

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY  
SAULT STE. MARIE, ON**



**COURSE OUTLINE**

**COURSE TITLE:** ANIMAL DIVERSITY

**CODE NO.:** NRT105 **SEMESTER:** 2

**PROGRAM:** PARKS & OUTDOOR RECREATION TECHNICIAN

**AUTHOR:** JASON VANSLACK

**DATE:** JAN 2001 **PREVIOUS OUTLINE DATED:** JAN 2000

**APPROVED:** \_\_\_\_\_  
DEAN DATE

**TOTAL CREDITS** 3  
**PREREQUISITE(S):** None  
**LENGTH OF COURSE:** 3 hrs/week x 16 weeks  
**TOTAL CREDIT HOURS:** 48

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*For additional information, please contact Joe Fruchter, Dean,*  
*School of Business & Hospitality and Natural Resources Programs,*  
*(705) 759-2554, Ext. 688*

**I. COURSE DESCRIPTION:**

This course is an introduction to the identification of common fish and wildlife species in Ontario. Lectures will concentrate on discussing key anatomical features used to identify selected specimens. Interpretative value will be stressed through learning significant points of each species natural history. In the following labs, students will be exposed to slides and specimens where information from the previous lecture will be applied. Topic areas will include: invertebrates, terrestrial insects, freshwater fish, reptiles and amphibians, birds, mammals, and fish & wildlife diseases.

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

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

**1. Identify various invertebrate groups found in the aquatic environment, with special ecological and interpretive value.**

Potential Elements of the Performance:

- Using specimens provided, identify to order over 30 selected aquatic invertebrates, crustaceans and molluscs including troublesome exotics
- Identify major external features, and their functions, of aquatic insects
- Recognize the major types of metamorphosis in insects and identify the stage from selected specimens
- Identify a variety of aquatic insects to orders/families
- Explain significant ecological facts of aquatic insects for interpretative purposes

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

**2. Identify terrestrial insects to order and identify to specific type,**

**selected insects with special ecological and interpretative value.**

Potential Elements of the Performance:

- Identify over 40 terrestrial insects to order
- Identify to specified group/species, selected butterflies and other insects with high interpretative value
- Relate the importance of each of these special groups ecologically and describe their unique biological features

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

**3. Identify over 20 selected sport and commercial freshwater fish, with special ecological and interpretive value.**

Potential Elements of the Performance:

- Using slides and preserved specimens identify major sport and commercial species of freshwater fish including selected exotics
- Relate economic and ecological importance and interest of selected species

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

**4. Identify over 20 selected amphibians and reptiles, with special ecological and interpretive value.**

Potential Elements of the Performance:

- Using slides and recordings identify several Ontario amphibians
- Relate ecological/interpretative importance of amphibians
- Using slides identify several turtles and snakes of Ontario
- Relate ecological/interpretative importance of reptiles

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

**5. Identify important songbirds, waterfowl, raptors and shorebirds, with special ecological and interpretative value.**

Potential Elements of the Performance:

- Using slides and recordings, identify important species from each of the major bird groups from sight and song
- Relate the ecological/interpretative importance of selected species of birds
- Identify exotic species and relate their influence on the native fauna

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

**6. Identify important mammals in Ontario, with special ecological and interpretative value.**

Potential Elements of the Performance:

- Using slides and available specimens, identify important Ontario mammals and indicate changes in range/introductions
- Relate the ecological/interpretative value of mammals

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

**7. Recognize the danger posed by diseases associated with wildlife and fish, and describe the specialized organisms responsible.**

Potential Elements of the Performance:

- Outline the complex life cycles of organisms responsible for such diseases as rabies, Lyme's, and beaver fever
- Recognize the danger of these diseases and outline appropriate preventative methods
- Outline the complex life cycles associated with selected wildlife/fish parasites
- Describe the biology of selected parasite groups
- Relate important and interesting ecological information for interpretative purposes

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

**III. TOPICS:**

1. Invertebrates

**ANIMAL DIVERSITY**

Course Name

**NRT105-3**

Code No.

2. Terrestrial Insects
3. Freshwater Fish
4. Amphibians and Reptiles
5. Songbirds, Waterfowl, Raptors and Shorebirds
6. Mammals
7. Fish and Wildlife Diseases

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

Peterson, R. T. 1980. *A Field Guide to the Birds*. Houghton Mifflin Company, Boston. 384 pp. ISBN # 0-395-36164-8

Burt, W.H. and R.P. Grossenheider. 1976. *Peterson Field Guide to Mammals*. Houghton Mifflin Company, Boston. 289 pp. ISBN #0-395-24084-0

Reid, G.K. 1967. *Pond Life: A Golden Guide*. Golden Press, New York. Western Publishing Company, Inc. Racine, Wisconsin. 160pp. ISBN #0-307-24017-7

**V. EVALUATION PROCESS/GRADING SYSTEM**

Invertebrate Identification Test	15%
Terrestrial Insect Identification Test	15%
Freshwater Fish Identification Test	15%
Amphibian and Reptile Identification Test	15%
Bird Identification Test	15%
Mammal Identification Test	15%
Fish and Wildlife Diseases Identification Test	<u>10%</u>
	100%

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	3.75
B	70 – 79%	3.00

**ANIMAL DIVERSITY****NRT105-3**

Course Name

Code No.

C	60 – 69%	2.00
R (Repeat)	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject areas.	
U	Unsatisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade – limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see Policies & Procedures Manual – Deferred Grades and Make-up).	
NR	Grade not reported to Registrar’s office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has been impossible for the faculty member to report grades.	

**VI. SPECIAL NOTES:****Special Needs:**

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

**Retention of course outlines:**

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post-secondary institutions.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided by the professor. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

Field Trips:

A total of two field trips will be conducted throughout this semester, and are a ***mandatory component*** of this course. Students missing either one of these outdoor learning activities without prior consent of the instructor or without good reason, will automatically be ***penalized 5%*** of their overall course mark, per trip.

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the instructor. Credit for prior learning will be given upon successful completion of the following:

**VIII DIRECT CREDIT TRANSFERS:**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean’s secretary. Students will be required to provide a transcript and course outline related to the course in question.

**ANIMAL DIVERSITY**  
Course Name

8

**NRT105-3**  
Code No.