


**Form NP**

**NEW DEGREE PROGRAM PROPOSAL**

Sponsoring Institution: Missouri University of Science and Technology  
Program Title: Multidisciplinary Studies  
Degree/Certificate: Bachelor of Arts  
Options: None  
  
CIP Classification: 24.0101  
Implementation Date: January 2013  
Cooperative Partners None  
Expected Date of First Graduation: May 2016

AUTHORIZATION:

 9/17/12  
\_\_\_\_\_  
Steve Graham, Senior Associate Vice President for Academic Affairs  
Name/Title of Institutional Officer                      Signature                      Date

Person to Contact for More Information:  
Steve Graham, Senior Associate Vice President for Academic Affairs 573-882-6396

## 1. Introduction

In addition to the general requirements for the Bachelor of Arts at Missouri S&T, students will work with faculty advisors to blend two (21 and 24 hr) or three (15 hr) focus areas into a unique degree program tailored to their individual interests, preferences, and experience. Transfer students will be able to combine previous academic interests with S&T's rigorous technologically-enriched coursework.

As examples of the diverse possibilities afforded by the degree, a BA MS program could:

- enable a young man or woman interested in ecology to combine coursework in geology, biology, and mining/petroleum engineering;
- allow a fledgling filmmaker to combine electrical and computer engineering with studio art;
- permit a military retiree to combine psychology and business with his/ her vast career experience to "re-make" him or herself for lucrative civilian employment;
- offer workers laid off in mid-career to re-tool themselves by reinforcing prior college work with the latest developments in automation and computer science.
- provide a military spouse who opted out of college before graduating the opportunity to design and complete a degree tailored to his/her life experience.

The BA MS degree curriculum was originally approved by the Academic Council (now Faculty Senate) in 2007 as a joint program between the College of Arts and Sciences and the School of Business. Changes in the bylaws pursuant to the elimination of academic deans, schools, and colleges at S&T made it necessary to re-structure the program to fit under a single academic home. Current initiatives by Governor Nixon, as well as COPHE, MDHE, and CBHE argue strongly that the timing is now particularly appropriate for this degree. The current proposal received a verbal "go-ahead" from Vice-President Graham at system level in September 2010, in response to Governor Nixon's initiative.

The current program may theoretically make use of virtually any course offered by S&T and requires only one new course: an individualized capstone project supervised by a small committee of faculty. The committee is analogous to a graduate degree committee, but less demanding of faculty effort, while equally insistent on academic rigor.

The Chair of Arts, Languages, and Philosophy, Professor W. Lance Haynes, will act as program director and multidisciplinary degree advisor until such time as the number of advisees justifies a 0.25 faculty advisor position.

Initial costs for the program (\$2-3.5K) will address a targeted advertising campaign using existing funds. Thereafter, program expenses will be covered by revenue generated by BA MS enrollments.

## **2. Fit with University Mission and Other Academic Programs**

### **2.A. Alignment with Mission and Goals**

This proposal follows directly from the University's mission to promote: "learning by its students and lifelong learning by Missouri's citizens" [and to advance] the health, cultural, and social interests of the people of Missouri, the nation, and the world." It reflects the campus mission of integrating "education and research...to solve problems for our State and the technological world." The BA MS program has the potential for major impact on the south-central region of Missouri in terms of improving college-completion rates as called for by Governor Nixon and further contributing to the economic development of a growing area of the state. As a land-grant research institution, Missouri S&T is committed not only to its technological focus and strengths, but also to its role as the primary 4-year public university for south-central Missouri.

The Bachelor of Arts in Multidisciplinary Studies (BA MS) is designed for students with unique academic interests that do not fit into any of the existing Missouri S&T degree programs. It is also designed to help nontraditional students with substantial credit hours from other institutions who desire to complete a college degree. The program requires a minimum of 120 hours of course credit. In the place of specific requirements associated with a major, courses in two or three specific academic fields of study are required to complete the program.

This program is overwhelmingly oriented toward campus rather than departmental priorities; however, with its seven distinct disciplines, the Department of Arts, Languages, and Philosophy is both the primary service department and the most diverse and multidisciplinary department on campus.

### **2.B. Duplication and Collaboration within Campus and across System**

Because it offers additional access and learning options at virtually no cost, hundreds of well-respected institutions – including several Ivy League and prestigious technological research universities – offer this mixed-discipline type of degree. General studies programs are a cost-effective means of offering a quality degree to students seeking advanced learning outside of the traditional/static degree programs. In today's competitive environment, Missouri S&T's lack of a general studies type degree is surprising.

Industry leaders have asked for more college graduates with critical thinking skills who are self-driven and who can make moral, ethical, and humanistic connections across multiple fields and issues. The BA MS degree is eminently consistent with the development of these types of career skills. Such programs have been assessed similarly to all other arts and science degrees and have been successful in meeting the needs of students with multiple study interest areas.

The concept of choosing multiple concentration areas that lead students to work with interdisciplinarily-related theories and concepts has long been supported by the general education movements and liberal arts advocates. The "multidisciplinary studies" or "general studies" (some schools title such a program "liberal arts studies" or use a title fitting of the home department, i.e. "general studies in ...") degree movement has been embraced nationwide for well over the last twenty years. The movement starting in the late 1980's focused on the benefits

of a true liberal arts education that some educators felt was being lost in heavily prescribed bachelor's degree programs.

Although active collaboration per se is not a provision of this degree, its relatively generous transfer provisions provide *de facto* collaboration with universities around the world. Additionally, given Missouri S&T's successful expansion in distance/online learning, there is potential in future years to offer the BA MS program using this technology to complement S&T's current online programs and to offer distance learning experiences for on-campus students. However, this is not an initial goal of the BA MS program.

A general Arts and Sciences market study completed in 2004 found that the fact that S&T does not have such a multidisciplinary studies degree was surprising to many respondents. All of the other UM campuses, and most of the Big 12 and Big 10 universities, as well as 8 of 14 technological campuses reviewed, actively promote this type of degree program on their homepages.

This proposal has been vetted on the other three UM campuses. Professor Michael Porter, the director of Special Degree Programs at UMC, made the following comments to the proposal's authors:

*"I have just [reviewed the proposal] . . . and am very impressed with the strength of the proposal.*

*I am a major proponent of interdisciplinary studies and I think you make a very solid case for why MST needs/deserves such a degree program. To be honest, I'm surprised that this hasn't been proposed years ago. In other words, yes, go for it. It is time you offered such a program for all of the reasons you mention: notably: there is a need for such a degree program.*

*We have students with broad interests that bleed out from our existing degree programs, and they need a home. This would provide one. I think the way it is organized and structured is very appropriate.*

A more detailed review by UMSL Associate Dean and Professor Teresa Thiel, who has pioneered the interdisciplinary program at UMSL, is in the appendix of this document.

