

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: FISH & WILDLIFE STUDIES I

CODE NO. : NET100 **SEMESTER:** Fall 2015

PROGRAM: Natural Environment Technician/Technologist
Adventure Recreation and Parks Technician

AUTHOR: Bob Knudsen

DATE: Aug 2015 **PREVIOUS OUTLINE DATED:** August 2014

APPROVED: Colin Kirkwood
DEAN **Aug 2015 DATE**

TOTAL CREDITS: 3

PREREQUISITE(S): NONE

HOURS/WEEK: 3

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I. COURSE DESCRIPTION:

This course concentrates on fundamental aspects of anatomy, physiology, and ecology of Ontario birds, Ontario Turtles, Ontario Snakes and Ontario Amphibian species. Lab sessions will develop skills in identification and classification, as well provide knowledge and experience with commonly used field inventory techniques.

I LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Identify common Ontario bird species based on visual field marks.Potential Elements of the Performance:

- Using specimens examine external and internal avian anatomy
- Identify 35 groups of Ontario birds
- Identify approximately 40 common Ontario bird species, using visual field marks and field guides.
- Explain the ecological/interpretive importance of selected species of birds.
- Identify exotic and controversial bird species and explain their influence on the native fauna.
- Use natural history-related information pertaining to Ontario birds for interpretive purposes.
- Use visual field marks to identify common Ontario bird species from specimens, digital images, video, or field guides
- Identify bird species through connections with their associated preferred habitats

This learning outcome will constitute approximately 40% of the course.

2. Discuss avian biology, ecology and migration behaviour.

Potential Elements of the Performance:

- Discuss theories related to bird behavior including territoriality and nest building
- Discuss migration, navigation techniques and use of migratory flyways
- Research ecological requirements for selected avian species

This learning outcome will constitute approximately 10% of the course.

3. Conduct field surveys to assess habitat and relative abundance of wildlife populations.

Potential Elements of the Performance:

- research habitat requirements for bird species and assess suitability of selected areas
- discuss common survey techniques used in the management of various herptiles and bird species
- follow survey protocols for selected species and calculate the relative abundance using formulae

This learning outcome will constitute approximately 10% of the course.

4. Record, analyze and present field data.

- establish avian feeding stations, recording findings including species presence and food utilization
- completely and accurately fill out field forms for field studies
- analyze collected data using minor statistics
- present findings from field surveys in a report format

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

5. Identify selected amphibians and reptiles, with special ecological and interpretive value.

Potential Elements of the Performance:

- Define the characteristics of each of the 5 wetland classes and discuss their ecological importance
- Relate the factors contributing to wetland loss and amphibian decline on Ontario
- Summarize prominent environmental monitoring programs involving herptiles in Ontario
 - Identify using images and vocalizations recordings common to Ontario amphibians
 - Discuss the ecological/interpretative importance of amphibians
 - Identify using images of common turtles and snakes of Ontario
 - Discuss ecological/interpretative importance of herptiles

This learning outcome will constitute approximately 25% of the course.

III. TOPICS:

1. Bird Classification and Identification.
2. Biology/Physiology, Morphometry
3. Ecology of Birds, Reptiles and Amphibians
4. Field Surveying

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

1. Peterson, Roger Tory Peterson *A Field Guide to the Birds of Eastern North America* – available in the Bookstore
2. Cornell Lab of Ornithology Website – available on library e-books
3. Harding, James H. *Amphibians and Reptiles of the Great Lakes Region (Great Lakes Environment)* 1997, University of Michigan Press available in bookstore
4. Hardhat, safety boots, reflective vest.
5. Lab coat, dissecting kit – available at bookstore

V. EVALUATION PROCESS/GRADING SYSTEM:

Lab Tests/Assignments	75%
Field Survey	10%
Report	<u>15%</u>
	100%

Lab assignments and report values will be reduced at a rate of 10% per day for late submissions for a period of 10 days after the due date, after which they will not be accepted. After 10 days assignment/report value will be zero.

All labs and assignments must be completed to pass the course. Students that miss labs and/or tests must have a valid, documented excuse in order to participate in a make up test/assignment.

The following semester grades will be assigned to students:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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.

VII. COURSE OUTLINE ADDENDUM:

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