#### **ENVS 5400**

# EXAMPLES OF MECHANISMS BY WHICH STUDENTS IN ENVS 5400 MAY MEET THE REQUIREMENT OF THESIS EXTENSION INTO THE PUBLIC REALM

Note: the following is considered a guide, not a definite list. Students planning on using an activity not listed here should, through their supervisor, notify the Coordinator of the MSc Program who will seek verification from the MSc Program Committee.

#### Acceptable activities:

- An oral presentation of a significant duration to a non-scientific audience. This includes public
  presentations and/or lectures to a non-specialist audience (i.e. removed from the student's
  discipline).
  - Presentations to first year courses would be considered extension as the audience would be non-specialists.
- An article principally focused on the student's research. The article should be senior-authored by the student, or written by a third-party, such as a member of the media. Articles written by the supervisor will not normally be acceptable.
  - Articles meeting the above criteria may appear in hardcopy (i.e. newspaper, booklet, promotional material, etc.) or in an electronic format.
  - Reports principally aimed at a broad, layperson audience are acceptable. Articles or reports submitted to a granting agency or industry partner, for example, will not be considered acceptable.
- An interview, or recorded, through a media outlet (e.g. television, radio, webcast, etc.)
- The development of signage, posters, brochures, web material, or some other educational tool that uses the products of the student's work in an educational purpose.

#### Activities that do not count towards ENVS 5400 credit:

- Presentation(s) at scientific or management conferences, workshops, or meetings, where the audience consists individuals with a professional interest in the topic.
- Publications of any sort that are targeted towards professionals or those with a vested interest in the topic.
- Guest lectures or presentations to formal classes of students where the topic of the research falls within the course's subject matter or curriculum.



# Graduate Course Outline

# ENVS 5400, 2 credits (30 contact hours)

# ENVIRONMENTAL SCIENCE: DISSEMINATION AND OUTREACH

#### 1. COURSE OVERVIEW

#### **Calendar Description**

Students design and deliver oral presentations and poster displays on their thesis research at the Master of Science research forum; students also required to demonstrate that they have extended their work into the public forum through a variety of possible avenues.

# **Educational Objectives/Graduate-Level Learning Outcomes**

- Provide students with experience and constructive feedback in showcasing their work in a scientific context, via both an oral presentation and a poster display.
- Promote student involvement in community outreach and extension, and increase exposure of student research to the non-scientific community.

#### **Additional Information**

Letter grades are not assigned in this course; upon successful completion of the course requirements students receive a COM ('completed') on their transcript.

#### Texts/Materials

None

#### **Student Evaluation Philosophy and Methods**

To successfully complete this course, students in the MSc (Env. Sci.) program must:

- deliver an oral presentation of their research at the annual MSc Showcase; this normally takes place during the first year of the student's program; a presentation based on proposed work is acceptable for those students just embarking on their thesis research.
- present their thesis research (either completed or in progress) in the form of a poster presentation at the MSc Showcase; this normally takes place during the second year of the student's program;
- demonstrate to their thesis committee that during their tenure as an MSc student, they have extended their research, results and implication into the public realm. There are numerous ways that this may be accomplished, including but not limited to presentations to non-scientific audiences, an article (either self-written or through a reporter) appearing on paper or in an electronic medium, laypersons' reports, interviews (television, radio), lectures in non-specialist courses (i.e. well outside the student's discipline), signage/ poster awareness, etc. Students should work with their supervisor and thesis committee to identify early on a mechanism by which they can accomplish this course requirement at some point during their tenure.

Students should seek direction and advice from their supervisor in preparing material for all of the above.

#### 2. RELATIONSHIP TO OTHER COURSES

**Prerequisites:** Admission to the MSc (Env. Sci.) Program

**Co-requisites:** None

# 3. COURSE PURPOSE AND FIT IN GRADUATE PROGRAM

Conducting research is no longer acceptable on its own: the accomplished researcher must ensure the results and application of his/her work are conveyed to both the scientific and non-scientific audience. Granting agencies, industry, government and other partners often require that results of sponsored research are made available through conventional means (e.g. scientific publications) as well as in laymen's terms. These efforts often are factored into proposal evaluations, promotions, and other assessment processes.

Students in the MSc program in Environmental Science are required to engage in the dissemination of their work, through both conventional, scientific formats (oral and poster presentations) as well as through more public forums.

This course represents an important component of the training and experience of MSc students in Environmental Science. To prepare students to enter society as researchers and managers, experience in presenting their work to a wide arrange of audiences is an absolute necessity. Further, the professional use of public funds and resources for research obliges the scientist to see the maximum extension of their work to all sectors of society.

#### 4. DELIVERY

**Delivery mode (face-to-face, blended, distance):** Face-to-face + individual study

# **Delivery Features**

Presentations are developed under the tutelage of thesis supervisors and experienced graduate students. Presentations (and feedback) occur during the MSc forum.

#### **Instructional Approach**

Again, individual tutelage is the major mode of instruction in this course; discussions and walk-arounds to view previous posters generally occur in other courses; further, through ENVS 5000, students discuss characteristics of effective seminar presentations.

# 5. OTHER

# Methods for Prior Learning Assessment and Recognition: n/a

#### **Course Policies**

As per the requirements of the course, all students are expected to attend at least two MSc showcase forums where they present their work. Excused absences are permissible only under exceptional circumstances that must be conveyed by the student's thesis committee to the Program Coordinator. In such cases, students will be required to make an analogous presentation at some other acceptable, alternative forum. This will occur only in exceptional circumstances.

Constructive feedback on posters and presentations is provided through the MSc Showcase.

It is recognized that some forms of research are more easily translated into the public arena. In extreme cases, thesis committees may propose to the MSc Program Committee an alternative form of extension for a student; however, serious effort first must be made to find a means through which the student will gain experience in disseminating their work into a form understandable by the layperson.