

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



**SAULT  
COLLEGE**

**COURSE OUTLINE**

**COURSE TITLE:** NET 310 Environmental Assessment Implementation & Monitoring

**CODE NO. :**

**SEMESTER:**

**PROGRAM:**

**AUTHOR:** Robert Rattle

**DATE:** Dec '15      **PREVIOUS OUTLINE DATED:** Dec 2014

**APPROVED:** Colin Kirkwood      Dec '15

\_\_\_\_\_  
Dean

\_\_\_\_\_  
DATE

**TOTAL CREDITS: 3**

**PREREQUISITE(S): N/A**

**HOURS/WEEK: 3**

**Copyright ©2010 The Sault College of Applied Arts & Technology**  
*Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited.*  
**For additional information, please contact Brian Punch, Chair, Environment and Design  
School of Technology and Natural Resources  
(705) 759-2554, Ext. 2681**

## ***NET 310 - Environmental Assessment Implementation and Monitoring***

- I. **COURSE DESCRIPTION:** This course will focus on the documentation of potential environmental effects of projects subject to the Environmental Assessment Act and measures to mitigate these effects in a comprehensive report. In addition, the design of follow-up programs to assess the effectiveness of mitigating measures will be covered.

### **II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon successful completion of this course, the student will demonstrate the ability to:

1. List and describe the necessary steps for completion of an environmental assessment in Canada  
Potential Elements of the Performance:
  - describe the EA process
  - outline the necessary types of information for completing an EA in Canada
2. Describe best practices when conducting an environmental assessment  
Potential Elements of the Performance:
  - list the various stages of an EIA
  - explain the role of each stage in an environmental assessment
  - list and describe the various methods used for each stage
  - discuss the merits of different methods for different applications
3. Explain the different types of assessments, the significance of the social, health and environmental components and the role of public participation in an assessment process  
Potential Elements of the Performance:
  - describe and discuss the different types of assessments used in an environmental assessment
  - explain their uses and merits
  - explain their differences
  - describe the different techniques and methods each use
4. Design, develop and execute a public consultation plan  
Potential Elements of the Performance:
  - explain the basic and operational principles of meaningful participation
  - describe various methods and techniques used for public

- consultation
- explain the role of local and traditional ecological knowledge
5. Describe the function and elements of a cumulative effects assessment  
Potential Elements of the Performance:
    - Define cumulative effects
    - Describe types of cumulative effects
    - identify different models to assess cumulative effects
  6. Design a follow-up plan to assess the effectiveness of mitigation measures and explain the development and use of different types of indicators  
Potential Elements of the Performance:
    - describe what an indicator is and the different types
    - explain the difference between types of follow-up monitoring
    - list and describe a variety of monitoring methods and techniques

### **III. TOPICS:**

1. Environmental assessment process
2. Stages of the EIA in Canada
3. Environmental social, health and other assessments
4. Public participation
5. Cumulative effects assessment
6. Indicators, monitoring and follow-up

### **IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

*Introduction to Environmental Impact Assessment, Noble.*

#### *Approach to learning:*

Although there will be lectures, students are encouraged to participate and share their perspectives on the respective themes as much as possible. A significant proportion of classes will be dedicated to class activities based on readings and assignments. A portion of the evaluation for this course depends upon the student being able to demonstrate your comprehension of the materials by engaging in class discussions and activities on the respective themes, completing assignments, and raising questions about specific subject matter. Emphasis will be placed on creating a positive environment whereby students can express themselves without fear of criticism or judgment. This approach to learning recognizes that everyone has something to contribute to class discussions, and reduces the amount of lecture time for any given topic.

## V. EVALUATION PROCESS/GRADING SYSTEM:

Term Assignment – 40%

Assignments - 50%

Class Participation and Activities – 10%

The following semester grades will be assigned to students:

<b>Grade</b>	<b><u>Definition</u></b>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

### Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.



**COURSE SCHEDULE:** Subject to change

Week/ Hours	Topic/Chapter	Concepts Covered
<b>Week 1</b>	Introduction	overview CEAA provincial EA EA process positioning implementation and monitoring in process definitions classification of effects and impacts introduction to HIA
<b>Week 2</b>	HIA and term assignment	what is HIA process methods key values roles in impact assessment term project process outline: data collection workshop research analysis reporting community website: <a href="http://pointesprotection.org">http://pointesprotection.org</a> <a href="http://www.sootoday.com/content/news/details.asp?c=36884">http://www.sootoday.com/content/news/details.asp?c=36884</a> <a href="http://www.lssu.edu/bpac/wp-content/uploads/2011/09/BPACminutes03272012-4-Agency-and-Pres.pdf">http://www.lssu.edu/bpac/wp-content/uploads/2011/09/BPACminutes03272012-4-Agency-and-Pres.pdf</a>
<b>Week 3</b>	Introductions to Pointe Estates proposal  EIA Methods	community proponent  definitions purposes types advantages and disadvantages
<b>Week 4</b>	Screening	significance approaches

		<p>guidelines</p> <p>roles</p> <p>precautionary principle</p>
<b>Week 5</b>	scoping and baseline	<p>issues, boundaries, focus</p> <p>types</p> <p>alternatives</p> <p>evaluating alternatives</p> <p>VECs</p> <p>issues to consider</p> <p>spatial, temporal and jurisdictional bounding</p>
<b>Week 6</b>	impact predictions	<p>accuracy and precision</p> <p>tools and techniques</p> <p>predicting impacts on human and biophysical environments</p> <p>components, techniques , challenges and verification</p>
<b>Week 7</b>	impact significance	<p>determining impact significance</p> <p>direction, magnitude, probability, duration and frequency, spatial extent</p> <p>standards and regulations</p> <p>cumulative effects</p> <p>values</p> <p>methods</p>
<b>Week 8</b>	managing impacts and monitoring	<p>managing adverse and beneficial impacts</p> <p>strategies to manage impacts</p> <p>types of monitoring</p> <p>follow-up</p> <p>data collection, approaches and techniques</p>
<b>Week 9</b>		
<b>Week 10</b>	study week	
<b>Week 11</b>		
<b>Week 12</b>		
<b>Week 13</b>		
<b>Week 14</b>	Term assignment due	
<b>Week 15</b>	Final exam	

Term Assignment

Participate in the completion of a Health Impact Assessment of the Pointes Estate development (proposal) located in west Sault Ste. Marie.