THE FACULTY SENATE

November 10, 1998

MEMORANDUM

TO: President Ray M. Bowen

SUBJECT: Approval of Curriculum Changes

At its regular meeting on October 12, 1998, the Faculty Senate approved the following curriculum changes as recommended by the University Curriculum Committee and submits them for your approval. Enclosed for your information are copies of the materials sent to senators on this item.

B.S. in Geography
B.S. in Geography–Environmental Studies Option

Thank you for your consideration of these items. I would appreciate your informing me of your action on these recommendations.

Diane S. Kaplan
Speaker, 1998-99

Enclosures

cc: Dr. Ronald G. Douglas, Executive Vice President & Provost
Dr. R. Bruce Simpson, Chair, University Curriculum Committee
Ms. Linda F. Lacey, Director of Academic Support Services
Dr. David Prior, Dean, College of Geosciences
Dr. Jonathan D. Phillips, Head, Department of Geography

Approved:

Ray M. Bowen, President

Date 12/21/98
Report of the University Curriculum Committee
September 11, 1998

The University Curriculum Committee recommends approval of the following:

Changes in Curriculum

College of Geosciences
  Department of Geography
  B.S. in Geography
  B.S. in Geography—Environmental Studies Option
MEMORANDUM

TO: Mary Jo Richardson, Graduate Dean  
    College of Geosciences

FROM: Jonathan D. Phillips, Head  
       Department of Geography

SUBJECT: MATH requirements for GEOG Majors

The faculty recently approved a change in the Mathematics requirement for the Geography Major. MATH 141 and 142 will be now required for all Geography majors, beginning with Fall 1999. This change will make both GEOG and GEOG/ENV have the same Mathematics requirements. Attached you will find a copy of the current catalog description of the degree requirements for Geography and Environmental Studies. Thank you for your consideration.
Curriculum in Geography

Geography is the study of the relations between people and the environment, a relationship that varies from place to place over the earth. Students of geography inquire into those factors responsible for the changing character of the earth's surface, which over time has been transformed into the human habitat.

A student seeking a B.S. degree in geography is expected to complete a minimum curriculum of 40 hours in geography. A student may decide on applicable electives with a department undergraduate advisor.

Physical geography emphasizes an interdisciplinary approach to the study of landforms, climate, soils, and vegetation. Biogeography focuses upon vegetation and the complex impact of humans and other environmental factors on vegetation distribution and development. Human geography seeks to explain the impact of humans from antiquity to the present, in accounting for varied land uses and people-altered landscapes upon the earth. Economic geography seeks to predict and explain the location of economic activities in rural and urban settings.

The Department of Geography also administers an environmental studies program for those who want to increase their understanding of current environmental and resource issues facing our planet (see program listing). Those students who choose an option must complete 24 hours of option-related course work, selected in consultation with their advisors.

The curriculum in geography emphasizes breadth of training in the geosciences and related fields. Graduates with the B.S. degree may be able to qualify for a variety of jobs using skills in cartography, geographic information systems (GIS), remote sensing, and locational and environmental analysis. A master's degree is recommended for those seeking a professional career in business or industry, or for a variety of positions in local, state or federal organizations; it also is the minimum degree for teachers at the community- or junior college-level. The Ph.D. degree is generally required for higher level government positions, and for college and university-level teaching and research.

For students interested in a career in education, the Department of Geography works closely with the Department of Educational Curriculum and Instruction in furtherance of a program which has geography as a teaching specialization in both elementary and secondary school levels. Students of other disciplines may choose to complete a minor in geography if they take a minimum of 16 hours in geography which include GEOG 201, 203 and 213. The remaining 9 hours may be selected from GEOG 204, 205, 301, 305, 306, 309, 311, 320, 321, 322, 324, 330, 332, 335, 370, 380, 390, 398, 401, 402, 405, 431, 433, 440, 450 and 489. At least 6 of these hours must be at the 400 level. The selection of courses must be made in agreement with an advisor from the geography faculty. Many of the geography courses include field trips outside scheduled class hours. Students are required to defray some or all of the expenses incurred on such trips.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr</th>
<th>Second Semester</th>
<th>Cr</th>
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<tbody>
<tr>
<td>ENGL 100 Comp and Rhetoric</td>
<td>3</td>
<td>GEOG 201 Envir. of the Global Village</td>
<td>3</td>
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<td>GEOG 201 Intro. to Human Geography</td>
<td>3</td>
<td>GEOG 203 Planet Earth</td>
<td>3</td>
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<tr>
<td>American History</td>
<td>3</td>
<td>GEOG 213 Planet Earth Lab</td>
<td>1</td>
</tr>
<tr>
<td>Science</td>
<td>4</td>
<td>Mathematical/Logical reasoning *</td>
<td>3</td>
</tr>
<tr>
<td>Social Science elective</td>
<td>3</td>
<td>Science</td>
<td>4</td>
</tr>
<tr>
<td>KINE 179</td>
<td>1</td>
<td>KINE 199</td>
<td>1</td>
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### Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>GEOG 214 Economic Geography</td>
<td>3</td>
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<tr>
<td>GEOG 352 Human Geography</td>
<td>3</td>
</tr>
<tr>
<td>POLS 227 State and Local Govt.</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 400 Advanced Topography</td>
<td>3</td>
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<td>KINE 191</td>
<td>(0-2)</td>
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### Junior Year

