

I. COURSE DESCRIPTION:

CICE students, with assistance from a Learning Specialist, will learn to identify, discuss life cycles and interpretive value of selected fish and mammals. Common wildlife species will be identified by their tracks & signs, scat, fur and skull. Field surveys will be conducted to assess wildlife habitat.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Outline the role of the National Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and the Provincial Committee on the Status of Species at Risk in Ontario (COSSARO), as they pertain to species at risk.

Potential Elements of the Performance:

- **Discuss the risk categories as defined by COSEWIC**
- **Research and report on species at risk in Ontario**
- **Outline the process of determining if a species is at risk**
- **Review protection legislation for Ontario species at risk**
- **Discuss species at risk topics addressed by guest speakers**
- **Outline the role of recovery plans, recovery teams and recovery action groups to improve the status of a species at risk**

This learning outcome will constitute approximately 15% of the course.

2. Identify selected fish species and discuss their biology, life cycles, and ecological value.

Potential Elements of the Performance:

- **Correctly identify most internal and external anatomical structures of fish and describe their purpose.**

- **Demonstrate the effective use of bifurcated (dichotomous) keys in order to identify common Ontario fish species.**
- **Discuss scientific techniques of determining fish age.**
- **Discuss the ecology of fishes and their role as indicator species.**

This learning outcome will constitute approximately 20% of the course

3. Identify common mammals in Ontario based on tracks and signs, scat, study furs, specimens and skulls.

Potential Elements of the Performance:

- **Identify most Ontario mammal species using images, study furs and specimens**
- **Identify skulls of Ontario mammals using keys**
- **Distinguish between common species within an order based on tracks, movements, browsing, droppings, remains of food, method of kill, claw marks or antler scrapes, dens or nests**
- **Discuss scat characteristics, track formula and trail patterns of common wildlife**
- **Investigate and document 10 wildlife tracks & signs**

This learning outcome will constitute approximately 35% of the course

4. Discuss the biology, life cycles, ecology and interpretive value of many Ontario wildlife species.

Potential Elements of the Performance:

- **Research and report on key biological and ecological features of selected orders/families of wildlife**
- **Relate the interpretative value of selected mammalian species**
- **Explain the lifecycles of parasites & diseases of Ontario fish and wildlife**
- **Identify select parasites & disease by their signs and symptoms, outlining the possible impact to human health.**

This learning outcome will constitute approximately 15% of the course

5. Conduct field surveys to assess wildlife presence.

Potential Elements of the Performance:

- **Use tracks and signs in the field to survey wildlife species presence**
- **Discuss the presence or absence of certain species based on habitat type surveyed**

- **Discuss and demonstrate knowledge of various types of field surveys used to determine wildlife species presence.**

This learning outcome will constitute approximately 15% of the course

III. TOPICS:

- 1. Species at Risk in Ontario**
- 2. Common fish species of Ontario**
- 3. Mammals**
- 4. Wildlife Tracks & Signs**
- 5. Fish & Wildlife Parasites and Diseases**

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- **Kurta, A. 1995. Mammals of the Great Lakes Region. Michigan Press.**
- **Rezendes, P. 1999. Tracking & the Art of Seeing: How to Read Animal Tracks & Sign. Camden House Publishing, Inc. Charlotte, Vermont.**
- **Lab coat**
- **Outdoor equipment – snowshoes, hardhat with liner, safety vest, compass, GPS.**
- **Printed class resources from LMS.**

ADDITIONAL RESOURCES:

Ayles, H. 1970. Common Parasites of Ontario Fishes. Fisheries Inventory Unit, Fish and Wildlife Branch. Ontario Ministry of Natural Resources. 21 pp.

Holm, Erling, Nick Mandrak and Mary Burrige. The ROM Field Guide to Freshwater Fishes of Ontario. 2009. ROM.

Scott W.B. and E.J. Crossman. 1998. Freshwater Fishes of Canada. Galt House Publications Ltd. Oakville, Ontario.

Sheldon, Ian. Animal Tracks of Ontario. 1998. Lone Pine Publishing. Edmonton, Alberta.

V. EVALUATION PROCESS/GRADING SYSTEM:

Tests and Assignments	90%
Participation	10%
	100%

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
A	80 – 89%	
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.

VI. SPECIAL NOTES:

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.

Addendum:

Further modifications may be required as needed as the semester progresses based on individual student(s) abilities and must be discussed with and agreed upon by the instructor.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline

CICE Modifications:**Preparation and Participation**

1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
3. Study notes will be geared to test content and style which will match with modified learning outcomes.
4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

A. Tests may be modified in the following ways:

1. Tests, which require essay answers, may be modified to short answers.
2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

B. Tests will be written in CICE office with assistance from a Learning Specialist.***The Learning Specialist may:***

1. Read the test question to the student.
2. Paraphrase the test question without revealing any key words or definitions.
3. Transcribe the student's verbal answer.
4. Test length may be reduced and time allowed to complete test may be increased.

C. Assignments may be modified in the following ways:

1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

The Learning Specialist may:

1. Use a question/answer format instead of essay/research format
2. Propose a reduction in the number of references required for an assignment
3. Assist with groups to ensure that student comprehends his/her role within the group
4. Require an extension on due dates due to the fact that some students may require additional time to process information
5. Formally summarize articles and assigned readings to isolate main points for the student
6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

D. Evaluation:

Is reflective of modified learning outcomes.