

STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK



MASTER SYLLABUS

MECH 101 –DRAWING FOR ENGINEERS

CIP Code: 15.0805

For assistance determining CIP Code, please refer to this webpage

<https://nces.ed.gov/ipeds/cipcode/browse.aspx?v=55>

or reach out to Sarah Todd at todds@canton.edu

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Updated by: N/A

**CANINO SCHOOL OF ENGINEERING TECHNOLOGY
MECHANICAL ENGINEERING TECHNOLOGY
FALL 2022**

A. TITLE: DRAWING FOR ENGINEERS

B. COURSE NUMBER: MECH 101

C. CREDIT HOURS (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity):

Credit Hours: 1

Lecture Hours ___ per Week

Lab Hours 2 Week (1x at 2 hours)

Other ___ per Week

Course Length (# of Weeks): 15

D. WRITING INTENSIVE COURSE: No

E. GER CATEGORY:

Does course satisfy more than one GER category? If so, which one?

F. SEMESTER(S) OFFERED: (Fall)

G. COURSE DESCRIPTION:

In this course, students learn basic drawing skills including, sketching, geometric construction, measuring, isometrics, orthographic views, section views, dimensioning, auxiliary views, and sheet layout.

H. PRE-REQUISITES: none

CO-REQUISITES: none

I. STUDENT LEARNING OUTCOMES:

<u>Course Student Learning Outcome [SLO]</u>	<u>PSLO</u>	<u>GER</u>	<u>ISLO</u>
a. Communicate engineering ideas clearly through the use of sketching	(ABET – 3)		1, W
b. Employ industry-accepted drawing and dimensioning practices	(ABET – 1)		5
c. Correctly locate and orient orthographic, section, and auxiliary views on drawing sheets	(ABET – 1)		5

KEY	<u>Institutional Student Learning Outcomes</u>
	<u>[ISLO 1 – 5]</u>
ISLO #	ISLO & Subsets
1	Communication Skills

	Oral [O], Written [W]
2	Critical Thinking <i>Critical Analysis [CA] , Inquiry & Analysis [IA] , Problem Solving [PS]</i>
3	Foundational Skills <i>Information Management [IM], Quantitative Lit./Reasoning [QTR]</i>
4	Social Responsibility <i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i>
5	Industry, Professional, Discipline Specific Knowledge and Skills

J. APPLIED LEARNING COMPONENT: Yes ___X___ No _____

If Yes, select one or more of the following categories:

Classroom/Lab ___X___

Internship _____

Clinical Practicum _____

Practicum _____

Service Learning _____

Community Service _____

Civic Engagement _____

Creative Works/Senior Project _____

Research _____

Entrepreneurship _____

(program, class, project)

K. TEXTS: <https://www.g-w.com/exploring-drafting-2018#toc>

L. REFERENCES: N/A

M. EQUIPMENT: Room with large, smooth table spaces for drawing. ELMO + projector for demonstrating drawing concepts, or, smart board

N. GRADING METHOD: A-F

O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

Homework/Labs

Quizzes

Exams

P. DETAILED COURSE OUTLINE:

See Lab Outline

Q. LABORATORY OUTLINE:

1. Week 1
 - a. Why Drafting + Sketching
2. Week 2
 - a. Sketching + Drafting Equipment
3. Week 3
 - a. Drafting Techniques
4. Week 4
 - a. Basic Geometric Construction
5. Week 5
 - a. Lettering
6. Week 6
 - a. Multi-View Drawings
7. Week 7
 - a. Dimensioning
8. Week 8
 - a. Dimensioning & Review
9. Week 9
 - a. Exam 1
10. Week 10
 - a. Section Views
11. Week 11
 - a. Auxiliary Views
12. Week 12
 - a. Pictorials
13. Week 13
 - a. Pattern Development
14. Week 14
 - a. Making Prints & Review
15. Exam 2