SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

Sault College

COURSE OUTLINE

COURSE TITLE: Software For Fish And Wildlife

CODE NO. : NRT 201   **SEMESTER:** 3

PROGRAM: Fish and Wildlife Technician

AUTHOR: Don Hall

DATE: Dec 03   **PREVIOUS OUTLINE DATED:** Dec 02

APPROVED:

_____   _____
                            DEAN   **DATE**

TOTAL CREDITS: 2

PREREQUISITE(S): EDP 122

LENGTH OF COURSE: 16 WKS   32
                        TOTAL CREDIT HOURS:

I.   COURSE DESCRIPTION:

This course is intended to build on computer skills acquired in earlier courses by covering software designed specifically for fisheries and wildlife biology and management. Students will gain a deeper understanding of global positioning systems, file management and fish and wildlife applications for presentation managers. Use of spreadsheets to format and analyze field data is covered in some detail. Software specific to fish and wildlife management such as the Ontario Deer Model, population modeling software, and aquatic/terrestrial ecosystem assessment programs will be included. Students are assumed to be competent in the use of word processors.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1.   ***Use the Global Positioning System to determine UTM coordinates and to navigate on water-bodies and in forested areas.***

     Potential Elements of the Performance:
- Understand the functional elements of a GPS receiver.
- Use a GPS receiver to determine UTM coordinates in the field.
- Use a GPS receiver along with a compass to navigate in a forested area.

     This learning outcome will count for approximately 10% of the final mark

2.   ***Manage diskettes and files using Windows Explorer.***

     Potential Elements of the Performance:
- Develop a structured approach to managing files and folders
- Open the Windows Explorer
- Create folders
- Copy files between folders
- Move files between folders
- Save files to appropriate folders
- Delete files and folders

     This learning outcome will count for approximately 5% of the final mark

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3. ***Use a presentation manager to design an effective fish and wildlife related computer-based slide presentation.***

   <u>Potential Elements of the Performance</u>:
   - Choose an appropriate fish and wildlife related theme
   - Storyboard an effective presentation
   - Use text, graphics and charts to create an effective presentation

   This learning outcome will count for approximately 15% of the final mark.

4. ***Effectively use current software applications specific to fish and wildlife management.***

   <u>Potential Elements of the Performance</u>:
   - Gain an understanding of specialized software used by government agencies such as:
     - Ontario Deer Model
     - Deercamp
     - Creelsys

   This learning outcome will count for approximately 15% of the final mark.

5. ***Use a spreadsheet to format and present scientific data related to fish and wildlife applications.***

   <u>Potential Elements of the Performance</u>:
   - Analyze field notes to determine formatting and analysis needs.
   - Load field data from tally sheets or from hand-held computers onto spreadsheets
   - Use formatting features to present data in an effective, professional manner.
   - Work with dates and times in an effective manner.
   - Use scientific notation in data analysis
   - Use sorting, filtering, functions, formulas, charting, pivot tables and other spreadsheet features to effectively analyze scientific data

   This learning outcome will count for approximately 35% of the final mark.

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6.   ***Design and use a simple Access database to store data collected during lake or stream surveys.***

      Potential Elements of the Performance:
      • Design an effective table to store data, using appropriate data types
      • Load data into table

      This learning outcome will count for approximately 5% of the final mark

7.   ***Use database filters to effectively isolate useful information from lake/stream survey or urban tree survey databases.***

      Potential Elements of the Performance
      • Examine data to determine what useful information it contains
      • Design queries appropriate to the task at hand

      This learning outcome will count for approximately 5% of the final mark

8.   ***Use a database report generator to concisely and professionally present data.***
      Potential Elements of the Performance

      • Examine data available to determine what information should be displayed
      • Use a database report generator to design and print concise, professional reports

      This learning outcome will count for approximately 5% of the final mark

9.   Explain the function of database manager features including tables, queries, forms, and reports

      This learning outcome will count for approximately 5% of the final mark

III.   TOPICS:
      1.   Global Positioning Systems
      2.   File Management using Windows Explorer
      3.   Fish and Wildlife Applications for Presentation Software
      4.   Spreadsheets for Fish and Wildlife – Data Analysis and Presentation
      5.   Specialized Fish and Wildlife Software
      6.   Introduction to Database Software for Fish and Wildlife

IV.　REQUIRED RESOURCES/TEXTS/MATERIALS:

1. At least three IBM formatted 1.44Mb high density diskette
2. One CD-R writeable compact disks
3. Software for Fish and Wildlife NRT201 Study Guide

V.　EVALUATION PROCESS/GRADING SYSTEM:

Tests	60%
Assignments	40%
Total	100%

Note: There will be two unit tests; students must achieve a grade of at least 50% in <u>both</u> unit tests. If the student has passed at least one of the two unit tests, a rewrite may be allowed in the unit not passed

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

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00

CR (Credit)	Credit for diploma requirements has been awarded.
S	Satisfactory achievement in field /clinical placement or non-graded subject area.
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

Notes:
- Attendance is very important. Attendance will be recorded one way or another, in every class.
- Students may be assigned an "F" grade early in the course for unsatisfactory performance.
- Students should bring at least one blank diskette to every class.
- Communications will frequently be posted in WebCT. Students are expected to check WebCT email and discussion postings at least 3 times each week.
- Your instructor reserves the right to modify the course, as he/she deems necessary to meet the needs of students.

VI.   SPECIAL NOTES:

Special Needs:
If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 493 so that support services can be arranged for you.

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 postsecondary institutions.

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Plagiarism:
Students should refer to the definition of "academic dishonesty" in *Student 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/program, as may be decided by the professor/dean. 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.

Course Outline Amendments:
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.

<include any other special notes appropriate to your course>

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

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.