Programs targeted toward enabling degree completion at the other UM campuses have enjoyed enormous success. UMC's Interdisciplinary BA degree currently has 154 students enrolled while UMSL's Liberal Studies BA has 258 enrollees. Most remarkable of all is the Bachelor of Liberal Arts degree at UMKC, which enjoys enormous popularity with pre-med and pre-law programs and currently has 368 students enrolled, the largest baccalaureate program on campus.

### **3. Business-Related Criteria and Justification**

#### **3.A. Market Analysis**

##### **3.A.1. Need for Program**

Nationwide industry leaders have asked for more college graduates with critical thinking skills who are self-driven and can make moral, ethical, and humanistic connections across multiple fields and issues. Employment forecasters have embraced the concept of multidisciplinary studies and the need to have individuals with multiple foci. Career planners are now advising students to be prepared to have multiple jobs in three to four careers during their working lifetime.

Many of the large and expanding employers in the south-central region of Missouri have also asked for employees with multiple skill sets. Fort Leonard Wood alone has grown to 5,000 civilian employees and expects to grow its civilian workforce significantly as it expands in its new mission as the nation's Basic Combat Training facility. Ft. Wood was assigned in 2002 to train most non-combat arms soldiers, combat engineers, bridging engineers, chemical specialists, and military police. The educated civilian workforce needed to support this effort will be extensive.

A February 2008 article in "Inside Higher Education," while warning about difficulties associated with military education numbers, suggests that about 5% of all US higher education enrollment in 2008 was military personnel and that over 8000 bachelor's degrees were awarded to active military during 2006. At any time, Fort Leonard Wood is home to approximately 20,000 military personnel and their dependents. Approximately 33% of these rotate in or out in any given year. During 2010, the Fort's education center reports 5562 people were enrolled in classes at the various on-post colleges. Given that approximately 93% of all enlisted personnel have or achieve a high school diploma and 90% of all Department of Defense (DoD) officers have a college degree or higher, this target audience should be quite receptive to the BA MS program.

Noting that Missouri S&T has been "integral to our growth," David Dunstedter, Director of Quality Assurance in the Office to the Deputy to the Commanding General at Fort Leonard Wood states that *"As we move forward, Fort Leonard Wood's future is tied to the skills of our permanent workforce. A multidisciplinary undergraduate degree from a first rate teaching and research institution that allows for academic customization and specialization will help prepare our experienced workforce for our future transformations."*

Speaking about the importance of providing increased educational opportunities to Fort Leonard Wood-based soldiers, Commanding General Mark W. Yenter recently stated: *"We are looking to do new and different things – and one thing I have learned at Fort Leonard Wood is that everything is mass – when I talk to lieutenants it is a crowd of 240 and when I talk to the enlisted it is a thousand. I want to be able to tell them all 'leave Missouri with a degree'."*

For many years adult, transfer, and undecided traditional students have requested Missouri S&T to offer a less prescriptive degree program for individuals seeking a baccalaureate degree. For the Fall 2009 semester, 4% of S&T's new transfer student inquiries (taken online via S&T's homepage) were from undecided students (64% of whom lived within 100 miles of Rolla). However, none of these students enrolled on campus because Missouri S&T did not offer a

degree program that met their academic needs. Due to S&T's highly focused curricula and lack of a general studies program, many local students have been unable to complete a BS/BA degree or have been forced to pay for that degree from a private college or extension program. In fact, the only institution in the area offering a general studies-type bachelor's degree is private Drury College; their degree is a Bachelor of General Studies, which might be argued is one credential level below the Bachelor of Arts in Multidisciplinary Studies.

The south-central region needs more college graduates to fill its high tech and service industry needs. The most recent census data indicates that, of adults at least 25 years of age, living in Phelps and Pulaski counties, only 21.1% and 18.8% respectively had completed a BS/BA degree. This is considerably less than the state average of 37% and significantly less than the 28% rate of the general working population of the United States. For the Fall 2009 semester, 24 prospective transfer students (or 8% of total online transfer inquiries taken via S&T's homepage) went so far as to contact Missouri S&T desiring a degree not offered at the university.

### **3.A.2. Student Demand for the Program**

**FIRST-TIME FRESHMEN:** As of 2008, Missouri S&T was attracting ACT test scores from about 7.5% (39 of 518) of the undecided students living within 75 miles of Rolla who would likely be admissible to Missouri S&T (ACT Composite  $\geq 22$ ). Statewide, S&T is attracting test scores from about 4% (154 of 3,655) of Missouri's total number of undecided students that would likely be admissible. In the fall of 2009, 23% of Missouri S&T's freshman class enrolled admitting that they were still undecided about which major they would select. ACT test-score senders are historically S&T's highest-probability-to-enroll inquiry pool.

In 2006, approximately 12% of students nationwide lived at home or with a family member while attending college and 50% attended a college within two hours of their hometown (Stamats, 2007). From 2000 to 2008, the overall populations in Phelps, Pulaski, Crawford, and surrounding counties grew by 5%-9.9%.

Using 2008 ACT data, three students living within 75 miles of Rolla, and 14 total students in the state, indicated an interest to pursue a degree in "general letters" and had an average 27.1 ACT. Likewise, in 2007, five students living within 75 miles of Rolla – and 30 total students in the state – indicated an interest in "general letters" and had an average 25.8 ACT. These students would be a target market for the BA MS program.

For the Fall 2009 semester, Missouri S&T had 146 of 5,155 on-campus undergraduate students enrolled as "undecided." An additional 36 were enrolled as non-degree seeking students (most likely through S&T's Community Access Program). Each of these student groups represents potential enrollments for the BA MS program.

We initially assumed that the undecided student market would have lower ACT scores than students more decided on an academic track. However, 2008 ACT data indicates that the average undecided student within 75 miles of Rolla had a 24.8 ACT, and thus would be admissible. Statewide, the average undecided student had a 22.0 ACT and the average student selecting a major scored a 21.6. These are students who can enroll – and succeed academically – at Missouri S&T.

The interest is high. A survey of 35 “undecided major” high school seniors in the Ft, Leonard Wood area conducted in June, 2012, showed 10 “very interested, 14 “somewhat interested” and only 11 “not interested” in the possibility of the BA MS degree. Several comments from those surveyed are telling:

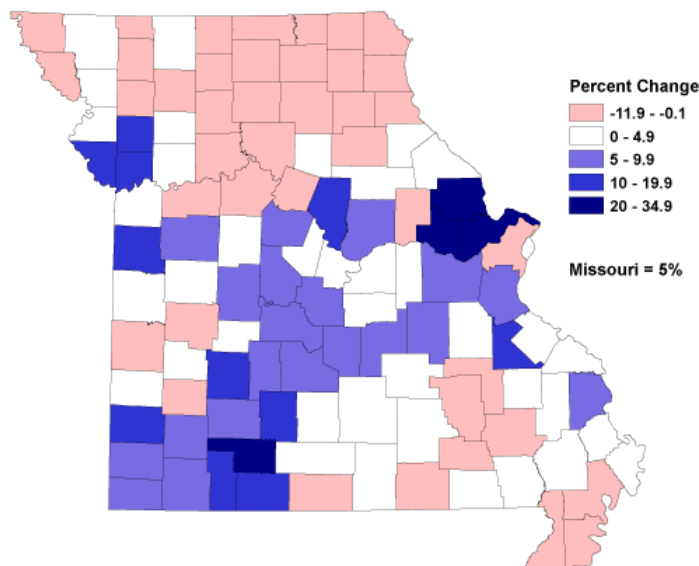
One respondent indicated an interest in combining business and economics with teaching certification, hoping to “understand the business cycle to determine funding education needs.”

