EVS 502

SEMINAR IN ENVIRONMENTAL SCIENCE AND MANAGEMENT

Spring Term, 1 credit (may be taken twice)

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Course Objectives:

The fundamental objective of the course is to create an interdisciplinary environment for engaging Master of Environmental Science and Management (MESM) students in instruction, development, and review of their major paper (EVS598) research/outreach projects. Specifically, the course will:

- Facilitate communication, interaction, and collaboration among Master of Environmental Science and Management (MESM) graduate students.
- Provide MESM graduate students instruction on how to identify and develop research, white paper and outreach topics for their major paper (EVS 598), through interaction with URI faculty and staff, as well as environmental scientists and policy-makers from NGOs, public agencies, and the private sector.
- Initiate a student-centered peer review process for each MESM student’s major paper, starting with the initial development stages and continuing through the final draft of their written document.
- Develop an opportunity for MESM students to get critical feedback from URI faculty throughout the development and completion of their major papers, including public presentations and communication of scientific information.

MESM Policy on EVS 502:

MESM graduate students are required to take 2 credits of seminar. Students can either take a departmental seminar an EVS seminar, thus EVS 502 is optional. EVS 502 credits can be used for program credit in a student’s Program of Study. Students enrolled in EVS 502 are required to participate in all aspects of the seminar.
Course Format:

First and second year students will be split into separate working groups for the first portion of the course. In the second part of the course, all students will give formal presentations and provide constructive feedback to each other.

For first year students the course will begin with a series of working sessions focused on major paper proposal development, methods, data analysis, and communication of scientific information (see schedule below). Possible major paper topics will be presented by URI faculty, extension staff, and speakers from private and public organizations. These presentations will focus on current environmental concerns and opportunities for participation by MESM students.

First year students will engage in group exercises to hone their skills at developing objectives and selecting appropriate methods for different types of major papers. Students will examine and critique former MESM major paper projects that include examples of White Papers, data-based studies, modeling-based assessments, survey-based assessments, and projects that focused on development and evaluation of training/outreach materials.

The first year MESM students will work in faculty-mentored teams to explore potential major paper topics in an informal setting. Each student will present and obtain feedback from their peers on proposed objectives, audience, possible cooperating agencies, methods, required resources, timeline and expected outcomes. Once a major paper topic is selected students will then develop and present a formal presentation that will be delivered to faculty, staff and fellow graduate students who will provide constructive feedback that can be used to improve the quality of the final EVS 598 paper.

First year student formal presentations will be scheduled at the rate of three to four per class, depending on enrollment. First year students will typically have 20 minutes for their presentation (10 minutes for their oral presentation, followed by up to 10 minutes of critical feedback from those in attendance). Second year students will have 30 minutes for a “final” presentation of the major paper with 20 minutes for their oral presentation and 10 minutes for questions and feedback. In addition, students, faculty, and others in attendance will complete written evaluation forms intended to provide critical feedback (see evaluation rubric below).

Second year students in the first ½ of the semester will participate in teams that provide peer-mentoring and review of their major papers to generate an interdisciplinary learning environment. Faculty will provide guidance on elements of constructive peer review. Students will provide detailed feedback to each other on all aspects of each other’s work, including major paper organization, format, clarity of writing and analyses/presentation of results and discussion. Following faculty input on the aspects and expectations for final presentations,
Second year students will also provide feedback to each other on their final presentations.

Types of Presentations:

**Major paper proposal.** For first-year MESM students. The goal of this presentation is to gain assistance in identifying a major paper topic and developing tentative methods for investigating that problem. The format for this type of presentation should be:

a.) Statement of the potential problem
b.) Justification for and significance of the study
c.) Objectives, hypotheses, questions and/or expected outcomes
d.) Proposed methods (data gathering, White Paper, extension output and/or synthesis, and analysis)
e.) Required resources
f.) Possible mentor/cooperating organization
g.) Timeline

**Major paper final report.** For second-year MESM students. The goal of this presentation is to summarize the findings of the major paper project. The format for this type of talk would be tailored to the project, but might include:

a.) Identification of the problem and review of previous work on the topic
b.) Project objectives
c.) Methods/Approach
d.) Results
e.) Discussion, conclusions, future opportunities

Evaluation Rubrics for Presentations:

See Appendix below

Seminar Announcements for Second Year Students:

By noon on Monday of the week before a scheduled presentation, a student should send to the EVS 502 coordinator a 1-page seminar announcement that includes an abstract summarizing the content of the upcoming presentation as well as a one-paragraph biography. The seminar announcement and bio should be sent to the coordinator as a Microsoft Word document. Each abstract should be no more than 300 words in length, 12-point font, single-spaced, and with margins left-justified.

Seminar Introductions and Biographical Sketches:

Each second year speaker will also introduce another speaker. By noon on Monday of the week before a scheduled presentation, a student should send to the EVS 502 coordinator a brief biographical sketch.
Presentation Media:

Presentations should be prepared using Microsoft PowerPoint or other presentation software. A laptop and computer projector for practicing presentations will be available for students in the NRS Office (105 Coastal Institute in Kingston) or other CELS departments.

Readings:

There are no textbooks for this course. Readings that provide guidelines for proposal development, data analysis, report writing, and for oral presentations may be distributed in class.

Grading:

EVS 502 grades are assigned on an S/U (satisfactory/unsatisfactory) basis.

Satisfactory performance includes:
- regular class attendance
- completion of class assignments
- presentation of a seminar
- providing constructive feedback for fellow students on their presentations
- oral presentation relative to rubric (Appendix 1)

Course Materials:

EVS 502 course materials will be available on the EVS 502 website. Abstracts of presentations will be posted each week, so be sure to take special care in preparation of your abstract.

