INTRODUCTION TO ENVIRONMENTAL SCIENCE 120

COURSE OUTLINE - WINTER 2013

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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)
 - THEME: Fisheries...Miramichi Watershed

EVALUATIONS:	Tests / Quizzes / Assignments / Labs / Journals	40 %
	Eco-Challenge Project	30 %
	Exam	30 %

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* and *Appendix B* for more information.

ECO-CHALLENGE PROJECT

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.

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.).
 - Experts may be invited to class to help judge these presentations.
 - Presentations will be peer reviewed.

Part III: Eco-Point Activities

- Complete a choice of optional activities that demonstrate the following four components:
 - o Personal appreciation of the environment
 - o Stewardship through action
 - o Advocacy for the environment
 - o Engagement of others in environmental inquiry

ECO- CHALLENGE PROJECT

<u>Mandatory Components</u>	<u>Weight</u>
1. Research Paper	40 % of overall mark
2. Collaborative Presentation	30 % of overall mark
3. Eco-Point Activities	30 % of the overall mark

NOTE: Maximum will be set at 300 Eco-points with at least 50 from each category.

APRIL 2nd → MUST have at least 150 points attempted.

Student must keep a portfolio with Eco-Point activities and record their progress bi-weekly.

Student must keep a portion with Eco-Point activities and recor	u men progress di-weekly.
Personal Appreciation Component	
 Read an approved book and share with the class. 	10
• Write a poem or song. (maximum 2)	5
• Create a piece of artwork (drawing, sculpting, painting, etc.). (max. 1)	10
 Organize an outdoor activity for at least 5 classmates out of class. 	10
 Attend a lecture or seminar out of class and report to class. 	15
 Create a scrapbook of current ES issues, clippings, summaries, etc. 	15
 Share an appropriate article with the class. 	5
• Invite a guest speaker to class. Prep class before and debrief class after.	15
Create a bulletin board display	10
Build a model using recycled materials.	10
Review a media topic and how different media handle e.g. biases	10
• Other (student suggestions)	negotiable
tewardship Through Action Component	
Organize a community workshop on composting and/or recycling.	50
Attend a lecture or seminar out of class and report to class.	15
Work on a farm, document your experience and share with class.	15
Head up an anti-litter campaign and organize a highway clean-up day .	25
• Create a CD celebrating the earth, peace, freedom, social justice, etc.	10
 Organize a school art show featuring a category for recycled art. 	30
Write, produce and create your own nature interlude (on video).	15
An interlude should be 100% human-free and generally is put to music	13
• Create and market an earth-friendly product (bags, soaps, stationary, etc.).	50
• Beautification project (e.g. create a community or senior's home garden)	75
• Design and maintain for the duration of the term, a web-based environmental newsletter that is a compilation of current environmental issues, interviews,	70
news clips photos, articles, etc.	
• Other (student suggestions)	negotiable
Advocacy for the Environment Component	
 Write a letter to advocating change (unlimited) 	5
Send your letter to and receive a reply	10
 Interview a local "environmentalist" who you consider a role model 	10
Complete an appropriate career profile	10
Organize a special awareness/promotion day at school	30
• Create a TV commercial promoting "green" behavior (max. 2)	30
Other (student suggestions)	negotiable
Engagement of Others in Environmental Inquiry Component	
Organize a lab activity for the class	20
 Design a game for the class to review a unit or to introduce a new topic (Board game, computer interactive activity, etc.) 	10
	10
 Bulletin board display Design a Web Quest or scavenger hunt for your classmates which you 	
Design a web Quest or scavenger nunt for your classmates which you will collect and correct	30
• Other (student suggestions)	negotiable