Columbus State Community College
Mathematics Department Syllabus

Course & Number: MATH 1110–Mathematics for the Skilled Trades  Cr: 3 Class Hours Per Week.: 4

Prerequisites: MATH 1020 with a grade of “C” or higher, or placement by MATH1099 or COMPASS score

COURSE DESCRIPTION: This course is intended to be a basic math course for students in the skilled trades. Special emphasis will be given to the practical application of topics in elementary algebra and elementary geometry. Topics include measurement, ratio and proportion, systems of equations, the study of quadratic equations, basic plane geometry, and basic right triangle trigonometry.

SPECIAL COURSE REQUIREMENTS: None

COURSE GOALS: To improve the students’ algebra, geometry, and practical problem solving abilities. To prepare students for mathematics they will encounter in a diverse array of skilled trades programs.

GENERAL EDUCATION GOALS: This course addresses the following Columbus State general education goals:
- Critical Thinking
- Quantitative Literacy

TEXTBOOK, MANUALS, REFERENCES, AND OTHER REQUIRED MATERIALS:
- TI-30 Scientific Calculator

UNITS OF INSTRUCTION:
- Proportions and Percents (Chapters 4 and 5)
- Measurement: Precision, Accuracy, and Tolerances (Chapters 7, 8, 10, and 11)
- Systems of Equations (Chapter 17)
- Quadratic Equations: Square Root Method and the Quadratic Formula (Chapter 18)
- Plane geometry and Angular Measure (Chapters 19 and 20)
- Geometry using Properties of Circles and Triangles (Chapters 22 and 25)
- Areas and Volumes of Geometric Figures (Chapters 26, 27, and 28)
- Fundamentals of Trigonometry (Chapters 33-35)

GENERAL INSTRUCTIONAL METHODS: Lecture, discussion, demonstration, exploration and discovery exercises with the use of visual aids, calculators, and/or computer resources.

STANDARDS AND METHODS FOR EVALUATION:
Final Exam = 20% of course grade (final exam is 100% departmental).
The remaining 80% of the course grade will be determined by the instructor.
No more than 15% of the course grade may be determined using non-proctored assessments.

GRADING SCALE:
Letter grades for the course will be awarded using the following scale:

$ \geq 90\% - A \quad 80-89\% - B \quad 70-79\% - C \quad 60-69\% - D \quad < 60\% - E$

Grades will not be curved, skewed, or otherwise inflated.