

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

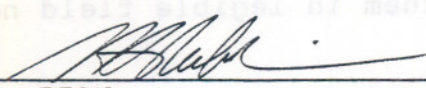
COURSE TITLE: NATURAL RESOURCE PLANNING

CODE NO.: FOR 300-3 SEMESTER: 6

PROGRAM: FISH AND WILDLIFE, PARKS AND RECREATION,
AND FOREST MANAGEMENT TECHNOLOGY

AUTHOR: H. A. COOPER

DATE: JUNE 1990 PREVIOUS OUTLINE DATED: JUNE 1989

APPROVED:  June 7 1990.
DEAN DATE

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TOTAL CREDIT HOURS: 3

PREREQUISITE(S): None

I. PHILOSOPHY/GOALS:

A project oriented course in which the student inventories, evaluates and prepares a land-use plan for a natural area. Areas for study may be selected by the student to accommodate his/her area of interest. An emphasis is placed on integrated resource use in management of any natural area.

An oral presentation and written report are required for evaluation. Possible projects include day-use parks, interpretive trails, marsh management, trout stream management, upland game management plans, experimental forest or private woodlot management plans.

II. STUDENT PERFORMANCE OBJECTIVES:

The student will select an approved natural area and on that area will be required to:

1. Perform a complete inventory of all pertinent flora, fauna, soil and geological features, natural history and climate, and existing land use.
2. Analyze the features found with respect to significance to their project, and briefly compile them in legible field notes and plot them on maps.
3. Research data regarding the species and area managed to assess the suitability of the prescribed area for these species or activities.
4. Prepare a detailed development plan complete with maps and specifics of all proposals and alternatives, to be presented in proper technical manner.
5. Prepare a promotional brochure to describe the area and the proposed developments there to the public (ie. other students).
6. Present the final management plan to an audience in a professional manner, using appropriate aids.

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III. TOPICS TO BE COVERED:

1. Inventory procedures.
2. Methods of literature research.
3. Preparation of development plans.
4. Student presentations.

IV. EVALUATION METHODS:

Weekly progress reports and attendance	- 15%
Progress interviews	- 10
Short report on species or area	- 15
Oral presentation of plan	- 25
Written version of plan	- 25
Promotional brochure describing area	- 10
	<u>100%</u>

- Grades:
- A+ = 85%+ consistently
 - A = 80 - 84%
 - B = 70 - 79%
 - C = 60 - 69%
 - I = less than 60%

Attendance Requirements:

Students will be expected to check in every week **PRIOR TO CLASS TIME** even if there is not a regular class scheduled. There will be a course time-table available to indicate which classes are compulsory as far as classroom attendance is concerned.

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IV. EVALUATION METHODS: (Cont'd)

On all other weeks, it is your responsibility to fill in your activity in the attendance book. Activities could include the following:

- Field work at -
- Research at library
- Consultation with -
- Map work
- Other research

Attendance will also be expected for other presentations. Penalties for neglecting to check in or missing **EACH SEMINAR:**

- 1 absence - 0
- 2 " - 5%
- 3 " - 10%
- 4 " - 15%
- 5 " - 25%

Penalty for late reports - One (1) grade per day. After 3 days, a final grade of zero (0) will be assigned to the report. If no report is submitted, a grade of "R" will be assigned.

V. REQUIRED STUDENT RESOURCES:

None. Reference list of library materials will be assigned to students.

VI. SPECIAL NOTES:

PROGRESS REVIEW

Interviews will take place on or about the third week and the sixth week of classes. A schedule will be posted.

For these interviews, please bring the following:

1. A project title for your proposal eg. A day-use plan for Heyden Lakes area recreational activities.
2. Rough maps, showing access to your area and rough locations of pertinent features.

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VI. SPECIAL NOTES: (Cont'd)

3. Inventory lists (see inventory hand-out).
4. A project outline.
5. Any other information you feel is necessary to evaluate your effort and progress. eg. photos, slides, etc.
6. A list of questions, if you have any.

SHORT REPORT

Due ONE WEEK after your first progress interview.

This report should cover either:

- a. Requirements, limiting factors and compensating factors of the fauna and/or flora you will be managing.
or
- b. Potential of your area for particular species to be managed or for recreational activity. The requirements, limiting factors and compensating factors that the environment imposes on the species or activity should be included.

The report need not be long, but should be well researched and written up in proper technical fashion. The instructors in your specialty area may be able to assist you in selecting up-to-date materials for research on your topic.

** Remember to stress **integrated** resource use.

SUGGESTED PROCEDURE: (Plan of Attack)

The development of your plan will include the following, generally in this sequence.

1. Selection of Study Area by a "Team" of Students
 - a. Your area of interest eg. hiking trails, interpretaton, cold-water fisheries, waterfowl, upland game etc.

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VI. SPECIAL NOTES: (Cont'd)

1. b. Familiarity with the area.
- c. Transportation to and from the area.

A map package for each of the listed areas is available from the instructor.

2. Site Inventory and Appraisal

There are various guidelines or methods for inventorying an area. In most cases, you will include:

- a. a brief history of the area
- b. geology/soils description
- c. climate
- d. significant flora
- e. significant fauna
- f. rare and sensitive species
- g. any physical or biological features that will influence your plan eg. social factors, public attitudes

Your rough maps should be used to locate the above features. Some of the above information will be obtained from your research or interviews. The rest will be from on-site observation.

3. Inventory Analysis

What features are significant to your plan?

4. Research Phase

Use reference material to make yourself aware of the requirements, limitations etc. of your type of proposed activity. Consult other plans for examples of what is required.

