The University Senate of Michigan Technological University

PROPOSAL 5-06

(Voting Units: Academic Departments)

BACHELOR OF SCIENCE IN ANTHROPOLOGY

Department Social Sciences
Michigan Technological University

A. General description and characteristics

The degree in Anthropology will offer social science undergraduates a specific focus in the study of anthropology. Currently, the department offers two degrees: 1) a B.S. in Social Sciences with options in Social Studies Education or Law and Society; and 2) a B.A. degree in Liberal Arts with a History Option. Typical of small programs in Anthropology, after completion of core courses in the discipline, this Anthropology degree focuses students upon specific areas of emphasis. In this program, those areas are Archaeology and Environmental Anthropology. Because the core faculty of five are heavily involved in the department’s M.S. Program in Industrial Archaeology and History and M.S. Program in Environmental Policy, they have the depth of knowledge and research experience to offer both general anthropology courses and upper-division classes that allow students to concentrate upon studies in these sub-fields.

The degree requires completion of 124 credits and has three unique features which distinguish it from the existing Social Sciences degree — a grounding in the biophysical sciences, a fieldwork requirement, and an optional, but recommended senior project. The core curriculum (required of all majors) introduces students to archaeology, environmental anthropology, fieldwork, social science theory, methods, economics, language and society, and evolution. Upper-division electives within the Department’s social sciences offerings permit advanced study in archaeology, environment, history, and culture. Outside of the social sciences, students select electives from specific courses in geology, biology, ecology, and geographic information systems. In selecting electives, students will concentrate upon either environmental anthropology or archaeology. A senior project allows the student to identify and work with one faculty member on an original research project. As a capstone to the degree, the project will utilize fieldwork methods and the research and writing skills gained from their curriculum to design, conduct, and report on research defined in collaboration with their mentor. This research focus, which we intend to be a hallmark of this program, is feasible because of the graduate education and research already underway in these areas of concentration. Since many students will pursue advanced degrees as part of their education, we will encourage all students to develop or strengthen their competence in another language and to take advantage of opportunities for study outside the U.S.

B. Rationale

The rationale for offering a BS in Anthropology is twofold:

a. Diversification of the MTU curriculum and retention of students at MTU. A key element in the University’s recent marketing and recruitment plans, as well as in the strategic plan is the development of appropriate programs that expand the range of degree options available to MTU
students. This program meets this goal. In recent years, about half of the students enrolling in the Social Sciences Department majors transfer from other degree programs. Many of these students have requested that the Department offer more specialized degrees. With a core faculty possessing expertise in anthropology and archaeology, it is possible to meet this demand with a new Anthropology major. Offering a major that allows students to specialize in a specific field which offers potential employment in the public sector and in cultural resource management firms will be attractive. In addition, the B.S. aligns with the Department’s Masters and Doctoral programs in industrial archeology and the M.S. in environmental policy.

b. Student Diversity. Another University strategic goal is to insure the presence of a fully diverse student body. Nationally, over 50% of Anthropology majors are women and minorities. For example, the 2005-05 AAA Guide reports that women substantially outnumber male students at every other state university in Michigan (p. 644). An anthropology degree also draws students interested in international studies, cultural and gender diversity, and social problems. MTU currently offers only limited options for students with these and similar interests. Additionally, an anthropology major should allow the Social Sciences Department an advantage in the recruitment of students from the local and regional communities with an interest in this field.

C. Discussion of related programs within the institution and at other institutions

Currently two majors offered by the Social Sciences Department are related to the proposed Anthropology major: (1) B.S. in Social Sciences (with three options: general social sciences, law and society, and social studies education); and (2) B.A. in Liberal Arts, History Option.

State-wide, eleven (11) university programs offer a B.A. or B.S. in anthropology. University of Michigan, Michigan State University, Wayne State University, and Western Michigan University offer degrees in anthropology which encompass the traditional four fields of cultural anthropology, archaeology, physical anthropology, and linguistics. These departments have large faculties and Ph.D. programs in Anthropology. The remaining seven programs are small departments that offer undergraduate anthropology degrees that specialize in specific sub-fields of anthropology. The Department’s proposed Anthropology major would adopt this strategy, although with a unique set of course requirements that complement the strengths of the faculty and the Department’s graduate programs.

The American Anthropological Association (of which MTU’s Social Science Department is a member) is host to the Federation of Small Anthropology Programs, a unit within the Association that represents over 100 small anthropology programs nationwide. Located mainly in small liberal arts colleges and smaller public universities, these programs generally have 3-5 faculty members and graduate 8-10 students per year. Frequently anthropology degrees are offered by departments that include majors in sociology and social work as well.

