TRANSMITTAL for UNDERGRADUATE PROGRAMS:
Changes or Proposals

I. INFORMATION:

1. Program Title: Conservation and Environmental Planning
2. Department(s): Plant and Earth Science
3. College(s): Agriculture, Food, and Environmental Science
4. Proposal prepared by: Eric Sanden Date: 2-6-15
5. Check all that apply
   - New program
   - Existing program
   - Change in course name
   - Change in number of credits
   - Change in major
   - Change in minor
   - Change in course content
   - Change in emphasis/option

6. Other Programs/Departments Consulted (Requires letters of comment from all Departments or Programs substantially affected):
   a.) Biology  b.) Geography  c.) Ag. Engineering  d.) Ag. Economics

7. Catalog year (and semester) of Implementation: Semester Fall Year 2015

8. Have all courses in this program been approved? Yes ☑ No ☐
   If “No” which courses have not been approved?

9. Attach Request Narrative
   Include in narrative on attached pages a rationale for the requested changes or creation of program.
   Include clarification concerning any courses that have not yet been approved. If requesting a program change also include a listing of course array for both the current and proposed program?

10. UNIT APPROVALS: Requires signatures of all Department Chairs and Deans whose programs will be substantially affected by the changes or proposal. Signature lines for the affected Departments and Colleges (noted in “6” above), are on the addendum to this form. These signatures should be obtained prior to review by all other shared governance levels.

   Department Curriculum Committee Chair (optional)
   Department/Program Chair
   College Curriculum Committee Chair
   Dean of College
   University Curriculum Cmtt. Chair
   Academic Policy & Program Cmtt. Chair
   Faculty Senate Chair
   Provost / Vice Chancellor
   Chancellor

Signature Date

*NOTE: The master copy of this transmittal & accompanying documents must be filed in the Provost’s office upon final approval. The Provost’s office will notify all appropriate administrative offices [Registrar, Dean(s), Department Chair(s)] of approvals & necessary actions to implement changes.

Revised December 2012
Narrative for Conservation and Environmental Planning Major Program Change

Remediating the impacts of human activity and restoring performance and balance to natural systems have become defining themes in resource management. To better serve the interests in the St. Croix Valley and beyond, and to prepare our students for successful careers, the Environmental Science and Management Unit within the Plant and Earth Science Department is initiating a reconfiguration of two of programs.

The Conservation program will be redesigned to include additional training in restoration theory and practice, and to provide additional flexibility. The Community Planning program, which was suspended in 2013, will be reconfigured to Environmental Planning, focusing on the built environment and remediating its impacts on natural areas. To provide a more coherent curriculum, greater discipline recognition by students, and maximum synergies, these two programs will be merged into the Conservation and Environmental Planning Major. For the major, students will take a common set of core courses and then specialize into either the Conservation Option or the Environmental Planning Option to gain more specialized training.

These program updates will prepare our students to seize the opportunities and meet the challenges in a rapidly changing natural resource management discipline.

The current curricula and new curriculum are summarized below with changes highlighted (yellow in the proposed curriculum are new requirements, blue in the current curriculum no longer required). A more complete curriculum of the proposed Conservation and Environmental Science Major Curriculum is attached along with letters from Biology, Geography, Agricultural Engineering and Agricultural Economics Departments.
Current Conservation Major

Core Courses
- ESM 109 Intro. to Forestry
- ESM 151 Intro. to Land Use Theory and Practice
- ESM 220 Environmental Sustainability
- ESM 270 Internship
- ESM 303 Env. Policies and Admin.
- ESM 343 Woodlot Management
- ESM 360 Hydrology and Water Quality
- ESM 363 GIS Applications in Resource Management
- ESM 485 Seminar: Resource Mgt.
- SOIL 120 Intro. to Soils
- SOIL 440 Soil and Water Conservation
- AGEC 450 Intro. to N.R. Econ.
- BIOL 344 Wildlife Biology
- BIOL 360 Ecology

Supporting Courses
- GEOG 250 Intro. to GIS
- ENGL 266 Business Writing/ENGL 367 Technical Writing
- AGEC 230 Intro. to Ag. Economics/ECON 201 Principles of Microeconomics
- CHEM 120 Introduction to General Chemistry/
- CHEM 121 General Chemistry

Directed Electives
11-13 cr.

General Electives
6 cr.

Proposed Conservation and Environmental Planning Major – Conservation Option

Core Courses
- ESM 151 Intro. to Land Use Theory and Practice
- ESM 220 Environmental Sustainability
- ESM 245 Found. of Ecological Restoration
- ESM 270 Internship
- ESM 303 Env. Policies and Admin.
- ESM 333 Remote Sensing of Nat. Res. or
- ESM 363 GIS Applications in Res. Mgt.
- ESM 360 Hydrology and Water Quality
- ESM 485 Seminar: Resource Mgt.

Supporting Courses
- SOIL 120 Intro. to Soils
- AGEC 230 Intro. to Ag. Economics
- GEOG 250 Intro. to GIS

Conservation Option
- SOIL 440 Soil and Water Conservation
- GENG 235 Surveying
- BIOL 344 Wildlife Biology
- BIOL 360 Ecology
- AGEC 450 Intro. to N.R. Econ.
- ESM 109 Intro. to Forestry

Directed Electives
15 cr.

General Electives
5-10 cr.
Community Planning Major Curriculum
at the time of suspension in 2013

Core Courses
ESM 151 Intro. to Land Use Theory and Practice
ESM 220 Environmental Sustainability
ESM 251 Community Decision-Making
ESM 270 Internship
ESM 293 Community Analysis
ESM 303 Environmental Policies and Administration
ESM 305 Environmental Impact Assessment
ESM 351 Planning for Sustainable Communities
ESM 333 Remote Sensing of Natural Resources or
ESM 363 GIS Applications in Resource Mgt. or
GENG 265 Engineering Graphics
ESM 360 Hydrology and Water Quality
ESM 393 Comprehensive Planning
ESM 411 Site Planning and Development
ESM 435 Advanced Land Use Planning and Design
ESM 485 Seminar: Resource Management

Supporting Courses
GEOG 250 Intro to Cartography and GIS
SOIL 120 Introduction to Soil Science
GEOG 360 GIS: Theory and Methods
AGEC/ESM 445 Land Use and Sust. Ag. Law
ENGL 266 Business Writing/ENGL 367 Technical Writing

Directed Electives
24 cr.

General Electives
6-8 cr.

Proposed Conservation and Environmental Planning Major – Environmental Planning Option

Core Courses
ESM 151 Intro. to Land Use Theory and Practice
ESM 220 Environmental Sustainability
ESM 245 Found. of Ecological Restoration
ESM 270 Internship
ESM 303 Env. Policies and Admin.
ESM 333 Remote Sensing of Nat. Res. or
ESM 363 GIS Applications in Res. Mgt.
ESM 360 Hydrology and Water Quality
ESM 485 Seminar: Resource Mgt.

Supporting Courses
SOIL 120 Intro. to Soils
AGEC 230 Intro. to Ag. Economics
GEOG 250 Intro. to GIS
CHEM 215 Chem. Lab. Concepts and Techniques

Environmental Planning Option
ESM 251 Community Decision-Making
ESM 351 Planning for Sustainable Communities
ESM 411 Site and Landscape Planning
ESM 435 Adv. Land Use Planning and Design
AGEC/ESM 445 Land Use and Sust. Ag. Law
GEOL 269 Environmental Geology

Directed Electives
15 cr.

General Electives
7-12 cr.