Another expressed interest in combining accounting and management with life sciences “to give me practical knowledge of running business with expertise in the sciences.”

A third respondent who indicated coursework in education, mathematics, and business believes working in several different fields will best prepare her to become a school principal.

Still another was interested in computer science, music, and theatre because s/he wants a career in the video game industry.

**Percent Population Change in Missouri, by County  
2000-2007**



Source: Population Division, U. S. Census Bureau, Annual Estimates, April 1, 2000 - July 1, 2007.  
Prepared by: University of Missouri Extension, Office of Social and Economic Data Analysis (OSEDA)  
Map Generated on: 20 Mar 2008

Missouri S&T’s proposed BA MS program is designed to support non-traditional and traditional students living within a one-hour drive of Rolla. It is anticipated that the majority of enrollments for the BA MS program will come from Phelps, Pulaski, Maries, Laclede, Texas, Dent, Crawford, Miller, Osage, Gasconade, Franklin, and Camden counties, where a Lumina Foundation study found that an average of only 22.7% of adults have 2 or 4 year degrees (compared with a national average of 37.9%!) Many of these students will have completed some college credit, but have not been able to complete a prescribed baccalaureate degree.

**TRANSFER STUDENTS:** Currently, most new transfer applicants (94%, or about 290 each fall) have already selected a major or decided not to attend Missouri S&T due the university not

offering an applicable major or program to allow them to complete a bachelor's degree. East Central College (ECC) in Union, Missouri, currently has 668 students enrolled in lower division college course work and is actively pursuing a major expansion in the community. In the Midwest, most community college students interested in completing a bachelor's degree have expressed an interest in completing a degree within a 30 mile radius of their home (Stamats, 2003). Very few of the ECC-Rolla students are pre-engineering majors (less than 1% in Fall 2009).

**ADULT/NON-TRADITIONAL STUDENTS:** Only about 3% of Missouri S&T's current undergraduate students would qualify as full-time adult or non-traditional students (24 years of age or older). This implies that an untapped, undecided transfer student and adult student market likely exists in the immediate Rolla area, but this market is difficult to measure and typically wants evening courses. The BA MS program also would be an excellent option for many current S&T support-staff members who don't have college degrees, but wish to pursue them (benefitting from the UM System's Education Assistance program for employees).

Since all transfer students and adult students would need to meet regular Missouri S&T admission criteria, the quality of students should be relatively close to that of current students. In particular, we expect our BA MS students to parallel those in S&T's successful Technical Communication, Information Science, and Business and Management Systems degree programs. No existing standards are being altered.

**UNIQUE TECHNOLOGICAL/SCIENCE FOCUS:** Any admitted student mature enough to undertake the design of a coherent individualized degree is likely to be competent, committed, and sufficiently responsible to be very successful in life. This program will offer such students a campus-wide array of coursework to facilitate an exciting individualized degree design process.

Employers routinely comment on the need for increased numbers of college graduates who are "technologically literate." Because all BA MS students would be exposed to the unique campus environment of a student-focused technological research university, Missouri S&T's proposed BA MS program would help fill this need and increase the number of highly-qualified college-educated citizens in the south-central region of the state. The BA MS program would not in any way weaken the substance of S&T's existing degrees, but will better guarantee faculty that their classes will be full and can be offered – benefitting all students. The option will boost the number of student credit hours taught by the Arts, Languages and Philosophy (ALP) department; a sufficient increase would justify the need for the department to hire additional faculty.

Although ALP's one existing degree program (the Philosophy BA) enrolls only 5 full-time, degree-seeking students (Fall 2011), the department's extensive service course mission is vitally important to S&T's focus as a technological research university and contributes broadly to the integrity and intellectual base of the institution. In Fall 2011, 1,189 students enrolled in ALP courses and 57 students pursuing academic minors in the performing arts, foreign languages, music, art, theatre and speech communication. Many current S&T students clearly demonstrate interest in areas that stereotypically might not be associated with the traditional S&T student; the BA MS program would give them a more stringent, yet still quite attainable option to pursue and include these interests more intensely than would a minor but less so than a full-blown major.



For instance, in S&T's Fall 2009 new student class, 26% of students indicated during orientation that they wanted to be actively involved in the performing arts. The BA MS program greatly enhances the flexibility of degree program choices students might make to balance their technological and humanistic interests.

It is also possible that the BA MS program will appeal to a unique student population that S&T cannot currently gauge: intellectually-curious students who seek to pursue an academic track that blends the sciences, engineering, social sciences, and/or liberal arts. For example, students who wanted to study "acoustics" (a frequently-mentioned interest of students visiting the S&T campus) might work with their BA MS committee to blend coursework from music, economics, physics, technical communication, entry-level architectural engineering, entry-level mechanical engineering, technical theatre or even electrical engineering. The BA MS program allows faculty to take maximum advantage of S&T's unique curricula in designing degrees that fit a student's needs without sending them to another university. The Missouri S&T Career Opportunities and Employer Relations Center will also help market the graduates of this degree program to potential employers.

The BA MS program would also be a potential boost to pre-med and pre-law students at Missouri S&T by offering them an additional degree option to blend the biology, communication, chemistry, history, physics, and social science background preferred by most medical and professional schools.

PROGRAM SUCCESSES: Although programs such as this tend to attract more transfer and non-traditional students, their academic abilities and post-graduation experiences have been excellent at the universities surveyed by S&T. The extra effort and creativity needed to essentially "design your own degree program" is indicative of a motivated student who does not fit into the existing university peg holes (and one might argue would be a "good fit" for the campus environment at S&T). The University of Michigan claims to have recently completed a study that determined the following:

*"There is abundant evidence during the past thirty years that indicates acceptance of the degree. Employers and graduate schools give equal consideration to Bachelor of General Studies (BGS) students who meet the specific requirements of a graduate or professional school, who perform at a high level, and who select coherent undergraduate courses. Graduate and professional schools and employers are far more concerned with the courses selected and a student's performance than with a degree label."*

*"The BGS is a proven and respected degree which gives (students) flexibility in combining academic disciplines and still prepares you for your next steps after graduation. In fact, a recent study showed no difference between law school and medical school acceptance rates for U of M BGS graduates versus BA/BS graduates."*

A BGS graduate who was a resident physician in pathology at the University of Vermont put it this way:

*“In my case my transcript speaks for itself and contains a fair number of graduate level courses in the biological sciences as well as the routine 100-200 level courses in chemistry and physics that are required for entry into medical school; none were easy, at least for me. Ultimately, I think a careful reading of one's transcript is far more revealing than the specific title of the degree program.”*

Purdue University has been offering the multidisciplinary option for over 20 years. Former Missouri S&T Professor Akira Tokahira, who directed the S&T nuclear reactor, was a graduate of Purdue's multidisciplinary program and an active supporter of its benefits.