D. Projected enrollment

Given the number of faculty and demands of graduate programs and general education, we consider 3-5 new students per year a reasonable and manageable target. This would be comparable to the enrollment in other SS degree options.

E. Scheduling plans (Extension, Evening, Regular)

Regular. Evening courses remain the exception at MTU, which enrolls relatively few non-traditional students.

F. Curriculum design (refer to format of degree audit form). Indicate subject areas to be used for Departmental GPA calculation.
See attached curriculum plan.

G. New course descriptions. (New Course Add forms are needed for each course and will be processed upon final approval of program)

New Courses include:

**SS4001 Social Theory.** 3 credits/alt. year: Reviews 19th and 20th century social science theory, including Marx, Durkheim, Weber, and major theorists of 20th century anthropologists, sociologists, and political scientists. This course will benefit and be open to all social science majors.

**SS3240. Landscape Perspectives.** 3 credits/alt year: Examines cultural landscapes from the fields of archaeology and cultural anthropology.

**SS3211. Ethnographic Field Methods.** 3 credits: A field-based research course emphasizing readings and practice of ethnography. Can be a summer based field course at another institution. Taken under the direction of a faculty member and can be done in co-ordination with SS4030 Senior Project.

**SS3920. Topics in Anthropology.** 3 credits. (Name change only)

**SS4030. Senior Project.** 3 credits, may be repeated once. Students design, carry out, and write up a research project under the direction of a faculty member. This becomes the Department's capstone experience.

H. Library and other learning resources

An addition to library and video resources will be necessary to support the research orientation of students enrolling in this degree. We ask that the Library upgrade one of the main databases for social sciences journals, JSTOR include JSTOR (Arts and Sciences II). This step would make available additional social science (especially anthropology) journals. It is not a small expense – the library acquisitions staff estimates it will take $10,000 the first year and $2,000 every year thereafter to maintain this database.

In addition, it would be useful to add one or two additional periodicals of general public interest such as Cultural Survival Quarterly. But generally speaking, current subscriptions to paper copies of anthropology and archaeology journals are adequate to support this major.

I. Computing access fee

Department computing access fees will remain the same as for all other Social Science students: $205/semester.

J. Faculty resumes (a web site link is sufficient).

The five core faculty will be:

- Carol A MacLennan, Associate Professor of Anthropology, Ph.D., University of California - Berkeley
- Patrick E. Martin, Professor of Archaeology, Ph.D., Michigan State University
- Susan R. Martin, Associate Professor of Archaeology, Ph.D., Michigan State University
- Timothy J. Scarlett, Assistant Professor of Archaeology, Ph.D., University of Nevada, Reno
- New hire for August 2006
K. Description of available/needed equipment.

Current equipment available for anthropology majors will be:

Computing. All computers in the Social Sciences undergraduate computing lab have current versions of MS Word, Excel, Powerpoint, and Access for standard research and writing projects. In addition, several computers have other software programs such as SPSS and ArcGIS.

Industrial Archaeology lab. Includes an artifact cleaning area and a historic preservation and archaeology resource library. The lab also contains a number of pieces of equipment available to undergraduate students for specific projects, including a Nikon Cool Scan 5000 slide scanner; EPSON and Microtek flatbed scanners; and an HP 48 inch plotter. Camera Equipment includes Olympus and Canon EOS film and digital bodies and lenses; as well as two copy stands, an artifact lighting kit, and light table. Survey Equipment includes a Total Station and Trimble GEO-XT GPS. Students also may work with two automated kilns.

L. Program costs, years 1, 2, and 3. (Additional information may be requested by the Senate Finance Committee)

The recent faculty hire related to the Department’s doctoral program supports this new BS in important ways, and provides the capacity for the Department to propose this new undergraduate option. Thus there is no need for additional faculty to inaugurate or sustain this program at its anticipated size.

Ideally, other program costs should be met during the first year. However, if necessary, these expenses can be spread out over three years. In total they include:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library: Books</td>
<td>$750</td>
</tr>
<tr>
<td>Upgrade to JSTOR</td>
<td>$10,000; $2,000/year</td>
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Space: Again, new space provided to the Department in support of the doctoral program has alleviated the severe space situation that faced the Department two years ago. We expect that a modest increase in majors will be accommodated by our current archaeology lab and computer facilities.

