional students graduating spring 2014.

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

The proposed program will provide students with more diverse clinical education experiences due to the ability to affiliate with more clinical sites in the state and region. In addition, the curriculum will be able to focus more on students' conducting research and inquiry in athletic training to enhance "evidence based" learning to athletic training students. With the proposed program, students may matriculate to the program in different ways:

- 1) students may take 3 years of pre-requisite courses and apply for admission into the graduate program for their final two years;
- 2) transfer students may take pre-requisite courses elsewhere and transfer into the institution for their final two years of graduate work;
- 3) students may elect to complete a bachelor's degree and then apply to the proposed program for 2 years of graduate work.

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

This transition supports the MUS Strategic Plan goal to build competitive graduate and research programs, and is also consistent with The University of Montana's Strategic Issue Education for the Global Century, an objective of which is "Discovery and innovation through graduate education." In addition, it addresses the Phyllis J. Washington College of Education and Human Sciences goal to increase the overall number of graduate students.

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

Currently, Montana has two accredited athletic training education programs- the current program here at The University of Montana, established in 1971, which we are asking to expand to an accelerated entry-level Master's and an entry-level Master's program at Montana State University -

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Billings, which was established in 2006. The core content of the curriculum offered in both programs have some similarities; however the clinical rotations offered and the resources available for students at each institution differ. For example, students in the professional program at The University of Montana have access to a cadaver lab. The recruiting base for students into either program is geographically different due to the distance between Billings and Missoula. The UM program typically attracts students from the Northwest region, such as Idaho, western Montana, Washington, Alaska, Oregon, and a few students from Wyoming. The MSU-Billings program typically attracts more students from eastern Montana, the Dakotas, Wyoming, and Idaho. Another difference between the entry-level MSU-Billings master's program and the proposed UM program is that the UM program is that both programs are able to offer different clinical experiences to their students. With the newly proposed curriculum, students will be placed in clinical sites throughout Montana under close supervision. In addition, key officials from UM and MSU-B programs have met and discussed strategies for future collaboration to share curriculum as well as clinical sites (Appendix E addresses the plan for collaboration).

The UM program allows for greater potential to establish partnerships within the state of Montana and surrounding Northwest Territory. Currently, the athletic training education program affiliates with 10 different health care facilities to provide UM students with clinical education experiences (Active Physical Therapy, Alpine Physical Therapy, Peak Performance Physical Therapy, Hellgate High School, Big Sky High School, Sentinel High School, Curry Health Center, Missoula Family Medical Center, Rhinehart Athletic Training Center and UM-Western). If the proposed program is approved, we will be able to expand our affiliations with the University of Great Falls, Carroll College, Montana Tech, and Montana State University, as well as high schools and clinics in the Kalispell, Butte, Helena, and Northwest Region. With the infusion of online learning components into the newly designed curriculum students in their 2nd year of the professional program will have more opportunities to gain supervised clinical education experiences outside of Missoula.

### 5. Program Details

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

This program is designed for students seeking certification as athletic trainers who wish to advance their study in the profession. Individuals who complete the graduate program will be prepared for a career at the high school, community college, college/university, industrial, corporate, military, professional sports, sports medicine clinic, physician extender, or other health-related setting. Admission requirements for the graduate program include:

- Acceptance into The University of Montana's graduate school
- Minimum cumulative GPA of 3.0 for all college coursework
- Documentation of 75 hours of observation under a Certified Athletic Trainer, with at least 40 hours completed in a traditional setting such as a college or high school
- Official transcript(s) of all previous college coursework
- Earned grade C or higher in the following courses or their equivalents (course syllabi are required): Anatomy and Physiology 8 credits, Personal Health and Wellness 3 credits, General

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and Inorganic Chemistry 6 credits, Nutrition 3 credits, Use and Abuse of Drugs/Pharmacology 3 credits, Applied Anatomy and Kinesiology 4 credits, Motor Control and Learning 3 credits, Exercise Physiology 4 credits, Intro to Psychology 4 credits, Prevention and Care of Athletic Injuries with Lab 3 credits , Statistics 3 credits

- Completion of general education requirements by the end of the 3rd academic year
- Completion of the Writing proficiency exam
- Completion of entrance athletic training essay (letter of interest)
- Submission of 3 or more letters of recommendation, at least one of which must be from a Certified Athletic Trainer
- Completion of interview process
- Meeting established technical standards
- Passing a physical examination by a physician
- Current certification in Health Care Provider CPR/Professional Rescuer CPR and First Responder.

In the students' third year of coursework, they will complete the application to the graduate school and to the athletic training education program by March 1st. Upon completion of the application process, students will be notified of acceptance into the graduate program by May 15th. If a student is not accepted into the program, he or she may reapply the following year or continue at The University of Montana in pursuit of a bachelor's degree in another area of study (i.e. exercise science). Appendix A outlines the course of study for the first three years for students, which will allow the students to complete the necessary pre-requisite courses as well as general education requirements.

