# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

## SAULT STE. MARIE, ONTARIO

Sault College

## COURSE OUTLINE

**COURSE TITLE:** Web GIS

**CODE NO. :** GIS 416          **SEMESTER:** W2004

**PROGRAM:** Geographic Information Systems Applications Specialist

**AUTHOR:** M.VanLandeghem

**DATE:** Jan 2004          **PREVIOUS OUTLINE DATED:** Dec 2003

**APPROVED:**

_____     _____
                              **DEAN**                                    **DATE**

**TOTAL CREDITS:** 5

**PREREQUISITE(S):** GIS 415 – Acquiring and Building Spatial Data using ARC/INFO GIS

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

_____                              _____
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 cover the  distributing maps on the Internet (using ArcIMS software) and on the issues involved in doing so.


**II.    LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

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

1.    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)

_____                                    _____
Course Name                                                        Code No.

3    Using Application software to create Web Applications

Potential Elements of Performance

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

4.    Web GIS

Potential Elements of the Performance:
• Describe the available Web GIS software packages
• Understand the issues involved with Web GIS
• Create a GIS web page using Arc/IMS

## III. TOPICS

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

## IV.    Required Student Resources

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

_____                                 _____
Course Name                                                          Code No.

## 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                                **15%**

**Major Project**                       **20%**

o  Some minor modifications to the above percentages may be necessary.  The professor reserves the right to adjust the mark up or down 5% based on attendance, participation, leadership, creativity and whether there is an improving trend.

o  Students must complete and pass both the test and assignment portion of the course in order to pass the entire courses.

o  All Assignments must be completed satisfactorily to complete the course. Late hand in penalties will be 5% per day.  Assignments will not be accepted past one week late unless there are extenuating and legitimate circumstances.

o  The professor reserves the right to adjust the number of tests, practical tests and quizzes based on unforeseen circumstances.  The students will be given sufficient notice to any changes and the reasons thereof.

o  A student who is absent for 3 or more times without any valid reason or effort to resolve the problem will result in action taken.

   NOTE: If  action is to be taken, it will range from marks being deducted to a maximum of removal from the course.

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Course Name                                                          Code No.


## V.    *EVALUATION PROCESS / GRADING SYSTEM (Continued):*

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.


## 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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Course Name                                                          Code No.

## VI.  SPECIAL NOTES (CONTINUED):

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.

## 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.