M. Policies, regulations and rules: None

N. Accreditation requirements: None.

O. Internal status of the proposal:

P. Planned implementation date: Fall 2006.

Criteria for Financial Evaluation of New Academic Programs at Michigan Technological University

I. Relation to University Strategic Plan

a. This program relates directly to the University’s plans to increase the range of degree programs, both to attract and retain more students, and to diversify the makeup of the student population. The recent marketing and recruiting plans both identify these goals. Moreover, this step more directly aligns the Department’s
existing graduate programs with its undergraduate degree options. It builds directly upon the strengths of the existing faculty.

b. This proposal is perfectly consistent with the university’s resource allocation criteria. Recent allocations of space and faculty lines allow the Department to move in this direction without requesting any additional resources.

II. Impact on University Enrollment

a. We envision this will remain a small and targeted program, since the Department will specialize in two of the traditional subfields of anthropology. Moreover, given the limited number of faculty in the department, we anticipate that 3-5 new majors per year is both realistic and manageable. A group of majors that size is comparable to the number of students who enroll in other degrees in Social Sciences.

b. Students will likely come both from other departments and from the region. Right now half of SS majors start in another department and then transfer – this pattern is going to continue. In this way, we support the University’s retention efforts. But the Department also is attracting new students from the UP and northern Wisconsin. We are working to recruit more students, most of whom remain unaware of the degree options in this Department. The continually increasing visibility of the Department’s field archeology activities is an especially important tool for marketing the degree, and we anticipate attracting a few students from further afield. This fall, for example, a transfer student from Connecticut interested in archeology enrolled even before the anthropology degree is in place.

c. We hope that this program can improve existing enrollment patterns here at MTU. For example, half of all anthropology students in the nation are female – a group under-represented at Michigan Tech. Moreover, anthropology degrees appeal to students with international interests, another pattern that is not strong at Michigan Tech.

d. Current undergraduate enrollment in Social Sciences is about 67 majors. We hit a peak of 79 two years ago, but many undecided Social Science students now enroll in psychology, which is more of a traditional disciplinary degree program than those currently offered by the Social Sciences department. In order to attract undergraduate majors, it is vital that the Department develop options that are more focused and specialized, such as the proposed anthropology degree, which better serves student needs.

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

a. The Department will not require additional faculty lines to support this program at its anticipated level. The new faculty line added for the doctoral program (we are searching now for an August 2006 hire) provided the final missing element in assembling the necessary faculty to allow an undergraduate anthropology degree to be launched.

b. The current lab space will suffice for this program, as will the undergraduate computing facility.

c. The current advising system can adapt to the number of students anticipated.

d. Current assessment activities can easily include the new program.
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. As a small program, we have little reason to think that other units will be adversely affected in any way by the addition of 15-20 anthropology majors.

b. There should be no adverse problems posed in the realm of IT or central administration. We do request support to allow the Library to upgrade one of the electronic databases (JSTOR Arts and Sciences 2) at a cost of about $10,000 in year one and $2,000 thereafter. This resource supports our intentions of constructing a research-oriented program for students – and access to published literature is a significant requirement.

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

The Department is quite hopeful that the small needs associated with launching this program can be met through the normal budget allocation process.

VI. Past proposals. Has the department initiated any other new degree programs in the last five years? If so:

The Department’s only recent degree proposal was the Ph.D. in Industrial Heritage and Archaeology, launched this fall. It is meeting original targets in terms of students and external support, but it is too early to offer a full assessment. Two earlier degree proposals were for a pre-law program (renamed Law & Society last year) and Secondary Education – each during the late 1990s.

VII. Departmental Budget contribution

a. What is the department’s total general fund budget?

- 2004-05 base salary + SSE = $999,918.04, not including fringe benefits.
- Total general expenditures by the Department (includes GTAs) has averaged about $1.6 million.

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.

The College of Sciences and Arts CSA assumes that majors take half of their credits in the home department, (14 credits in a given year or 64 credits over 4 years). By that estimate, SS majors accounted for 12% of the SCH generated by the Department. The current number of majors is down slightly from the 90 reported in 2003-04 (the last year for which compendium data is available,). The assumption also is made that all students paid in-state tuition, so the estimated tuition generated is likely to be understated. On the other hand, there is no way to allow for the discount represented by financial aid. This is, in short, a very crude calculation.

Total SCH by SS Department in 2003-04: 10430
Total number of majors: 90
Credit hours generated by majors: 1260
Credit hours generated by non-majors: 9170
Tuition rate for 2003-04 $227/credit
Tuition Generated by Department:
\[
= (90 \times 14 \text{ SCH/major/year} \times $227) + (9170 \text{ SCH} \times $227) \\
= $286,020 + $2,081,590 = $2,367,610
\]

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?

