

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



Sault College

**COURSE OUTLINE**

**COURSE TITLE:** NATURAL RESOURCE PLANNING

**CODE NO. :** FOR 300 **SEMESTER:** 5

**PROGRAM:** INTEGRATED RESOURCE MANAGEMENT

**AUTHOR:** H.A. Cooper

**DATE:** JUNE 1999 **PREVIOUS OUTLINE DATED:** May 1998

**APPROVED:**

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DEAN

\_\_\_\_\_  
DATE

**TOTAL CREDITS:** 3

**PREREQUISITE(S):** N/a

**LENGTH OF COURSE:** 16 weeks

**TOTAL CREDIT HOURS:** 48

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*For additional information, please contact  
School of Natural Resources  
(705) 759-2554, Ext. 687*

- I. **COURSE DESCRIPTION:** A project oriented course in which the student will select a natural area, and then inventory, appraise and prepare a land use plan for that area. Study locations may be selected by the student to accommodate his/her area of interest or expertise. An emphasis will be placed on integrated resource use in the resulting management plan. An oral presentation and a written report are required for evaluation. Potential projects include: areas suitable for day-use parks, interpretive trails, marsh management, woodlot management, stream management, upland game management, timber management and sugar bush management.

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

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

1. *Perform a complete inventory of biotic and abiotic components of a study area consisting of several ha of land or water base.*

Potential Elements of the Performance:

- Select a study area of interest
- Locate aerial photographs, contour maps, stand maps and any other pertinent background information related to the area
- Determine the most suitable access to the area.
- Locate the area from the ground and attempt to establish boundaries by survey stakes, historical fence rows etc.
- Using acceptable survey methods, inventory the soil, geological features, hydrological features, flora and fauna of the area.
- Prepare a complete inventory list .
- Present the results of this inventory in an interview and in a management plan.

(This outcome will constitute 25% of the final grade)

2. *Prepare a detailed development plan and a written report regarding the potential of the study area.*

Potential Elements of the Performance:

- Develop local contacts including municipality personnel, local residents to research the natural and settlement history of the study area

- Use all available libraries and reference materials to determine the biological and ecological requirements of the biotic components of the study area that will be included in the management plan.
- Prepare management goals for your study area
- Assess the potential of the study area for the proposed management goals
- Discuss any enhancements that will be required and their feasibility.
- Estimate costs for all activities.
- Recommend amount and types of development to occur in the area.

(This outcome will constitute 30% of the final grade)

3. ***Prepare a promotional brochure designed to attract other people to the study area.***

Potential Elements of the Performance:

- Using reference material based on interpretation techniques and sample brochures, prepare an attractive “lure” brochure for your study area

( This outcome will constitute 10% of the final grade)

4. ***Present a management proposal orally to the rest of the class and/or outside guests to promote the study area as a site of ecological significance***

Potential Elements of the Performance:

- Prepare maps suitable to describe area to a technical/ professional audience
- Display photographs, 35mm slides or video materials related to the area that will showcase the proposal
- Assemble a promotional display that will effectively describe the area and the proposed developments to the audience
- Present the final management plan to an audience in a professional manner, using appropriate aids.
- Attend presentations of other groups to learn from their strengths and weaknesses

(This outcome will constitute 35% of the final grade)

**III. TOPICS:**

1. Natural resource inventory methods and procedures
2. Presentation methods for management plans— oral presentations
3. Presentation methods – Written reports that are area-specific
4. Promotional brochure and display preparation
5. Methods of research
6. Assessment of peer presentations

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

1. Map set for the study area (available from the Technician's office)
  2. Field notebook
  3. Field survey equipment (Compass, appropriate safety equipment)
- Although no one text is required, a multitude of suggested references will be handed out in class. Searching the Web for current research on selected species/areas of research are recommended

Weekly progress reports/attendance (see below*)	- 20%
Progress interviews	- 15%
Oral presentation	- 20%
Promotional brochure	- 10%
Written report	- 35%

Attendance policy: After week 2, there will be no regularly scheduled classes until student presentations commence in week 8. However, students will be expected to be working on their projects at the College or on site during scheduled class time. Each week, students will sign in with the instructor and indicate where they will be located and what they are doing. Attendance is required at all scheduled classes and student presentations.

