

CUMBERLAND COUNTY COLLEGE

Course: IT 105: Blueprint Reading and Sketching

Credits: 2

Prerequisite: EN 060 and MA 091

Description:

Students learn the technical information and methods of blueprint construction and interpretation, sketches and prints that are necessary to visualize various manufacturing and fabricating processes, and standard drafting techniques.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Read a scale in English and metric units.
- Use a micrometer and veneer caliper
- Obtain dimensions from a print
- Understand the various views found on a print
- Understand screw thread nomenclature
- Identify welding symbols
- Understand gears and drive trains
- Identify steels using the AISI and SAW systems
- Identify types of fasteners.

Topical Outline:

- English and metric system of measurements
- Alphabet of Lines and their applications
- Arrangement and purpose of views
- Obtaining dimensions from a print
- Datum's, Ordinate and tabular dimensioning
- Sectional and auxiliary views
- Free hand sketching
- Screw threads
- Identify steel types and shapes
- Welding symbols
- Worm gear parts symbols and terms
- Identify pin fasteners

Text:

Basic Blueprint Reading and Sketching by Olivo, Delmar pub. Blueprint Reading for Machinists Intermediate by Haylor, Delmar pub. IT

Student Assessment:

Assessment is accomplished based on assignments, term project, and exams, as follows:

Weekly Assignment	30%
Two mid-semester exams	30%
Final exam	25%
Term Project	15%

Academic Integrity:

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense.

As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Tutoring & Project Assist:

If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

Before Withdrawing From This Course:

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA, which can limit or eliminate future financial aid in addition to causing academic suspension.