

Course Description:

Drafting III is designed to stimulate the student learning. A broad foundation of the subject is necessary as the student may select detailed projects in a number of different study areas. Areas of study may include those of Drafting I and II, architectural drafting, aerospace drafting, machine drafting, threads and fasteners, electrical and electronic drafting, cams and gears and welding. Computer aided drafting can be utilized to enhance all advanced areas.

Length of course: Semester – Intensive Schedule Quarter Other _____

Type of Offering: Required Elective Selective _____

Credit: One

Prerequisite (s): Drafting Technology II with a minimum of 73% average

Goal: The goals Drafting Technology III are:

- (1) To help every student acquire the knowledge, understanding and appreciation of science and technology.
- (2) To help every student develop self-understanding and a feeling of self-worth.
- (3) To help every student acquire the knowledge, skills and attitudes necessary to become a self-supporting member of society.
- (4) To help every student acquire skills in mathematics.
- (5) To help every student develop analytical thinking skills.

COURSE OBJECTIVES:

The student:

- (1) Will be able to hand letter vertical Gothic letters and numerals and space them correctly (3.5B)
- (2) May develop various drawings to produce a complete set of architectural plans to be used in the construction of a model (3.6 & 3.7)
- (3) May develop a set of plans for use in aerospace drafting (3.6 & 3.7)
- (4) May develop a set of plans for a particular machine part design (3.6 & 3.7)
- (5) May develop a set of plans for a particular machine part design (3.6 & 3.7)
- (6) May develop a set of plans for a detailed thread or fastener. (3.6 & 3.7)
- (7) May develop a set of plans for an electrical or electronic device (3.6 & 3.7)
- (8) May develop drawings for various cams and gears (3.6 and 3.7)
- (9) May develop drawings for welding construction (3.6 & 3.7)

Drafting Technology III

Course Contents By Units: 90 Days (85 min. period)	Learning Strategies including Enrichments/Adaptations	Assessment Measures/Expected Levels of Achievement
Letters (2 days) <ul style="list-style-type: none"> • Lettering styles • Guidelines and spacing • Techniques • Instruments Architectural Drafting (*88 days) <ul style="list-style-type: none"> • Floor plans • Elevation • Pictorial • Details Aerospace Drafting Machine Drafting Threads and Fasteners Electrical and Electronic Drafting Cams and Gears Welding Computer Aided Drafting *One or more of the topics will be covered depending upon student interest	<ul style="list-style-type: none"> • Lecture • Discussion • Question / Answer • Cooperation Learning • Demonstration • Drawings • Guest Speakers • Individually Guided Instruction • Exams • Note Taking • CD-ROM 	<ul style="list-style-type: none"> • Exams: Teacher Made – Standardized • Performance Tests (Drawing) • Teacher Observation • Class Participation <p style="text-align: center;">Instructional Materials</p> <ul style="list-style-type: none"> • Text: Mechanical Drawing – 12th Edition, Glencoe, ©1997 • Student Workbook: Mechanical Drawing – 12th Edition, Glencoe, ©1997 • Reference Books • Video Tapes • Transparencies • CD-ROM • Worksheets • Instruction Sheets • Models

Drafting Technology II – 11th – 12th Grade Level

Course Contents By Units: 90 Days (85 min. period)	Learning Strategies including Enrichments/Adaptations	Assessment Measures/Expected Levels of Achievement
<p>Fasteners (10 days)</p> <ul style="list-style-type: none"> • Screws and screw threads • Classifications • Bolts and nuts • Other fasteners <p>Surface Developments (10 days)</p> <ul style="list-style-type: none"> • Drafting for sheet metal • Development • Parallel line development • Radial line development • Triangulation <p>Computer Assisted Drafting – “CAD” (incorporated throughout the course)</p> <ul style="list-style-type: none"> • CAD concepts • Start-up and shut-down of a CAD system • Grouping • Demonstration • Project making-drawings • Resource speakers • Individual guided instruction • Test-various kinds • Note taking 		
		<p>Instructional Materials</p>