

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Architectural Modeling and Presentation Methods
CODE NO. : ARC 234 **SEMESTER:** 04 (Winter)
PROGRAM: Architectural Technician
AUTHOR: B. Sparrow
DATE: Jan 05 **PREVIOUS OUTLINE DATED:** Jan 04
APPROVED:

		_____	_____
		DEAN	DATE

TOTAL CREDITS: 4
PREREQUISITE(S): None
HOURS/WEEK: 1

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*For additional information, please contact the Dean,
School of Technology, Skilled Trades and Natural Resources*

(705) 759-2554

Course Name

Code No.**I. COURSE DESCRIPTION:**

The intent of this course is to provide the student with skills relating to various architectural drawing and model presentation techniques. The course will examine freehand sketching, massing and presentation models, rendering techniques and three dimensional computer modeling. At the conclusion of the course, the student will be required to submit a portfolio of work completed. The course will require the student to self direct much of the work and requires that the student plan and execute tasks to achieve the deadlines that have been established.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Create freehand sketches in pencil.

Potential Elements of the Performance:

- Understand methods and approaches to freehand sketching
- Develop a freehand pencil sketch of a construction assembly
- Create a freehand perspective sketch of a building interior
- Create a freehand perspective sketch of a building exterior

2. Construct a building massing model.

Potential Elements of the Performance:

- Discuss the purpose of massing models
- Build a massing model from given sketches using card

3. Construct a presentation model.

Potential Elements of the Performance:

- Discuss the purpose of presentation models
- Describe the uses of different model making materials
- Develop a design from given sketches and construct a presentation model of that design

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4. Develop a three dimensional computer model

Potential Elements of the Performance:

- Use AutoCAD and Architectural Desktop to create a 3D computer model
- Assign materials and lighting to an AutoCAD model
- Create and print rendered images from a 3D computer model

5. Create an animated video clip of a 3D computer model

Potential Elements of the Performance:

- Use Architectural Desktop to set up a computer model for animation
- Understand basic animation principles and techniques
- Assign viewpoint and camera positions
- Assign a path and create a video clip of the model of at least 15 seconds duration
- Recognize and manipulate video file formats for animation clips

III. TOPICS:

1. Freehand Sketching Using Pencil
2. Massing Model Construction
3. Presentation Model Construction
4. Three Dimensional Modeling of Architectural Designs
5. Basic Computer Model Animation and Video Clip Creation

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Mastering AutoCAD Architectural Desktop 2005
Autodesk Press / Thomson Delmar Learning
Paul F. Aubin

The student will be expected to supply various tools and materials for model construction.

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V. EVALUATION PROCESS/GRADING SYSTEM:

You will be assigned a final grade on successful completion of laboratories assignments, and tests, weighted as follows:

Assignments (2)	25%
Assignments (2)	60%
<u>Portfolio</u>	<u>15%</u>
TOTAL	100%

Each laboratory or assignment carries equal weight, unless otherwise noted. Late submittals receive only a maximum grade of 60%. However, assignments handed in later than one week will receive a grade of 0.

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

Grade	Definition	<i>Grade Point Equivalent</i>
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.	

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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 E1101 or call Extension 703, 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.

Plagiarism

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. 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, as may be decided by the professor. 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.

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.

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Testing Absence

If a student is unable to write a test on the date assigned, the following procedure is required:

- The student shall provide the Professor with advance notice preferably in writing of his/her need to miss the test.
- The student may be required to document the absence at the discretion of the Professor.
- All decisions regarding whether tests shall be re-scheduled will be at the discretion of the Professor.
- The student is responsible to make arrangements, immediately upon return to the College with his/her course Professor related to make-up of the missed test prior to the next scheduled class for the course in question.
- In the event of an emergency on the day of the test, the student may require documentation to support the absence and must telephone the College to identify the absence. The college has a 24 hour electronic voice mail system (759-2554)

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.