

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



**COURSE OUTLINE**

**COURSE TITLE:** Independent GIS Project

**CODE NO. :** GIS424 **SEMESTER:** 16W

**PROGRAM:** Geographic Information Systems Applications Specialist

**AUTHOR:** Heath Bishop

**DATE:** Dec, 2015 **PREVIOUS OUTLINE DATED:** Dec, 2014

**APPROVED:** Colin Kirkwood 1<sup>st</sup> Dec '15

\_\_\_\_\_  
**Dean**

\_\_\_\_\_  
**DATE**

**TOTAL CREDITS:** 2

**PREREQUISITE(S):** None

**HOURS/WEEK:** 2

**Copyright ©2012 The Sault College of Applied Arts & Technology**  
*Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited.*  
*For additional information, please contact Colin Kirkwood, Dean  
Environment, Design, Business  
(705) 759-2554, Ext. 2688*

**I. COURSE DESCRIPTION:**

This course is designed to develop the student's skills in project development/management as well as their GIS and cartographic abilities. Each student will come up with a project idea, gather the necessary data, manipulate/edit the data, perform necessary spatial analysis and produce a final GIS poster/layout which clearly and aesthetically shows their project findings. ArcGIS will be the primary software used for the project, although supplemental software packages may be used as necessary. 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 for project
- Gather and assemble necessary 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. Perform GIS Project Analysis**Potential Elements of the Performance:

- Determine the appropriate analyses that need to be performed and complete this analysis

**4. Create a Finished Large Format Cartographic Product**Potential Elements of the Performance:

- Format and print a large map layout (using a colour plotter) which includes the project findings

**5. Be Familiar with a Variety of Cartographic Techniques**Potential Elements of the Performance:

- Perform various cartographic techniques to improve map aesthetics

**III. TOPICS:**

1. Project Management
  - Project Creation and data acquisition
  - Creation of project timeline forecast
2. Data Acquisition, Maintenance and Analysis
  - Data acquisition
  - Database maintenance
  - Analysis
3. GIS Project Deliverables
  - Various cartographic techniques
  - Plotting layouts in ArcGIS
  - Large format plotting
  - Peer Editing
4. Cartographic processes
  - Map production
  - Labeling and annotation
  - WSYWYG analysis

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

None

**V. EVALUATION PROCESS/GRADING SYSTEM:**

Assignments 100%

**Note: Students must complete all of the assignments to an acceptable level in order to pass the course.**

Note: All assignments are due at the beginning of class on the scheduled due date, or will be subject to a 10% penalty. Each subsequent day that the assignment is not handed in by 9:30am is an additional 10% deduction.

The following semester grades will be assigned to students:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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:**Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

Course Outline:

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.

**VI. COURSE OUTLINE ADDENDUM:**

The provisions contained in the addendum located on the portal form part of this course outline.