<table>
<thead>
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<th>Course</th>
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<tbody>
<tr>
<td>American History</td>
<td>3</td>
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<tr>
<td>Humanities elective*</td>
<td>3</td>
</tr>
<tr>
<td>Option elective*</td>
<td>6</td>
</tr>
<tr>
<td>Regional geography*</td>
<td>3</td>
</tr>
<tr>
<td>Topical systems*</td>
<td>3</td>
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### Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 495 Field Geography</td>
<td>3</td>
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<tr>
<td>Advanced Topical*</td>
<td>3</td>
</tr>
<tr>
<td>Humanities elective*</td>
<td>3</td>
</tr>
<tr>
<td>Option elective*</td>
<td>4</td>
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### Notes:
1. The American history requirement may be satisfied by:
   a. HIST 105 or 106, or
   b. HIST 105 and one of the following: HIST 226, 327, 451, 453, 455, 467, 469, 478, or
   c. HIST 106 and one of the following: HIST 226, 326, 367, 369, 416, 450, 457, 459, 462.
2. To be chosen from the following: CHEM 101, 102, or PHYS 201, 202, or BOL 113, 114, 116, or GEOG 101, 102. (Science section of University Core Curriculum).
3. Social science electives to be chosen from the University Core Curriculum approved list, but must not include courses in geography that satisfy the University Core Curriculum.
4. Mathematical/Logical reasoning electives to be chosen from the University Core Curriculum approved list.
5. Option courses to be chosen in consultation with advisor.
6. The regional geography requirement may be satisfied by:
   a. GEOG 301, 321, 322, 323, or
   b. GEOG 305, 320, 321, 323.
7. STAT 392 or 393.
8. Philosophy electives to be chosen from the University Core Curriculum approved list, but must not include courses in geography that satisfy the University Core Curriculum.
10. To be chosen from ENGL 253, 256, 258, 265, 266, 267.
11. GEOG 400, 407, 421, 451, 454, 455, 475.
Curriculum in Environmental Studies Program

The curriculum is designed to increase understanding of the human-environment relationship. Course work is intended to provide background knowledge of those aspects of the physical and human systems that are responsible for producing such conditions as over-population, resource depletion, land degradation and pollution as well as to facilitate thinking about alternative approaches to solutions of environmental problems. Each year, students have an opportunity to participate in a workshop to consider local and regional environmental issues, one of which will be selected for the semester's project. Emphasis will be in part on data gathering and in part on learning about how these problems are resolved at the community level. Students will also select the semester project; they also will be responsible for both developing the field study and presenting the results in public forums at the end of the semester. Students must see the departmental advisor for approval of appropriate track electives and 489S. There are three environmental tracks within the directed electives.

Environmental Science Track

This track is for students requiring a more rigorous and in-depth foundation in science courses applicable to the study of the environment. The science emphasis enables students to better prepare for graduate studies or technical positions in government, industry or research laboratories. Students must coordinate their directed electives with the environmental studies advisor. Students must select 24 hours from the following restricted electives.

AGRO 301, 310, 411, 417; AGEN 335, 350, 468; BICH 107; BIOL 103, 113, 114, 123, 124, 357, 358, 440; BOTN 101, 328; CHEM 101, 102, 227, 228, 237, 238, 383; CPSC 203, 206, 207; CVEN 463; ENTC 477; FRSC 302, 461; GEOG 390, 475; GEOI 106, 301, 306, 320, 321, 410, 440; GEOS 410; HIST 359; LAND 461; MATH 152, 304; METR 201, 202, 324; OCNG 251, 252, 401, 410, 420, 430, 440; PHYS 201, 202; RENR 205, 215, 410; RLEM 316; WFSC 301, 420.

