

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY  
SAULT STE MARIE, ON



COURSE OUTLINE

Course Title: FISHERIES MANAGEMENT

Code No.: NRT 216 Semester: IV

Program: FISH & WILDLIFE TECHNICIAN

Author: Valerie Walker

Date: JAN 2002 Previous Outline Date: JAN 2001

Approved: \_\_\_\_\_

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Dean, Natural Resources

\_\_\_\_\_  
Date

Total Credits: 3 Prerequisite(s):

Length of Course: 3 hrs/week X 16 weeks

Total Credit Hours: 48

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For additional information, please contact Brian Punch, Dean, School of Natural Resources,  
(705) 759-2554, Ext. 688

**I. COURSE DESCRIPTION:**

This course concentrates on management strategies for important sports and commercial species of fishes of the Great Lakes Region. Emphasis will be placed on harvest control, habitat manipulation and fish stocking as management tools. Collection of aging structures, their preparation and interpretation will be performed. In addition, various software fisheries data will be analysed and interpreted using appropriate software.

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

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

**1. Outline the history and importance of Ontario's fisheries resource**

***Potential Elements of the Performance:***

- *summarize the commercial fishing industry in the Great Lakes since the early 1900's*
- *discuss the economic value of the commercial fishery, past and present*
- *detail the importance of recreational fishing to residences of Ontario*

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

**2. Discuss the factors threatening Ontario's fisheries resource**

***Potential Elements of the Performance:***

- *list and describe the factors resulting in declining aquatic ecosystem health*
- *outline issues regarding the loss of fish habitat*
- *detail the history of fisheries exploitation in the Great lakes*
- *describe the various shareholders in the fisheries resource and their conflicts*
- *list the various exotic species which have invaded the Great lakes and their impact on indigenous fish stocks*

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

**3. Outline the various strategies for the management of Ontario's fisheries**

***Potential Elements of the Performance:***

- state the goals and strategic management actions to resolve Ontario's important fisheries management issues (SPOF II)
- outline and discuss the three (3) general approaches to fisheries management
- list and briefly discuss five methods of fisheries habitat enhancement
- argue the pro's and con's of fish stocking as a management tool
- list the factors affecting natality, mortality and stability
- discuss the indicators of over exploitation
- list and explain various management prescriptions to reduce the harvest of a given fishery
- outline the quota system for the management for the commercial fishery in the Great Lakes

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

**4. Describe various methods used in Ontario to assess the status of a fish population.**

***Potential Elements of the Performance:***

- discuss the various methods of estimating fish populations
- describe Ontario's three provincial index netting standards (Spring Littoral Index Netting, Fall Walleye Index Netting and Nearshore Community Index Netting) to assess relative abundance
- use appropriate software to interpret various fisheries data
- outline techniques for the assessment of fish growth and fish age
- discuss the role of fisheries as a reflection of the health of the environment

*This learning outcome will constitute approximately 35% of the course.*

**III. TOPICS:**

1. The Importance of Ontario's fisheries
2. Factors threatening Ontario's fisheries
3. Fisheries Management
4. Fisheries Assessment

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

Fisheries Biology & Management (NRT 216) Study Guide,  
Sault College of Applied Arts & Technology, Sault Ste. Marie.

**V. EVALUATION PROCESS/GRADING SYSTEM**

<b>Unit Tests</b>	<b>30%</b>
<b>Assignments/Labs</b>	<b>45%</b>
<b>Presentation</b>	<b><u>25%</u></b>
	<b>100%</b>

Lab assignments and report values will be reduced at a rate of 10% per day for late submissions for a period of 5 days after the due date. After 5 days lab assignment/report value will be zero.

All labs and assignments must be submitted regardless of lateness to pass the course. Labs and/or tests missed without documented health or personal reasons will be valued at zero.

**Method of Assessment (Grading Method) The following letter grade will be assigned:**

A+	Consistently outstanding	(90% - 100%)
A	Outstanding achievement	(80% - 89%)
B	Consistently above average achievement	(70% - 79%)
C	Satisfactory or acceptable achievement in all areas subject to assessment	(60% - 69%)
R	Repeat -- The student has not achieved he objectives of the course and the course must be repeated.	(Less than 60%)
CR	Credit exemption	
X	A temporary grade, limited to situations with extenuating circumstances, giving a student	

additional time to complete course requirements.

**VI. SPECIAL NOTES:**

Special Needs

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

Plagiarism

Students should refer to the definition of “academic dishonesty” in the “Statement of Students 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.

Advanced Standing

Students who have completed an equivalent post-secondary course should bring relevant documents to the Coordinator, Natural Resources Programs.

Retention of Course Outlines

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

Substitute course information is available at the Registrar’s Office.

**VII. PRIOR LEARNING ASSESSMENT:**

Please contact the Prior Learning Assessment Office (E2203) for further information.

FISHERIES MANAGEMENT  
**COURSE NAME**

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NRT 216-3  
**CODE NO.**