Minnesota State University, Mankato
Curriculum Proposal

Please type or select the requested information. Print completed forms, add appropriate paper attachments, and route through MSU's curricular process for recommendations and decisions.

<table>
<thead>
<tr>
<th>College: Science, Engineering and Technology</th>
<th>Undergraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department: Biological Sciences</td>
<td>Graduate</td>
</tr>
<tr>
<td>Program: Environmental Sciences</td>
<td>CIP #</td>
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<tr>
<td>Type of Change: COURSE PROPOSALS</td>
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<tr>
<td>Proposed: New Course</td>
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<tr>
<td>Title Current: Environmental Assessment</td>
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<tr>
<td>Title Proposed: Environmental Assessment</td>
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<tr>
<td>24-Char. Abbrev: Environmental Assessment</td>
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</table>

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):
Introduces students to National Environmental Policy Act and requirements for Environmental Impact Statements and Environmental Assessment Worksheets. Phase I Environmental Assessment of land and buildings, an international perspective on environmental assessments, and economic and social impact assessment are discussed.

Rationale or Justification for change:
Currently undergraduates have had an option to take Environmental Assessment as an independent study. However, it will now be a required course in the undergraduate program. Therefore the number must be changed from 600 to 470/570. ENVR 570 Environmental Assessment will still be required for all graduates students in the Environmental Science Program.

***For General Education or Cultural Diversity Courses Only***

<table>
<thead>
<tr>
<th>General Education Course:</th>
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<tbody>
<tr>
<td>GE Category #</td>
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<tr>
<td>N/A</td>
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? For Writing Intensive Courses, attach a description of the kind and quantity of writing.
? For Upper Division Courses, include a description of the respects in which it is broad and general rather than narrow and specific, and so suitable as GE.

Attach paper copies of the following:

a. Syllabus or course outline.
b. Course's student learning outcomes associated with each GE competency or CD designation.
c. List of strategies to be used to assess students' achievement of each GE competency or CD designation.

***For New Courses***

<table>
<thead>
<tr>
<th>(Check all that apply:)</th>
<th>Instructional Type: Lecture</th>
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<tbody>
<tr>
<td>Course is an elective</td>
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<td>X Course is required for program</td>
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<tr>
<td>X Pre- or Co-requisites: Environmental Sciences undergraduate and graduate</td>
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<td>X Other courses are being changed or eliminated. (Explain.)</td>
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Course will be offered:

- Fall Semester
- X Spring Semester
- Summer Session

Simultaneous with the acceptance of this new course, we will eliminate ENVR 600.

- Course content or title is similar to courses in other departments. (Attach copy of letter of agreement with other program(s) contacted. Indicate the nature of the discussions and/or resolution of differences or potential conflicts.)

Attach paper copies of the following:

a. Syllabus or course outline.
b. Course's student learning outcomes.
c. A list of resources required to offer and support this course.
d. A description of how teaching this course will affect department staffing.
e. If 400/500 level course, an explanation of added expectations of graduate students.
### Signature Page

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<th>Department</th>
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<td><strong>Recommended</strong> (Category/ies)</td>
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<td><strong>Not Recommended</strong> (Category/ies)</td>
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Comments:

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Comments:

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<th>College Dean</th>
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Comments:

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<th>Academic Affairs Council</th>
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<td><strong>Not Recommended</strong></td>
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Comments:

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<th>Senior Vice President and Vice President for Academic Affairs</th>
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<tr>
<td><strong>Approved</strong></td>
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<tr>
<td><strong>Not Approved</strong></td>
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Comments:
Addendum to ENVR 470/570 curriculum proposal:

A. Syllabus—attached

B. Outcomes—Students will:
   a. Understand the requirements for Environmental Impact Statements (EIS) and Environmental Assessment Worksheets (EAW) at the federal and state level.
   b. Be able to perform environmental assessments of land and buildings.
   c. Understand how environmental assessments vary in different geopolitical environments.
   d. Be able to describe the economic impacts of environmental assessment.
   e. Be able to describe the social impacts of environmental assessment.

C. List of resources—the resources required for this course are already in place for the ENVR 600 course it is replacing. No additional resources will be required.

D. The teaching load for this course will replace the teaching load currently assigned for ENVR 600, which is being eliminated.

E. Graduate students are required to answer additional questions on each test and they submit an additional 8-10 page paper on a topic related to Environmental Assessment.
ENVR 470/570 Environmental Assessment
Instructor: Beth Proctor, Ph.D.

Environmental Impact Statements (EIS), Environmental Assessments Worksheets (EAW) and PHASE I SITE ASSESSMENTS (LIMITED DEFENSE UNDER CERCLA) by law and/or prudent management practices must be completed for a variety of circumstances. Environmental Impact Statements are required for major projects that directly or indirectly involve the Federal Government. Each federal agency has its own requirements regarding what must appear in the statement. Many states and local agencies have their own versions of EIS or EAW that must be done for any proposed construction. EISs and EAWs are cornerstones in the Environmental Field. Phase I Environmental Assessment of property at the federal, state and local levels will be presented and discussed.

Course description

Approximately 70% of the course focuses on environmental protection in the United States as implemented through the National Environmental Policy Act (NEPA) of 1969. The major goals of this course are to:

Understand the role of science in environmental assessment; Understand the role of the courts in the interpretation of NEPA; Describe the interpretation and implementation of NEPA through various federal agencies; Go through the process involved in preparing an environmental impact statement; Review and critique EAs and EISs as well as think about the general philosophy of environmental assessment and evaluate its goals.