Management and Policy Track

This track is for students interested in pursuing the management and policy aspects of the human-environment interactions. Students with interests in environmental law, resource analysis, planning and policy decisions in environmental issues, among others, are encouraged to pursue this track. A holistic approach to human-environment interactions is emphasized. Students must coordinate their directed electives with the environmental studies advisor. Students must select 24 hours from the following restricted electives.

AGEC 316, 317, 320, 422; AGED 440; BANA 305, 316, 318; BOTN 328; CPSC 203, 206, 207; CVEN 301, 402, 466; ECMT 463; ECON 322, 412, 420, 435; ENTC 477; FNC 341, 471, 478; FRSC 302, 314, 404, 461; GENE 210; GEOG 390, 475; GEOS 410; HIST 359; HLUH 429; LAND 461; MGMT 211, 212, 450, 452, 460; PLAN 360, 464; POLS 306, 313, 314, 347; RENR 400, 410; RLEM 301, 330.

Geographic Information Systems (GIS) and Remote Sensing Track

This track is particularly designed for students interested in the technical and applied aspects of the environmental studies option, with emphasis on cartography, computer science, GIS, air-photo interpretation and remote sensing. Students must coordinate their directed electives with the environmental studies advisor. Students must select 24 hours from the following restricted electives.

AGRO 301; BANA 316, 318; CPSC 110, 120, 206, 210, 318; CVEN 201, 202, 206, 466, 470, 489; ECMT 463; ENDS 105; ENDS 105; ENTC 477; FRSC 302, 461; GEOG 390, 475; GEOL 320, 321; GEOS 410; HIST 359; LAND 461; METR 201, 202; MGMT 460; PLAN 360; RENR 444; STAT 211, 212.
FRESHMAN YEAR

First Semester  (Th-Fr)  Cr  Second Semester  (Th-Fr)  Cr
ENGL 104 Compo. and Rhetoric  (O-6)  3  GEOG 202 Geog. of the Global Village  (O-6)  3
GEOG 101 Physical Geogy.  (O-3)  4  GEOG 203 Planet Earth  (O-2)  3
MATH 141 Business Mathematics I  (O-6)  3  MATH 142 Business Mathematics II  (O-6)  3
American history\*  3  POLS 356 American Natl. Govt.  (O-6)  3
KINE 199  (O-2)  1  American history\*  3
17  KINE 199  (O-2)  1

SOPHOMORE YEAR

BCON 202 Principles of Economics  (O-6)  3  BCON 203 Principles of Economics*  (O-6)  3
GEOG 204 Economic Geography  (O-6)  3  KERN 275 Consrv of Natural Resources  (O-6)  3
GEOG 332 Cartography  (O-6)  3  Humanities elective\*
POLS 207 State and Local Govt.  (O-6)  3  Science\*
Science\*
17  Science\*

JUNIOR YEAR

STAT 302 Statistical Methods  (O-2)  3  GEOG 380 Workshop in Env Studies  (1-4)  3
or
STAT 303 Statistical Methods  (O-2)  3  PLAN 365 Land Use Planning  (O-6)  3
English\*
Science\*
16  Science\*

SENIOR YEAR

GEOG 450 Field Geography  (0-6)  3  GEOG 480 Workshop in Env Studies  (1-4)  3
Advanced topical\*  3  GEOG 440 Nature of Geography  (O-6)  3
Track elective\*  3  Track elective\*  9
Track elective\*  6
15

NOTES: 1. The American history requirement may be satisfied by:
   a. HIST 105 and 106, or
   b. HIST 105 and one of the following: HIST 226, 259, 372, 373, 451, 453, 455, 457, 460, 463 or
   c. HIST 106 and one of the following: HIST 226, 259, 387, 389, 396, 416, 450, 457, 459, 462.
2. To be chosen from CHEM 101, 102 or BIOL 113, 114, 123, 125, 127 or PHYS 201, 202.
3. Humanities electives to be chosen from the University Core Curriculum approved list, but must not include
   courses in geography that satisfy the University Core Curriculum.
5. To be chosen from the ENGL 205, 210, 225, 234, 301, 341.
6. Take one of the following: AGRO 301, BOTN 101, ECOL 106, METR 201 and 304, ZOOOL 197.
7. See above for the three different environmental tracks. Students must see the departmental advisor for
   applicable classes.
8. GEOG 430, 431, 435, 475.
9. PHIL 105, 314, 316.
10. Social science elective to be chosen from the University Core Curriculum approved list, but must not include
    courses in geography that satisfy the University Core Curriculum.