

Piedmont Technical College Course Syllabus

COURSE INFORMATION

Course Prefix/Number: MTT 105

Title: Machine Tool Math Applications

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/MTT105.

Textbook and Other Materials:

For textbook information and additional required and/or supplemental materials, visit the [college bookstore](http://www.ptc.edu/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](http://www.ptc.edu/syllabus/policies) (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) (http://www.ptc.edu/grading-policy). Final grade appeal information is available in the [Academic Catalog](http://www.ptc.edu/catalog/) (http://www.ptc.edu/catalog/).

ACCOMMODATIONS

Accommodations for ADA:

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

TITLE IX HARASSMENT AND SEXUAL ASSAULT INFORMATION

In accordance with Title IX of the Education Amendments of 1972, Piedmont Technical College does not discriminate on the basis of sex in its education programs or activities. Title IX protects students, employees, and applicants from sex discrimination in admissions and employment to include discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. More information regarding Title IX, including contact information for the Title IX coordinators, is available at [Title IX Harassment and Sexual Assault Information](https://www.ptc.edu/about/legal-disclosures/title-ix-harassment-and-sexual-assault-information) (<https://www.ptc.edu/about/legal-disclosures/title-ix-harassment-and-sexual-assault-information>).

RATIONALE

Why do I need this course?

A Machinist's knowledge of math is a necessity in any area of machining. The basics of math along with a strict adherence to accuracy cannot be overemphasized. Machine tool math applications shall always be a major factor in a machinist's capability to work intelligently and reliably to exacting specifications.

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) (<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:

- ☐ Read problems and understand how to correctly answer those questions.
- ☐ Use basic calculator skills.
- ☐ Sketch and visualize word problems.
- ☐ Use basic math in the shop.
- ☐ Use trigonometry in the shop.
- ☐ Use resource materials to help solve problems.

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:

N/A

Apply mathematical skills appropriate to an occupation.

Assessment:

Solve math problems with 100% accuracy due to the nature of the required machining requirements.

Employ effective processes for resolving problems and making decisions.

Assessment:

Solve problems related to the Machine Tool industry.

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

Assessment:

Use best practices when determining math problems using appropriate calculators.

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