Central Connecticut State University  
Department of Mathematical Sciences

READ THIS SYLLABUS CAREFULLY.

Trigonometry  
MATH 115 - 01   Spring 2021    3 credits

College:     Sch of Engnrng, Science & Tech  
Department: Mathematics

<table>
<thead>
<tr>
<th>Scheduled Meeting Times</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
</tr>
<tr>
<td>Class</td>
</tr>
</tbody>
</table>

This is a HyFlex class with 75-minute synchronous class meetings twice a week. You are expected to attend all live class sessions either online (Zoom meeting instructions below), face-to-face virtual interactions are mandatory, or on-ground.

George Fosdick is inviting you to a scheduled Zoom meeting.

Topic: Math 115.01  
Time: This is a recurring meeting Meet anytime

Join Zoom Meeting  
https://us02web.zoom.us/j/86150587693?pwd=N2YvenplZHE2Y0dOR0IaeXFqanIvQT09

Meeting ID: 861 5058 7693  
Passcode: MATH115
Textbook: Trigonometry, 4th edition by Cynthia Y. Young, John Wiley & Sons

Instructor: Prof. G. Fosdick

OFFICE HOURS

<table>
<thead>
<tr>
<th>Location (Building and Room #)</th>
<th>Day(s)</th>
<th>Times (hours &amp; am/pm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackboard Collaborate Ultra</td>
<td>MW</td>
<td>10:40 a.m. – 11:25 a.m.</td>
</tr>
<tr>
<td>and/or Maria Sanford - Room 211</td>
<td></td>
<td>and</td>
</tr>
<tr>
<td>And by appointment</td>
<td>Very flexible</td>
<td>2:55 p.m. – 3:40 p.m.</td>
</tr>
</tbody>
</table>

E-mail: gfosdick@ccsu.edu

Trigonometry Fall and Spring. Skill Area II Prereq.: MATH 101 (C- or higher) or MATH 103 (C- or higher) or placement exam. Study of relations, functions (special emphasis on the six trigonometric functions), inverses, and graphs. An analytic approach to trigonometry using circular functions, angular measures, identities, graphs and inverses. No credit given to students with credit for MATH 119, 124, 135, or 152. Can be used to meet requirements of a major or minor in mathematics only for students seeking elementary, early childhood or middle level certification. Not recommended for use in meeting certification requirements for secondary school mathematics.

Course and Classroom Policy:
(1). Attend and participate in class regularly; read the book and complete homework assignments, take quizzes and tests as scheduled (no email submissions please). Note: HW may be checked during class; please include the corresponding HW number on this assignment. Only on-time, legible work is acceptable.

A general rule for any college course is that you are expected to put in at least 2 hours of work outside of class for every hour in class. For a mathematics class, the expectation is at least 6 hours per week outside of class.

(2). It is virtually impossible to pass this course without completing the homework.
It would be like taking a course in swimming without ever getting in the water. Learn by doing; i.e., do the assigned homework diligently and read the textbook faithfully. For best results, complete more than the suggested homework problems.

(3). Develop the ability to independently solve each problem (i.e., without aid from a tutor, an online resource, the textbook’s explanation and/or solution, etc.); answering each problem quickly and correctly on your own will be the key to
success.

(4). Smart-phones, cell phones, and laptops are not to be used during class, or exams, unless special accommodations are necessary.

(5). Classroom etiquette:

Be prompt  Be prepared  Be polite  Be productive

Final Exam: Wednesday May 12 @1:00 p.m.-3:00 p.m.

Evaluation Plan:

Test 1, 2, and 3  60%
HW/quizzes/computer projects  15%
Final exam  25%

Note: To receive the grade of C- or better for the course, you must receive the grade of at least 60% on the final exam.

