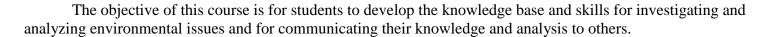
INTRODUCTION TO ENVIRONMENTAL SCIENCE 120

COURSE OUTLINE - WINTER 2016

TEACHER: A. Hallihan

COURSE DESCRIPTION:



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	50 %
Eco-Challenge Project	25 %
Exam	25 %

ECO-CHALLENGE PROJECT:

Completion of a student project is a requirement for this course. The three components of the project are...

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

See *Appendix A - D* for more information.

Completion of a student project is a requirement for this course. The three components are:

Part I: 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.

IMPORTANT DATE:

May 20th: Research Paper is due

Part II: Collaborative Presentation

- Team up with others researching related topics to develop a cohesive and engaging presentation for the class.
 - Visuals should be included (graphs, pictures, videos, etc.).
 - An activity must be included.
 - Presentations will be peer reviewed.
 - Duration will be 20 to 25 minutes.

IMPORTANT DATES:

- May 25th: Presentations groups will be announced
- June 1st: Presentations will begin

Part III: Eco-Point Activities

- Complete a choice of optional activities that demonstrate the following four components:
 - o Personal appreciation of the environment
 - Stewardship through action
 - Advocacy for the environment
 - o Engagement of others in environmental inquiry
- <u>At least one</u> activity from each category must be attempted. An inventory/portfolio will be recorded as this will be done throughout the course.
- A maximum of 300 eco-points may be accumulated. Inventories will be collected on the following dates:

100 points - March 23rd 100 points - May 4th 100 points - June 1st

Mandatory Components Weight 1. Research Paper 40 % of overall mark 2. Collaborative Presentation 30 % of overall mark 3. Eco-Point Activities 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] 10 [+? depending on effort] Create a piece of artwork (drawing, sculpting, painting, etc.). (max. 1) 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 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). 20 [+? depending on effort] An interlude should be 100% human-free and generally is put to music Create and market an earth-friendly product (bags, soaps, stationary, etc.). 50 [prior discussed with teacher] 75 [prior discussed with teacher] Beautification project (e.g. create a community or senior's home garden) Design and maintain for the duration of the term, a web-based environmental 75 [prior discussed with teacher] newsletter that is a compilation of current environmental issues, interviews, news clips photos, articles, etc. 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 20 [+? depending on effort]

10 [+5 if school-wide]

negotiable

30 [prior discussed with teacher] 50 [+? depending on effort]

75 [prior discussed with teacher]

- (Board game, jeopardy, etc.)
- Bulletin board display
- Create a video documentation of a lab or field trip
- Create a lesson plan with an activity
- Design a lesson and teach to an elementary class
- Other (student suggestions)