Course Code: Title	NET356: APPLIED ENVIRONMENTAL ASSESSMENT
Program Number: Name	5221: NAT ENVIRONMENT TY
Department:	NATURAL RESOURCES PRG
Semesters/Terms:	21W
Course Description:	Using the knowledge from the past semester and new information in this semester, students will plan and prepare components of environmental assessment projects. This course will focus on the identification, description, measurement and documentation of potential environmental effects of a development project or proposal and identify recommendation 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.
Total Credits:	2
Hours/Week:	2
Total Hours:	45
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Vocational Learning Outcomes (VLO's) addressed in this course: **Please refer to program web page for a complete listing of program outcomes where applicable.**	**5221 - NAT ENVIRONMENT TY** VLO 1 Collect, analyze, interpret and report on data from representative biological and environmental samples. VLO 2 Utilize natural resources information technology equipment to assemble, analyze and present identified ecosystem components for purposes of conserving and managing natural resources. VLO 3 Apply the basic concepts of science to natural resource conservation and management. VLO 4 Plan, design, implement and participate in the maintenance of natural environment assessments. VLO 7 Ensure all work is safely completed in adherence to occupational health and safety standards. VLO 8 Contribute to the development, implementation and maintenance of environmental management systems. VLO 10 Communicate technical information accurately and effectively in oral, written, visual and electronic forms.
Essential Employability Skills (EES) addressed in this course:	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. EES 3 Execute mathematical operations accurately. EES 4 Apply a systematic approach to solve problems.

In response to public health requirements pertaining to the COVID19 pandemic, course delivery and assessment traditionally delivered in-class, may occur remotely either in whole or in part in the 2020-2021 academic year.

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	EES 6 Locate, select, organize, and document information using appropriate technology and information systems.
	EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.
	EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.
	EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.
	EES 10 Manage the use of time and other resources to complete projects.
Course Evaluation:	Passing Grade: 50%, D A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation & Assessment Requirements:	Academic success is directly linked to attendance. Missing more than 1/3 of the course hours in a semester shall result in a F Grade for this Course. Missed tests will only be accommodated with valid documentation supporting absence and approval of instructor. Missed quizzes cannot be made up. Late Assignments will only be accepted up to 2 days after due date with a 20% late penalty imposed. Assignments will not be accepted after.

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
1. 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.	1.1 Describe and discuss the different types of assessments used in an environmental assessment. 1.2 Explain their purposes and when and how each may be used. 1.3 Identify the legislative requirements for each in various Canadian jurisdictions. 1.4 Explain their uses, merits and disadvantages. 1.5 Discuss their differences and similarities. 1.6 Describe a variety of techniques and methods each use.
Course Outcome 2	**Learning Objectives for Course Outcome 2**
2. Describe key elements of a public consultation plan.	2.1 Explain the basic and operational principles of meaningful participation. 2.2 Describe Arnstein`s ladder of citizen participation. 2.3 Describe various methods and techniques used for public participation. 2.4 Discuss, compare and contrast the role(s) and goals of public participation in Canadian environmental assessment across jurisdictions. 2.5 Contrast and compare the value of scientific, proponent, government, local and traditional knowledge in an environmental assessment. 2.6 Explain the roles and values of local and traditional ecological knowledge.
Course Outcome 3	**Learning Objectives for Course Outcome 3**
3. Describe a Health Impact Assessment (HIA) and its	3.1 Identify both the social and environmental determinants of health.

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	roles in project, program and policy proposals and situate within the EIA processes.	3.2 Describe their relationships to one another. 3.3 Explain the advantages and disadvantages of HIA. 3.4 Describe the relationships between HIA and the natural, physical and built environments 3.5 Compare and contrast a HIA, SIA and EIA in evaluating these determinants. 3.6 Compare and contrast the values of a HIA and EIA in policy, program and project assessment settings.
	Course Outcome 4	**Learning Objectives for Course Outcome 4**
	4. Apply appropriate tools, techniques and methods to complete a HIA.	4.1 Identify and apply appropriate methods for completing each stage of a HIA. 4.2 Select tools and techniques appropriate for the identification and collection of data. 4.3 Justify the selection of techniques and methods used. 4.4 Describe the variances in techniques and methods between types of proposals (project, program, policy). 4.5 Apply appropriate methods to assess data and evaluate impacts.
	Course Outcome 5	**Learning Objectives for Course Outcome 5**
	5. Design a follow-up plan to assess the effectiveness of mitigation measures and explain key features for the development and use of different types of indicators.	5.1 Describe what an indicator is and the different types. 5.2 Explain the difference between types of follow-up monitoring. 5.3 List and describe a variety of monitoring methods and techniques. 5.4 Explain the roles of community participation in the follow-up and indicator processes. 5.5 Describe the different types of indicator information. 5.6 List and describe a variety of tools used for follow-up and monitoring.
	Course Outcome 6	**Learning Objectives for Course Outcome 6**
	6. Describe the function and elements of a cumulative effects assessment and a strategic assessment.	6.1 Define cumulative effects. 6.2 Describe types of cumulative effects. 6.3 Identify different models to assess cumulative effects. 6.4 Define a strategic environmental assessment. 6.5 Compare and contrast a strategic and cumulative assessment with other forms of assessments. 6.6 Explain the purpose of a strategic environmental assessment. 6.7 Situate and discuss the roles of cumulative effects and strategic decisions in the EIA process to ecosystem health and environmental complexity.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignments	50%
Tests and Quizzes	50%

Date: June 17, 2020

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| Addendum: | Please refer to the course outline addendum on the Learning Management System for further information. |

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