SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

SAULT COLLEGE

COURSE OUTLINE

COURSE TITLE: WILDLIFE BIOLOGY

CODE NO. :   NRT 205   **SEMESTER:**   3

PROGRAM: Fish & Wildlife Conservation

AUTHOR: T. Winter (Revised by C. Marcinkowski)

DATE: Aug 2013   **PREVIOUS OUTLINE DATED:**   Aug 2012

APPROVED:

"C. Kirkwood"

_____   _____
                        DEAN   **DATE**

TOTAL CREDITS: 4

PREREQUISITE(S):   NONE

HOURS/WEEK: 4

WILDLIFE BIOLOGY & MANAGEMENT   NRT205
COURSE NAME   **COURSE NO.**

I.

COURSE DESCRIPTION:

Wildlife Biology is a practical introductory course to field identification, life histories, and habitat requirements of Ontario wildlife species. A laboratory component is included emphasizing anatomy and physiology, parasites and diseases of wildlife, and identification of key species.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1.   ***Identify principle wildlife species in Ontario, describing life histories, and habitat requirements.***

      Potential Elements of the Performance:

      - Identify principle mammal species using class resources, and field guides.
      - Have the knowledge necessary to key out less common species using a taxonomic key.
      - Identify the skulls and hairs of many Ontario mammal species using a key.

2.   ***Demonstrate knowledge of wildlife anatomy and evaluate the health status of wildlife populations.***

      Potential Elements of the Performance:

      - Dissect and identify anatomical features of mammals.
      - Identify the components of the digestive tract and its associated organs.
      - Identify and state the stages in the life cycles of major parasites/diseases of wildlife.

3.   ***Research and describe life history requirements for a selected wildlife species.***

      Potential Elements of the Performance:

      - Using resources from Media Services, your instructor, the Internet, and other libraries and agencies, conduct research, develop and present a

report outlining the biology, and ecology, for an assigned species (or group of similar species) that will include:

- Biological life history and reproductive potential
- Ecological relationships
- Limiting and compensating factors on growth
- Behavioural traits

4. **Perform field identification of wildlife based on tracks and signs, perform scatology analysis**
Potential Elements of Performance:

- Complete a photo collection of 30 tracks and signs indicating species and key feature
- Examine and differentiate the scat of several wildlife species native to Ontario

5. **Perform techniques used for wildlife sex and age determination**
Potential Elements of Performance:

- Explain techniques used for age and sex determination in many Ontario mammal species.
- Demonstrate the ability to correctly determine age and sex for many wildlife species.
  - Age deer and moose using jaw-aging techniques
  - Become familiar with Tooth grinding and cross-sectioning teeth for aging purposes
  - Learn how to age selected fur bearing mammals

III. **TOPICS:**

1. **Parasite and disease identification and diagnosis**
2. **Mammal Identification and status**
3. **Mammal anatomy, physiology and state of health**
4. **Wildlife Tracking and Signs**
5. **Criteria for Aging and Sexing Mammals**

WILLDLIFE BIOLOGY & MANAGEMENT
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IV.   REQUIRED RESOURCES/TEXTS/MATERIALS:

Kurta, A. 1995. *Mammals of the Great Lakes Region*. Rev. Ed. The University of Michigan Press. Ann Arbor. 376 pp

LMS

Lab coat, safety glasses.

Calculator, Pencils, Clip Board, Mylar Sheet

Hardhat, Safety Boots, Reflective Vest (Optional: Rubber Boots, Rain Suit)

Recommended/Optional:
Miller, D. 1981. ***Track Finder: A Guide to Mammal Tracks of Eastern North America***. Nature Study Guild Publishers.

Rezendes, P. 1999. ***Tracking and the Art of Seeing: How to Read Animal Tracks and Sign***. Collins Reference.

V.   EVALUATION PROCESS/GRADING SYSTEM:

Exams	**30%**
Lab Tests	**30%**
Species Project & Presentation	**15%**
Quizzes/Assignments	**15%**
Participation	**10%**
TOTAL	**100%**

NOTE: Assignment values will be reduced at a rate of 10% per day for late submissions for a period of 5 days after the due date. After 5 days, lab assignment/report value will be zero. All assignments and must be submitted regardless of lateness to pass the course.

Attendance during field exercises is MANDATORY. Students missing field work without valid, documented reason will risk repeating the course.

NOTE: Students given the opportunity to submit a lab report associated with a missed field trip will receive a maximum grade of 60% for that report

WILDLIFE BIOLOGY & MANAGEMENT   NRT205
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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.

VI. COURSE OUTLINE ADDENDUM:

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