A course schedule will be handed out in the first class to indicate when compulsory classes will take place. A penalty of (-5 ) will be imposed for each missed compulsory session.

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

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
R (Repeat)	59% or below	0.00
	Credit for diploma requirements has been awarded.	
CR (Credit)		
S	Satisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies &amp; Procedures Manual - Deferred Grades and Make-up</i> ).	
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has been impossible for the faculty member to report grades.	

**VI. SPECIAL NOTES:**

The above topics will be covered in class lectures and discussions. In this course, students will be expected to use their knowledge of natural resources, survey procedures and problem-solving skills to come up with a comprehensive plan. The students will work on their own to a large degree, with the instructor acting as mentor and facilitator.

Although there is no one set plan of action that must be adhered to, the "*suggested procedure*" below may assist you in getting the project started.

**B. Suggested Procedure or "Plan of Attack" :**

1. *Selection of area by a multi-disciplined team of students.* Study area selection will

depend on:

a. Your area (s) of interest, whether it is wildlife related, interpretation, outdoor recreation, or forest management. Again an integrated approach should be used where possible.

b. Familiarity with the area.

c. Transportation to and from the area.

2. *Research phase:*

a. Search out the latest and best reference material from libraries, faculty etc.

b. Examine a few plans from the past to see different approaches to these projects.

c. Consult with faculty, outside contacts from other agencies

**CAUTION:** Please use discretion when asking for assistance from outside agencies and other faculty. Book interviews well in advance and try not to "pester" them. If you are meeting them, have well thought-out questions in advance and don't try to get them to do your thinking for you.

3. *Site Inventory and appraisal:*

The method of inventory will depend on your expertise and what you are proposing. In any case your final plan should include:

a. A brief history of the area

b. Geology/ soils

c. Climate

d. Significant flora

What is present that can be utilized in your plan?

What is absent that might be compensated for in your plan?

Is further research required to determine this?

- e. Significant fauna
- f. Rare and sensitive species
- g. Sensitive areas (e.g. archeologically significant etc.)
- h. Physical , biological or sociological features that will impact your study area
- i. Forest description from FRI maps, cruising if important to your plan.

4. *Inventory analysis:*

What is present that can be utilized in your plan?

What is absent that might be compensated for in your plan?

Is further research required to determine this?

5. *Progress Interviews:* (week 6)

By this time, you should have a fairly clear idea of what is on your study site, and some ideas about what can be done with the resources present.

Interviews will be scheduled on or about the 6th and 9th week of classes to determine student progress, assist in solving problems etc. For these interviews, please bring a one -two page summary that includes the following:

- A project title for your proposal  
e.g. "*A Day use plan for winter recreational activities in the Heyden lakes area*"
- Rough maps that show: Access to your area  
Area boundaries  
Pertinent features and what has been inventoried
- Field notes and inventory list.
- A project outline -Goals and objectives
- Any other information that will show your effort and progress (e.g. photos, contacts list)
- A list of questions, if you have any.

**BE PREPARED. This will be an opportunity to ask the instructor questions and bounce some ideas off the instructor as well.**

6. *Consider alternate plans* for what can be done to improve the area.

7. *Draw up a detailed development plan*, beginning with goals and objectives for the area.

Remember that you will be promoting the area for some resource use(s) and want to draw the area to the attention of the public.

video materials or anything else that will add credence and interest to your presentation. The audience will be acting as an outside agency with a vested interest in your project area, and to be convinced (or not convinced) of the worth of your proposal.

9. *Review the critiques of audience* to determine if changes in final plans are suggested.

10. *Attend the presentations of other students* to critically analyze their performance and learn from their techniques.

11. *Complete the written report and submit.*

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 post-secondary institutions.

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 instructor. Credit for prior learning will be given upon successful completion.

**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.