**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: MEAS 1100

Course Title: Common Technical Skills

Credit Hours: 3

Prerequisite: None

Division/Discipline: Workforce Training and Community Education/ Gas Measurement Program.

Course Description: This web based course introduces the student to the basic skills necessary to pursue further training in Natural Gas Measurement. Skills will include applied mathematics, physics, and basic computer operation.

# **INSTRUCTOR INFORMATION**

# **COLLEGE POLICIES**

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The College assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. The student is responsible for learning the rules of, and avoiding instances of, intentional or unintentional plagiarism. Information about academic integrity is located in the Student Handbook.

The college reserves the right to suspend a student for conduct that is determined to be detrimental to the College educational endeavors as outlined in the College Catalog, Student Handbook, and College Policy & Procedure Manual. (Most up-to-date documents are available on the College webpage.)

Any student seeking an accommodation under the provisions of the Americans with Disability Act (ADA) is to notify Student Support Services via email at disabilityservices@bartonccc.edu.

# **COURSE AS VIEWED IN THE TOTAL CURRICULUM**

Success in the courses that follow Common Technical Skills depend on the student having a fundamental grasp of mathematical, physics, and statistical concepts that will be used in Fluid Mechanics and Measurement principles. Since much of the training is computer based, the student will also need basic computing competence to navigate Microsoft Windows and web based modules.

1. **ASSESSMENT OF STUDENT LEARNING**

Barton Community College assesses student learning at several levels:  institutional, program, degree and classroom.  The goal of these assessment activities is to improve student learning.  As a student in this course, you will participate in various assessment activities.  Results of these activities will be used to improve the content and delivery of Barton’s instructional program.

## Course Outcomes, Competencies, and Supplemental Competencies:

1. Apply the rules and theorems of industry applied mathematics.
2. Perform basic arithmetic calculations including whole numbers and fractions.
3. Convert fractions to decimals and percentages.
4. Factor square roots.
5. Solve industry applied algebraic and geometric problems.
6. Convert numbers to scientific notation.
7. Perform basic computing tasks.
8. Demonstrate navigating through Windows Explorer.
9. Create files and save work to specified locations.
10. Define the fundamental laws of Physical Science.
11. List Newton’s laws.
12. Apply laws of energy, work and power.
13. Define laws of heat transfer.
14. Perform electrical calculations using Ohm’s Law..
15. Determine voltage, amperage, and resistance using given values.
16. Navigate simple technical drawings.
17. Define symbols used in technical drawings.
18. Identify the different types of technical drawings.
19. Define industry related statistical concepts.
20. Define the terms average, mean, median, mode, and standard deviation.
21. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**
22. **TEXTBOOKS AND OTHER REQUIRED MATERIALS**
23. **REFERENCES**
24. **METHODS OF INSTRUCTION AND EVALUATION**
25. **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**