
Master Course Syllabus

Course Title: Blueprint Reading & Sketching
Course Code: DFTG 1025
Course Instructor(s): Brisco Humes and Terry Winkelmann

Purpose:

This course is designed to teach students how to read and interpret pieces from blueprints drawn by an engineer in the metal working industry.

Course Description:

This comprehensive 48 hour class will provide the student with class room instruction and laboratory application to produce part pieces from blueprints.

Learning Outcome:

Participants will be able to identify the following on a blueprint:

- Half section and full section
- Detail view
- Auxiliary view
- Center line
- Object line and hidden line
- Extension line
- Dimension line
- Leader line
- Cutting plane line and its reference notation
- Line
- Datum feature
- Co-axial and co-planer datum feature
- Datum target feature

After completing this lesson the student will be able to identify and explain the following abbreviations and symbols on a blueprint:

- DIA, D
- R, RIA, RAD
- TIR, FIR, FIM
- TYP, 2X, 3X
- MAX
- MIN
- C, CFR, CHAM
- Provide any appropriate first aid for injured persons

After completing this lesson the student will be able to identify the following on a blueprint:

- Surface finish symbol
- Counter bore, counter sink, and depth symbols
- Identify notes area
- Explain nominal dimension
- Explain tolerances
- Identify basic dimensions
- Datum and chain dimensioning
- Find missing dimensions

After completing this lesson the student will be able to identify the following on a blueprint:

- Explain the two common systems of measurement
- Inch and metric system principles
- Elements of the inch system
- Elements of the metric system
- Visualize dimensions and estimate sizes

Pre-requisites:

None

Required Immunization:

None

Credit Hours:

No credit hours are given for this course; the class is comprised of 48 contact hours

Materials required for this course:

Books: Unit I “Basic Print Reading” of the Precision Measurement for Machinists Student’s Guide,
Produced by: Master Task Training Systems a Division of V-TIP, Inc. Rockford, Illinois

Course Structure:

- Classroom Lecture with CD Rom
- Classroom Skills and Demonstrations
- Lavatory application

Attendance Policy:

To receive a Certificate of Completion, participants must have 100% attendance.

Grade Requirements and Evaluation Procedures:

The lesson plan and class schedule informs participants of scheduled topics. As a machinist participant, your success in this class requires you to participate in both classroom and hands-on application of features in producing parts from blueprints.

Final Assessment Appeal Policy:

As per Blinn Workforce Education policy and, if applicable, the policy is included in the Blinn College student handbook, as well as the website.

Civility Statement:

Members of the Blinn College community, which includes faculty, staff and students, are expected to act honestly and responsibly in all aspects of campus life. Blinn College holds all members accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that recognizes personal respect and demonstrates concern for the personal dignity, rights, and freedom of every member of the College community, including respect for College property and the physical and intellectual property of others.

If a student is asked to leave the classroom because of uncivil behavior, the student may not return to that class until the student arranges a conference with the instructor; it is the student's responsibility to arrange for this conference.

Policies and Procedures:

All students are required to adhere to the policies of Blinn College. These policies are listed in the Student Handbook. A copy of the handbook is available to you at the Office of Workforce Education located at 301 Post Office Street, Bryan, TX 77805.