Appendix B outlines the course of study for students once they are accepted into the graduate program and the final two years of study. The graduate course sequence focuses on the core content areas in the profession of athletic training and is supplemented with clinical rotations in the Missoula area. The second year in the program focuses on advancing the skills and knowledge learned in the first year, and students will be placed in clinical rotations either in the Missoula community or with other clinical sites in the state or region. Courses will be offered online for students who are completing clinical education outside the Missoula area. In the second year of study, students will also complete a thesis, professional paper or comprehensive examination prior to graduation. Upon completion of the 2 year curriculum, students will be eligible to sit for the national Board of Certification (BOC) examination to become a Certified Athletic Trainer (ATC) and highly marketable for employment in the Athletic Training field.

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

Upon approval of the proposed program, the first applications would be accepted spring 2013. This will allow the department and athletic training faculty time to market the graduate program on a local, regional and national level. Summer 2013 would mark the beginning of the entry-level master's curriculum for AY 2013-2014. The final class of the existing undergraduate program will graduate in spring 2014. The first graduating class from the proposed entry-level master's program will be spring 2015. It is anticipated that the first class to be accepted for Summer 2013 would have 10-12 students. For 2014 and 2015 we are projecting numbers closer to 15, for a program Total: of 25-30 students in the graduate program. Numbers are based on current trends in application and enrollments in the undergraduate entry-level athletic training education program at UM.

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**6. Resources**

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

With the proposed program some additional resources are necessary to implement the curriculum. Currently, the Department of Health and Human Performance has 13 full-time faculty members who are tenured or tenure-track, with one faculty member who is dedicated to the athletic training education program full-time and one faculty member who splits responsibility as chair of the department and as a faculty member in the athletic training education program. In addition to full-time faculty, there are 12 part-time adjunct faculty (many of whom have terminal degrees). With the expansion of clinical sites to the surrounding region, a clinical supervisor is necessary at these clinical sites. Currently, the Clinical Director of Athletic Training is responsible for the direct placement and oversight of all athletic training students and their clinical placements in 10 different facilities. This involves a great deal of paperwork, communication, and travel to sites on a regular basis to meet rigorous CAATE accreditation standards. The Clinical Director also is required to participate in full-time teaching, evaluation of clinical sites, research, and service activities. With the addition of the Masters level students to the program, the clinical responsibilities will increase dramatically due to the establishment of additional clinical sites beyond Missoula. At least half of the students in the proposed master's program will also complete a thesis or professional paper, which will require extra time and effort by faculty to support these projects. Assistance with the oversight and travel to the new clinical sites, instruction in coursework, and supervising thesis/professional papers will be essential in the new curriculum. A new full-time clinical faculty position (Clinical Supervisor) will fulfill this obligation. The funding needs for this position could partially be met with a program fee, in addition to money already set aside in the department budget for athletic training instruction (see Appendix C).

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

To meet the demands placed on the Department of Health and Human Performance, the athletic training students and Clinical Instructors serving our program, and to ensure the best possible learning environment for students, a program fee of \$925/semester to support the costs of the academic program is being requested. There are several expenditures unique to the proposed program that is above and beyond a typical Master's program. (Appendix C)

The proposed program relies heavily on laboratory fees to support the purchase of equipment necessary to the athletic training curriculum. To maintain necessary ratios of athletic training students to equipment, additional therapeutic modalities, tables, and rehabilitation equipment will need to be purchased to optimize the learning environment and meet CAATE accreditation standards. To minimize out-of-pocket expenses for the athletic training student, the program fee will pay for criminal background checks, athletic training professional clothing, such as polo's and jackets, athletic training software, and medical equipment (scissors, medical packs, and medical supplies). With the expansion of clinical sites across the state and region, additional money is necessary for travel to and from those clinical sites to meet accreditation standards (routine site visits and evaluations must be completed on each clinical site by the Clinical Supervisor). Lastly, the athletic training education program relies heavily on the use of practicing athletic trainers to supervise the athletic training students in clinical

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rotations. Currently, these athletic trainers are not being compensated for their time supervising students.

**7. Assessment**

**How will the success of the program be measured?**

As part of the requirements to maintain CAATE accreditation, the undergraduate program has developed a comprehensive assessment plan that is revisited on a yearly basis. As a result, several assessment tools have already been developed and will be used for the proposed entry-level Master's program. The graduate program will utilize several methods of evaluation to monitor the progress of the program. Program success will be assessed by evaluating:

- student success on the national Board of Certification (BOC) exam
- employment rates
- employer satisfaction surveys
- alumni surveys
- student evaluations of coursework
- student evaluations of program directors and clinical instructors
- clinical instructors' evaluations of students and program.

