Piedmont Technical College Course Syllabus

COURSE INFORMATION

Course Prefix/Number: MTT 120

Title: Machine Tool Blueprint Reading

Responsible Division: Industrial/Engineering

Last Day to Withdraw from this Course: For the last date to withdraw from this course, consult the current *Student Calendar*.

Course Description:

For course, credit hour, pre-requisite(s) and co-requisite(s) information, visit the Detailed Course Information page: www.ptc.edu/courses/MTT120.

Textbook and Other Materials:

For textbook information and additional required and/or supplemental materials, visit the college bookstore (www.ptc.edu/bookstore).

Proctored Examinations:

Proctored examinations for distance learning courses taken at non-PTC campuses may require a proctoring fee for each exam taken.

COURSE POLICIES

Course policies are available online through the *Academic Catalog* and *Student Handbook*. Visit the Course Policies page (www.ptc.edu/syllabus/policies) for a detailed list of important policies and more information.

GRADE POLICY

Detailed grading policy information can be found on the Grading Policy webpage (http://www.ptc.edu/grading-policy). Final grade appeal information is available in the *Academic Catalog* (http://www.ptc.edu/catalog/).

Revision Date: 12/14/2015

ACCOMMODATIONS

Accommodations for ADA:

Information is available on the Student Disability Services webpage (http://www.ptc.edu/ada).

RATIONALE

Why do I need this course?

The machinist is a key person in all industry which is engaged in metal manufacturing. The services of this highly skilled craftsman are much in demand and industrial development depends upon an ample supply of trained machinists. To machine a common piece of metal into an intricate part meeting precise blueprint specifications, the machinist must poses a strong knowledge of reading blueprints and understanding their application.

The importance of blueprint reading cannot be overlooked in an era such as ours, when manufacturing and mass production have been developed to such a high degree. Sub-industries now produce component parts in many different plants, and these parts are shipped to a central plant for final assembly. To maintain world class quality it is important for the manufacturers to have and be able to interpret information on the blueprints used in their processes. The importance of blueprint reading cannot be over emphasized.

PROGRAM INFORMATION

For program information including required courses, program learning outcomes, gainful employment information and advisement information, refer to the Academic Program webpage. Go to Academics (http://www.ptc.edu/academics), select your program, and then select Credentials Offered.

COURSE STUDENT LEARNING OUTCOMES

Upon successful completion of this course and/or clinical, each student will be able to:

- Identify the six basic views of an object.
- Determine size, shape, and features of an object.
- Identify the nine basic types of lines used in blueprint interpretation.

- Explain six basic types of holes and how they are represented in blueprint drawings.
- Draw or sketch necessary information to produce an object.
- Determine dimensions and directions of measurement of various features of an object.

GENERAL EDUCATION COMPETENCIES

Piedmont Technical College General Education Competencies for All Graduates:

This course may address one or more of the following General Education Competencies (assessment will be stated when applicable):

Communicate effectively.

Assessment:

Verbal blueprint description

Apply mathematical skills appropriate to an occupation.

Assessment

Describe parts shape and size using mathematical terminology

Employ effective processes for resolving problems and making decisions.

Assessment:

Manufacture machined parts using blueprints

Demonstrate the basic computer skills necessary to function in a technological world.

Assessment:

N/A

To validate proficiency in the general education competencies, students in some programs will be tested using Work Keys.