

COURSE SYLLABUS

COURSE: MAT 121 ALGEBRA/TRIGONOMETRY I

HOURS: Lecture: 2 Lab: 2 Shop/Clinical: 0 Credits: 3

COURSE DESCRIPTION:

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include the properties of plane and solid geometry, area and volume, and basic proportion applications; simplification, evaluation, and solving of algebraic equations and inequalities and radical functions; complex numbers; right triangle trigonometry; and systems of equations. Upon completion, students will be able to demonstrate the ability to use mathematics and technology for problem-solving, analyzing and communicating results.

PREREQUISITE(S): DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 and DMA 060

COREQUISITE(S): None

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

Washington, Allyn J. *Basic Technical Mathematics, 10th Edition*. Boston, MA: ISBN 9780133083507 Pearson/Prentice Hall, 2014. Print. ISBN
Readability Level: 10

Miller, Charles D., et al. MyMathLab Access Code (w/ebook), *4th Edition*. Boston: Pearson, 2008. Print. ISBN 0-32119991X
Readability Level: 7-8

STUDENT LEARNING OUTCOMES:

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

1. Use geometric principles to solve industrial application problems involving perimeter, area, and volume.
2. Employ basic algebraic operations to simplify, evaluate, and solve proportions, radical and other algebraic functions, equations, and inequalities.
3. Perform basic algebraic operations involving complex numbers.
4. Solve applied problems using trigonometric principles involving right triangles.
5. Solve applied problems using systems of equations involving two and three variables.
6. Use technology to solve practical problems and communicate results.

SYLLABUS INFORMATION:

The Student Learning Outcomes listed in this syllabus are those required actions that a student who successfully completes the course must be able to perform. The educational experience, however, is a two-way, interactive process involving both the student and the instructor. The student must play an active role in the learning process in order to be successful. This syllabus contains the Learning Outcomes for the course. A student who is unable to accomplish the outcomes will not receive a passing grade in the course.

The information in this BCC Syllabus may not be accurate beyond the current semester. Textbooks and other course materials are subject to change. Students should verify the textbooks with their instructor at the first class meeting prior to opening and using the textbook and/or material.

GRADING SYSTEM:

Brunswick Community College employs a system of letter grades and corresponding quality points per grade to evaluate a student's performance in meeting the stated goals and objectives for each course. The grading system is published in the [BCC Catalog and Student Handbook](#).

ATTENDANCE POLICY:

Each student has individual responsibility for attending class regularly and for meeting course objectives. A student is expected to attend all class meetings in a course. Rules on tardiness and leaving class early are addressed in each instructor's syllabus addendum. Instructors are required to record absences and report excessive absenteeism to the Registrar.

If a student is absent for any reason in excess of 20 percent of the class hours, he or she is in violation of the Brunswick Community College attendance policy. Unless the student officially withdraws from the course prior to the 65 percent point of the 16 week semester (or equivalent days for courses of other duration), he or she may receive a grade of "F."

Students who receive an "EXCESSIVE ABSENTEEISM NOTICE" are advised to contact their instructors immediately to review the conditions for withdrawing from the course or for continuing the course.

STUDENTS WITH DISABILITIES:

Brunswick Community College complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act, which require that no qualified student with a disability be excluded from participation in or be denied the benefits of any services, programs or activities on the basis of his or her disability. If a student has a disability that is covered by the Americans with Disabilities Act and requires accommodations in the classroom and/or in extracurricular activities, the student must request the

accommodations in writing and submit the request to the Disability Services Coordinator. Instructors will not provide accommodations without notification from Disability Services Coordinator. Brunswick Community College will make every effort to provide reasonable accommodations.