## MONTANA UNIVERSITY SYSTEM 2011 BIENNIUM BUDGET PLANNING – NEW PROPOSALS (FEBRUARY 2008)

UNIT/CAMPUS: MONTANA TECH OF THE UNIVERSITY OF MONTANA	UNIT PRIORITY: 1
NEW PROPOSAL NAME: IMPLEMENTATION OF HONORS PROGRAM	
BOARD OF REGENT STRATEGIC GOAL:ACCESS ECON DEV EFFICIENCY _X_ RECRUIT/RETAIN	

TOTAL BIENNIAL COST: \$70,000	FUNDING SOURCES: State Appropriation
FY 10 TOTAL COST: \$35,000	FY 11 TOTAL COST: \$35,000
FY 10 BASE FUNDING REQUESTED: \$35,000	FY 11 BASE FUNDING REQUESTED: \$0
FY 10 OTO FUNDING REQUESTED: \$0	FY 11 OTO FUNDING REQUESTED: \$0
ADDITIONAL STAFF IN FY10 (FTE): 0.0	ADDITIONAL STAFF IN FY11 (FTE): 0

#### **DESCRIPTION OF NEW PROPOSAL:**

The purpose of this proposal is to assist with the implementation of the newly approved Honors Program at Montana Tech. Honors Programs have been found to be effective for recruiting and retention of top tier students. Supporting evidence for this idea is found in several publications by the National Collegiate Honors Council (NCHC), was repeated numerous times at the 2007 NCHC conference, and is supported by the Dean of the Davidson Honors College at the University of Montana, Missoula and the Director of the Honors Program at Montana State University, Bozeman. The students that are the high achievers are looking for schools that provide them the intellectual challenge and education that they desire. These are also the students that generally go on to graduate or professional schools, and the education obtained in an Honors Program makes them more competitive for admission and more successful in their post-graduate work.

In addition, the development of Honors courses that are made available to students outside the Honors Program enhances the academic programs offering those courses, both for the students and the faculty. Honors courses provide greater breadth and/or depth in the subject area and may use alternative teaching/learning techniques. These courses often provide the "hook" to bring students into and remain in a particular degree program, even if they are not part of the larger Honors Program. Frequently, these courses are a combination Honors/Major course and are appealing to both students and faculty. The grouping of students by academic interest has been shown to enhance the students' social and learning experiences leading to improved academic performance and retention. The current administrative and development structure for the Honors Program is based on full-time faculty members that are volunteering their "free time" for this program.

This proposal is to fund faculty salary supplements for those participating in the program.

Faculty Salary Supplements are for those teaching an overload, buy-outs from the regular teaching schedule, and/or the additional work for adding honors components to regular courses. The faculty salary supplements would be for six, three-credit courses each semester. The time made available by this additional money will accelerate the development of the Honors Program, make the program more effective for those already enrolled, and make it more enticing to prospective students.

#### HOW SUCCESS IS MEASURED:

Success will be measured by the number of new and or improved Honors courses, the number of

students recruited to Montana Tech because of the Honors Program, and the retention of students within the Honors Program and those that stay at Montana Tech because of the Honors courses that are offered.

# MONTANA UNIVERSITY SYSTEM 2011 BIENNIUM BUDGET PLANNING – NEW PROPOSALS (JANUARY 2008)

UNIT/CAMPUS: MONTANA TECH OF THE UNIVERSITY OF MONTANA	UNIT PRIORITY: 2
NEW PROPOSAL NAME: MARKETING	
BOARD OF REGENT STRATEGIC GOAL:AC	CESS ECON DEV _X_ EFFICIENCY

TOTAL BIENNIAL COST: \$60,000	FUNDING SOURCES: State Appropriation
FY 10 TOTAL COST: \$30,000	FY 11 TOTAL COST: \$30,000
FY 10 BASE FUNDING REQUESTED: \$30,000	FY 11 BASE FUNDING REQUESTED: \$0
FY 10 OTO FUNDING REQUESTED: \$0	FY 11 OTO FUNDING REQUESTED: \$0
ADDITIONAL STAFF IN FY10 (FTE): 0	ADDITIONAL STAFF IN FY11 (FTE): 0

#### **DESCRIPTION OF NEW PROPOSAL:**

As the primary campus in Montana with a stated mission to educate students in Science, Technology, Engineering and Math (STEM) Programs, Montana Tech must market its programs more aggressively than we have been able to over the past 10 years. Graduates of STEM Programs represent only 5% of the population of the US and are responsible for driving 50% of the Gross Base Product (GBP) of the Nation. Only 32% of the Bachelor's Degrees awarded in the US are in STEM Programs. This percent is much lower than either Japan or China. The European Union has demonstrated its concern for education in STEM Programs by announcing the establishment of the European Institute of Technology to be modeled after MIT.

Located in the Pacific Northwest, Montana Tech has an array of programs that are unique and essential in the search for both short-term and long-term solutions to our energy needs. The capacity to educate more students in STEM Programs exists. Our goal is to get students interested these programs and attending Montana Tech. Therefore, we plan to utilize the knowledge and materials provided by a recent marketing and branding study to more aggressively market our unique programs in Montana, the Pacific Northwest, nationally and internationally.

### HOW SUCCESS IS MEASURED:

Success will be measured by increased enrollments in STEM Programs.

