APTECH 55 Course Outline as of Fall 1991

CATALOG INFORMATION

Dept and Nbr: APTECH 55 Title: BASIC DRAFTING SKLS
Full Title: Basic Drafting Skills
Last Reviewed: 5/8/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.50	Lecture Scheduled	2.00	8	Lecture Scheduled	16.00
Minimum	1.50	Lab Scheduled	3.00	4	Lab Scheduled	24.00
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	40.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 32.00 Total Student Learning Hours: 72.00

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	03 - May Be Taken for a Total of 3 Units
Also Listed As:	
Formerly:	IED 55

Catalog Description:
Introduction to basic manual drafting skills, this course will teach the student: how to use drafting tools; the development of linework and lettering skills; the procedures for executing geometric construction; techniques of freehand drafting; and fundamentals of orthographic projections and isometric drawing.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Intro to basic manual drafting skills. How to use drafting tools, development of linework & lettering skills, procedures for executing geometric construction, freehand drafting & fundamentals of orthographic projections & isometic drawing. (Grade Only)
Prerequisites/Corequisites:
Recommended:

Limits on Enrollment:
Transfer Credit: CSU;UC.
Repeatability: May Be Taken for a Total of 3 Units

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Transferable	Effective:	Fall 1989	Inactive:
UC Transfer:	Transferable	Effective:	Fall 1991	Inactive:

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
The students will:
1. Show proper use of drafting tools by producing drafting projects.
2. Demonstrate the ability to produce consistent linework on drafting exercises.
3. Show ability to produce legible lettering in drafting projects.
4. Illustrate how to execute geometric construction in assigned drafting exercises.
5. Execute freehand drafting in assigned drafting projects.
6. Show understanding of orthographic projections and isometric drawings in completing drafting projects.

Topics and Scope:

1. Introduction and use of tools, beginning linework.
   A. Use of tools, how to make a print, drawing procedure, and vocabulary of reproducible linework.
2. Linework and lettering.
   A. Reproducible linework continures, letter forms, practice lettering.
3. Lettering and geometric construction.
   A. Lettering continues, how to use compass, basic geometric drafting techniques (dividing lines, constructing triangles, hexagons, octagons).
4. Geometric construction.
   A. More complex geometric construction such as tangents, and constructing forms by figuring out missing data.
5. Freehand drawing.
   A. How to do drafting without using tools, basic level.

6. Orthographic projections.
   A. Introduction to the principles of orthographic projection, freehand three-view drawings, and practice converting isometrics to three-view.
7. Orthographic projections and isometric drawing.
   A. Orthographic projections from incomplete data based on principles learned earlier and instrument orthographic projections. Introduction to isometrics.
8. Isometric drawing.
   A. Drawing isometrics using instruments.

Assignment:

1. Each unit of instruction will have assignments to be completed by the student during the lab portion of the class and outside the class.
2. These assignments have been designed to develop basic manual drafting skills.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None	Problem solving 0 - 0%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances, Performance exams, DRAFTING ASSIGNMENTS	Skill Demonstrations 40 - 60%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion	Exams 10 - 30%

Other: Includes any assessment tools that do not logically fit into the above categories.

PARTICIPATION	Other Category 5 - 10%

Representative Textbooks and Materials:
Syllabus developed by instructors with assignments.