

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Pattern and Template Development II

CODE NO. : MTF235 **SEMESTER:** Four

PROGRAM: Metal Fabrication Technician - 4051

AUTHOR: Steve Witty

DATE: January 2017 **PREVIOUS OUTLINE DATED:** January 2016

APPROVED: *"Corey Meunier"* Jan '17
CHAIR DATE

TOTAL CREDITS: 3

PREREQUISITE(S): MTF207

HOURS/WEEK: 3

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For additional information, please contact Corey Meunier, Chair
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I. COURSE DESCRIPTION:

Curriculum based on a combination of theoretical knowledge and practical (hands on) skill related to the development and creation of patterns and templates.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Develop patterns and templates employing triangulation method.

- oblique cones
- oblique cones with elliptical elements
- rectangle to round
- rectangle to elliptical
- reducing elbows
- hoppers and chutes
- mismatched shapes
- truncated shapes

2. Use mathematical problem solving techniques to support the development of patterns.

- square to round
- tapered rectangular shapes
- tapered conical shapes
- trigonometry
- ratio and proportion
- Pythagorean theorem

III. TOPICS:

1. Develop and construct templates and patterns.
2. Check and prove accuracy of templates using mathematical equations.

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- IPT Metal Trades & Welding Manual
- Drafting equipment
- scissors
- Calculator

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

1. Late hand in penalties will be 10% per day. Assignments will not be accepted past one week late unless there are extenuating and legitimate circumstances.
2. If a student misses a test/lab he/she must have a valid reason (i.e. medical or family emergency – documentation shall be required). In addition, the instructor MUST be notified PRIOR to the test or lab sitting. If this procedure is not followed the student will receive a mark of zero on the test/lab with no make-up option.
3. Re-writes are NOT allowed for any written assignment, quiz or test.
4. Repeats are NOT allowed for any shop test.
5. Course attendance is mandatory. One percent (1 %) per hour will be deducted from the final course grade for unexcused* absence.

Valid reasons would include:

- Doctor's note
- Family Death or Serious Illness supported by a written note.

FINAL COURSE GRADES:

The final course grade will be determined by means of the following list of weighted factors:

<i>Factor</i>	<i>Value</i>
<u>Classroom Assignments</u>	
Oblique Cone Template	20%
True Wye Template	20%
45 Lateral Template	20%
Reducing Elbow Template	20%
Mismatched Shapes	20%
Attendance	-1% per Unexcused Hour
Lates	-1% per Incident

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.	

VI. SPECIAL NOTES:

Attendance:

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.

It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers will not be granted admission to the room.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.