Texas A&M University-Corpus Christi  
Department of Mathematics and Statistics  
MATH 1316.001  
Trigonometry  
Fall 2012 (8/22 – 12/04/2012)

I. Course Information:  
Instructor: Dr. Ping-Jung “Charlene” Tintera  
Office: CI-368  
Phone: 825-3483  
Class meeting: Math 1316.001 TR 9:30 am ~ 10:45 am CS-112  
Office hours: MW: 12noon ~ 2pm and TR: 2~3 pm  
Email: ptintera@tamucc.edu  
Final Exam: Math 1316.001 Dec. 11 (T) 8 ~ 10:30 am CS-112

II. Course description:  
Trigonometric functions, identities, equations involving trigonometric functions, solutions of right and oblique triangles.

III. Prerequisites for the course:  
Math 1314 college algebra or placement into trigonometry.

IV. Text and other supplies required:  
- A TI-83 or TI-83/84 + graphing calculator is required for the class.

V. STUDENT LEARNING OUTCOMES:  
This course is designed to enable students to understand and work comfortably with:
- Trigonometric functions,
- Angles, radian measure, and circular functions,
- Trigonometric identities,
- Inverse trigonometric functions and trigonometric equations, and
- Complex numbers and polar equations.

VI. Instructional methods and activities:  
Methods and activities for instruction include:
- instructional presentation of new material and concepts,
- class discussion and problem solving analysis using critical thinking techniques,
- individual written assignments to enhance understanding of new concepts,
- discovery method techniques supported by a graphing calculator to view the effects of shifting and translation concepts on the trigonometric functions,
- optional 1-to-1 discussion time between students and instructor office hours.

VII. Evaluation and grading polices:  
Attendance/Homework MANDATORY  
Tests 75% (take top 3 scores out of 4 tests)  
Final exam 25% (comprehensive)  

VIII. Class policies:  
- Attendance is mandatory. Attendance will be checked each class period and each absence after 3 times (4th, 5th, and 6th) will result in one letter grade lower. Please save absences for emergencies.
- Homework will be given each class period and discussed at the beginning of next class period.
• Cell phone using is prohibited in any circumstances.
• “Cheating” is strongly prohibited. If I caught someone cheating during any test, students may drop the class without my permission. If not, normally it is an “F” for the semester grade.
• You are the only person responsible to drop the class and responsible to stay inform for any changes for tests and room changes. All the changes will be announced in the class.
• You may email me for help any time but not the night before the scheduled test neither the possible chance to postpone the test.
• I respect your request by email and I will answer it in my best convenient time.
• Makeup test will be given once per student with appropriate documentation provided. Please save the opportunity for the emergencies.
• There is no makeup final exam. It will be an “F” for the semester grade regardless if you do not take final on the final date. You must take the final exam on the official scheduled date (not a day early neither late).
• This syllabus is a contract between students and the instructor. If you have no any question regarding to this class, this syllabus will be activated from now and through this semester.

IX. Tentative schedule:

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<td>2</td>
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<td>3</td>
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<tr>
<td>4</td>
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<tr>
<td>5</td>
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<td>10</td>
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<td>12</td>
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<td>13</td>
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<td>14</td>
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<td>15</td>
<td>Review for final exam</td>
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*Notice to Students with Disabilities: Texas A&M University-Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Services for Students with Disabilities Office, located in Driftwood 101, at 825-5816. If you need disability accommodations in this class, please see me as soon as possible.

** Grade Appeal Process. As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

*Help.*
Tutoring and Learning Center has many quality tutors to help you while you need someone beside my office hours. Welcome to visit those tutors at the second floor of library. Please find out their schedule first before you make a plan to go for this semester. I will be happy to work with you anytime during my office hours and also email me for your special needs. Good luck to everyone in the class.

**About the Family Educational Rights and Privacy Act (FERPA)**
Under FERPA, a student has the right to:

1. **Inspect and review their education records**
   Students can inspect and review their education records within 45 days of the day the University receives a request for access. A student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request that identifies the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. **Request to amend their education records**
   Students can request to amend any of their education records that they believe are inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA. A student who wishes to ask the University to amend a record should write the University official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the University decides not to amend the record as requested, the University will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. **Some control over the disclosure of their education records**
   Students have the right to provide written consent before the University discloses personally identifiable information from their education records, except to the extent that FERPA authorizes disclosure without consent. The University discloses education records without a student’s prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is:
   - A person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff)
   - A person or company with whom the University has contracted as its agent to provide a service instead of using University employees or officials (such as an attorney, auditor, or collection agent)
   - A person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.
   - A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the University.

Upon request, the University also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

4. **File a complaint if they feel any of these rights have been violated**
   Students can file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

   **Family Policy Compliance Office**
   **U.S. Department of Education**
   **400 Maryland Avenue, SW**
   **Washington, DC 20202-5901**

Texas A&M University-Corpus Christi
Department of Mathematics and Statistics
Math 1316 - Trigonometry
By Lial, Hornsby, Schneider, 9th Edition
(28 sections)

1.1 Angles
1.2 Angle Relationships and Similar Triangles
1.3 Trigonometric Functions
1.4 Using the Definitions of the Trigonometric Functions

2.1 Trigonometric Functions of Acute Angles
2.2 Trigonometric Functions of Non-Acute Angles
2.3 Finding Trigonometric Function Values Using a Calculator
2.4 Solving Right Triangles
2.5 Further Applications of Right Triangles

3.1 Radian Measure
3.2 Applications of Radian Measure
3.3 The Unit Circle and Circular Functions
3.4 Linear and Angular Speed

4.1 Graphs of the Sine and Cosine Functions
4.2 Translations of the Graphs of the Sine and Cosine Functions
4.3 Graphs of the Tangent and Cotangent Functions
4.4 Graphs of the Secant and Cosecant Functions

5.1 Fundamental Identities
5.2 Verifying Trigonometric Identities
5.3 Sum and Difference Identities for Cosine
5.4 Sum and Difference Identities for Sine and Tangent
5.5 Double-Angle Identities

6.1 Inverse Circular Function
6.2 Trigonometric Equations I
6.3 Trigonometric Equations II (Optional)

7.1 Oblique Triangle and the Law of Sines
7.2 The Ambiguous Case of the Law of Sines
7.3 The Law of Cosines
7.4 Vectors, Operations, and the Dot Product

STUDENT LEARNING OUTCOMES:
This course is designed to enable students to understand and work comfortably with:
* Chapter 1: Trigonometric functions,
* Chapter 2: Angles
* Chapter 3: Radian measures
* Chapter 4: Circular functions,
* Chapter 5: Trigonometric identities,
* Chapter 6: Inverse trigonometric functions and trigonometric equations,
* Chapter 7: Applications of Trigonometry and Vectors
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