# MONTANA UNIVERSITY SYSTEM 2011 BIENNIUM BUDGET PLANNING – NEW PROPOSALS (FEBRUARY 2008)

UNIT/CAMPUS: MONTANA TECH OF THE UNIVERSITY OF MONTANA	UNIT PRIORITY: 3
NEW PROPOSAL NAME: LEARNING AND ADVISING CENTER	
BOARD OF REGENT STRATEGIC GOAL: _X_ACCESS ECON DEV _X_ EFFICIENCY _X_ RECRUIT/RETAIN	

TOTAL BIENNIAL COST: \$70,000	FUNDING SOURCES: State Appropriation
FY 10 TOTAL COST: \$35,000	FY 11 TOTAL COST: \$35,000
FY 10 BASE FUNDING REQUESTED: \$35,000	FY 11 BASE FUNDING REQUESTED: \$0
FY 10 OTO FUNDING REQUESTED: \$0	FY 11 OTO FUNDING REQUESTED: \$0
ADDITIONAL STAFF IN FY10 (FTE): 0	ADDITIONAL STAFF IN FY11 (FTE): 0

#### **DESCRIPTION OF NEW PROPOSAL:**

MUS: Goal 1 Prepare Students for Success in life through quality higher education Section 2 Increase retention rates within the Montana University System Goal 3 Improve efficiency and effectiveness Section 2 Deliver efficient and coordinated services

## Montana Tech Strategic Plan:

Goal 6 Increase Enrollment to 2,688 (FTE) by 2112

Section 1.2 Improve transition rates between recruited, applied and enrolled students.

Currently Montana Tech is reorganizing the student services offices. As a part of this new organization structure, a First Year Experience Team has been created. This team will be managed by the Associate Vice Chancellor of Student Services and all student services will report through his organization.

Included in this redesign of student services is the creation of an Advising and Mentoring Center. The vision for this center is that every student will have consistent and unbiased access to advising and mentoring services. This group will be tied very closely to faculty throughout the campus. The COT advising center and the North Campus learning center will be the physical locations for these functions.

#### **HOW SUCCESS IS MEASURED:**

This effort will lead to increased student success, retention, and completion of educational goals. Further, these offices will track, assist and manage student success at both the North Campus and the COT with a focus on those students who enter the university system needing remedial or pre-baccalaureate math and English education.

The success of this program will be measured through the stabilization and growth of first year retention which has fluctuated from 57.67% to 70.77% over the last ten years. Given the specialized nature of Montana Tech's academic offerings, a retention rate which is consistently above 80% is thought to be sustainable through combining this initiative with other retention efforts.

## MONTANA UNIVERSITY SYSTEM 2011 BIENNIUM BUDGET PLANNING – NEW PROPOSALS (FEBRUARY 2008)

UNIT/CAMPUS: MONTANA TECH OF THE UNIVERSITY OF MONTANA	UNIT PRIORITY: 1
NEW PROPOSAL NAME: MONTANA ACADEMY OF MATH AND SCIENCE	
BOARD OF REGENT STRATEGIC GOAL: _X_ACC	CESS ECON DEV EFFICIENCY

TOTAL BIENNIAL COST: \$500,000	FUNDING SOURCES: State Appropriation
FY 10 TOTAL COST: \$250,000	FY 11 TOTAL COST: \$250,000
FY 10 BASE FUNDING REQUESTED: \$0	FY 11 BASE FUNDING REQUESTED: \$0
FY 10 OTO FUNDING REQUESTED: \$250,000	FY 11 OTO FUNDING REQUESTED: \$250,000
ADDITIONAL STAFF IN FY10 (FTE): 0	ADDITIONAL STAFF IN FY11 (FTE): 0

## **DESCRIPTION OF NEW PROPOSAL:**

This is a proposal to establish a residential Math and Science Academy at Montana Tech of The University of Montana. The concept has been demonstrated to work at many universities across the nation including the University of North Texas. The idea is to bring high-achieving students to Montana Tech where they complete the last two years of high school and the first two years of college concurrently. We estimate that each year about twenty high school students in Montana are capable of completing a math and science curriculum that is equivalent to the first two years of a rigorous, college-level math and science curriculum.

This initiative is important to Goals I and II of the MUS Strategic Plan and fits perfectly into Montana Tech's strategic plan. The Montana Math and Science Academy would permit students to complete a BS degree two years earlier than normal. This should also result in keeping the highest-achieving students in Montana longer.

When fully operational with 40 students (20 juniors and 20 seniors) the cost of the Academy is estimated to be approximately \$750,000 annually. This consists of about \$250,000 for bond payments on a residence hall and about \$500,000 in operational costs including instructional costs. The proposed revenue is about \$250,000 room and board, about \$250,000 from tuition, and \$250,000 from appropriation as a base incremental increase to the Montana Tech budget.

Montana Tech has a commitment for private funding conditional on approval of this project for tuition for 40 students for four years, with the possibility of longer-term funding.

### HOW SUCCESS IS MEASURED:

Student success will be defined as completing two years of math and science study on Montana Tech's campus. Additional success will come from eventual completion of a bachelor's degree in the STEM (Science, Technology, Engineering and Math) field. Ultimate success is achieved by enrollment and completion of a STEM graduate program. Undergraduate and graduate research results will also serve as indicators of success for the Academy.

Revised Draft - February 21, 2008