Similar degrees on other UM campuses have enjoyed enormous success. Probably the most remarkable is the Bachelor of Liberal Arts program at UMKC, which currently enrolls over 500 students and is the most in-demand single degree on campus. It is particularly popular with pre-med students who frequently prefer the wider scope of study such a degree offers as preparation for the eclectic demands of a career in medicine or law.

Taken together, our appraisal of the potential student market groups discussed above (first-time freshmen, transfers, and non-traditional students), seen in the light of S&T's strengths and reputation, lead us to the enrollment projections shown in Table 1a below. These estimates are based on the factors noted above, information provided from the Missouri S&T Enrollment Management Office, and the Missouri S&T Fort Leonard Wood Liaison, and represent new students who would not otherwise attend Missouri S&T.

**Form SE**

**STUDENT ENROLLMENT PROJECTIONS**

**Table 1a**

**Student Enrollment Projections Based on Market and Student Demand.**  
**(These numbers represent students who are NEW to campus. Revenue from tuition reported in Section 3.B is based on these numbers.)**

| <b>Year</b>      | <b>1</b> | <b>2</b> | <b>3</b>  | <b>4</b>  | <b>5</b>  |
|------------------|----------|----------|-----------|-----------|-----------|
| <b>Full-Time</b> | <b>3</b> | <b>6</b> | <b>9</b>  | <b>13</b> | <b>17</b> |
| <b>Part-Time</b> | <b>2</b> | <b>3</b> | <b>4</b>  | <b>6</b>  | <b>7</b>  |
| <b>Total</b>     | <b>5</b> | <b>9</b> | <b>13</b> | <b>19</b> | <b>24</b> |

Table 1b includes students who transfer into the BA MS program from another program at S&T. It is anticipated that annually, starting with Year 2, five full-time students who are in other programs at Missouri S&T will switch majors and transfer over to the BA MS degree. Since these students will enter the program with credits, the table reflects an estimated time-to-graduation of three years from the date of entering the BA MS program.

**Table 1b**

**Student Enrollment Projections Based on Market and Student Demand.**

**(These numbers include students who transfer into the program from other majors at Missouri S&T.)**

| <b>Year</b>      | <b>1</b> | <b>2</b>  | <b>3</b>  | <b>4</b>  | <b>5</b>  |
|------------------|----------|-----------|-----------|-----------|-----------|
| <b>Full-Time</b> | <b>3</b> | <b>11</b> | <b>19</b> | <b>28</b> | <b>32</b> |
| <b>Part-Time</b> | <b>2</b> | <b>3</b>  | <b>4</b>  | <b>6</b>  | <b>7</b>  |
| <b>Total</b>     | <b>5</b> | <b>14</b> | <b>23</b> | <b>34</b> | <b>39</b> |

**3.B. Financial Projections**

If, each year, Missouri S&T enrolled a 10% (3-4 students) yield of the regional undecided students as freshmen and enrolled at least 5-7 transfer and adult students, in 5 years, with current retention rates, the university could have, conservatively, an additional 24 majors generating \$145,163 in after-discount, in-state annual academic fees. Since no additional courses or specialized faculty will be needed for the BA MS program, the program will have relatively small start-up expenses (brochures printing, postage, etc.) to draw off of the additional revenue generated. Even after five years, at this enrollment rate, campus costs associated with this degree would only be \$14,300 annually. These costs are associated with a 0.25 FTE faculty advisor for the program that will only be hired based on sufficient enrollment.

Limited financial resources for public higher education represent a further reason to embrace the multidisciplinary concept. The concept serves as mechanism to attract additional students while placing virtually no additional financial or resource pressures on the university. The degree provides a mechanism to better use the social science and liberal arts course offerings and possibly develop/test future degree programs experimentally prior to seeking formal curricular approval.

**3.B.1. Additional Resources Needed**

No special requirements are needed nor expected in order for one to teach in this degree program. The standard requirements to teach at Missouri S&T (i.e., the approval of the faculty in the discipline) are all that is necessary for the program. No additional credit hours will be assigned to full-time faculty to teach in the BA MS program. Teaching assignments will remain as regularly scheduled. No special expectations of the faculty are needed, such as special student contact hours or faculty development programs. Service on individual degree committees should require far less effort than analogous service on Masters-level committees and thus is not expected to represent a significant additional workload for faculty. The capstone course will typically be executed as an independent study project, again supervised primarily by the faculty advisor with appropriate levels of assistance from the degree committee or other faculty as needed. A modest advertising budget is included as is the cost of one 0.25 FTE faculty advisor to backfill that portion of the program's student advisor's teaching load after the first year, when the additional tuition revenue generated by these students will more than compensate for the increased load.

### **3.B.2. Revenue**

As shown on the accompanying spreadsheet, our conservative revenue estimates are based only on new in-state students to campus (Table 1a). The BA MS degree's obvious appeal to transfer students will likely lead to significantly greater revenue.

### **3.B.3. Net Revenue**

Beginning with the first year, the net revenue to the campus will be approximately \$25,000, and will grow to an annual net revenue of nearly \$130,000 by the fifth year.

### **3.B.4. Financial and Academic Viability**

Table 2 lists the minimum enrollment for financial and academic viability. Because the BA MS program costs are minimal, financial viability is reached when the advertising costs are covered by the tuition income, which would occur with approximately four students in the program. The expense of a 0.25 FTE faculty advisor only arises as the anticipated steady growth occurs. Thus, the program incurs very little costs, but is anticipated to have a large regional impact.

For the BA MS to be a vibrant, academically viable program, able to meet MDHE's minimum requirement of ten graduates per year, an enrollment of at least 30 students is required. Note that a yield of ten graduates per year with an enrollment of 30 is reasonable considering many students will enter the program as juniors or seniors.

**Table 2**  
**Enrollment at the End of Year 5 for the Program to Be Financially and Academically Viable.**

| <b>Viability</b> | <b>Minimum Enrollment</b> |
|------------------|---------------------------|
| <b>Financial</b> | <b>4</b>                  |
| <b>Academic</b>  | <b>30</b>                 |

We recognize the MDHE expectation that a successful bachelor's degree program should produce a minimum of 10 graduates per year and, as shown in Table 1b, the program should be well on its way to meeting that standard within 5 years.

### **3.C. Business and Marketing Plan: Recruiting and Retaining Students**

The following serves as our basic marketing strategy and recruitment tactics for the new degree program:

Increase the portion of regional and adult, undecided students who enroll at Missouri S&T. Develop a recruitment communication cycle, similar to the programs for existing majors, for undecided or general engineering prospects. This program would be coordinated by the Admissions Office, with the Department of Arts, Languages and Philosophy serving as the program's academic home and faculty support base.