The Department has been considering strengthening the History degree, mainly because it would support the secondary education option in satisfying the emphasis that the “No Child Left Behind” legislation is placing on disciplinary specialization. However, that option would require an additional faculty line or two. Given the current faculty structure, an anthropology major allows the department to use its current resources in the most effective way. Any resources allocated for the proposed anthropology major also enhance other majors, rather than precluding them.

BS in Anthropology
Department of Social Sciences
124 Credits

General Education (28 total credits)

Quantitative Knowledge (16 Credits)

- MA1032 Data, Function, and
- BL1040 Principles of Biology (non-bio majors)
- XXXxxx Other Lab or Math Course (recommended: Geology [GE 2300, 2310], Chemistry [CH 1110/1111], Biology [BL 2160, BL 2170], Physics, Forestry [FW 1035], Math 2720)

Core Courses in SS Dept. (15 credits)

- SS2100 World Peoples & Environments (3)
- SS2200 Prehistory and Archeology (3)
- SS4001 History of Social Thought (3)
- SS4200 Cultural and Political Ecology (3)
- SS4030 Senior Seminar/Thesis (3)

Research Methods and Orientation (5 credits)

- SS1001 Introduction to the Social Sciences (1)
- SS4910 Senior Orientation & Assessment (1)
- SS3210 Field Archaeology (3)
- Or SS3211 Ethnographic Field Methods (3)

Core Courses in Non-SS Dept (9 credits)

- EC3001 Principles of Economics (3)
- HU2920 Language and Society (3)
- BL3190 Evolution (3)

Electives in Social Sciences (24 Total Credits)

Anthropology (Take 6 credits from this list)

- SS2610 Law and Society (3)
- SS3100 Developing Societies (3)
SS3920 Topics in Anthropology/Archaeology (3)
SS3810 Culture, Science, & Technology (3)
SS3910 Histories and Cultures (3)
SS3960 International Experience (3)
SS4100 American Indian Political Issues (3)

Archaeology (Take 6 credits from this list)

SS3200 Historical Archeology (3)
SS3220 Archaeological Laboratory Methods (4)
SS3230 Archaeology of Industry (3)
SS3240 Landscape Perspectives (3)
SS3920 Topics in Anthropology/Archaeology (3)
SS4405 Geophysics for Archaeologists (4)

History/Sociology (Take 6 credits from either List A or List B)

List A:
SS2500 The American Experience (3)
SS3500 Modern American History (3)
SS3510 History of American Technology (3)
SS3515 History of American Architecture (3)
SS3541 The Copper Country (3)

List B:
SS2700 Introduction to Sociology (3)
SS3710 Social Problems (3)
SS3720 Social Psychology (3)
SS3750 Social Inequality (3)
SS3890 Industry and the World Economy (3)

Environment (Take 6 credits from this list)

SS3300 Environmental Problems (3)
SS3410 World Resources and Development (3)
SS3520 U.S. Environmental History (3)
SS3630 Environmental Policy and Politics (3)
SS3760 Human Dimensions of Natural Resources (3)

Non-Department Electives (Take 9 credits from List A or List B)

List A (recommended for Archaeology)

CH 4222 Introduction to Quantitative and Instrumental Analysis (5) [pre-req CH 1120 (4)]
EC 3020 History Economic Thought (3)
FW 3180 Geomorphology, Landscapes and Ecosystems (2)
FW 3540 Remote Sensing and Geographic Information Systems in Natural Resource Management (4)
GE 2100 Environmental Geology (3)
GE 3320 Earth History and Paleoclimatology (3)
GE 4100 Geomorphology and Glacial Geology (4)
HU 2910 Language and Mind (3)
HU 3700 Philosophy of Science (3)
HU 4625 Risk Communication (3)
SU 1100 Introduction to Surveying and Mapping (2)

List B (recommended for Environmental Anthropology)

BA 4790 Ecological Sustainability and Organizations (3)
BL 2160 Botany (4)
BL 3400 Principles of Ecology (4)
BL 4090 Tropical Island Biology (2)
CH 4222 Introduction to Quantitative and Instrumental Analysis (5) [pre-
req CH 1120 (4)]
EC 4600 Natural Resource and Environmental Economics (3)
FW 2010 Vegetation of North America (4)
FW 3540 Remote Sensing and Geographic Information Systems in
Natural
Resource Management (4)
FW 3410 Conservation Biology (3)
GE 2000 Understanding the Earth (3)
HU 4702 Environmental Philosophy (3)
HU 4625 Risk Communication (3)

Approved Electives (9 credits)

Free Electives (9 credits)

Introduced in the University Senate: 26 October 2005
Adopted by the University Senate: 9 November 2005
Approved by Administration: 17 November 2005
Approved by Board of Control: 24 February 2006