## SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



### **COURSE OUTLINE**

COURSE TITLE: Independent GIS Project

CODE NO.: GIS424 SEMESTER: 09W

**PROGRAM:** Geographic Information Systems Applications Specialist

**AUTHOR:** Heath Bishop

DATE: Dec. 2008 PREVIOUS OUTLINE DATED: N/A

APPROVED: "B"Punch"

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CHAIR DATE

TOTAL CREDITS: 2

PREREQUISITE(S): None

HOURS/WEEK: 2

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For additional information, please contact Brian Punch, Chair,

Natural Environment/Outdoor Studies & Technology Programs

(705) 759-2554, Ext. 2681

### I. COURSE DESCRIPTION:

This course is designed to develop the student's skills in project development/management as well as their overall GIS skills. Each student will come up with a project idea, gather the necessary data, manipulate/edit the data, perform spatial analysis and produce a final GIS poster/layout which clearly shows their project findings. ArcGIS will be the primary software used for the project, although different software packages may be used while maintaining the data. The students will hone their GIS skills, as well as perform peer-editing on the final cartographic products.

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

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

1. Locate and Collect Necessary GIS Project Data

### Potential Elements of the Performance:

- Determine necessary GIS data
- Gather and assemble this data
- 2. Manipulate and Edit Data for Project Purposes

### Potential Elements of the Performance:

- Manipulate and update data into a useable form
- Maintain the data for the project
- 3. Undertake a GIS Project

#### Potential Elements of the Performance:

- Manage project timelines
- Perform data analysis
- Create a cartographically sound GIS layout
- Create a presentation-quality hard copy layout and report

#### III. TOPICS:

- 1. Project Management
  - Project Creation and data acquisition
  - Creation of project timelines and status reports
- 2. Data Acquisition and Maintenance
  - Data acquisition
  - Database maintenance
  - Analysis
- 3. GIS Project Deliverables
  - Cartographic techniques
  - Plotting layouts in ArcGIS
  - Large format plotting
  - Justifying the necessity of the layout

### IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

None

## V. EVALUATION PROCESS/GRADING SYSTEM:

Assignments (4)
Project Preview (10%)
Project Status Update (10%)
Tutorial and Presentation (20%)
Final Project Layout and report (60%)

The following semester grades will be assigned to students:

<u>Grade</u>	<u>Definition</u>	Grade Point <u>Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	0.00
В	70 - 79%	3.00
С	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 W	Grade not reported to Registrar's office. Student has withdrawn from the course without academic penalty.	

#### 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.

#### VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit Form from the program coordinator (for course-specific courses), or the course coordinator (for general education courses), or the program's 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 also be given upon successful completion of a challenge exam or portfolio.