SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

Sault College

COURSE OUTLINE

COURSE TITLE: Web GIS

CODE NO. : GIS 416   **SEMESTER:** W2005

PROGRAM: Geographic Information Systems Applications Specialist

AUTHOR: M.VanLandeghem

DATE: Jan 2005   **PREVIOUS OUTLINE DATED:** Dec 2004

APPROVED:

_____   _____
                           DEAN   **DATE**

TOTAL CREDITS: 5

PREREQUISITE(S):

LENGTH OF COURSE: 3 hrs/wk 13 wks   **TOTAL CREDIT HOURS:** 60

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Course Name   Code No.

I.   COURSE DESCRIPTION:
The fastest growing part of GIS is the serving of maps on the Internet. The Web GIS course develops student skills in Web page design. This course will also review basic XML commands as well as distributing maps on the Internet using ArcIMS software.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1 Understand basic web page fundamentals

Potential Elements of the Performance:
- Understand the role of graphic design in web pages
- Understand Internet security and privacy issues
- Design web page content
- Illustrate web pages as a marketing method

2.   Web Page Programming Using HTML

Potential Elements of the Performance:
- Understand the basic code to create a web page
- Using basic formatting techniques
- Add text, graphics, forms and special features into a web page
- Insert Video in a web page
- Create a basic web application using HTML
- Introduction to XML
- Uploading web pages to a server (FTP)

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    3   Using Application software to create Web Applications

        <u>Potential Elements of Performance</u>

        Create advanced web applications Using Front Page
        Create advanced web applications using Macromedia Dreamweaver,
        Advanced Project Development.

    4.   Web GIS/XML

        <u>Potential Elements of the Performance</u>:
- Describe the available Web GIS software packages
- Understand the issues involved with Web GIS
- Create a GIS web page using Arc/IMS
- XML vs HTML

III. TOPICS

1.   **Web Page Fundamentals**
2.   **Web Page Programming HTML**
3   **Web Page Programming Using Front Page/Macromedia Dreamweaver**
4.   **Using   ARCIMS**

IV.   Required Student Resources

        On Line Help and Student Resource Files
        Internet Research
        Lecture Notes and Printed Handouts from Instructor

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V. EVALUATION PROCESS/GRADING SYSTEM

Tentative Breakdown*:

The marks for this course will be arrived as follows:

Tests and Quizzes
- HTML /Front Page/Dreamweaver   **20%**

Lab Assignments
- HTML Assignments   **20%**
- Front Page/Dreamweaver   **25%**
- Arclms/XML   **15%**

Major Project   20%

At least 80% attendance required in the labs and lectures.
- Students must complete and pass both the test, assignment and project portion of the course in order to pass the entire course.
- All Assignments must be completed satisfactorily to complete the course.
- Late assignments will not be accepted.
- Makeup Tests are at the discretion of the instructor and will be assigned a maximum grade of 60%.

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The following semester grades will be assigned to students:

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.

UPGRADING OF INCOMPLETES:

When a student's course work is incomplete or final grade is below 50%
There is the possibility of upgrading to a pass when the student meets all
of the following criteria:

1   The student 's attendance has been satisfactory.
2   An overall average of at least 40% has been achieved by semester's end
         on tests and practical assignments.
3   The student has maid reasonable efforts to participate in class and
         maintain the recommended schedule for assigned activities.

The nature of the upgrading requirements will be determined by the instructor
And may involve re-testing and/or additional lab assignments.

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ATTENDANCE:

Absenteeism will affect the student's ability to succeed in the course. Absences due to medical or other unavoidable circumstances should be discussed with the instructor. The instructor reserves the right to deduct 1% of the final mark for each class missed up to a maximum of 10%. Poor attendance will also affect the upgrading process if a student   receives a mark below 50%.

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 703 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.

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.

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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.