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

# **COURSE OUTLINE**

COURSE TITLE: NATURAL RESOURCE PLANNING

CODE NO.: FOR300-3

SEMESTER: 5

PROGRAM: INTEGRATED RESOURCE MANAGEMENT

AUTHOR: HAROLD COOPER

DATE: MAY 1997

PREVIOUS OUTLINE DATED: AUGUST 1995

APPROVED:

SCHOOL OF BUSINESS & HOSPITABLITY, NATURAL RESOURCES PROGRAMS &

**COMPUTER PROGRAMS** 

DATE:

97-05-26

TOTAL CREDITS: 3

PREREQUISITES:

LENGTH OF COURSE: 3 hrs/week - 16 weeks

TOTAL CREDIT HOURS: 48

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#### I. PHILOSOPHY/ GOALS:

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, and stream management.

# II. STUDENT PERFORMANCE OBJECTIVES (LEARNING OUTCOMES):

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

- 1. Perform a complete inventory of biotic and abiotic components of the study area
- 2. Prepare a detailed development plan and a written report regarding the potential of the study area.
- 3. Present a complete management proposal orally to the rest of the class and/or outside guests to promote the study area as a site of ecological significance.

#### III. POTENTIAL ELEMENTS OF THE PERFORMANCE:

- 1. Perform a complete inventory of biotic and abiotic components of the study area.
  - 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.

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

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- 2. Prepare a detailed development plan and a written report regarding the potential of the study area.
  - 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 35% of the final grade)

- 3. 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.
  - 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 plant to an audience in a professional manner, using appropriate aids.

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

#### IV. Evaluation Methods:

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. 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.

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#### GRADING SYSTEM:

A+ => 90% consistently A = 80 - 90% consistently B = 70 - 80% consistently

C = 60 - 69% consistently R = less than 60 % overall

All marks are cumulative throughout the semester.

# V. LEARNING ACTIVITIES/ REQUIRED RESOURCES:

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 under Part VI -Special notes may assist you in getting the project started.

# Required Resources:

- 1. Map set for the study area (available from the Technician's office)
- 2. Field notebook
- 3. Field survey equipment (Compass, appropriate safety equipment)

#### Other resources:

Numerous reference materials will be required for the research phase of this project; students will be using library sources, personal contacts and the Internet to collect required information.

#### **VI. SPECIAL NOTES:**

# A. Progress Interviews:

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:

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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

3. Field notes and inventory list.

4. A project outline -Goals and objectives

- 5. Any other information that will show your effort and progress (e.g. photos, contacts list)
- 6. A list of questions, if you have any.
- B. Suggested Procedure or "Plan of Attack":
- 1. Selection of areas 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 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
- e. Significant fauna
- f. Rare and sensitive species

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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:

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.

Requirements for the interview are listed above in A. 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.
- 8. Present your plan in seminar or workshop style, using maps, overheads, slides, 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.
- Attend the presentations of other students to critically analyze their performance and learn from their techniques.
- 11. Complete the written report and submit.

### 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.

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# **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 (H0240) for further information.