Student Disability Services

Any student with a documented disability should contact me as early in the semester as possible so we may arrange reasonable accommodations. As part of this process, please be in touch with URI’s Office of Disability Services, located in Room 330 of the Memorial Union, 874-2098.

Tentative timeline for course:

Week 1
- Introduction, class goals and format.

Weeks 2-5
First Year Students

- Exploring Major Paper Opportunities
- Expectations and types of Major Papers.
- Presentations and critiques of prior major papers.
- Project opportunities with academic and non-academic partners.

Second Year Students

Student Team exercise: Peer review and revision of major papers. Initial draft of major paper should be completed. These drafts will be presented to small groups of MESM students and faculty instructor for critical evaluation.

Week 6-7

First Year Student Team Exercise:

- Each student will draft potential goals and approaches for their MESM major paper.
- Small groups of MESM students will work together to critique major paper ideas
- Small groups of MESM students will share their major paper ideas with interested MESM faculty.

Second Year Student Team Exercise:

- Peer review and revision of final presentations.

All students: Expectations for oral presentations (see Appendix 1)

Week 8-11

Second Year Student Final Presentations

- Second-year students formally present major paper for critique and discussion.
- First year students provide critiques of second-year student presentations

Weeks 11-12

First Year Student Final Presentations
• First-year students formally present research proposals for class critique and discussion

• Second year students provide critiques of student presentations

**Week 13**

• Wrap up: Conclusions and lessons learned for next year’s course
<table>
<thead>
<tr>
<th>Criterion</th>
<th>Well Done</th>
<th>Suggestions for Improvement</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction: Big Picture</strong></td>
<td>Issue presented clearly &amp; succinctly; no doubt as to why it is important; big-picture context clear; appropriate reference to earlier work.</td>
<td></td>
<td>The explanation of why this problem matters is very unclear; big-picture context not apparent; not clear why this is important</td>
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<tr>
<td><strong>Introduction: Specific Problem</strong></td>
<td>A particular aspect, application or need related to the issue is presented clearly and succinctly. This will be the bridge between the big picture and the objective. Identify the types of audiences(s) who are grappling with the specific problem.</td>
<td></td>
<td>Poor introduction to the problem. Not clear about audience. Not clear why the problem is worth addressing.</td>
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<tr>
<td><strong>Objective</strong></td>
<td>Succinct description of project objective &amp; how it relates to the big-picture context.</td>
<td></td>
<td>Objective not defined clearly; hard to tell what, specifically, the researchers intended.</td>
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<td><strong>Methods I: What Will You Do?</strong></td>
<td>Succinct – what will you be doing? White paper/literature review; data analyses; surveys; geospatial analyses; model application; other? Appropriate design &amp; analysis; described clearly.</td>
<td>Methods dominate presentation or are confusing. Methods not logically or completely presented.</td>
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<td><strong>Methods II: Resources</strong></td>
<td>What resources will you need for your methods and how you obtain those resources? Include any cooperators/partners/collaborator in this section.</td>
<td>Not clear on what it will take to make project happen. No partnerships developed or proposed.</td>
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<td><strong>Methods III: Time Line</strong></td>
<td>Break your major paper into a series of 3-5 activities (literature review and write up will be two common activities for everyone)</td>
<td>Sequence of activities not clearly articulated.</td>
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<td><strong>Expected Outcomes: What Will be the Result of Your Study?</strong></td>
<td>This should be a reflection of your objectives.</td>
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<td>Tangible outcomes of project not stated or confusing.</td>
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<td>Logical flow</td>
<td>Logical, intuitive progression of ideas with clear &amp; direct reference to information on slides.</td>
<td>Poorly organized flow; ideas presented at random; unrelated to information on slides.</td>
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<td>Balance - Visual</td>
<td>Slides balance figures, text, white space; figures dominate, text minimal; clean, uncluttered background.</td>
<td>Slides dominated by small, cluttered text or pictures; insufficient text supporting images; distracting background.</td>
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<tr>
<td>Balance - Content</td>
<td>Presentation focuses on results &amp; conclusions, with a reasonable introduction to problem context &amp; succinct methods.</td>
<td>Too much time &amp; space devoted to introducing the problem &amp; describing methods; little time left for results &amp; conclusions.</td>
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<tr>
<td>Text</td>
<td>Fonts readable throughout room (slides). Headings large, obvious, appropriate.</td>
<td>Text too small, lengthy blocks of text, no indentation, too much bold or italic.</td>
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<tr>
<td>Figures</td>
<td>Appropriate for point being made; neat, uncluttered, visible (large enough).</td>
<td>Off-point; hard to see (too small).</td>
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<tr>
<td>Presentation</td>
<td>Slide transitions simple &amp; direct. No irrelevant animation effects &amp; sounds (slides). Walks audience / viewer through data &amp; results. Uses slides as a guide, does not read presentation from them.</td>
<td>Lots of confusing visual transitions (animations, etc for slides). Does not guide audience / viewers through data &amp; results. Reads presentation from slides.</td>
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<td>Presence</td>
<td>Excited, enthusiastic, animated; eye contact with audience; spoke loudly &amp; clearly enough to be understood; spoke at a reasonable pace; appropriate attire (e.g., business casual); controlled use of laser pointer.</td>
<td>Dull, lifeless delivery; spoke in monotone; spoke too softly or too quickly &amp; without clear enunciation; little eye contact with audience, talked to screen or poster board; read from slides, poster, or paper; over-rehearsed.</td>
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<td>Audience Questions</td>
<td>Answers were direct, clear, on-target, no-nonsense.</td>
<td>Answers incorrect, evasive, defensive, incoherent. No time left for questions.</td>
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