SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: ENFORCEMENT AND WILDLIFE MANAGEMENT

Code No.: FOR 338-6

Program: FISH AND WILDLIFE TECHNOLOGY

Semester: VI

Date: MAY 17, 1985

Author: H. A. COOPER

New: ____X____ Revision: _____

OVED: _____ _____

Chairperson Date

ENFORCEMENT AND WILDLIFE MANAGEMENT — COURSE NAME

FOR 338-6 — COURSE NUMBER

CALENDAR DESCRIPTION:

An advanced level course combining theoretical and practical aspects of game and fish legislation and enforcement, as well as other wildlife management tools. Topics include comprehensive study of major acts and regulations and enforcement procedure; biology of important wildlife species; the role of harvesting fish and game; habitat improvement for upland game birds, small game and big game mammals, furbearers and waterfowl; population manipulation; management of protected areas; predator and nuisance species control; and the role of effective public relations in resource management.

METHOD OF ASSESSMENT (GRADING METHOD):

Students will be assessed on the basis of the following:

Term tests (3) — 45%

Practical tests every second week in labs — 40%
- Enforcement problems
- Habitat improvement
- Mammal and Bird anatomy
- Waterfowl whole specimens, wings and in flight
- Bird, amphibia, and reptilia i.d.
- Parasites and diseases
- Firearm anatomy and handling
- Mammals, skull & fur i.d.

Reports - 3 technical style reports — 15%
- position paper
- species biology and management

100%

Grading - for practical tests
A = 85%+ consistently
B = 75-89%
C = 65-74%

- for all else
A = 80%+ consistently
B = 70-70%
C = 60-69%

TOPIC #	HOURS	TOPIC DESCRIPTION	REFERENCES
			(SEE LIST)
1	4	INTRODUCTION TO AND SCOPE OF COURSE	
		- goals and objectives of game management	
		- principles of management	(1) Ch. 1-5
		- tools and techniques	(2) Ch. 1-2
		- factors influencing future management	(8)
II	4	THE ROLE OF HARVESTING FISH AND GAME	
		- objectives of hunting, trapping & fishing	
		- methods of regulating harvests	
		- sustained yield concept	
		- opposition to and alternatives to harvesting	(2) Ch. 14
III	15	LEGISLATION AND ENFORCEMENT	
		- need for enforcement	
		- authority for legislation	(4)
		- types of offences & regulations	
		- rights of private citizens	
		- rules of evidence	
		- power and technique to search, arrest, take statements	
		- procedure for enforcing provincial and Federal offences	
		- record taking & public relations of officers	
		- courtroom procedure	
IV	6	BIOLOGY & REQUIREMENTS OF GAME SPECIES	
			(7)
		- biological requirements & limiting factors affecting important game spp.	(9) (10) (11) (12)

TOPIC #	HOURS	TOPIC DESCRIPTION	REFERENCES
V		HABITAT IMPROVEMENT	
		- methods of enhancing the habitat of:	(2) Ch. 7,8,9 (8)
		a. Upland Game Species	(3)
		- planting - release & rejuvenation of food plants	(1) p. 329
		- artificial feeding - types of cover and their improvement	
		b. Wetland Improvements for Furbearers, Waterfowl, Non-game spp. - water level control - potholes and their formation - wetland farming - other types of enhancement	(14)
VI		POPULATION MANIPULATION	
		- artificial propogation of game spp. - introduction of exotic game spp. - potential and problems - case studies - successes and failures	(2) Ch. 17
VII		ESTABLISHING PROTECTED AREAS	(2) Ch. 15
		Role and Short-comings of - refuges and reserves - preserves - sanctuaries - management areas and wilderness areas	
VIII		PREDATOR AND NUISANCE SPECIES CONTROL	(2) Ch. 13
		- principles of predator-prey relationships - types and extent of predator damage - methods of control	
IX		PUBLIC RELATIONS AS A MANAGEMENT TOOL	(2) Ch. 20
		- role of public relations - extension roles - contentious issues related to P-R	

TEXTS:

(1) Schemnitz, S. S., 1980. Wildlife Management Techniques Manual. The Wildlife Society, Washington, D.C. 686 pp.

(2) Robinson, W. L. and E. G. Bolen, 1984. Wildlife Ecology and Management. Collier MacMillan Canada Inc. 478 pp.

(3) U.S. Forest Service. 1969. Wildlife Habitat Improvement Handbook. U.S.D.A. Washington. 200 p.

(4) Assorted Acts and Regulations

SUGGESTED READINGS:

(5) The Journal of Wildlife Management - 1966-1983. LRC.

