SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Independent GIS Project

CODE NO.: GIS424 SEMESTER: 17W

PROGRAM: Geographic Information Systems Applications Specialist

AUTHOR: Heath Bishop

DATE: Dec, 2016 **PREVIOUS OUTLINE DATED:** Dec, 2015

APPROVED:

Corey Meunier Jan '17

Chair DATE

TOTAL CREDITS: 2

PREREQUISITE(S): None

HOURS/WEEK: 2

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For additional information, please contact Corey Meunier, Chair

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Independent Project GIS424

I. COURSE DESCRIPTION:

This course is designed to continue the development of students' skills in project development/management as well as their GIS and cartographic abilities. Each student will come up with their own project idea, gather the necessary data, manipulate/edit the data, perform necessary spatial analysis and produce a final GIS report and 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:

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
 - WSYIWYG 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 may be subject to a 10% penalty. Each subsequent day that the assignment is not handed in by 9:30am may be an additional 10% deduction.

The following semester grades will be assigned to students:

		Grade Point
<u>Grade</u>	<u>Definition</u>	<u>Equivalent</u>
A+ A	90 – 100% 80 – 89%	4.00
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	
NR	requirements for a course. Grade not reported to Registrar's office.	
W	Student has withdrawn from the course	
v v	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.