The second part of the course will focus on Phase I Site Assessments. Particular emphasis will be placed on case studies of problem Phase I Site Assessments.

TEXTBOOK: Environmental Assessment, Second Edition by Jain et al.

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<th>GRADING</th>
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<tbody>
<tr>
<td>Exam I</td>
<td>(Chapters 1-6, 2/23)</td>
<td>20</td>
<td>15</td>
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<tr>
<td>Exam II</td>
<td>(Chapters 7-13, 4/6)</td>
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<td>15</td>
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<tr>
<td>Exam III</td>
<td>(Phase I (mostly WEEK 5/8))</td>
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<td>15</td>
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<tr>
<td>Assignments</td>
<td></td>
<td>40</td>
<td>55*</td>
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*GRADUATE STUDENTS will be required to answer additional questions on each exam and submit a paper 8-10 page on a topic related to Environmental Assessment.

FINAL GRADE WILL BE BASED ON THE FOLLOWING
A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: below 60
This is only an outline and is subject to change.

<table>
<thead>
<tr>
<th>Week</th>
<th>TOPIC</th>
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| 1/16/06    | Environmental Assessment  
Environmental Laws and Regulations  
Read PAGES 1-57  
READ FOR NEXT WEEK 61-85, Appendix A |
| 1/23       | National Environmental Policy Act & CEQ  
Environmental Documents and CEQ Regulations  
READ FOR NEXT WEEK 86-125 |
| 1/30       | NEPA/ CEQ Cont.  
READ FOR NEXT WEEK 125-162, Appendix D |
| 2/6        | Environmental Assessment  
READ FOR NEXT WEEK 163 – 192, |
| 2/13       | Environmental Assessment Methodologies  
READ FOR NEXT WEEK 193-224, Appendix B |
| 2/20       | Catch-up  
EXAM #1 2/23 (All of this Exam is In Class) CHAPTERS 1-6  
Generalized Approach to Environmental Assessment  
International Perspectives on Environmental Assessment  
READ FOR NEXT WEEK 225-279, Appendix C |
| 2/27       | International Perspective  
Social and Economic Impact  
READ FOR NEXT WEEK 281-326 |
| 3/6        | Public Participation  
Energy and Environmental Assessment  
READ FOR NEXT WEEK 327-397 |
| 3/13       | SPRING BREAK |
3/20  Contemporary/Global Issues in Environmental Assessment
      Environmental Assessment Worksheets
      HANDOUT

3/27  Catch-up/ HANDOUT

4/3   EXAM II 4/6 CHAPTERS 7-13
      Phase I Environmental Site Assessment (assessment conducted prior to
      the sale or acquisition of commercial property)

4/10  Phase I Site Assessment

4/17  Phase I Site Assessment

4/24  Phase I Site Assessment

5/1   Phase I/Review

5/8   FINAL

INTERNET SOURCES

A. Law and Policy

Federal Register: http://www.epa.gov/fedrgstr/

Major Environmental Laws  http://www.epa.gov/epahome/laws.htm

NEPA  (Title 42, Chapter 55)
http://www4.law.cornell.edu/uscode/html/uscode42/usc_sup_01_42_10_55.html

ESA (Title 16, Chapter 35)
http://www4.law.cornell.edu/uscode/html/uscode16/usc_sup_01_16_10_35.html

B. National Environmental Policy Act (NEPA)

Council on Environmental Quality
http://www.whitehouse.gov/ceq/
- NEPANET
  - http://ceq.eh.doe.gov/nepa/nepanet.htm

NEPA
http://ceq.eh.doe.gov/nepa/regs/nepa/nepaecqia.htm

CEQ Regulations
http://ceq.eh.doe.gov/neap/regs/40/40p3.htm

Most commonly Asked Questions
http://ceq.eh.doe.gov/nepa/regs/40/40p3.htm

Implementation NEPA
http://ceq.eh.doe.gov/nepa/regs/agency/agency/cfm

EPA Lists of EISs
http://cfpub.epa.gov/compliance/nepa/current/

EPA COMMENTS ON EISs
http://cfpub.epa.gov/compliance/nepa/comments/

NEPA MAJOR CASES
http://www.1hope.org/nepacase.htm

Environmental Impact Statements:

A. General EIS Sites
   - Federal Programs EAs/EISs

Department of Energy
http://www.eh.doe.gov/nepa/

Environmental Protection Agency
http://www.epa.gov/compliance/

US Geological Survey
http://water.usgs.gov/eap/

PHASE I Site Assessment
http://www.enterprisefoundation.org/resources/dss/newconh/nc&in&rin&rnepscm1.htm
ENVR 470/570 Environmental Assessment
NAME______________________

PRE COURSE TEST SPRING

What is an

Environmental Impact Statement (EIS)

Environmental Assessment Worksheet (EAW)

Phase I Site Assessment (Phase I)

List the major differences between an EIS, EAW and Phase I.

List all potentially responsible parties under CERCLA.

Discuss the uniqueness of CERCLA and the evolution of landowner protection under CERCLA
What is the National Environmental Policy Act and why is it important?

How has case law impacted NEPA?

Define:

- Scoping
- Tiering
- Federal action (under NEPA)
- Human Environment
- Lead Agency
- Mitigation

What is/ are the role(s) of EPA in the EIS Process?
What is Council on Environmental Quality (CEQ)?

How did the Clean Air Act impact CEQ and EIS?

What is/are the role(s) CEQ in the EIS Process?