1. Develop an internal communication plan targeted at the 23% of Missouri S&T First-Time Freshmen students who are undecided about choosing a specific major and who are considering leaving Missouri S&T to study at another school with broader degree options.
2. Create greater public awareness of the new degree program that allows more latitude for students interested in completing a bachelor's degree, but not desiring to study in one of the traditional academic fields.

Communication: A target audience-specific communication campaign using direct mail publications, tele-counseling, email, and a degree specific web-site will be developed. Pieces of this campaign will focus on the advantages of a BA MS degree in today's changing technological society. Each communication will feature the benefits of the new program. Following the model of other successful degree-specific recruitment communication plans currently in place at S&T, we anticipate that a targeted campaign for the BA MS program would require \$2,000-\$3,500 annually, and these expenses would initially be covered using existing funds (Year 1), with the intent to utilize revenue generated by BA MS enrollments in future years (Year 2 on).

Action Plan: The Admissions Office and the Chair of Arts, Languages and Philosophy will assign individuals to be responsible for each strategy/objective and will prepare a step-by-step outline of tasks with an action timeline. Implementation will be coordinated around the existing new student recruitment program/cycle.

Evaluation: Overall the effectiveness of this campaign will ultimately be measured by the number of students enrolling in the program at the end of the initial five-year implementation. From the start of the program, the number of prospective students, campus visitors, unique webpage users, and admission applications will be monitored weekly by the Admissions Office and the Enrollment Management Office and shared with the Department of Arts, Languages and Philosophy. Feedback from the new student survey, ACT prospective student profiles, and campus surveys will be tabulated by the Enrollment Management Office at the end of the academic year and used for plan revisions each summer.

### **4. Institutional Capacity**

The BA MS degree reflects the mission of Missouri S&T. As indicated in its Mission Statement, S&T "integrates education and research to create and convey knowledge to solve problems for our state and the technological world." Coherent combinations of courses associated with majors

and minors across S&T's disciplines offer profound opportunities for this sort of integration and will provide graduates who are uniquely equipped to address the most important problems facing our society in the future.

For nearly half a century, Missouri S&T has strived to promote its own particular brand of humanistic and social scientific studies, both to enrich its academic portfolio and to offer Missouri and the world graduates who are particularly able to prosper and contribute in the increasingly technological environment of the contemporary and future workplace. S&T's degree programs are profoundly enriched by strong experiential learning activities both in and outside the classroom that provide experience in leadership, teamwork, and creative problem-solving activities. S&T's faculty, alumni base, and administration are all committed to designing and producing a special type of graduate and the BA MS degree program is planned to become a showpiece in the campus's design.

As discussed in 3.B, the BA MS degree places only a minimal additional burden on existing resources; after the first year, with no more than four students enrolled, the program will be fully self-supporting. The 0.25 FTE faculty/advisor will have responsibility for directing the capstone course. As Table 1 reflects, we anticipate a more-than-ample supply of students.

## **5. Program Characteristics**

### **5.A. Structure**

To obtain a Bachelor of Arts in Multidisciplinary Studies, a student will have to complete the general requirements for a Bachelor of Arts degree as shown in Table 4. In addition, under the supervision of a small faculty committee analogous to graduate degree committees, the student selects and completes a concentrated course of study in two or three focus areas from existing campus curricula, culminating in a final capstone project.

The Capstone activity may follow a "Plan A" or "Plan B" arrangement, to be determined by agreement among the Multidisciplinary Advisor, the student's degree committee, and the student. Plan A would consist of a substantial multidisciplinary research effort among the focus areas, attested to by a scholarly monograph; Plan B would combine experiential activities with practical application germane to the focus areas and attested to by a student-authored summary document. In either case, the project will demonstrate facility with the integration of theoretical and conceptual materials from each focus area at levels of competence and sophistication appropriate to the baccalaureate degree.

Sample curricula to meet the needs of three student examples suggested in the introduction (assuming appropriate General Education prerequisites), illustrate the BA MS's versatility and heuristic potential:

#### Example 1

A young man or woman interested in ecology might combine coursework in geology, life sciences, and mining/petroleum engineering, reflecting the increasing demand for specialization in the modern workplace:

Geology:

- Ge Eng 275 Geomorphology and Terrain Analysis
- Ge Eng 337 Geological Aspects of Hazardous Waste Management
- Ge Eng 331 Subsurface Hydrology
- Ge Eng 339 Groundwater Remediation
- Ge Eng 373 Geologic Field Methods

Biological Sciences:

- Bio Sci 211 Cell Biology (with 212 Lab)
- Bio Sci 242 Human Physiology (with 243 lab)
- Bio Sci 251 Ecology
- Bio Sci 254 Fresh Water Ecology
- Bio Sci 364 Global Ecology

Mining/Petroleum Engineering

- Mi Eng 225 Surface Mine Design
- Mi Eng 235 Underground Mine Design
- Mi Eng 241 Principles of Mineral Processing
- Mi Eng 270 Mining Industry Economics
- Mi Eng 317 Mine Power and Drainage

Such a degree would provide a unique educational background for employment with government or industry concerning the effects of mining on water supplies. A capstone project could develop a series of case studies based on actual mine-water events and identify appropriate monitoring and regulatory actions, as well as other protective measures that might ensue.

Example 2

A military retiree might combine psychology and business with his/ her vast career experience to “re-make” him or herself for lucrative civilian employment. In the course of a 20-30 year career, a non-commissioned officer will often have attended many college classes and dozens, if not hundreds, of seminars and short courses dealing with various aspects of personnel and material management, to say nothing of many years of experience handling people. Such an individual might formalize his or her past with a degree combining psychology and business courses:

Psychology

- Psych 240 Theories of Learning
- Psych 305 Cognitive Psychology
- Psych 307 Industrial Psychology
- Psych 308 Social Psychology

Psych 316 Psychology of Leadership in Organizations  
Psych 362 Abnormal Psychology  
Psych 364 Tests and Measurements  
Psych 374 Organizational Psychology

#### Business and Management Systems

Bus 306 Management and Business Law Essentials  
Bus 311 Business Negotiations  
Bus 305 Accounting Essentials  
Bus 360 Business Operations  
IST 230 E-Commerce  
IST 354 Multi-Media Development and Design  
IST 385 Human Computer Interaction

An appropriate capstone project might be a thesis discussing key psychological issues for military managers transitioning into the modern civilian workplace or some similar topic more specifically tailored to the student's employment plans.