Consult your instructors and agencies for assistance BUT use discretion. Have specific questions prepared for these people. Try some ideas on them, but be sure these are feasible and not ridiculous.

5. Consider alternate plans for what can be done with the area.

6. Major consultation

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VI. SPECIAL NOTES: (Cont'd)

Progress interviews - By this time you should have a fairly clear idea of what you intend to do. BE PREPARED. SEE REQUIREMENTS FOR THIS INTERVIEW.

- 7. Draw up a detailed development plan.
- 8. Present your plan in a seminar style, using slides, maps, overlays and anything else that will add credence and interest to your presentation. The audience will act as an outside agency to be convinced (or not convinced) of the worthiness of your presentation.
- 9. Prepare a promotional brochure (see samples).
- 10. Attend the seminars of your classmates and be prepared to give a critical analysis based on content, organization and presentation of each.

LIST OF PRESELECTED AREAS

- 1. Crystal Creek below Weyerhaeuser Road (Tarentorus Twp.)
.coldwater stream management
- 2. Crystal Creek from Crystal Falls to Minie Ha Ha Falls (Tarentorus Twp.)
.biological interpretive trail
- 3. Heyden Lakes area, top of Mile Hill (Aweres Twp.)
.upland game-mgmt.
.winter recreational area
- 4. Robertson Creek area, including south side of King Mt. (Van Koughnet Twp.)
.mountain climbing park and scenic trail
.coldwater stream management
- 5. Sill Lake (Van Koughnet Twp.)
.winter day-use recreational area
- 6. Echo Bay Marsh (MacDonald Twp. and Garden River Reserve)
.waterfowl management
.marshland interpretive management

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VI. SPECIAL NOTES: (Cont'd)

7. Big Point, St. Joseph Island (Hilton Twp.)
.deer yard and range management
8. Stokely Creek area (Haviland Twp.)
.coldwater stream management
9. Cave area (Johnston Twp.)
.cave park and interpretive trail
10. Goulais River rapids (Deroche Twp.)
.river basi day-use park
.flood plain management and fish spawning
11. Chippewa Falls area (Tilley Twp.)
.roadside picnic area and scenic trail-stream mgmt.
.grouse management
12. Chippewa River (Tupper Twp.)
.erosion control and stream management
.picnic and swimming area
13. The Chutes, Goulais River (Twp 23, Range 10)
.day-use area and geological interpretive trail
14. Anderson Marsh
.marsh management for fur-bearers and/or waterfowl
15. Private woodlots (Jocelyn and St. Joseph Twp.)
Several Choices
.forest/multiple use management
.includes maple syrup operations, clear-cuts fuel wood lots
16. Gros Cap, north of Bluewater Inn and west of Marshal Drive
(Prince Twp.)
.geological interpretive and scenic trail
.associated with present voyageur trail
17. Pumpkin Point Marsh (Lair Twp.)
.waterfowl and marsh bird management
18. Pointe Aux Pins Bay shorline, west of Carpin Beach (Parke Twp.)
.historical interpretive centre and associated ruins

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VI. SPECIAL NOTES: (Cont'd)

19. Bruce Station Area (Plummer Add'l Twp.)
.an automobile interpretive route presenting local history and rural architecture
20. Bone Creek and upper end Robertson Lake (Van Koughnet Twp.)
.general interpretive trail and day-use park
21. Diamond Lake Deer Yard (Johnson Twp.)
.deer yard and range management
22. Whitefish Island (Sault Rapids)
.historical interpretive centre
23. St. Mary's Island (Sault Rapids)
.day-use picnic area playground
24. Richardson Creek, below Cooper's Dam (St. Joseph Twp.)
.trout stream management
.grouse and pheasant management
25. Mark's Bay Deer Yard
.winter range management for deer
26. Ottertail Lakes (Plummer Twp.)
.waterfowl management
27. Sault College Woodlot
.multiple use plan for day use or small game management
28. Any open range or meadow-land for private enterprise day-use park or game farm or preserve on approved private lands.
29. Neff Lake (Prince Twp.)
.can be one of several topics
30. Camp McDougall Property, Thessalon area
.multiple use with emphasis on recreational use
31. Portlock Harbour, Mouth of Stobie Creek, (Johnson Twp.)
.marsh management
32. Mile Hill area, (Aweres Twp.)
.forest management

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VI. SPECIAL TOPICS
 18. Bruce... (Van Koughnet Twp.)
 - an...
 - tour...

19. Bone Creek... and Robertson Lake (Van Koughnet Twp.)
 - general... trail and day-use park

20. Diamond Lake... (Johnson Twp.)
 - deer yard and range management

21. Whittier Island (Sault Rapids)
 - historical interpretive center

22. St. Mary's Island (Sault Rapids)
 - day-use picnic area playground

23. Richardson Creek, below Cooper's Dam (St. Joseph Twp.)
 - trout stream management
 - grouse and pheasant management

24. Mark's Bay Deer Yard
 - winter range management for deer

25. Ottertail Lakes (Pimmar Twp.)
 - waterfowl management

26. Sault College Woodlot
 - multiple use site for day use or small game management

27. Any open range or meadow-land for private enterprise day-use park
 or game farm or preserve on approved private lands.

28. Wolf Lake (Prince Twp.)
 - can be one of several topics

29. Camp McDougall Property, Thessalon area
 - multiple use with emphasis on recreational use

30. Portlock Harbour, Mouth of Stobie Creek, (Johnson Twp.)
 - marsh management

31. Wolf Hill area, (Awater Twp.)
 - forest management