At the middle of each term, graduate students both complete self-evaluations, and will undergo evaluations by their clinical site supervisors. This will happen again at the end of each semester, and will help to identify any strengths and weaknesses of the students, clinical instructors, and clinical rotations. Indicators of success will include a first time passing rate on the BOC exam of greater than 80%, enrollment of 12-15 students per class, job placement in the athletic training profession greater than 80%, and scores averaging greater than 80% on all subjective evaluations. This assessment plan and benchmarks are currently in place at the undergraduate level and will be continued with the proposed master's program.

**8. Process Leading to Submission**

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

The initial discussion of the transition from an undergraduate athletic training program to an entry-level master's program took place between athletic training faculty members Scott Richter and Valerie Moody in the spring of 2009. Informal discussions with other Certified Athletic Trainers practicing in Missoula, student alumni from the athletic training education program, and at professional meetings with other athletic training education program directors took place in the spring and fall of 2009. Valerie Moody developed the proposal for the accelerated entry-level master's program in spring 2010 and it was reviewed by Scott Richter. Over the course of three meetings in spring 2010, the Health and Human Performance faculty discussed the proposal at length and modifications were made based on faculty feedback. In late spring 2010, Scott Richter contacted Suzette Nynas, the Program Director of the entry-level Master's in Athletic Training at MSU-Billings to notify her of our intent to move forward with proposing a graduate program. A follow-up email was also sent to Suzette on September 10, 2010 to keep her apprised of HHP's intent to move forward with this proposal. In May 2010, Scott Richter and Valerie Moody formally met with the UM athletic training staff members who serve as adjunct faculty and clinical supervisors for the students to discuss the proposal. Other clinical supervisors in the Missoula community were contacted about the proposal in summer 2010. All constituents

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associated with the current AT program supported the move towards an entry-level master's program. Scott Richter had numerous discussions in 2010 with Roberta Evans, the Dean of the Phyllis J. Washington College of Education and Human Sciences, who is also fully supportive of transitioning the undergraduate program to a master's level program. Valerie and Scott have also met with Carol Durnford, Associate Director of Financial Aid to discuss the move of our program to a master's degree and have discussed the program fee and financial aid available to potential students. The final draft of this proposal was submitted to the HHP Graduate Committee and approved by HHP faculty on September 15, 2010. Roberta Evans, the Dean of the Phyllis J. Washington College of Education and Human Sciences also approved the proposal in fall 2010. Bonnie Allen, Dean of Libraries, approved the proposal October 14, 2010, and Associate Provost for Graduate Education Stephen Sprang approved in in December 2010. Dean Bobbie Evans, Department Chair Scott Richter, and Program Director Valerie Moody first met via Vision Net with MSU-Billings December 17, 2010 to discuss collaboration between the two athletic training education programs. Subsequently, we followed up with a trip to Bozeman on January 3, 2011 to meet with Dean Diane Duin, Department Chair Russell Lord and Program Director Suzette Nynas, in a face-to-face meeting. Upon leaving the meeting in Bozeman, we developed what we feel could be a groundbreaking model for athletic training education. Although there are many logistics to sort through, the potential for collaboration is extremely exciting (Appendix E). This plan for collaboration was sent forth with our proposal to Faculty Senate and the Graduate Council. The UM Faculty Senate's Graduate Council approved the proposal in fall 2011. The Faculty Senate approved the proposal in fall 2011.

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**APPENDIX A**

**Recommended Course Sequence Pre-Professional Program (first 3 years), Full Time**

<b>YEAR 1 - FALL</b>	<b>CREDITS</b>
HHP 184 Personal Health and Wellness	3
WRIT101 English Composition	3
CHMY 121 General Chemistry	3
HHP 181 Foundations in HHP	3
Gen Ed	3
Total:	15

  

<b>YEAR 1 - SPRING</b>	<b>CREDITS</b>
CHMY 123 Organic Chemistry	3
HHP 226 Basic Ex. Prescription	3
PHAR110 Use and Abuse of Drugs	3
PSYX 100 Intro to Psych	4
COMM 111 Intro to Public Speaking	3
Total:	16

  

<b>YEAR 2 - FALL</b>	<b>CREDITS</b>
SCN 201 Anatomy and Physiology I	4
HHP 236 Nutrition	3
WRIT 222 Technical Writing	2
Gen Ed	3
HHP 288-289 First Aid and CPR	3
Total:	15

  

<b>YEAR 2 - SPRING</b>	<b>CREDITS</b>
SCN 202 Anatomy and Physiology II	4
MATH 115 Probability and Linear Math	3
Gen Ed	6
Total:	13