#### Example 3

A military spouse who opted out of college before graduating might wish the opportunity to design and complete a degree tailored to his/her life experience. All too often, older adults in or out of the workforce have plentiful experience and a wide variety of college credits but lack the credentialing of a bachelor's degree. Such folks might, for example, select degree programs that would enhance both subjective and objective qualities of their lives. For instance:

#### Economics (assumes prerequisites taken for Gen Ed)

Econ 220: History of Economic Thought  
Econ 230 Law and Economics  
Econ 222 Intermediate Macroeconomic Theory  
Econ 320 Money and Banking  
Econ 323 International Finance

#### Arts

Art 221 Introduction to Photography  
Art 250 Thematic Studies in Film and Literature  
Music 251 History and Analysis of Music I  
Music 252 History and Analysis of Music II  
Theatre 243 Entertainment Design

#### English

Eng 202 Critical Approaches to Literature  
Eng 230 African American Literature  
Eng 225 Science Fiction and Fantasy Literature  
Eng 362 The English Novel



## Eng 378 The American Experience

For such a student, the capstone experience might entail a somewhat whimsical but well-documented video production reflecting the practical applicability of economics to living the “good life.”

**Table 4**

**Form PS**

**PROGRAM STRUCTURE**

**1. Total credits required for graduation: 120**

A minimum of 120 credit hours with an average of at least two grade points per credit hour is required for a BA MS degree. At least 45 credit hours of the student’s work must be taken at the upper-class level (S&T courses numbered 200 or above).

**2. Residency requirements, if any:** The Student Academic Regulations for Missouri S&T state that a student must complete the last 60 hours of the degree in residence; however provision exists for up to an additional 15 hours to be taken off campus with departmental approval. Off-campus hours beyond 15 require the recommendation of the ALP Department Chair and approval by the Provost.

**3. General education**

Total credits for general education courses: 66-72

Courses (specific course or distribution area and credit hours):

**BASIC SKILLS & CONCEPTS**

**MATH AND SCIENCES**

**HUMAN  
INSTITUTIONS  
(24 credits) \***

(29-35 credits)

(13 credits)

| Course                                   | Hrs   |
|--|-------|
| English 20                               | 3     |
| English 60 or 65                         | 3     |
| History 111 & 112                        | 6     |
| Foreign Language                         | 11-16 |
| Speech 85                                | 3     |
| CompSci 53/54 (4) or 74/78 (3) Or 72 (3) | 3-4   |

| Course  | Hrs |
|---|-----|
| BioSci  | 3   |
| PhysSci   | 3   |
| Science Lab   | 1   |
| Mathematics and Statistics (beyond College Algebra) | 3   |
| One other   | 3   |

| Course          | Hrs |
|-----------------|-----|
| Humanities      | 12  |
| Social Sciences | 12  |
|                 |     |
|                 |     |
|                 |     |

\* HUMAN INSTITUTIONS DISTRIBUTION: Must include at least one course in each of two fields of social sciences selected from Economics, Political Science, and Psychology; and at least one course in each of three fields of humanities selected from History, Etymology, Fine Arts, Literature, Philosophy, and Speech and Media Studies.

#### 4. Major requirements

Total credits specific to degree: 48

Courses filling the general education requirements above may not be used to fulfill “Major requirements.”

Courses (specific course or distribution area and credit hours): 48

2 Focus Areas                      OR                      3 Focus Areas

| Course       | Hrs | Course       | Hrs |
|--------------|-----|--------------|-----|
| Focus Area 1 | 21  | Focus Area 1 | 15  |
| Focus Area 2 | 24  | Focus Area 2 | 15  |
| Capstone     | 3   | Focus Area 3 | 15  |
|              |     | Capstone     | 3   |

#### 5. Free elective credits

Total free elective credits: 0-6

*The sum of hours required for general education, major requirements and free electives should equal the total credits required for graduation.*

#### 6. Requirement for thesis, internship or other capstone experience:

Total credits: 3 (included in focus area hours)

A Capstone project, typically a “senior thesis” or richly documented extended project will be planned and completed under the direction of the Multidisciplinary Degree Advisor. The student will enroll in 3 credits of ALP 300, the independent studies course number. The procedure will include submission and approval of a statement of expectations, a project proposal, and satisfactory defense of its completion to the student’s degree committee. The student’s grade in the course will be assigned by the Multidisciplinary Advisor after consultation with the other members of the student’s committee. The advisor will work with the student to identify the other members of the committee.

#### 7. Any unique features such as interdepartmental cooperation:

In addition to the interdepartmental cooperation required to advise multidisciplinary degrees (See Section 6 above), the proposed program is designed to provide students with concentrated study in two or three different academic fields. Students completing this degree will have a strong and varied academic background with an unusually high level of eclecticism that prepares them for further detailed study in a particular field or employment in a multidisciplinary environment. Graduates of this program will have invariably benefited from S&T’s unique technological environment.

## **Form PG**

### **PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS**

#### **5.B. Faculty and Administration**

Initially, the BA MS program will be directed by the Chair of Arts, Languages, and Philosophy, Professor W. Lance Haynes, who has agreed to act as Multidisciplinary Advisor for the first 5 students enrolled in the program. Once there are five full-time students enrolled for the BA MS degree and the program is financially viable, a 0.25 FTE Multidisciplinary Advisor will be appointed from ALP faculty.

The Multidisciplinary Advisor's role, in addition to coordinating targeted advertising with the Vice Provost and Dean of Enrollment Management, will be to assist students in selecting faculty for their degree committees and to lead their efforts in assuring appropriate depth and coherence for each individual program, and in planning and coordinating individual capstone projects.

The BA MS program requires no special courses beyond the capstone. Credit hours in the focus areas will be taught by full-time faculty at the same rate as in traditional major programs. No additional credit hours will be assigned to full-time faculty to teach in the BA MS program. Teaching assignments will remain as regularly scheduled. No special expectations of the faculty are needed, such as special student contact hours or faculty development programs. Service on individual degree committees should require far less effort than analogous service on Masters-level committees and thus is not expected to represent a significant additional workload for faculty.

#### **5.C. Student Preparation**

Regular admission to Missouri S&T, a selective university, is the only specific preparation required for the program. No special admissions procedures or student qualifications are needed beyond the normal procedures. Students selecting the BA MS degree will be assigned to the Multidisciplinary Advisor when they enroll. A Multidisciplinary Advisor has been identified in Arts, Languages, and Philosophy who will voluntarily serve in this role in load until such time as a 0.25 FTE faculty position can be justified by the demand for the degree.

#### **5.D. Program Outcomes**

The purpose of the BA MS degree is to allow students to complete their undergraduate studies by focusing on two or three areas, instead of the traditional major-minor degree plan. This degree will allow students the flexibility of bringing diverse studies into a focused plan for graduation, thus learning outcomes will vary by individual. This flexibility will allow more students to complete their degrees thereby permitting them to enter or move ahead in the work force at a higher level than without the degree. Additional licensing, certification, and/or registration are not needed for this degree proposal.

Learning outcomes beyond the general education level will vary with each individually-designed program. Multidisciplinary advising will feature consideration of vocational relevance; however, the balance between personal and professional goals will be the student's choice. Some students are expected to select focus areas that complement their vocational activities; others, (military retirees, for instance), may choose to matriculate in areas that enrich leisure or charitable pursuits. Advisors will ensure that campus learning outcomes are addressed in each program.

