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 Conservation Technician

AUTHOR: Valerie Walker/Erwin Goertz

DATE: Dec. 08   **PREVIOUS OUTLINE DATED:**   Jan '08

APPROVED: "B. Punch"

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                                   Chair   **DATE**

TOTAL CREDITS: 2

PREREQUISITE(S):   None

LENGTH OF COURSE: 2 hrs/week   32

TOTAL CREDIT HOURS:

_____ _____
Course Name Code No.

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 PowerPoint to design an effective fish and wildlife related computer-based slide presentation.***

   Potential Elements of the Performance:
   - 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 10% of the final mark.

2. ***Use a Global Positioning System receiver and related software to determine UTM coordinates, to collect both track logs and waypoints and to create appropriate maps.***

   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 to collect track logs while delineating ecosystem boundaries
   - Use a GPS receiver to collect waypoints in the field

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

3.   ***Use Personal Digital Assistants (PDA) to gather field data.***

      Potential Elements of the Performance:
      - Use a personal digital assistant to gather data in the field

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

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

      Potential Elements of the Performance:
      - Gain an understanding of specialized software used by government agencies such as the Ontario Deer Model, Deercamp or Creelsys.

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

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

      Potential Elements of the Performance:
      - 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.
      - Effectively design and use data entry forms
      - Use sorting, filtering, functions, formulas, charting, pivot tables and other spreadsheet features to effectively analyze scientific data

      This learning outcome will count for approximately 25% of the final mark.

6. ***Understand the principles of database design, and the uses of database managers.***

   Potential Elements of the Performance:
   - Demonstrate an understanding of fields and records
   - Demonstrate an understanding of database table design
   - Demonstrate an understanding of the use of database queries
   - Demonstrate an understanding of the use of database reports

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

7. ***Complete a research project detailing specific fish/wildlife software.***

   Potential Elements of the Performance:
   - Demonstrate the ability to search the internet
   - Demonstrate an understanding of researched software

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

III. TOPICS:
1. Fish and Wildlife PowerPoint
2. Global Positioning Systems
3. Introduction to Database Software for Fish and Wildlife
4. Use of personal Digital Assistants in field data collection
5. Spreadsheets for Fish and Wildlife – Data Analysis and Presentation
6. Specialized Fish and Wildlife Software

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

1. 2 Gb (or higher) USB Memory Stick

V. EVALUATION PROCESS/GRADING SYSTEM:

Tests	50%
Assignments	50%
Total	100%

Note: Students must pass the Excel Test in order to pass the course. If the Excel Test is not passed on the first attempt, a rewrite may be

allowed, late in the semester. Rewrites will only be allowed for students with good attendance.

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.
- Your instructor reserves the right to modify the course, as he/she deems necessary to meet the needs of students.

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VI.   SPECIAL NOTES:

Disability Services:
If you are a student with a disability (e.g. physical limitations, visual
impairments, hearing impairments, or learning disabilities), you are
encouraged to discuss required accommodations with your professor
and/or the Disability Services office. Visit Room E1101 or call Extension
2703 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.

Communication:
The College considers **WebCT/LMS** as the primary channel of
communication for each course. Regularly checking this software platform
is critical as it will keep you directly connected with faculty and current
course information. Success in this course may be directly related to your
willingness to take advantage of the ***Learning Management System***
communication tool.

Plagiarism:
Students should refer to the definition of "academic dishonesty" in *Student
Code of Conduct*. 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.

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VII.   PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.

Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.