SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title:	Introduction to Wildlife
Course No:	FOR237-4
Program:	Fish & Wildlife Technician
Semester:	Three
Author(s):	Harold Cooper
Date:	March/97

APPROVED: _____ DATE: Mar 17/97

TOTAL CREDITS:	4
PREREQUISITES:	None
LENGTH OF COURSE:	4 Hours Per Week

INTRODUCTION TO WILDLIFE — FOR237-4

Course Name — Code No.

TOTAL CREDITS: 4
PREREQUISITE(S): None

I. PHILOSOPHY/GOALS:

A practical introductory course to field identification, life histories, habitat requirements and basic management of wildlife species of Ontario. Students will be required to take part in field trips to assist in identification and habitat assessment for birds and mammals. A laboratory component emphasizing anatomy and identification of species is also essential.

II. STUDENT PERFORMANCE OBJECTIVES (LEARNING OUTCOMES):

Upon successful completion of this course the student will be able to:

1. ***Inventory the principle game and non-game wildlife species of uplands and wetlands.***

Potential elements of the performance.

- Identify about 110 common bird species from field studies, field guides, slides, video or study skins
- Compile a "Check-list of Birds of the Sault Ste. Marie Area" for a period of one semester
- Identify 35 species of birds by their vocalizations
- Identify significant mammal species using video, slides, and field guides
- Have the knowledge necessary to key out less common species using a taxonomic key
- Identify the furs of all Ontario fur-bearers
- Identify the skulls of any Ontario mammal using a key
- Identify 20 common herptiles by sight and vocalization
- Identify all waterfowl species by whole specimen and by wings
- Identify the fauna of a community by their tracks or sign (e.g. scats, scrapes)
- Design and perform a small mammal inventory methodology using live traps
- Research methods of inventory of larger mammals and birds
- Participate in a check station for big game species or waterfowl.

(This outcome will constitute 50% of final grade)

2. ***Predict the growth potential for any wildlife population.***

Potential elements of the performance:

- Differentiate between the theoretical patterns of growth in wildlife populations (exponential, J-shaped, Sigmoid) and explain when each is likely to occur
- Describe factors that affect natality, mortality, survivorship and stability of wildlife populations
- Investigate the ecological relationships between individual wildlife species and the forest habitat, emphasizing:
  - forest soils
  - nutrient cycling
  - successional stages
  - impact of fire, timber management practices, and other forest disturbances
- Examine case studies in Ontario such as:
  - wildlife extirpations and extinction
  - impact of hunting, and trapping on populations
  - impact of other factors such as predation, interspecific and intraspecific competition
  - success stories in introductions of exotics and re-establishing endangered and extirpated species

(This outcome will constitute 20% of final grade)

3. ***Evaluate the health status of wildlife populations.***

Potential elements of the performance:

- Dissect and identify anatomical features of mammals and birds to assess "normal" and "abnormal" condition
- Identify common parasites and diseases by diagnosis of symptoms or direct evidence
- Examine physiological indicators of health such as muscle catabolism, fat layers, reproductive indicators
- Analyze parameters of herd health such as average weights, antler growth etc. from deer check station results
- Record observations correctly in an organized, systematic format

(This outcome will constitute 15% of final grade)

4. ***Formulate a wildlife management plan for a wildlife species.***

Potential elements of the performance:

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- Read and summarize the "Wildlife Stategy for Ontario" document to determine future trends in wildlife management
- Summarize the wildlife planning process and solve a simple scenario based on this process
- Review the values of wildlife that must be considered in a management plan, and discuss the possible approaches to wildlife management
- Discuss current management principles and problems that may develop from each.
- Using resources from Media Services, your instructor, the Internet, and other libraries and agencies, conduct research and develop a management plan outline 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
  - Present and future management

  (This outcome will constitute 15% of final grade)

III. TOPICS TO BE COVERED:

1. Wildlife Population growth
2. Wildlife values and management
3. Avian Identification
4. Mammal Identification
5. Reptile / Amphibian Identification
6. Avian anatomy, physiology, and state of health
7. Mammal anatomy, physiology and state of health
8. Wildlife Ecology and habitat requirements

PRACTICAL AND LABORATORY SESSIONS:

1. Dissection and anatomy of birds and mammals
2. Diagnosis of state of health of birds and mammals
3. Identifying waterfowl by whole specimen, wings
4. Identifying bird species of significance
5. Identifying mammals, skulls, and furs
6. Field trip - Inventory of critical habitat features and the ecological relationship between wildlife and the forests and wetlands
7. Field exercise - Small mammal inventory (May be done at field camp)
8. Field exercise- Participation in a deer or moose or waterfowl check station

IV. EVALUATION METHODS:

Assignment due dates will be clearly indicated when assignments are given out and penalties will apply for late submissions. Assignments will be due at noon on the date specified, regardless of class schedule.

After the specified due date and time, the penalty imposed will be a 10% reduction in value per college scheduled class day or portion thereof. After 10 late days the assignment is technically worth zero; however, it is required that it still be submitted. A final grade will be derived from the results of theory and practical tests and at least one assignment (number to be finalized in class).

Theory Tests (all equal value)	Total = 55%
Assignments (all equal value)	Total = 15%
Practical Tests (all equal value)	Total = 30%
	100%

The grading system will be as follows:

A+	=	90-100%	A	=	80-89%
B	=	70-79%	C	=	60-69%
R	=	less than 60%			

Students with a final grade of 55-59% will be permitted to write a comprehensive supplemental exam provided they have completed all assignments, and attendance is satisfactory.

V. LEARNING ACTIVITIES/REQUIRED RESOURCES:

Learning Activities:

The above topics will be covered in class lectures and discussions as well as several field trips. Guest lecturers will be invited.

Resources:

A comprehensive reference list will be distributed to students in first class of semester.

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VI. RESOURCE MATERIAL:

A comprehensive reference list will be distributed to students in first class of semester.

Your Sault College Library will also contain a number of texts and periodicals which could prove useful.

VII. SPECIAL NOTES:

Students with special needs (e.g. physical limitations, visual impairments, learning disabilities, etc.) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary.