

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: SECOND YEAR FISH & WILDLIFE FIELD CAMP
CODE NO. : NRT 251 **SEMESTER:** 3
PROGRAM: FISH & WILDLIFE TECHNICIAN
AUTHOR: VALERIE WALKER & TERI WINTER
DATE: JUNE 2007 **PREVIOUS OUTLINE DATED:** JUNE 2006
APPROVED:

DEAN **DATE**
TOTAL CREDITS: 2
PREREQUISITE(S): NONE
HOURS/WEEK: N/A

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For additional information, please contact Colin Kirkwood, Dean
School of Technology, Skilled Trades & Natural Resources
(705) 759-2554, Ext.2688

I. COURSE DESCRIPTION:

This 5 day field camp provides a hands-on, practical experience specific to F&W students. Emphasis will be placed on field techniques and surveys to evaluate fish and wildlife populations and assess their habitats (e.g. Ontario Wetland Habitat Evaluation, Ontario Aquatic Habitat (Lake) Inventory Survey, Ontario Stream Assessment Protocol). Students will demonstrate the proper use of field instruments, traps and nets. In addition, the correct procedures for humane capture, handling and marking of wild animals will be practiced. All terrain vehicle operation, safety and basic maintenance will be reinforced.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Correctly use field equipment to assess fish and wildlife populations and habitat

Potential Elements of the Performance:

- effectively use passive and active fish capture techniques such as gill nets, trap nets, minnow traps and seine nets
- correctly set live traps for small mammals inventory.
- properly operate telemetry equipment for determining animal presence and movement
- correctly operate and where necessary, calibrate the following instruments and equipment: oxygen meter, conductivity meter, pH meter, HYDROLAB, secchi disc, Juday plankton net, Eckman dredge.
- safely operate ATVs, outboard motors and canoes under field conditions

2. Use proper field techniques to assess fish and wildlife populations and habitat

Potential Elements of the Performance:

- conduct a lake survey as outlined in the MNR Manual of Instructions - Aquatic Habitat Inventory Surveys
- map aquatic vegetation communities using the methodology described in the MNR Ontario Wetland Habitat Evaluation Manual
- properly demonstrate the Ontario Stream Assessment Protocol field procedures for assessing physical processes and channel

- structure as well as benthic macroinvertebrate assessment
- practice efficient and humane procedures to capture, handle and mark small mammals and fish
- practice wildlife camera trapping techniques
- identify, determine vital statistics (sex , age, weight, maturity) of captured small mammals
- process fish by determining and recording species identification; total length; fork length; weight; sex; stomach contents; state of health; presence of parasites, tags or marks and by removing scales, fin rays cleithrum and/or otoliths for age determination
- properly conduct a King Strip Census to assess a ruffed grouse population
- properly conduct a Peterson Index to estimate local small mammal populations
- select and use appropriate field equipment to collect, document and preserve small littoral fish and aquatic invertebrates

3. Organize field data into neat, accurate and complete standardized field forms or field maps

Potential Elements of the Performance:

- construct an accurate lake physical features map
- construct a accurate aquatic vegetation community map
- neatly and accurately complete a Lake Summary form, Gill Net Catch Record Forms, Field Collection Records, Scale Sample Envelops associated with a lake survey
- neatly and accurately complete field forms associated with the King Census and the Peterson Index
- neatly and accurately complete field forms associated with the Ontario Stream Assessment Protocol
- perform basic calculations to summarized survey data

III. TOPICS:

1. Wetland Habitat Evaluation
2. Lake/Stream Survey
3. Wildlife Population and Habitat Surveys
4. Wildlife Trapping

IV. REQUIRED RESOURCES/TEXTS:

1. Dodge, D.P et al. 1986. Manual of Instructions - Aquatic Habitat Inventory Surveys. Fisheries Branch, OMNR (ONLINE)
2. Kurta, Allen. 1995. Mammals of the Great Lakes Region. Fitzhenry and Whiteside. Toronto. 376 p.
3. Newmaster, S.G., A.G. Harris and L.J. Kershaw. 1997. Wetland Plants of Ontario. Lone Pine Publishing. Edmonton, Alberta. 240 p.
4. OMNR. 1993. Ontario Wetland Evaluation System (Northern Manual). NEST Technical Manual TM-001. 171 p
5. Second Year Fish & Wildlife Field Camp Manual. 2007 Sault College, Sault Ste. Marie
6. Scott W.B. and E.J. Crossman. 1998. Freshwater Fishes of Canada. Galt House Publications Ltd., Oakville, Canada

V. EVALUATION PROCESS/GRADING SYSTEM:

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

<u>Grade</u>	<u>Definition</u>
S	Satisfactory
U	Unsatisfactory
W	Student has withdrawn from the course without academic penalty.

The grade received will be based on attendance and participation. **MANDATORY** attendance and participation is required for all field activities for a satisfactory (S) grade.

NOTE: This course provides an opportunity for field data collection fundamental to mapping exercises and analysis in both Aquatic Surveys (NRT 246-3) and Wildlife Biology & Management (NRT 205-4). Failure to receive a satisfactory (S) grade in F&W Field Camp may seriously hamper success in both Aquatic Surveys and Wildlife Biology & Management.

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 professor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 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.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. 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.

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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.