

## Appendix B

In accordance with Senate policy 51-04, we include the additional information to assist the Senate, and particularly the Senate Finance Committee, in assessing the potential financial implications of the proposed program.

### I. Relation to University Strategic Plan

#### a. Relation of program to the university's educational and research goals.

The University strategic plan focuses on three fundamental goals: 1) world-class faculty/staff, students, 2) distinctive and discovery-based learning, and 3) world-class research, scholarship, creativity, etc.

While the proposed degree relates to several of these goals, it seems to particularly relate to Goal 3.1 and Goal 2.3. First and foremost, Goal 3.1 calls for “*increase residential and non-residential master's offerings and enrollment.*” While 5<sup>th</sup> year MS programs are currently more common within Michigan Tech Engineering programs, there are areas within the College of Sciences and Arts where course-based MS programs may be appropriate and desirable for students. We believe Kinesiology represents such an opportunity because many of our undergraduates that do not pursue a professional graduate degrees (i.e., medical school, physical therapy, physician assistant, etc.) go on to get a MS to make them more competitive for a career in strength and conditioning, fitness, or sports administration. Moreover, 5<sup>th</sup> year course-based MS programs are professionally acceptable for these fitness/administrative careers.

Second, Goal 2.3 aims to support “*Graduates with the ability to respond to the needs and challenges of the 21st century.*” One of the ‘challenges’ of the 21<sup>st</sup> century is unsustainable increases in healthcare costs, and the economic consequences. In a time of great uncertainty when it comes to healthcare, everyone agrees that preventative wellness is a key aspect of healthy living. This graduate program includes advanced learning related to exercise, nutrition, sleep, stress physiology, and overall weight management.

Lastly, it is important to highlight that Inside Higher Ed recently reported that kinesiology is “*one of the fastest-growing majors in the country.*”<sup>1</sup> Accordingly, there is a strong base of undergraduate students to draw from for this graduate program, and a need for high-quality graduate programs. <sup>1</sup>(<http://www.insidehighered.com/news/2010/08/11/kinesiology>).

#### b. Consistency with the university's resource allocation criteria.

The university's resource allocation criteria are somewhat amorphous, but for academic units in the College of Sciences and Arts it begins with support from the Dean and other department chairs. This proposal has been discussed at College Council, and has the support of the Dean and other College of Sciences and Arts chairs.

Regarding the request for a Professor of Practice, this was requested for three reasons. First, we are proposing new courses that require additional instruction beyond our existing faculty and two pending searches. As outlined in the financial portion of the proposal, the 11-16 M.S. students associated with this degree will generate enough to support this Professor of Practice and still contribute ~\$100,000 to the general fund. Second, there was some precedent for this approach given last year's Master of Geographic Information Science (which also requested a Professor of Practice). Third, a Professor of Practice seems to be a more appropriate than a tenure-track faculty request because if enrollment targets are not met, there is a way to pull back this funding.

## **II. Impact on University Enrollment**

### **a. Projected number of students in the program.**

As outlined in the proposal, our goal is to have a total of 5-10 coursework (Plan D) MS students per year. We anticipate the majority of those Plan D students being 5<sup>th</sup> year MS students, thus completing within one year. Regarding the thesis-based (Plan A) MS degree, we estimate 1 MS student for every tenure/tenure-track faculty. We currently have 4 faculty and 2 ongoing searches, so in steady-state we expect approximately 6 Plan A MS students. Therefore, in total we expect somewhere between 11-16 MS students in this program.

### **b. Source of new students; in particular, will the students be drawn from existing programs, or will they be students who would otherwise not have come to MTU?**

We anticipate somewhere around a 50/50 split (i.e., 50% from our existing departmental undergraduate students and 50% that obtained their baccalaureate from another institution who otherwise would not have come to Michigan Tech).

### **c. What is the likely correlation between demand for the new program and existing enrollment patterns at MTU?**

The existing enrollment patterns at Michigan Tech (primarily within the College of Engineering) are strong with regards to coursework M.S. degrees. We believe the same will be true in Kinesiology, which is a field

with the College of Sciences and Arts that is well suited for a Plan D Master's degree.

