

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Working Drawings, Design and Detailing
CODE NO.: ARC 230 **SEMESTER:** III
PROGRAM: Architectural Technician
AUTHOR: Barry Sparrow
DATE: Aug 06 **PREVIOUS OUTLINE DATED:** Aug 04
APPROVED:

	_____ DEAN	_____ DATE
TOTAL CREDITS:		
PREREQUISITE(S):	ARC 111, CAD 120	
HOURS/WEEK:	3	

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For additional information, please contact C. Kirkwood, Dean
School of Technology, Skilled Trades & Natural Resources
(705) 759-2554, Ext. 688

I. COURSE DESCRIPTION:

This course is intended to provide the students with fundamental skills and understanding necessary for the preparation of contract documents, and in particular working drawings and detailing. The student will develop design drawings, details and working drawings for a building project. The student will also be required to prepare a partial specification and perform code analysis and review.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Prepare a site development drawing given a site and program.
Potential Elements of the Performance:
 - perform a physical factors site analysis
 - perform zoning/building by-law analysis
 - create CAD drawings of schematic site design
2. Perform schematic design and spatial planning.
Potential Elements of the Performance:
 - develop schematic plans and elevations given a program
 - analyze functional relationships
 - resolve spatial arrangements
 - prepare CAD drawings of schematic plans, sections and elevations
3. Create presentation drawings using CAD
Potential Elements of the Performance:
 - prepare design drawings using CAD
 - develop site design and building design presentation drawings
 - give an oral presentation of the design developed
4. Develop working drawings (plans, elevations and sections) with CAD
Potential Elements of the Performance:
 - prepare working drawings using CAD
 - prepare a fully dimensioned and annotated floor plan
 - develop a complete set of building elevations
 - prepare a working drawing of a building cross section
5. Develop construction details for brick and masonry assemblies
Potential Elements of the Performance:
 - design and draw construction details for masonry walls
 - draw complete wall sections using CAD
 - draw construction details for masonry assemblies including roof/wall, window, floor/wall and foundation

6. Develop miscellaneous working drawings and details using CAD

Potential Elements of the Performance:

- develop and draw a reflected ceiling plan
- develop and draw millwork details
- develop and draw stair details

III. TOPICS:

1. Site Planning and Design
2. Space Planning
3. Presentation Drawings
4. Working Drawings
5. Brick Veneer and Concrete Masonry Detailing
6. Miscellaneous Detailing

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Building Construction Illustrated Latest Edition
F. Ching
John Wiley & Sons Inc

V. EVALUATION PROCESS/GRADING SYSTEM:

Project Phase	Percent of Grade
Site Plan Analysis and Development	10
Preliminary Design	20
Final Design Drawings and Oral Presentation	20
Working Drawings Phase One	25
Working Drawings Phase Two	25
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Total	100

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

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	4.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50-59%	1.00
F (Fail)	49% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject areas.	
U	Unsatisfactory 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.	
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has not been possible for the faculty member to report grades.	
W	Student has withdrawn from the course without academic penalty	

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/program, as may be decided by the professor/dean. 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.

Course outline amendments:

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.

It is essential that students develop the ability to plan and schedule work so that it is completed by the scheduled date. *Work that is submitted late will receive a maximum grade of C. Work that is more than one week late (without reasonable justification and documentation) may receive a grade of zero.* Deadlines will be discussed in class and once established, cannot be changed without the unanimous consent of the instructor and all students.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam and/or portfolio.

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.