  

<b>YEAR 3 – FALL</b>	<b>CREDITS</b>
HHP 368-369 Applied Anatomy	4
HHP 377-378 Exercise Physiology	4
HHP 384 Motor Learning	3
HHP 240-241 Prevention and Care of AT injuries	3
Total:	14

  

<b>YEAR 3 - SPRING</b>	<b>CREDITS</b>
STAT 216 Statistics	3
HHP 446 Sports Nutrition	3
Gen Ed/Elective	6
Total:	12

  

<b>Total credits years 1-3:</b>	<b>85</b>
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**APPENDIX B**

**Recommended Course Sequence Professional Program (final 2 years), Full Time**

<b>YEAR 1 - SUMMER</b>	<b>CREDITS</b>
ATEP 534 Athletic Training Techniques	3
ATEP 566 Therapeutic Modalities	3
Total:	<b>6</b>
<b>YEAR 1 - FALL</b>	<b>CREDITS</b>
HHP 520 Educational Research	3
ATEP 540 Clinical Practicum in Athletic Training I	3
ATEP 542 Assessment of the Lower Extremities	3
ATEP 569 Clinical Anatomy Lab	1
Total:	<b>10</b>
<b>YEAR 1 - SPRING</b>	<b>CREDITS</b>
ATEP 541 Clinical Practicum in Athletic Training II	3
ATEP 544 Assessment of the Upper Extremities	3
ATEP 572 Therapeutic Exercise	3
Total:	<b>9</b>
<b>YEAR 2 - SUMMER</b>	<b>CREDITS</b>
ATEP 546 Assessment of the Thorax and Medical Conditions in the Athlete	3
ATEP 574 Manual therapy techniques	3
Total:	<b>6</b>
<b>YEAR 2 - FALL</b>	<b>CREDITS</b>
ATEP 550 Adv. Clin. Practicum in Athletic Training I	3
HHP 699/599 Thesis/Professional Paper	3
Elective	3
Elective (for non-thesis option)	(3)
Total:	<b>9</b>
<b>YEAR 2 - SPRING</b>	<b>CREDITS</b>
HHP 699/599 Thesis/Professional Paper	3
ATEP 578 Leadership in Athletic Training	3
HHP 479 Topics in Sports Medicine	2
ATEP 551 Adv. Clin. Practicum in Athletic Training II	3
Elective (for non-thesis option)	(3)
Total:	<b>11</b>
<b>Total credits years 4-5:</b>	<b>52</b>

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**APPENDIX C**

**Proposed Entry-Level Master's in Athletic Training Budget**

**Table 1. Proposed Program Fee Based on \$925 per Semester**

Program Fees	Program Fee by Semester	Total Program Fee	Total Fees Based on 10 Students	Total Fees Based on 15 Students
First Year in Graduate Program	Summer/Fall/Spring	\$2,775	\$27,750	\$41,625
Second Year in Graduate Program	Summer/Fall/Spring	\$2,775	\$27,750	\$41,625
<b>Total</b>	<b>36 credits</b>	<b>\$5,550</b>	<b>\$55,500</b>	<b>\$83,250</b>

**Table 2. Projected Program Expenses for Entry-Level Master's in Athletic Training**

Projected Expenses	Per Year	Total Projected for 10 Students	Total Projected for 15 Students
Accreditation Fees	\$1500	\$1500	\$1500
Student Expenses*	\$300/student	\$3000	\$4500
Software for Program Assessment^	\$800	\$800	\$800
Lab Equipment	\$5,000	\$5,000	\$10,000
Travel Expenses	Clinical Site supervision	\$2000	\$3000
Stipend for Clinical Instructors (n=20)	\$500/semester x 15 Clinical Instructors = \$15,000	\$15,000	\$15,000
New Faculty Line Contribution**		\$27,700	\$48,450
<b>Total</b>		<b>\$55,500</b>	<b>\$83,250</b>

\*Student expenses include: clothing, medical supplies, background checks, NATA memberships

^Software includes: ATrack (proficiency, hour tracking, and evaluation database), SIMS (injury management software), and IMPACT (concussion management software)

**\*\*New Faculty Line**

- Advertise for a Clinical Faculty Position- Full Time in Athletic Training
- Teach 12 credits in the graduate program; 3 credit release for clinical site supervision
- Would seek a Ph.D. candidate for this position

Estimated Funding Needed for Position: \$45,000-\$50,000

Funding available:

Athletic Training Funds (Currently a line in HHP Budget)	\$21,000
Funds from Program Fee (Based on 10 students enrolled)	\$27,700
<b>Total Funding Available</b>	<b>\$48,700</b>

