I. **Course Description**

**COURSE DESCRIPTION:** A traditional course in precalculus trigonometry. Topics include the trigonometric functions and their graphs, right and oblique triangles, degree/radian measure, trigonometric equations, identities, inverse trigonometric functions, vectors, the polar coordinate system, parametric equations, conic sections, and applications.

Credit Hours: 3 credit hours  3 class hours
Prerequisite: MATH 1710

II. **Course Outcomes and Topics**

Upon completion of this course, students will:

1. Solve problems using mathematics, and determine if solutions are reasonable.
   - Solve trigonometric equations, solve triangles, and evaluate inverse trigonometric functions and determine if the solution/result is reasonable.
2. Apply mathematical concepts to solve real-life problems using formulas (deduction) and interpret the meaning of the solution.
   - Create, analyze, and interpret results for applications involving vectors, linear and angular speed, navigation, the periodic nature of the trigonometric functions, and the conic sections.
3. Construct meaningful connections (transfer of knowledge) between mathematics and other disciplines.
4. Apply technology for mathematical reasoning and problem solving.
   - Apply mathematical reasoning with technology to solve problems involving trigonometric functions and inverse trigonometric functions.
5. Analyze data/graphs by using mathematical modeling and/or statistical reasoning.
   - Use modeling to determine information involving graphs of the conic sections, and approximating solutions to trigonometric equations.

III. **Materials**

Students must check with the instructor before purchasing any materials.

TEXT:


- **OR**
- **OPTIONAL** MyMathLab Student Access Kit only: ISBN 032119991X

OTHER ITEMS: **OPTIONAL** Student Solution Manual only, ISBN 9780134265230
REQUIRED Calculator: A graphing calculator is required (TI-84 or TI-83 or TI-83+ are recommended). The TI-84+ calculator will be the demonstration tool in the classroom. Supplemental software may be used (the instructor will clarify.) Calculators like the TI-89 will not be allowed (those with a Computer Algebra System - CAS). The TI-nspire calculator will only be allowed with the TI-84 Plus keypad (during tests).

IV. Course Policies
Attendance: Each instructor will provide information regarding his/her attendance policy. Failure to attend class will result in a final course grade of "FA" or "FN" (see explanation below) depending on the individual instructor’s course policy.
- FA= failure, attendance related; Last recorded date of attendance required.
- FN= failure, never attended class
Method of Evaluation:
Grading: 90-100 A, 80-89 B, 70-79 C, 60-69 D, below 60 F
The instructor will clarify specific examination, homework, and other methods of evaluation.

V. Communications
It is the student’s responsibility to check D2L and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. D2L contains specific course information and MyNSCC contains information important for other purposes.

VI. Inclement Weather Policy
Inclement Weather Policy: If classes at NSCC are cancelled there will be a posting to the school website in the announcement box at the top of the page and it will be on the school recording (615) 353-3333. Students need to check their NSOnline/D2L shell for an assignment and information from their instructor.

VII. ADA Statement
Nashville State Community College complies with the Americans with Disabilities Act. If you wish to request any special accommodations for any courses in which you are enrolled, contact the Disability Coordinator at 353-3721 in the Student Services building, S-114. Such services must have proof of documentation that is not over three years old.

VIII. Classroom Behavior
Nashville State Community College has a zero tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions. The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct which violates the general rules and regulations of the College. Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.) If a student disrupts the classroom, they may be removed by security. The student will not be allowed to return to class until the issue has been resolved with the Dean of Students.

Academic Dishonesty (Honor Code)
Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. "Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose
borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your own words” (A Writer’s Reference 331). Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of another person, using information from a web page or source without citing the reference, fraudulently using someone else’s work on an exam, paper, or assignment, recycling your own work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructor’s permission, allowing someone else to copy or use your work, using someone else’s work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member’s signature. In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty the instructor has the authority to assign an “F” or a “Zero” for the exercise, paper, or examination or to assign an “F” for the course.

NOTE: This syllabus is meant simply as a guide and overview of the course, the topics, the objectives, the general assessments, and some standard college policies. Some items are subject to change or revision at the instructor’s discretion. Each instructor will further clarify their criteria for grading, classroom procedures, attendance, exams and dates, etc.