

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: ANIMAL DIVERSITY
CODE NO. : NRT 142 **SEMESTER:** 1
PROGRAM: PARKS & OUTDOOR RECREATION TECHNICIAN
AUTHOR: DON HALL
DATE: JUNE 2006 **PREVIOUS OUTLINE DATED:** JUNE 2005
APPROVED:

DEAN DATE
TOTAL CREDITS: 2
PREREQUISITE(S): None
HOURS/WEEK: 2

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I. COURSE DESCRIPTION:

This course provides the student with an introduction to the field identification, natural history and ecology of featured animal species. Topics will include aquatic invertebrates, terrestrial invertebrates, freshwater fishes and birds of Ontario. Interpretive values will be stressed through learning significant points of the natural history of each species.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student 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, including troublesome exotics.
- Identify major external features of aquatic insects.
- Recognize the major types of metamorphosis in insects and identify the stage from selected specimens.
- Use natural history-related information pertaining to aquatic insects for interpretive purposes.

This learning outcome will constitute approximately 20% of the course.

2. **Identify terrestrial insects to order and identify selected insects with special ecological importance and interpretive value, to species.**

Potential Elements of the Performance:

- Identify over 30 terrestrial insects to order.
- Identify to specified group or species, selected butterflies and other insects with high interpretive value.
- Explain the importance of each of these special groups ecologically and describe their unique biological features.
- Use natural history-related information pertaining to terrestrial insects for interpretive purposes.

This learning outcome will constitute approximately 20% of the course.

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

Potential Elements of the Performance:

- Using images and preserved specimens, identify major sport and commercial species of freshwater fish, including selected exotics.
- Explain economic and ecological importance of selected species.
- Use natural history-related information pertaining to freshwater fish for interpretive purposes.

This learning outcome will constitute approximately 20% of the course.

4. **Identify common Ontario bird species.**

Potential Elements of the Performance:

- Identify approximately 75 common Ontario birds species, using visual field marks.
- Identify vocalizations of approximately 25 common Ontario bird species.
- 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.

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

III. TOPICS:

Note: These topics will not necessarily be explored as isolated learning units, or in the order presented below:

1. Aquatic Invertebrates
2. Terrestrial Invertebrates
3. Freshwater Fish
4. Birds of Ontario

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Peterson, R. T. and V.M. Peterson 2002. *A Field Guide to the Birds of Eastern and Central North America*. Houghton Mifflin Company.

VanSlack, J. and D. Hall 2006. *Animal Diversity (NRT142) - Study Guide*. Sault College of Applied Arts & Technology. Sault Ste. Marie, Ontario.

ADDITIONAL RESOURCES:

Scott, W.B. and E.J. Crossman. 1973. *Freshwater Fishes of Canada*. Bulletin 184. Fisheries Research Board of Canada. Canadian Government Publishing Centre. Ottawa, Ontario. 966 pp.

Elliott, L. and T. Mack. 1990. *Wild Sounds of the Northwoods (Audio CD)*. NatureSound Studio. Ithaca, New York.

Stokes, D. and L. Stokes. 1997. *Stokes Field Guide to Bird Songs (Audio CDs)* Time Warner Audio Books. New York, New York.

Walton, R.K. and R.W. Lawson. 1990. *Birding by Ear*. Houghton Mifflin. New York, New York.

Sibley, D.A. 2003. *Field Guide to Birds of Eastern North America*. Chanticleer Press, New York.

Sibley, D.A. 2000. *The Sibley Guide to Birds*. Chanticleer Press, New York.

V. EVALUATION PROCESS/GRADING SYSTEM:

The following semester grades will be assigned to students in this postsecondary course:

| | |
|---|------|
| Aquatic invertebrates – tests and assignments | 20% |
| Terrestrial invertebrates – tests and assignments | 20% |
| Freshwater fish – tests and assignments | 20% |
| Birds of Ontario – tests and assignments | 40% |
| Total | 100% |

The following semester grades will be assigned to students in post secondary courses:

| Grade | Definition | <i>Grade Point Equivalent</i> |
|--------------|--|-------------------------------|
| A+ | 90 – 100% | |
| A | 80 – 89% | 4.00 |
| 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:

Students should plan on identification tests virtually every week.

Students may be assigned an "F" grade early in the course for unsatisfactory performance.

Hard hats must be worn on all field trips.

All assignments must be prepared on a word processor. Handwritten assignments will not be accepted.

Bus or van transportation is provided for all field trips away from the main campus. Use of personal vehicles on field trips will only be allowed with the written permission of the instructor. Excepting those with written permission, students who do not travel on the bus or van will not be allowed to participate in field activities, or write field tests.

If a class is missed for a good reason, it is important that the student promptly discuss the absence with his/her instructor. If the absence is not explained within a reasonable period of time (typically one week), the student will receive a grade of zero for any tests missed, and may lose attendance marks as well.

At the instructor's discretion, a rewrite test may be allowed for students combining participation and good attendance with a final mark in the 45 - 50% range. Rewrites will normally consist of a single test (both identification and written material) covering the entire semester's work. The highest grade achievable on a rewrite test is "C".

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 professor and/or the Special Needs office. Visit Room E1101 or call Extension 2493 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 postsecondary 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/program, as may be decided by the professor/dean. 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.

Course Outline Amendments:

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.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

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.