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**APPENDIX D**

**Calculated Cost Savings for Students**  
Based on Tuition Rates AY 2011-2012

**Table 1. Projected Cost to Students: Traditional Bachelor’s Degree (4 years) with Master’s Degree (2 years)**

<b>4-2 Model</b>	<b>Resident Student</b>	<b>Non-Resident Student</b>
Lower Division 2 years	\$8,328.00	\$36,938.40
Upper Division 2 year	\$9,206.40	\$39,717.60
Graduate 2 years	\$38,442.79 (out of state)^	\$38,442.79
<b>Total Cost</b>	<b>\$55,977.19*</b>	<b>\$115,098.79</b>

\* Nearly 100% of AT students travel out of state for graduate school in athletic training  
^Estimated cost of out of state tuition calculated by averaging out of state tuition rates of the 25 Entry Level Masters Programs in Athletic Training in the United States

**Table 2. Projected Cost to Students: Accelerated Master’s Program**

<b>3-2 Model</b>	<b>Resident Student</b>	<b>Non-Resident Student</b>
Lower Division 2 years	\$8,328.00	\$36,938.40
Upper Division 1 year	\$4,603.20	\$19,858.80
Graduate 2 years	\$10,477.95	\$44,061.45
ATEP Program Fees	\$5,550.00	\$5,550.00
<b>Total Cost</b>	<b>\$28,959.15</b>	<b>\$106,408.65</b>

Current fee rates obtained from UM Website  
<http://www.umt.edu/bussrvcs/Students/Tuition%20and%20Fees/2011-2012%20Fall-Spring%20.aspx>

**Table 3. Total Cost Savings to Student Comparing 3-2 model to 4-2 model**

<b>Educational Model</b>	<b>Resident Student</b>	<b>Non-Resident Student</b>
4-2 Model Cost	\$55,977.19	\$115,098.79
3-2 Model Cost	\$28,959.15	\$106,408.65
<b>Total Cost Savings to Student</b>	<b>\$27,018.04</b>	<b>\$8,690.14</b>

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**APPENDIX E**

**Athletic Training Entry-Level Master's Program  
Collaboration with MSU-B**

Dean Roberta Evans, Department Chair Scott Richter, and Program Director Valerie Moody first met via Vision Net with MSU-Billings December 17, 2010 to discuss collaboration between the two athletic training education programs. Subsequently, we followed up with a trip to Bozeman on January 3, 2011 to meet with Dean Diane Duin, Department Chair Russell Lord and Program Director Suzette Nynas, in a face-to-face meeting. Upon leaving the meeting in Bozeman, we developed what we feel could be a groundbreaking model for athletic training education. Although there are many logistics to sort through, the potential for collaboration is extremely exciting. What follows are the key concepts/ideas that arose from our discussion:

- Key Points and Implementation Dates
  - UM should move forward with the AT Entry-Level Master's Proposal
  - 2012-2013
    - Montana AT Programs (UM and MSU-B) will seek program fees. This will provide additional resources for both program and the potential to hire a joint faculty member to oversee the clinical education component of the programs (due to expansion of clinical education sites- see below); Both programs have agreed to provide necessary support for each other throughout this process (ie attend BOR meetings, letters of support, etc)
    - 9-12 credits transfer between MSU and UM AT Programs- this will allow MSU students to take coursework offered at UM and vice versa; this allows greater flexibility for students in gaining clinical experience (ex: MSU Billings student would like to complete a rotation with Division I football, they could enroll in HHP 411 at UM, receive credit and that experience)
  - 2014
    - Establish common curriculum- due to accreditation standards, there are common elements across both curricula
    - Converged and redesigned curriculum complete- shift to the 3-2 model
    - Vision Net- using this resource will allow students across the state to collaborate in the classroom; MSU could offer a course that UM students could be enrolled in and vice versa; this will also reduce the teaching demands between the two programs
    - Initiate clinical education collaboration- share clinical education sites across the state
    - Addition of Clinical Education Coordinator shared between two programs- hired faculty member, split position to oversee and maintain all documentation required for accreditation of affiliated clinical sites; also assist with student placement in affiliated clinical sites- this person would be hired to travel throughout the state
    - Increased recruitment of out of state students
  - 2016-2018
    - Final implementation
    - Full fluidity between programs
    - Full clinical integration
    - Statewide service with affiliated clinical sites throughout the state
    - United degree

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- Potential for PhD program development in AT
- Joint Accreditation between MSU/UM

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**Table 4. Average total annual incomes of Certified Athletic Trainers. (NATA News, 2008)**

