

**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 B1165 tel: 759-2554 x 585  
email [barry.sparrow@saultc.on.ca](mailto:barry.sparrow@saultc.on.ca) fax: 759-1319

**DATE:** 28 Aug 01 **PREVIOUS OUTLINE DATED:**

**APPROVED:**

\_\_\_\_\_  
**DEAN**

\_\_\_\_\_  
**DATE**

**TOTAL CREDITS:**

**PREREQUISITE(S):** ARC 111, CAD 120

**HOURS/WEEK:** 3

**Copyright ©1998 The Sault College of Applied Arts & Technology**  
*Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited.*  
*For additional information, please contact Kitty DeRosario, Dean*  
*School of Engineering and Technical Trades*  
*(705) 759-2554, Ext. 642*

**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:**

**V. EVALUATION PROCESS/GRADING SYSTEM:**

<b>Project Phase</b>	<b>Percent of Grade</b>
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
<b>Total</b>	<b>100</b>

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%	3.75
B	70 - 79%	3.00
C	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.
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 (see <i>Policies &amp; Procedures Manual – Deferred Grades and Make-up</i> ).
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.

## 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 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 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.