#### **5.E. Program Design and Content**

Individual student curriculum choices will be guided by the Multidisciplinary Advisor, in consultation with focus area faculty who will comprise the student's program committee to insure sufficient coherence, depth, and rigor in the overall program.

Sequencing of courses will reflect the normal prerequisite sequences established by focus area departments.

The only new course is the Capstone which will entail production of a summary document that reflects both the breadth and depth of knowledge in each focus area and the capacity for intellectual flexibility required to integrate theories and methods from each area into a cogent world view.

#### **5.F. Program Goals and Assessment**

S&T Assessment practices for this program will include the same general education outcome assessment as for other degrees. Major field and general departmental outcomes will be assessed through the student's degree committee evaluations of the Capstone Project.

The specific outcomes for the students in the program are:

1. Successful completion of the required courses.
2. Successful completion of the multidisciplinary capstone project.
3. Successful completion of the "Report for Post-Grad Plans" for the Career

Opportunities Center to determine post-graduation plans.

The program is designed to promote the completion of Bachelor's degrees. As such, the graduation rate is expected to be higher than the standard university graduation rate of 66%. BA MS students' completion rates will be tracked during the first five years and will be reported to the Provost and at each program review beginning five years after the first fall semester the BA MS program begins. This program is expected to enhance retention rates by expanding the "safety net" the campus provides to students who become disenchanted with technical majors, a factor which can and will be easily tracked at the university.

In section 3, we presented enrollment projections based solely on market data. Factoring in this expected market with the success rates of past promotional efforts, the program can expect 14-20 enrolled students at the end of the third year after the program begins.

At the end of five years, an enrollment of at least 24-36 is expected. A significantly greater enrollment may be observed if similar success to the other UM campuses is seen.

The program expects 4-5 graduates per year at the end of the third year after the program begins. At the end of five years, at least 6-8 graduates per year will complete their BA MS degrees, and the program will easily meet or exceed the MDHE standard of 10 degrees per year soon thereafter.

#### **5.G. Alumni and Employer Survey**

Missouri S&T participates in the National Survey of Student Engagement and receives annual data on student satisfaction. The university's Center for Educational /Research and Teaching Innovation (CERTI) holds seminars at which faculty review the data and plan activities to respond to any dissatisfaction.

The university's Career Opportunities Center, which supports students and alumni in their employment searches, surveys employers and alumni for their feedback. We expect that the graduates of the BA MS program will rate comparably with other Missouri S&T graduates, who tend to receive exceptionally high employer ratings.

Since the students who participate in this program will be realizing their own personal interests and desires, we expect they will also rate the program quite highly. Because this program has been intentionally designed for workforce and regional economic development, this feedback is especially important to the departments who cooperate in the BA MS program.

#### **5.H. Program Accreditation**

Missouri S&T is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools, which applies to all baccalaureate, masters, and doctoral level degrees. There is no specialized accreditation in the field of Multidisciplinary Studies.

The next general accreditation review of the Missouri S&T by North Central Accreditation Association is scheduled for 2018.

## **Appendix**

### Letters of Support

Harvest Collier, Vice Provost for Undergraduate Studies

Henry Wiebe, Vice Provost of Global Learning

Laura Stoll, Vice Provost and Dean, Enrollment Management

Stephen H. Tupper, University Liaison to Fort Leonard Wood

### Review

Teresa Thiel, Professor and Associate Dean of Arts and Sciences, UMSL



MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

*Formerly University of Missouri-Rolla*

February 25, 2011

To Whom It May Concern:

This letter is provided in support of the Missouri University of Science and Technology Department of Arts, Languages, and Philosophy's proposal to establish a Bachelor of Arts in Multidisciplinary Studies (BAMS) degree program.

The implementation of the proposed BAMS degree program can assist the university in addressing a number of student retention, success, and persistence issues that Missouri S&T presently encounters. One primary issue is providing an immediate academic home for admitted freshmen students that are undecided about their major. The BAMS program could provide the academic home and reduce the negative impact of retaining these students relative to the "lack of academic home ownership factor" and the "lack of accountability" for a strong student academic focus.

A significant issue that may be addressed by the BAMS program is providing a degree option for the potentially growing number of upper-level undergraduate students that have regained their "good academic standing" status, but are not eligible to transfer back to their original degree program department due to higher gpa transfer requirements that the student is not able to attain.

A national concern that is becoming increasingly important relative to student success is the clear demonstration of rigorous learning in any degree program students pursue. The BAMS program offers the university the unique opportunity to establish a "STEM-Humanities" degree model study program that is both rigorous and achievable relative to the strong reputation Missouri S&T has in its traditional science and engineering degree disciplines.

The BAMS degree program also offers a significant opportunity to contribute to addressing the growing national concern of there being too few quality STEM educators at the pre-college level. The program would be an attractive option to a significant number of education degree seekers in the State by providing a strong discipline degree to support teacher certification.

The above considerations are indeed pertinent to our continuing efforts to promote student success at Missouri S&T. I look forward to the opportunity to engage all participating departments in pursuing the demonstration of rigorous learning outcomes for students in this program.

Respectfully submitted,

Harvest L. Collier  
Professor of Chemistry  
Vice Provost  
Undergraduate Studies





MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Global Learning

216 Centennial Hall, 300 W. 12th St.  
Rolla, MO 65409-1560

Phone: 573-341-4132  
Fax: 573-341-4992  
Web: www.mst.edu

February 23, 2011

TO: Whom It May Concern  
FROM: Henry Wiebe,  
Vice Provost of Global Learning  
RE: Letter of endorsement for the Bachelors of Multidisciplinary Studies

The Bachelor of Arts in Multidisciplinary Studies (BAMS) will fill a great need in the central Missouri area and Fort Leonard Wood (FLW) in particular. Missouri University of Science and Technology has a long standing record of serving the needs of Army officers assigned to FLW for advanced officer training. S&T currently graduates 80 to 100 officers per year with a Master of Science in:

Civil Engineering,  
Engineering Management,  
Environmental Engineering, and  
Geological Engineering.

However, there is an unmet need at FLW and the surrounding community for a non-technical program that would allow students with varied academic backgrounds to earn a university degree. Military families that are frequently transferred from one location to another would be particularly well served with such a program.

The proposed BAMS program is designed to meet this need. It will permit students to transfer in a variety of courses and allow them to structure their future studies in two or three different academic fields. Upon graduation, students will have a broad background and be better prepared for a variety of professional positions or further study in their chosen field. This preparation and flexibility will be particularly useful to spouses of military personnel as they seek employment to supplement their family's income.

Respectfully submitted,

A handwritten signature in cursive script that reads "Henry Wiebe".