Job Title	Average Annual Salary	Median Salary	25% Earn More Than...	25% Earn Less Than...	Number of Respondents
Administrative Coordinator	\$62,130	\$59,250	\$73,500	\$46,000	32
Administrative Director	\$73,447	\$75,000	\$85,000	\$59,000	47
Assistant/Associate Athletics Director	\$56,119	\$55,000	\$67,250	\$45,000	62
Assistant/Associate Athletic Trainer	\$36,334	\$35,745	\$42,000	\$31,000	1172
Assistant/Associate Athletic Trainer – Men's Sports	\$38,533	\$38,500	\$48,500	\$31,500	30
Assistant/Associate Athletic Trainer – Women's Sports	\$34,934	\$34,500	\$38,500	\$31,700	30
Assistant/Associate Professor	\$56,875	\$54,000	\$65,000	\$49,500	165
Assistant/Associate Professor – Program Director	\$57,699	\$56,000	\$68,500	\$50,000	163
Assistant/Associate Professor – Department Chair	\$66,239	\$61,100	\$80,000	\$52,500	22
Athletics Director	\$43,708	\$45,000	\$50,500	\$32,500	12
Athletic Trainer	\$39,658	\$38,500	\$45,000	\$33,000	2056
Clinical Director/Coordinator/Specialist	\$50,315	\$49,500	\$60,000	\$40,000	122
Consultant	\$65,411	\$59,500	\$75,000	\$36,780	22
Director/Coordinator of Athletic Training Services	\$50,337	\$52,000	\$60,000	\$40,000	132
Director/Coordinator of Sports Medicine	\$57,950	\$56,800	\$68,002	\$46,000	174
Director/Coordinator of Rehabilitation	\$63,847	\$63,250	\$79,000	\$46,651	56
Fitness Coordinator/Director	\$48,405	\$49,000	\$60,000	\$36,500	27
Full Professor	\$69,295	\$77,500	\$88,500	\$45,600	21
Full Professor – Program Director	\$72,613	\$66,750	\$86,500	\$51,500	22
Full Professor – Department Chair	\$93,174	\$84,250	\$111,500	\$67,000	14
Head Athletic Trainer	\$45,011	\$42,218	\$52,000	\$36,000	1286
Head Athletic Trainer – Men's	\$54,812	\$51,540	\$68,600	\$37,000	15
Head Athletic Trainer – Women's	\$43,840	\$42,000	\$49,750	\$34,450	10
Lecturer/Instructor	\$45,615	\$44,750	\$51,000	\$37,020	59
Manager	\$63,496	\$57,750	\$74,000	\$46,380	110
Medical Office Staff	\$40,397	\$36,450	\$52,000	\$30,000	30
Outreach Coordinator	\$47,563	\$41,800	\$59,936	\$41,600	107
Owner/Partner	\$75,942	\$65,000	\$100,000	\$35,000	41
Physician Extender	\$47,843	\$41,800	\$52,750	\$37,000	107
Sales/Marketing	\$61,078	\$54,500	\$70,000	\$40,500	41
Supervisor	\$56,820	\$53,000	\$66,500	\$40,000	22
Teacher	\$50,806	\$50,000	\$60,000	\$41,795	234
Wellness Coordinator/Director	\$47,621	\$46,000	\$55,500	\$33,500	18

**March 1-2, 2012**

**ITEM 154-1011-R0312**

**Technology in Education Permissive Special Competency Notation**

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**THAT**

The Board of Regents of Higher Education authorizes The University of Montana Department of Curriculum and Instruction to establish a collaborative graduate-level program between MUS campuses that leads to a Technology in Education Permissive Special Competency Notation.

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**EXPLANATION**

The University of Montana Department of Curriculum and Instruction, in collaboration with other institutions from the Montana University System (MSU-Billings, MSU-Bozeman, and MSU-Northern) is requesting to establish a graduate-level program that utilizes existing MUS courses and leads to the Technology in Education Permissive Special Competency Notation, a Montana Office of Public Instruction notation for P-12 licensed teachers in Montana (see Montana Professional Educator Preparation Program Standards 10.58.527). The statewide collaboration will best meet the needs of Montana teachers in the 21<sup>st</sup> century by allowing them to earn a master's degree with additional coursework.

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**ATTACHMENTS**

Level II Request Form  
Curriculum Proposal

**Montana Board of Regents**  
**LEVEL II REQUEST FORM**

Item Number: 154-1011-R0312 Meeting Date: March 1-2, 2012  
Institution: The University of Montana-Missoula CIP Code: 13.0301  
Program Title: Technology in Education Permissive Special Competency

Level II proposals require approval by the Board of Regents.

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

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

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

**Specify Request:**

The University of Montana Department of Curriculum and Instruction, in collaboration with other institutions from the Montana University System (MSU-Billings, MSU-Bozeman, and MSU-Northern) requests authorization from the Montana Board of Regents to establish a graduate-level program that utilizes existing MUS courses and leads to the Technology in Education Permissive Special Competency, a Montana Office of Public Instruction notation for P-12 licensed teachers in Montana (see Montana Professional Educator Preparation Program Standards 10.58.527). The statewide collaboration will meet the needs of Montana teachers in the 21<sup>st</sup> century by allowing them to earn a master's degree with additional coursework.