**d. What is the current enrollment in the unit?**

The department has been pretty steady over the last few years at about 130 students (~90 in Exercise Science and ~30 in Sports and Fitness Management).

**III. Impact on Resources Required by Department in Which the Program is housed. This would include, but not be limited to:**

**a. Faculty lines.**

No new tenure-track faculty lines are requested. We have two ongoing searches (i.e., replacement searches) that will be crucial for the proposed degree. Additionally, we have requested a Professor of Practice line starting in Year 2 of the program (rationale provided previously and within the full proposal).

**b. Faculty and student labs, including ongoing maintenance.**

Existing undergraduate teaching and research laboratories can sufficiently support the graduate students proposed. The courses associated with laboratory needs have requested course fees comparable to what is requested for undergraduates. These funds will be used to support common equipment and maintenance, including the metabolic carts and ergometers for estimating maximum oxygen consumption during exercise.

**c. Advising.**

The Plan A students will be advised by tenure-track faculty. The Plan D students will be advised by the Professor of Practice.

**d. Assessment.**

Although current assessment is being focused on undergraduate degrees, we anticipate future focus on the graduate programs. Our curricular committee that oversees assessment is prepared for this additional assessment, and the Professor of Practice is likely to be involved in assisting with some of this additional service workload. We will participate in any university level assessment requirements for graduate programs when these are put in place.

**IV. Impact on Resources Required By other Units Within the University. This analysis would include, but not necessarily be limited to, the impacts on:**

- a. **Other academic (e.g., Gen Ed) units with regard to faculty, labs and assessment. (NOTE: The current Student to Faculty ratio for the university as a whole is approximately 12:1 per Institutional Analysis.)**

This is a graduate degree, so it does not impact Gen Ed. We have proposed to allow certain courses from Biological Sciences, Mathematical Sciences, Psychology, and Biomedical Engineering as free-electives. This was done *with permission* from all of the respective department chairs, and we do not anticipate these few free electives impacting resources required by other units within the University.

- b. **Information Technology, the Library, central administration and career planning with respect to the impact on the need for computing services, library resources, advising, record keeping, development of employer relations etc.**

Any degree program is going to impact all of these areas (i.e., IT, Library, record keeping, etc.). However, we are estimating a modest number of total students (11-16 M.S. students in steady state). We believe the \$100,000+ net revenue is more than adequate to cover these additional expenses.

- V. **Assessment of the ability to obtain the necessary resources assuming requested funds are obtained**

- a. **For high demand fields (e.g., business fields, etc.), will it be possible to fill allocated lines**

Yes, we expect no problem filling allocated lines for this program; we have successfully filled open departmental lines over the past 7 years.

- VI. **Past proposals. Has the department initiated any other new degree programs in the last five years?**

The department has not initiated any other new degree programs in the last five years.

- VII. **Departmental Budget contribution**

- a. **What is the department's total general fund budget?**

FY 2014: \$642,135

- b. **How much tuition does the department generate? This information should be provided for both the credit hours taught by the department and the number of credit hours taken by the department's majors.**

With the recent change to 'flat-rate tuition' in AY14, it is unclear if this question is still relevant, and if so, how to provide a reasonable number. Additionally, there are other factors such as in-state vs. out-of-state tuition that influence this calculation. Given the new flat-rate tuition policy, we kindly request the Senate Finance Committee to clarify how they would like to see this calculation (if in fact they deem it appropriate and necessary). In accordance with Senate policy 51-04, we will work with the Provost office to obtain the calculation once the request is clarified given the recent changes.

**VIII. How do the benefits from this program compare to other alternatives that are currently under consideration or development. Will approval and allocation of resources to this program preclude the development of other programs?**

As outlined in the main proposal, the program appears to be financially sustainable. Even with the new Professor of Practice, each of the first three years provides new financial contributions to the University general fund budget. By year 3 (i.e., steady-state), the new program is expected to generate \$100,000+ net income for the University. We do not anticipate that approval and allocations provided for this degree will preclude the development of other programs.