Minimum averages have been established for each of these grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93%</td>
</tr>
<tr>
<td>A-</td>
<td>90%</td>
</tr>
<tr>
<td>B</td>
<td>87%</td>
</tr>
<tr>
<td>B-</td>
<td>83%</td>
</tr>
<tr>
<td>C</td>
<td>77%</td>
</tr>
<tr>
<td>C-</td>
<td>73%</td>
</tr>
<tr>
<td>D</td>
<td>67%</td>
</tr>
<tr>
<td>D-</td>
<td>63%</td>
</tr>
</tbody>
</table>

University’s Academic Integrity Policy: Any student who engages in any forms of academic misconduct will face disciplinary consequences. Academic sanctions can range from a reduced grade for the quiz or exam to a failing grade for the course. An Academic Misconduct Report may be filed, and a Faculty Hearing Board may impose sanctions such as probation, suspension, or expulsion. It is your responsibility to know the Student Code of Conduct (see http://www.ccsu.edu/page.cfm?p=4155) and the Policy on Academic Misconduct (see http://www.ccsu.edu/page.cfm?p=2468#Misconduct.)

Additional University Policies:
1. You must take the final examination at the time specified in the course selection book.

2. If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment as soon as possible.

3. In the event of weather emergency that requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call (860) 832-3333 for the “general snow message” or check the CCSU web page.

4. The last day to withdraw from a course is Monday, April 19th. Approvals for withdrawal are not required. However, it is strongly recommended that students
consult with their academic advisors prior to deciding to withdraw and to document the extenuating circumstances. Cessation of attendance notice to instructor, or telephone calls to the Enrollment Center is not considered official notice of a student’s intention to withdraw from the course.

After Monday, April 19th withdrawals are allowed only under extenuating circumstances and require approval of the course instructor, department chair and dean of the School of Arts and Sciences. Failure to withdraw properly from a course will result in a grade of F appearing on the transcript.

Resources Available:
1. If you need help, take advantage of instructor’s office hours. Do NOT wait until just before the test to do so.

2. The Learning Center (TLC) is in Diloreto 316 or D-316, (860) 832-1900. For more information, visit their website at www.ccsu.edu/learnctr/. Free tutoring is available as well as free on-line eTutoring. The tutorial schedule, which includes both day and evening hours, is posted in The Learning Center and online by the end of the add/drop period. Student Disability Services is in Willard 201: Stephanie Scapeccia, (860) 832-1952.

3. Form a study group with other students in your section. Explaining solutions to homework problems to each other is a good way to learn.

4. A list of private tutors for hire is available in the math department office, Room 128 Marcus White, 832-2835.

Note: Departures from this outline responsive to the needs of the students may be made at the discretion of the instructor.

Homework:
1.1 Angles, Degrees and Triangles: 1 - 57 odd
1.2 Similar Triangles: 1 - 35 odd
1.3 Trigonometric Functions as Right Triangle Rations: 1 - 39 odd
1.4 Evaluation Trigonometric Functions: 1 - 45 odd
1.5 Solving Right Triangles: 1 - 63 odd

2.1 Angles in the Cartesian Plane: 1 - 49 odd
2.2 Second Definition of Trigonometric Functions: 1 - 45 odd
2.3 Evaluation Trigonometric Functions: 1 - 61 odd
2.4 Basic Trigonometric Identities: 1 - 51 odd

3.1 Radian Measure: 1 - 71 odd
3.2 Arc Length and Area of a Circle Sector: 1 - 55 odd
3.3 Linear and Angular Speeds: 1 - 55 odd
3.4 Unit Circle Approach: 1 - 57 odd
4.1 Graphs of Sine and Cosine: 1 - 21 odd, 53 - 69 odd
4.2 Translations of Sine and Cosine Graphs: 1 - 23 odd
4.3 Graphs of the other Trigonometric Functions: 1 - 37 odd

5.1 Trigonometric Identities: 1, 5, 9, 11, 15, 21, 23, 31, 39, 51, 53
5.2 Sum and Difference Identities: 1, 5, 9, 11, 21, 25, 29, 31, 35, 37, 39, 67
5.3 Double-Angle Identities: 1 - 35 odd
5.4 Half-Angle Identities: 1 - 35 odd, 49, 51, 53
5.5 Product-to-Sum and Sum-to-Product Identities: 1 - 19 odd, 29, 33

6.1 Inverse Trig Functions: 1, 5, 7, 15, 21, 25, 37, 49, 53, 55, 103, 105, 107
6.2 Solving Simple Trig Equations: 1 - 27 odd
6.3 More Complex Equations: 1 - 19 odd

7.1 Law of Sines: 1 - 53 odd
7.2 Law of Cosines: 1 - 25 odd, 45 - 53 odd
7.3 Area of Triangles: 1 - 15 odd