Vice Provost



MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

*Formerly University of Missouri-Rolla*

July 25, 2012

Warren K. Wray, Ph.D., P.E.  
Provost  
Missouri University of Science and Technology  
204 Parker Hall, 300 W. 13<sup>th</sup> Street  
Rolla, MO 65409

RE: LETTER OF SUPPORT FOR BAMS DEGREE PROGRAM

Dear Dr. Wray,

This letter is submitted in support of the bachelor of multidisciplinary studies (BAMS) at Missouri University of Science and Technology.

The need for and benefits of this program have been recognized by each of Missouri's public universities, most of the Big 12 and Big 10 universities, and 8 of our 15 peer technological research universities. It is a cost effective and high quality way to increase the degree completion rates utilizing existing courses and academic structure. With minimal additional expense, a population of students, traditional and non-traditional, with multiple academic areas of interest is served, and available seats in classrooms are filled.

Interdisciplinary and general studies programs have traditionally been a good fit with the development of on-line and evening degree completion programs. In addition, this program will help Missouri S&T's retention and graduation rates by offering a non-STEM based degree to complement our technological campus, while adding an aspect of academic enrichment and diversity.

The students selecting BAMS would meet the same general admissions requirements as all the other undergraduate programs and, by taking the already existing courses, academic quality would not be compromised. Combining multiple concentration areas will allow students to achieve their educational goals and succeed in the professional area of their choice. Research has shown that graduate and professional schools, as well as employers, often are more concerned with the courses a student has taken and their academic competence, as well as the degree title.

It is with great enthusiasm and confidence of success that I submit this letter. The BAMS degree program at Missouri S&T will be a very positive addition for the university, and has my full support. Please let know if further discussion would be beneficial.

Sincerely,

Laura Stoll  
Vice Provost and Dean for Enrollment Management  
212 Parker Hall | 573-341-6292 | lstoll@mst.edu



*May 2, 2011*

For: Professor W. Lance Haynes of the Department of Arts, Languages & Philosophy  
Missouri University of Science and Technology

From: Stephen H. Tupper liaison to Fort Leonard Wood

Reference: Endorsement of a Bachelor of Arts Multidisciplinary Studies

Dear Lance;

I am very excited to see progress on offering an undergraduate degree in multi-disciplinary studies; I fully endorse it and offer to assist in implementing for the markets at Fort Leonard Wood.

There is a market here at the Fort for this degree offering as suggested in the proposal; I highlight three things that demonstrate this to me.

- a) The Army Civilian University has been corresponding with me for over a year to execute an agreement allowing Army employed civilian workers to take courses and programs that would allow the Army Management Staff College to credit their workers for completing the three Army required programs (Civilian Basic, Intermediate and Advanced courses). The Army is not able to bring all of the 2452 'Army civilians' at the Fort to Virginia to accomplish this required professional development and instead are trying to form a local partnership. I note also that the number of civilian workers – and hence the market – has steadily climbed from the 1900 when I started in 2003. My expectation is that this will continue to be a growing issue. The BAMS program will be attractive to this population even though the actual Army need would be addressed short of attaining a full degree. Once the students are invested in most will finish it to a BA.
- b) Army military leaders have asked for help for their people – one assistant commandant after visiting campus asked "... wanting me to contact you in reference to perhaps getting a course set up for civilians and military on how to write staffing papers and memorandums. Just mostly a good refresher course on grammar and content. If you could please call me ..." is another indication of needs within the current military workforce and providing this would be another entrée into BAMS. And again the Fort continues to draw more military missions over

time. Starting again from 2003 there are now an additional 900 permanently stationed here for a total of 7396 servicemen at the Fort.

- c) The final factor is the success enjoyed by our seven sister educational institutions at the Fort. Each of these programs has been successful in a niche area just as Missouri S&T has been successful in graduate engineering. I have observed that general topics predominate for discipline-oriented degrees at Park, Webster, Columbia and Drury but little flexibility is available to the student to blend several mini-foci from arts, sciences and technology. BAMS would provide that. The civilian workers at the Fort – and an order of magnitude more so for the uniformed – are expected to handle a very diverse set of responsibilities and job postings over a career. They find that a specialized undergraduate degree in something like *law enforcement* was a great starter but left them underprepared for even the next career step. BAMS, as an alternative, would be very attractive.

Surrounds of the Fort is another market yet and you have discussed it both accurately and well in your proposal. The spouses, and increasingly dependent children of the military, will find this degree useful because of the academic quality noted by accreditation and the Missouri S&T reputation.

The military retired population in the area has significantly shifted its character within the last eight years and the education level, tastes and spending power are elevated. That means generally brighter, more ambitious and more affluent educational consumers are in the Missouri S&T neighborhood. BAMS will appeal to those who would otherwise dismiss the campus as too technical for their needs but would love to have the perceived stamp of ‘technologically literate’ that comes with an S&T degree.

In short I am all for this degree. Too long the University of Missouri has ceded this important and growing market. Too long the military and the civilian workers have not had a program flexible enough to meet their general needs allowing them to get the chemistry and biology to be in CBRN defense, or the computer science to work in MP intelligence, or the mechanics and energy studies to be successful workers for military engineering.

With great respect,



Steve Tupper  
Liaison

Review of the Proposed “Bachelor of Arts in Multidisciplinary Studies” from Missouri University of Science and Technology

Teresa Thiel, Professor and Associate Dean of the College of Arts and Sciences, University of Missouri-St. Louis

This proposal for a Bachelor of Arts in Multidisciplinary Studies BS-MS from Missouri University of Science and Technology follows a path that has been forged by many universities over the years to provide a degree for students whose interests and ambitions do not match the structured degree programs offered by traditional departments. These interdisciplinary degrees allow students the flexibility to design, under the supervision of an academic advisor, a degree program that is academically rigorous while still serving the interests of the student.

The University of Missouri-St Louis has a Bachelor of Liberal Studies that comprises minors in two different programs with a capstone course. This allows students to combine complementary disciplines to create a unique degree program. This is a very popular major and one that is becoming more popular over time. This likely reflects the more diverse interests of current students, but may also reflect the fact that careers are no longer as static as they used to be and that the ever changing landscape of the job market favors a workforce with a more diverse education. Thus, it appears that this new degree program at MST is well justified both in terms of student interest and probably in terms of workforce demands.

The Bachelor of Arts in Multidisciplinary Studies degree will be offered by the Department of Arts, Languages, and Philosophy, requires students to complete 45 hours of courses in two or three disciplines, a multidisciplinary capstone project as well as the normal general requirements for a Bachelor of Arts Degree. The program is well described in this proposal and it appears to provide sufficient flexibility for students while maintaining academic rigor. The disciplines included in the program are current majors and minors, so the program will not require significant new expenditures.

The proposal is well written and the program as presented here appears sound. It is consistent with the interdisciplinary degree programs now being offered not only within the UM System, but also across the country. It does not compete with other similar programs across the state because it offers students interested in or enrolled at MST with a unique blend of disciplines that are not offered at other campuses, particularly those with a strong technology focus. I see no reasons why this proposal should not be approved.