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**1. Overview**

The University of Montana, Montana State University, MSU-Billings, and MSU-Northern are collaborating to offer the Technology in Education Permissive Special Competency, utilizing existing MUS courses and leading a Montana Office of Public Instruction notation for P-12 licensed teachers in Montana (see Montana Professional Educator Preparation Program Standards 10.58.527).

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

This Technology in Education Permissive Special Competency program leads to a teaching notation through the Montana Office of Public Instruction in Technology for licensed teachers in Montana. This notation was developed by the state in response to the need for highly effective technology educators in Montana schools. The joint program across the state is a partnership of higher education teacher preparation programs, the Northern Rockies Educational Services, Inc., and the Montana Office of Public Instruction (OPI), to address the needs of Montana's school districts and their administrators, teachers, and students. The notation acknowledges that these teachers have specialized skills in technology integration. This Level II request will add the sequence of required courses to the catalogs of each institution.

**3. Need**

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

The collaboration of partners is responding to the need to provide future teachers with skills and competencies required for the Technology in Education Permissive Special Competency notation. In today's classroom, teachers need to be skilled in instructional technology and well-versed in the 21st century skills of collaboration, communication, innovation, creativity, and problem solving. The Technology in Education notation brings teachers one step closer to acquiring this 21st century skillset. As one of the partners noted in Phase I of a technology grant program, "The notation will be clear evidence that a teacher has been trained and has the skills to be a technology leader. This has been missing in the past. Administrators are looking for teachers with licensure. School districts win when teachers increase their skills."

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

Through this proposed program, students will have the opportunity to focus on developing skills in instructional technology and other areas, while taking courses that will lead to the Technology in Education notation. Students who successfully complete the requirements for the Technology in Education Permissive Special Competency will have a notation that indicates above-average experience with instructional technologies. Those hiring teachers will have a formal measure of a candidate's competency with educational technologies. Further, with state innovations such as the Montana Digital Academy (MTDA), the need for teachers well versed in teaching with digital and online tools will only grow.

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

We expect a demand from 15 teachers in the first program with similar expectations in future years. The demand was determined by those taking courses and the desire to have at least one 21st century technology educator in each school in the state.

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**4. Institutional and System Fit**

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

At The University of Montana, the existing sequence of courses has existed as part of a master's degree in education in Curriculum Studies for many years, but, without the notation, the number of students taking the degree program has averaged one or two per year. With the addition of the notation, enrollments are predicted to increase. At MSU-Bozeman, MSU-Northern, and MSU-Billings, all the courses have been offered on at least a one-time basis. Additionally, the Montana Digital Academy is a tremendous asset for innovative, creative, practical, and real-world applications to be used within the coursework of this collaborative effort.

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

No changes are anticipated to any existing programs, other than increased participation in the course offerings, greater communication between institutions, and a greater harnessing of existing digital resources.

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

Although the courses exist, the notation has not been an option at all of the partner institutions yet, nor has a clear path been created to spell out what a student needs to do in order to attain the notation.

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

Alignment with 2010 BOR Strategic Plan:

- Goal 1: Increase educational attainment of Montanans
- Goal 2: Assist in the expansion and improvement of the economy
- Goal 3: Improve institutional efficiency and effectiveness

The University of Montana Initiatives and Goals:

- Cultivate Learning and Discovery in Graduate Education
  - Grow graduate education to enhance the intellectual atmosphere and create economic impacts in Montana; increase graduate student enrollment; and increase regional awareness of graduate programs.
- Build Community through Engagement and Outreach
  - Expand the array of educational programs by improving access to Um through an online program; and enhance outreach and expand partnerships with P-12 education.
- Improve the Workplace Environment
  - Create a technology environment that supports the work of students and faculty

This program will increase P-12 teacher competency in technology, thus increasing P-12 student learning and post-secondary attendance, graduate school attendance, and graduate education. Additionally, this

## Montana Board of Regents CURRICULUM PROPOSALS

impacts outreach and engagement. Because the project is cross-campus based, it will improve institutional efficiency and effectiveness by not duplicating entire programs at multiple campuses.

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

Because this is a collaborative partnership with MSU-Billings, MSU-Bozeman, MSU-Northern, and UM-Missoula, we hope to avoid duplication of graduate programs at all campuses, taking the existing courses and combining into a coherent 20 credit package for Montana graduate students to become expert P-12 educators appropriately using technology. The planning committee involved representatives from each campus and also the Office of Public Instruction and the Northern Rockies Educational Resources, Inc.

