



# COURSE SYLLABUS

## Programs in Technology Education

General H.H. Arnold High School

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I. COURSE NUMBER AND TITLE: TED303, Engineering Drawing

II. CREDIT: 1 Semester

III. PREREQUISITE: None

IV. COURSE DESCRIPTION: The Engineering Drawing course is designed for the beginning 9th through 12th grade student. Fundamentals, equipment, and skills related to drafting are covered. Although students will be introduced to traditional drafting methods, they will spend most of their time using Computer Aided Design (CAD) techniques to solve their drawing problems. Students progress at their own pace while studying and completing tasks independently. Hands-on activities, design, and construction projects, supplemented with demonstrations and lectures familiarize students with the what is considered to be the language of industry. This course is highly recommended for those students aspiring to be engineers or technical artists.

V. COURSE OBJECTIVES:

Upon completion of this course, students should be able to

1. Maintain safety awareness in the laboratory.
2. Perform measurements in both metric and customary systems.
3. Employ vocational, employability, and interpersonal skills used in the world of work.
4. Represent objects and structures using traditional and CAD drawing methods.
5. Use scientific principles, technological information, and skills to solve drafting problems.
6. Analyze data and apply to design characteristics.

VI. COURSE OUTLINE

1. Drafting Equipment
2. Drafting Geometry
3. Lettering
4. Freehand Sketching
5. Pictorial Drawing: Isometric and Oblique
6. Multiview Drawing
7. Dimensioning
8. Sectional Views
9. Auxillary Views, Revolutions, and Basic Descriptive Geometry
10. Manufacturing Processes and Production Drawings
11. Computer Aided Drafting and Design
12. Advanced CADD Skills

VII. CURRENT TEXTS:

DRAFTING FUNDAMENTALS  
by Scott, Foy, and Schendau

VIII. PREPARED: August 25, 2002