

**INTRODUCTION TO ENVIRONMENTAL SCIENCE 120**  
COURSE OUTLINE - FALL 2017



**TEACHER:** A. Hallihan

**COURSE DESCRIPTION:**

The objective of this course is for students to develop the knowledge base and skills for investigating and analyzing environmental issues and for communicating their knowledge and analysis to others.

**DISTRIBUTION OF TOPICS:**

- **Unit 1: An Overview of Environmental Science (25 hours)**
  - The Issues
  - Population Growth and Resource Limitations
  - Researching Current Environmental Issues
  
- **Unit 2: Sustainable Development (30 hours)**
  - Ecology
  - Environmental Awareness
  - Sustainable Ecosystems and Communities
  
- **Unit 3: Investigating Environmental Issues (35 hours)**
  - CLASS THEME: Fisheries...Miramichi Watershed
  - INDIVIDUAL THEME: One of the following...  
Agriculture, Forests, Fresh Water, Energy Resources, Climate Change or Water/Air Pollution

**EVALUATIONS:**

Tests / Quizzes / Assignments / Labs / Journals	40 %
Eco-Challenge Project	30 %
Exam	30 % * <i>Academic Incentive... 15 % or 50 % Exam</i>

*\* To reach an academic incentive, a student must meet the following criteria...*

- 1) Misses 5 or fewer classes in a particular subject (school activities and death in the family are exempt).
- AND**
- 2) Is in good academic standing (nothing owing for assignments/quizzes/tests) with a passing grade.

**ECO-CHALLENGE PROJECT:**

Completion of a student project is a requirement for this course. There are two options for completion...

- |  |  |
|--|--|
| <b>A:</b> Research Paper<br>Presentation On Your Topic<br>Eco-Point Activities With A Target Of 200 Points | <b>B:</b> Eco-Point Activities With A Target Of 400 Points |
|--|--|

See *Appendix A - D* for more information.

Those students who choose **option A**...here are some details on the two of the components:

***Research Paper***

- Independently research an environmental issue.
- Summarize and analyze the results of your research and communicate the results through a written paper.
- 4 – 5 pages in length using MLA Referencing (12 Font, Times New Roman, Double Spaced).

**IMPORTANT DATE: December 15<sup>th</sup>: Research Paper is due**

***Collaborative Presentation***

- Develop a cohesive and engaging presentation for the class...can be done individually or with a partner with a similar topic.
  - Visuals should be included (graphs, pictures, videos, etc.).
  - An activity must be included.
  - Presentations will be peer reviewed.
  - Duration will be 5 minutes if done individually or 8 minutes if done with a partner.

**IMPORTANT DATES:**

- **January 11<sup>th</sup>: Presentation order will be announced**
- **January 15<sup>th</sup> – 17<sup>th</sup>: Presentations**

Both options require completion of EcoPoints...here are some details on the activities:

***EcoPoint Activities***

- Complete a choice of optional activities that demonstrate the following four components:
  - Personal appreciation of the environment
  - Stewardship through action
  - Advocacy for the environment
  - Engagement of others in environmental inquiry
- At least one activity from each category must be attempted. An inventory will be recorded as this will be done throughout the course and I will sign off on the inventory as they are completed.
- Option A has a target of 200 EcoPoints and option B has a target of 400 EcoPoints.
- Inventories will be collected on the following dates:
  - November 9<sup>th</sup>...marking for achieving at least half of your target points.**
  - January 16<sup>th</sup>...marking for achieving all of your target points.**

**Components**

1. Research Paper
2. Collaborative Presentation
3. Eco-Point Activities

**Weight**

- 40 % of overall mark  
 30 % of overall mark  
 30 % of the overall mark

**Personal Appreciation Component**

- Read an approved book and share with class 10 [+5 if reviewed on the blog]
- Write a poem or song. (maximum 2) 5 [+5 if recorded and +5 if published]
- Create a piece of artwork (drawing, sculpting, painting, etc.). (max. 1) 10 [+? depending on effort]
- Organize an outdoor activity for at least 5 classmates out of class. 10 [+? depending on scope of activity]
- Volunteer at an environmental event. 5 / hr [+5/hr if presenting]
- Create a scrapbook of current ES issues, clippings, summaries, etc. 15 [+? depending on effort]
- Share an appropriate article with the class. 5 [+5 if reviewed on the blog]
- Invite a guest speaker to class. Prep class before and debrief class after. 15 [+5 if done with Skype]
- Create a bulletin board display 10 [+5 if school-wide]
- Build a model using recycled materials. 10 [+? depending on effort]
- Create an video documenting your environmental experience 30 [prior discussed with teacher]
- Create a logo 5 [+5 if chosen to be published]
- Submit pictures from an event you attended/participated 5 [+? If given in different format]
- Other (student suggestions) negotiable

**Stewardship Through Action Component**

- Clean the fish tank 5
- Watering the plants 5
- Organize a community workshop. 50 [prior discussed with teacher]
- Attend a lecture or seminar out of class and report to class. 15 [+5 if reviewed on the blog]
- Work at an environmental job, document your experience and share with class. 30 [prior discussed with teacher]
- Head up an anti-litter campaign and organize a highway clean-up day . 30 [prior discussed with teacher]
- Create an environmental awareness video 30 [prior discussed with teacher]
- Organize a school art show featuring a category for recycled art. 30 [prior discussed with teacher]
- Write, produce and create your own nature interlude (on video).  
*An interlude should be 100% human-free and generally is put to music* 20 [+? depending on effort]
- Create and market an earth-friendly product (bags, soaps, stationary, etc.). 50 [prior discussed with teacher]
- Beautification project (e.g. create a community or senior's home garden) 75 [prior discussed with teacher]
- Design and maintain for the duration of the term, a web-based environmental newsletter that is a compilation of current environmental issues, interviews, news clips photos, articles, etc. 75 [prior discussed with teacher]
- Other (student suggestions) negotiable

**Advocacy for the Environment Component**

- Write a letter to \_\_\_\_\_ advocating change (unlimited) 5 [+5 if you receive a reply]
- Sign up for a newsletter from an environmental group 5 [must pass in confirmation e-mail]
- Interview a local "environmentalist" who you consider a role model 10 [+10 if done in video format]
- Complete an appropriate career profile 10 [+5 if reviewed on the blog]
- Organize a special awareness/promotion day at school 30 [prior discussed with teacher]
- Create a video commercial promoting "green" behavior 30 [prior discussed with teacher]
- Other (student suggestions) negotiable

**Engagement of Others in Environmental Inquiry Component**

- Organize a lab activity for the class 20 [+? depending on effort]
- Design a game for the class to review a unit or to introduce a new topic (Board game, jeopardy, etc.) 20 [+? depending on effort]
- Bulletin board display 10 [+5 if school-wide]
- Create a video documentation of a lab or field trip 30 [prior discussed with teacher]
- Design a lesson and teach to an elementary class 75 [prior discussed with teacher]
- Other (student suggestions) negotiable