### 5. Program Details

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

The following leads to the Technology in Education Permissive Special Competency Notation on the Montana teaching license. Students will choose from each category of three credit courses to complete 20 credits minimum:

- Choose one from: UM C&I 515; MSU-Billings EDCI 570; MSU-Bozeman EDCI 551; MSU-Northern EDUC 523
- Choose one from: UM C&I 571; MSU-Northern 590
- Choose one from: UM C&I 571; MSU-Billings EDCI 575; MSU-Bozeman EDCI 591-51
- Choose one from: UM C&I 580; MSU-Billings EDCI 576, MSU-Bozeman EDCI 591
- Choose from electives: UM C&I 581; UM C&I 582, MSU-Billings EDCI 572, EDCI 573
- Choose one from: UM C&I 584; MSU-Billings EDCI 698

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This table shows course equivalencies across the partner institutions.

UM-Missoula	MSU-Bozeman	MSU-Billings	MSU-Northern
C&I 515 Computer and Other Technological Applications in Education	EDCI 551 Educational Technology: Creative Integration	EDCI 570 Computers in Education (2 credits)	EDUC 623 Learning Technologies
C&I 570 Instructional Technology Foundations		EDCI 571 Integrating Technology into School Curriculum	EDUC 590 Teaching & Technology I - Standards
C&I 571 Planning, Preparing, and Assessing Educational Technology Media	EDCI 591-51 Designing Educational Multimedia	EDCI 575 Assessment of Learning Outcomes I	
C&I 580 Distance Learning Theory and Implementation	EDCI 591 Online Teaching & Learning	EDCI 576 Instructional Materials Design	
C&I 581 Planning and Management for Technology in Education		EDCI 573 Pedagogical Instructional Design	
C&I 582 Educational Technology: Trends and Issues		EDCI 572 Introduction to Educational Technology	
C&I 584 Authentic Application in Instructional Design for Technology		EDCI 698 Directed Research Project	

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

Students may choose from the following regular scheduled offerings. We expect 15 students per year statewide.

UM-Missoula courses are offered on a regular schedule as follows:

- C&I 515 Computer and Other Technological Applications in Education (summers and even spring)
- C&I 570 Instructional Technology Foundations (even fall)
- C&I 571 Planning, Preparing, and Assessing Educational Technology Media (even spring)
- C&I 580 Distance Learning Theory and Implementation (odd summer)
- C&I 581 Planning and Management for Technology in Education (odd fall)
- C&I 582 Educational Technology: Trends and Issues (even spring)
- C&I 584 Authentic Application in Instructional Design for Technology (even summer)

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MSU-Billings courses are offered as follows:

- EDCI 570 Computers in Education (2 credits) (fall, spring)
- EDCI 571 Integrating Technology into School Curriculum (fall, spring)
- EDCI 572 Intro to Ed. Tech (fall)
- EDCI 573 Pedagogical Instructional Design (fall)
- EDCI 575 Assessment of Learning I (spring)
- EDCI 576 Instructional Materials Design (summer)
- EDCI 577 Assessment of Learning II (fall)
- EDCI 698 Directed Research Project

MSU-Bozeman courses are offered as follows:

- EDCI 551-01 Ed Tech: Creative Integration (fall)
- EDCI 591 Online Teaching & Learning (fall)
- EDCI 591-51 Designing Educational Multimedia (spring)

MSU-Northern courses are offered as follows:

- EDUC 523 Learning Technologies (fall, spring)
- EDUC 590 Teaching & Technology I Standards (intermittently, summer)

### 6. Resources

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

No additional faculty will be required. Courses will be offered on a rotating schedule, with at least one course offered per semester at one of the partner institutions.

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

No additional institutional resources will be required.

### 7. Assessment

**How will the success of the program be measured?**

Assessment of the program will be twofold: 1) University/OPI/CAEP/NCATE/TEAC evaluation and 2) collaboration efforts will be reviewed by the grant evaluator in the first years of the program.

### 8. Process Leading to Submission

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

Northern Rockies Educational Services, Inc., the Montana Office of Public Instruction, and the University of Montana Phyllis J. Washington College of Education and Human Sciences, Montana State University-Bozeman

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College of Education, Health & Human Development, Montana State University-Billings College of Education, and Montana State University-Northern College of Education, Arts & Sciences, and Nursing have partnered to address the needs of Montana's school districts, their administrators, teachers, and students. The partnership builds on the capacity and commitment established during a Department of Education discretionary grant (FIPSE FY2008 Award Number P116Z080021 sponsored by Senator Max Baucus). The partnership continues with a Department of Education discretionary grant (FY2010 Award Number U215K100006 sponsored by Representative Dennis Rehberg).