SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

SAULT COLLEGE

COURSE OUTLINE

COURSE TITLE: Independent GIS Project

CODE NO. : GIS424   **SEMESTER:** 14W

PROGRAM: Geographic Information Systems Applications Specialist

AUTHOR: Heath Bishop

DATE: May, 2013   **PREVIOUS OUTLINE DATED:** Dec, 2012

APPROVED:

_____   _____
                            Dean   **DATE**

TOTAL CREDITS: 2

PREREQUISITE(S): None

HOURS/WEEK: 2

Independent Project   GIS424

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
- 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 necessary data processing, maintenance and analysis
- Create a cartographically sound GIS layout
- Create a presentation-quality hard copy layout and report showing the project findings

4.   Produce Aesthetically pleasing maps

Potential Elements of the Performance:
- Use some of the finer cartographic functions in ArcGIS
- Become more familiar with the use of annotation
- Be able to locate and use various data to complete a desired tasks

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

- 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(7)   100%

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 8:30am is an additional 10% deduction.

The following semester grades will be assigned to students:

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:

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.