

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: DRAFTING AND BLUEPRINT READING

CODE NO. : DRF120 **SEMESTER:** ONE

PROGRAM: PRE-TRADES and TECHNOLOGY

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DATE: June 2016 **PREVIOUS OUTLINE DATED:** September 2015

APPROVED: *"Corey Meunier"*
CHAIR

TOTAL CREDITS: TWO

PREREQUISITE(S):

HOURS/WEEK: TWO

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***For additional information, please contact Corey Meunier, Chair
Technology and Skilled Trades
(705) 759-2554, Ext. 2610***

I. COURSE DESCRIPTION:

The tradesperson is often required to receive and transfer technical information. Technical drawings, free hand sketches, schematics and flow diagrams are forms of this information transfer. This introductory course will expose the student to these methods of information transfer by drawing objects using standard drafting techniques, making complete, neat free hand sketches. Students will also use CAD software to create and interpret digital drawings.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. *Drawing Instruments***Potential Elements of the Performance:**

- With assorted problems learn the proper use of drafting instruments

2. *Orthographic***Potential Elements of the Performance:**

- Discuss when single view or multi – view orthographic are required.
- Sketch free hand assorted orthographic drawings
- Draw, with instruments assorted orthographic drawings
- Transfer surfaces
- Add missing views
- Finish incomplete views
- Apply proper dimension techniques

3. *Isometrics***Potential Elements of the Performance:**

- Understand the advantages of isometric drawings
- Sketch freehand isometric views
- Draw isometric views to scale

4. *Residential buildings***Potential Elements of the Performance:**

- With a set of house plans complete an isometric drawing of one room
- Calculate various amounts of building materials required
- With excerpts of the buildings codes understand why certain construction techniques are used

5. Commercial buildingsPotential Elements of the Performance:

- Using commercial drawings answer varied questions pertaining to the trades involved in the construction process.

6. Industrial applicationsPotential Elements of the Performance:

- Using industrial drawings, schematics and flow diagrams answer varied questions pertaining to the trades involved in construction and maintenance.

7. Computer Aided Drafting Applications

- Use AutoCAD to open and navigate drawing files
- Measure distances and areas using CAD
- Gather information from drawings using object properties
- Print AutoCAD drawings

III. TOPICS:

1. INSTRUMENTS
2. ORTHOGRAPHICS
3. ISOMETRICS
4. RESIDENTIAL
5. COMMERCIAL
6. INDUSTRIAL
7. COMPUTER AIDED DRAFTING

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:***Blueprint Reading for the Construction Trades***

(To come with blueprints), Micro-Press (2nd ed.)

Drafting Kit for DRF120 available in Campus Book Store

V. EVALUATION PROCESS/GRADING SYSTEM:

Assignments (4-6)	50%
Quizzes (4-6)	40%
Attendance	10%
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	100%

Attendance - 1% may be deducted for late arrival and/or early leaving where not approved by instructor.

Cell phones must be turned off while in the classroom

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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.	

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

VI. SPECIAL NOTES:

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.

All persons in the classroom shall conduct themselves in a professional and respectful manner.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located in D2L and on the Sault College Portal form part of this course outline.