(6) Transactions of N. A. Wildlife and Resources Conf. - 1971-1983. LRC.

(7) O.M.N.R. publications on Wildlife spp.

(8) Giles, R.H., Jr. 1978. Wildlife Management. Freeman & Co. San Francisco. 416 pp.

(9) Kortright, F. H., 1967. Ducks, Geese and Swans of N.A. Stackpole, Penn. 476 pp.

(10) Rue, L.L. III, 1980. Fur-Bearing Animals of North America. Crown publ., N.Y. 343 pp.

(11) Ibid, 1978. The Deer of North America. Crown publishers, N.Y. 463 pp.

(12) Schmidt, J. L., and D. L. Gilbert. 1978. Big Game of North America. W.M.I. Stockpole, Penn. 494 pp.

(13) Readings in Wildlife Conservation. 1974. The Wildlife Society, 722 pp.

(14) Linde, A.F., 1969. Techniques for Wetland Management. Department of Natural Resources, Madison, Wisconsin. 156 pp.

ENFORCEMENT AND WILDLIFE MANAGEMENT - PERFORMANCE OBJECTIVES

UNIT I: INTRODUCTION

At the completion of this unit, the student will be able to:

1. State and explain 8 principles of game management
   7 major management tools
   8 factors that future resource planners must consider

UNIT II: ROLE OF HARVESTING

At the completion of this unit, the student will be able to:

1. State the objectives and rationale for harvesting resources.
2. Describe how harvest numbers may be regulated for sustained yield management.
3. State the arguments that the many persons opposed to hunting, trapping or fishing use.

UNIT III: LEGISLATION AND ENFORCEMENT

At the completion of this unit, the student will be able to:

1. Differentiate between - Federal and Provincial offences
   - summary conviction, indictable, and dual procedural offences, giving examples of any of these

2. Solve case studies with respect to enforcement procedure, demonstratin mastery of:

   a. the use and contents of major Acts (including the Game and Fish, Fisheries Act, Migratory Bird Conv. Act, etc.)
   b. the officer's powers and authority

UNIT IV: BIOLOGY AND RELATED MANAGEMENT OF GAME

At the completion of this unit, the student will be able to:

1. Describe biology, habitat, limiting and compensating factors, life history and value of any major game spp. covered.

UNIT V: HABITAT IMPROVEMENT

At the completion of this unit, the student will be able to:

1. Describe the methods and rules for planting of game food or cover plant species.

2. State objectives of water level control, and design a control device for a given water course to achieve these objectives.

3. Describe four types of improvements to protective cover and five methods of improving nesting cover.

4. Demonstrate on a sketch six methods of improving the habitat of any wetland area for fur-bearers or waterfowl.

5. Differentiate between rejuventation and release operations, giving benefits, drawbacks and examples of each.

6. State five advantages and five disadvantages of the artificial feeding of any game species.

7. Describe the habitat requirements and guidelines for habitat improvement for moose, deer, bear, hare and grouse spp., as well as other game and fur bearer spp. as assigned.

UNIT VI: POPULATION MANIPULATION

At the completion of this unit, the student will be able to:

1. Describe theuse of population manipulation as a management tool.

2. Describe the reasons and methods for translocating game spp.

3. Describe the seven major potential problems and benefits of exotic game spp.

UNIT VII: ESTABLISHING PROTECTED AREAS

At the completion of this unit, the student will be able to:

1. Describe the role and short-comings of the protected areas listed in the course outline.

UNIT VIII: PREDATOR AND NUISANCE SPECIES CONTROL

At the completion of this unit, the student will be able to:

1. State eight principles of predator-prey relationships, and apply these principles to the ecological role of predators in the ecosystem.

2. State the major methods of humane predator and nuisance species control, and state the advantages and disadvantages of each.

UNIT IX: PUBLIC RELATIONS AND RESOURCE MANAGEMENT

At the completion of this unit, the student will be able to:

1. Outline the features of an effective public relations program.

2. Submit an acceptable position paper on a topic dealing with a contentious issue related to resource management, ensuring that the principles of a good public relation program are met, in a technical style.

LABORATORY COMPETENCY

In addition to the above objectives, the student must be abl
minimum grade of 65% in the following laboratory-related mate

1. Mammal and bird anatomy.
2. Mammalian and bird identification and classification.
3. Waterfowl identification from whole specimens or wings.
4. Reptile and amphibian identification.
5. Parasite and disease diagnosis.
6. Mammal skull and fur identification.
7. Firearm anatomy and handling.
8. Enforcement problems with practical test.