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



## **COURSE OUTLINE**

**COURSE TITLE**: Research Project / Presentation II

**CODE NO.**: GIS 411 **SEMESTER**: W2001

**PROGRAM**: GIS Applications Specialist

**AUTHOR:** Dennis Paradine

**DATE**: Dec 2000 PREVIOUS OUTLINE DATED: Jan 2000

**APPROVED:** 

DEAN DATE

TOTAL CREDITS: 4

**PREREQUISITE(S):** GIS 406 – Research Project / Presentation I

**LENGTH OF** 3 hrs/wk x

COURSE: 13 wks TOTAL CREDIT HOURS: 60

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(705) 759-2554, Ext. 642

Course Name

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#### I. COURSE DESCRIPTION:

Projects form the foundation of modern-day day business and research. In this course the student develops project management, oral presentation, and report writing skills by completing a GIS, remote sensing or GPS project of their own interest. The use of projects originating from commercial industry or government will be promoted.

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

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

1. Work through a large GIS project

#### Potential Elements of the Performance:

- Demonstrate effective project management skills
- Demonstrate effective time management
- Produce and update project status reports as a project proceeds
- Create report contents using GIS, remote sensing, GPS and other processes as required
- Perform time-line mapping, budgeting, and project re-definitions
- Produce a data dictionary
- Perform effective database maintenance
- 2. Demonstrate a working knowledge of MS Project 2000 project management software

#### Potential Elements of the Performance:

- Define critical paths, milestones and float time
- Input tasks and assign task duration
- Develop and continuously update a GANTT bar chart schedule
- Develop and assign relationships in a PERT diagram
- Use MS Project 2000 to schedule and determine critical paths
- 3. Understand good workplace personal management skills

#### Potential Elements of the Performance:

- Understand and practice stress management techniques
- Use good ergonomic and workplace environmental design skills
- Practice prioritization and decision-making techniques
- Learn to work in a collaborative team environment

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- Understand the fundamentals of good workplace communication
- Produce high-quality resumes and cover letters
- Perform career analysis and job searches
- 4. Perform an effective oral presentation

#### Potential Elements of the Performance:

- Explain the presentation as a marketing method
- Design background material for an oral presentation
- Define an audience and relevant content for a presentation
- Perform an effective oral presentation including the use of visual aids and computers
- 5. Produce a formal hard-copy GIS, Remote Sensing or GPS report

#### Potential Elements of the Performance:

- Describe the essential components of a GIS report
- Produce a high quality final report including, but not limited to, a formal written report, GIS produced tables, a data dictionary and map atlas

#### III. TOPICS:

- 1. Working Through a GIS Project (8 hours)
  - Large project management
  - Status reports
  - Budgeting
  - Project re-definition
  - Data dictionaries
  - Database maintenance
- 2. Project management applications (MS Project 2000) (6 hours)
  - Project management steps
  - Identifying tasks and assigning task duration
  - GANTT bar charts
  - Project evaluation and review techniques (PERT)
  - MS Project 2000 for scheduling and determining critical paths

Assignment #1. Given a set of tasks and relationships, prepare a PERT diagram that shows the critical path of activities.

#### **Assignment #2. Research Project Interim Status Report**

- 3. Workplace management skills (12 hours)
  - Stress management
  - Ergonomics and workplace environmental design
  - Prioritization and decision-making
  - Working in a collaborative team environment
  - Fundamentals of good workplace communication
  - Resumes, cover letters, career analysis and job searches

#### **Assignment #3. Workplace Management Techniques**

- 4. Oral Presentations (8 hours)
  - Presentation as a way of marketing
  - Audiences and levels of presentation
  - Components of an effective oral presentation
  - The use of visual aids and computers in presentations
  - Practicing for results
  - Interfacing between different software packages and audio-visual aids during an oral presentation

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# Assignment #4. Interim Research Project Oral Reports Assignment #5. Research Project Oral Report

- 5. Producing formal GIS reports (10 hours)
  - Components of a formal GIS report
  - Putting together a large report
  - Data dictionaries
  - Map atlases

**Assignment #6. Research Project Hard-Copy Report** 

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# IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Martin, P. and K. Tate. 1997. Project Management Memory Jogger. GOAL / QPC Publishing.

### V. EVALUATION PROCESS/GRADING SYSTEM:

# **Grading System:**

Project Management Charts	10%
Workplace Personal Management	10%
Interim Report	10%
Interim Oral Reports (3)	15%
Final Oral Presentation	15%
Hard-Copy Report	<u>40%</u>
•	100%

The following semester grades will be assigned to students in postsecondary courses:

		Grade Point
<u>Grade</u>	<u>Definition</u>	<u>Equivalent</u>
A+	90 – 100%	4.00
Α	80 – 89%	3.75
В	70 – 79%	3.00
С	60 – 69%	2.00
R (Repeat)	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been	
	awarded.	
S	Satisfactory achievement in field	
	placement or non-graded subject areas.	
X	A temporary grade. This is used in	
	limited situations with extenuating	
	circumstances giving a student additional	
	time to complete the requirements for a	
	course (see <i>Policies &amp; Procedures</i>	
	Manual – Deferred Grades and Make-up).	
NR	Grade not reported to Registrar's office.	
	This is used to facilitate transcript	
	preparation when, for extenuating	
	circumstances, it has been impossible for	
	the faculty member to report grades.	

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#### 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 post-secondary institutions.

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 advanced credit in the course should consult the instructor. Credit for prior learning will be given upon successful completion of the following:

#### 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.