SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY				
SAULT STE. MARIE, ONTARIO				
Sault College				
COURSE OUTLINE				
COURSE TITLE:	Web GIS			
<u>CODE NO.</u> :	GIS 4160	<u>SEMESTER</u> :	W2003	
PROGRAM:	Geographic Information Systems Applications Specialist			
AUTHOR:	M.VanLandeghem			
DATE:	Jan	PREVIOUS OUTLINE DATED:	Dec	
APPROVED:	2003		2002	
TOTAL CREDITS:	5	DEAN	DATE	
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	
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For additional information, please contact School of Engineering, Technology and Trades (705) 759-2554, Ext. 642				

### 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

Potential Elements of the Performance:

- Use HTML code and Microsoft Front Page to create web
   pages
- Add text, graphics, forms and special features into a web page
- Insert Video in a web page
- Use Macromedia Dreamweaver to Create Web Pages
- 3. 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

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4. Web Server Management and Configuration

Potential Elements of the Performance:

- Understand how to configure a server for Web GIS
- Describe the importance of speed, connections and data volume
- Describe prevention of server and network security and hacking

# TOPICS

- 1. Web Page Fundamentals
- 2. Web Page Programming
- 3. Web GIS ARCIMS
- 4. Web Server Management

# **IV. Required Student Resources**

Carey, P. 2001 Creating Web Pages with HTML Thomson Learning ...Course Technologies ISBN 0-619-10114-8 On Line Help and Student Resource Files Internet Research Lecture Notes and Printed Handouts from Instructor

# 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%
<ul> <li>Front Page/Dreamweaver</li> </ul>	25%
Arclms	15%
Major Project and Presentation	20%

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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, and creativity and whether there is an improving trend.

# ATTENDANCE:

- In order to remain up to date with the delivery of course material students will be required to do the following:
  - Be present for each class.
  - Report to class within 5 minutes of the scheduled start time.
  - Bring the required course text and resource materials.
  - Sign the class attendance book at the beginning of each class.
- Any student who is absent for 3 or more times without any valid reason or effort to resolve the problem will result in either of :
  - a) marks being deducted
  - b) his / her removal from the course.

# **ASSIGNMENTS**

- All Assignments must be completed satisfactorily to complete the course.
- Assignments will not be accepted past the designated due date unless there are documented, legitimate circumstances.

# <u>TESTS</u>

- The professor reserves the right to adjust the number of tests, practical tests and quizzes. Students will be given prior notice to any changes.
- All course material (electronic lessons, classroom lectures, printed handouts etc...) are subject to evaluation and may be used in the creation of tests and quizzes. If not in class at the time of their delivery it will be the student's responsibility to obtain the information.
- Written tests will be conducted as deemed necessary; generally at the end of each block of work, and will be announced in advance.
- Quizzes may be conducted without advance warning.
- Students who are absent on the day of a test or quiz will be marked absent and given a failing grade for the evaluation.
- Students who provide a signed written statement that explains their absence (to the satisfaction of the course professor) will be granted a one time opportunity to write

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the missing test or quiz. This opportunity will be scheduled at the discression of the course professor.

### **GRADING SCHEME**

- A+ 90 100% Outstanding Achievement
- A 80 89% Excellent achievement
- B 70 79% Average Achievement
- C 60 69% Satisfactory Achievement
- U Incomplete: Course work not complete at Mid-term. (Only used at mid-term)
- R Repeat
- X A temporary grade that is limited to instances where special circumstances have prevented the student from completing objectives by the end of the semester.

An

X grade must be authorized by the Chairman. It reverts to an R if not upgraded in an agreed-upon time, less 120 days.

### UPGRADE OF INCOMPLETE WORK

- When a student's course work is incomplete or below 55%, there is the possibility of upgrading to a pass when the student's performance warrants it. Attendance and assignment completion will have a bearing on whether upgrading will be allowed.
- The method of upgrading is at the discretion of the teacher and may consist of one or more of the following options:
  - assigned make-up work
  - o re-doing assignments
  - re-writing of tests
  - writing a comprehensive supplemental examination.
- A failing grade will remove the option of any upgrading and an R grade will result.
- Where a student's overall performance has been consistently Unsatisfactory, an R grade may be assigned without the option of make-up work.

# 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 instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 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.

### <u>Plagiarism:</u>

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, as may be decided by the professor. 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.

**NOTE:** The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and/or the class, as well as 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 instructor.

# 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.