Math 1316.WB
Plane Trigonometry - Web Based
Spring 2013
01/22/13-05/17/13

Instructor:	Daniel T. Murphree	**Office Hours:**	MW 11 am -12:30 pm
Office:	ET 105		TTh: 11:00 am -12:00 pm
Phone:	335-6541		& 3:00 pm- 5:00 pm
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Welcome to Trigonometry! This sheet will tell you about the course, including subject matter, homework, quizzes, exams, and term grade. Almost all of your questions about the course can be answered by reading this syllabus. If anything is unclear, please feel free to contact me for clarification.

Course Description:
MATH 1316 Plane Trigonometry (27.0101.5319)(3-0)3 hours
presents trigonometric functions, formulas, solutions of right triangles and applications, variations of functions with changes in angles, trigonometric equations, identities, solutions of oblique triangles and applications, logarithmic functions, inverse functions and complex numbers. The student will learn to select appropriate mathematical techniques and technologies and use skills in information organizing, processing, planning and problem solving. The student should be able to probe for mathematical meaning and, perhaps, describe these meanings to others. (ICOs 3, 6, 9, 11)

Prerequisites/Corequisites: MATH 1314 passed with a C or better or equivalent competency, or an independent school district/OC dual enrollment form.

Learning Outcomes:
Upon successful completion of this course, students will:

1. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
2. Graph trigonometric functions and their transformations.
3. Prove trigonometric identities.
4. Solve trigonometric equations.
5. Solve right and oblique triangles.
6. Use the concepts of trigonometry to solve applications.

Required Materials:
Required Software: MyMathLab
Course ID: murphree54922.
Optional Textbook: Trigonometry by Dugopolski, 3rd Edition: Pearson Publishing Co. 2011.
Optional Technology: Scientific Calculator

Technology:
As this is an online course, you will need a computer with internet access to access course materials and complete your course work. A valid email address is also required for communications purpose. All communications will be sent to the email address used to register your MyMathLab software, so please access this account regularly to check for any class announcements or other information. It is recommended that you use your Odessa College email account for this purpose. There are computers with internet access available in the Math Lab, located in the Electronics Technology building room 120, which you can use as needed. Math Lab hours for this semester are 8:30 am to 8:30 pm, Monday through Thursday and 8:30 am to 1:00 pm on Friday.

Term Grade:
Your term grade will be determined according to the following distribution:

	Homework	Self Tests	6 Exams	Final Exam
Percentage	10	11	9 each	25
Drops	2	2	0	0

I will be checking your progress weekly, including checking the time you are spending in each section, the assignments you have completed, and the status of your exams.
End of term grades will be assigned according to the following scale:

Percentage	Grade
90–100	A
80-89.9	B
70–79.9	C
60-69.9	D
Below 60	F

Homework:
There is required homework for all sections covered in this course. Homework will be completed online through MyMathLab and will count as 10% of your grade. Your two lowest homework scores will be dropped. Note that while MyMathLab has helpful tools available for homework, these tools will not be available on exams so use them with discretion and make sure that you are able to work the problems without the tools as well. Due dates for each section are listed below.

Self Tests:
Every section also has an associated self test. These are short quiz-like assignments designed to help you better gauge your understanding of the material. They will count a cumulative 11% of your grade. The self test for each section will become available after the associated homework is completed. You will have only three chances to work each self test, so make sure each attempt counts! The due dates for the self tests are the same as the due dates for the homework sections, listed below.

Midterm Exams:
There will be 6 midterm exams, each will count 9% of your grade. You have two attempts at each of the midterms so it is suggested that you make the first attempt early to give you time to study from that for your second attempt (if needed). Completion dates for the 6 midterms are listed below. You may complete the exams before the suggested dates, but late exams **WILL NOT** be accepted. If both attempts are completed for an exam and you did not get 100% then I will review the exam for possible partial credit that the MyMathLab sofware cannot award. This review can only improve your score, it will not make it go down. If your score is improved you will be notified.

Final Exam:
The final exam will be comprehensive and will be proctored. It will count 25% of your grade. **You must take the final in the Math Lab (ET 120) or a verifiable testing center by 8:30 PM on Tuesday, May 14th.** Please bring a picture ID with you to present before you take the exam and be aware that you will not be allowed to bring your cell phone into the final exam area. You will be allowed a scientific calculator and a sheet of formulae that will be provided. You will have only one attempt for the final exam. **You must score at least 50% on the final exam to pass this course.**

Communication:
Since this is an online course, good communication is essential to your success. Communications will be sent via e-mail and course announcements. Take special note of the "Ask My Instructor" homework help in MyMathLab which will send me an email linked to a specific problem you would like to ask a question about. I will try to reply to any emails I receive as quickly as possible, in at most 2 business days.

Evaluations:
The SEI process for face-to-face and online courses is scheduled for the week of April 29th.

Dropping:
Be aware that the last day to drop a course with a grade of W for the spring semester is Tuesday, April 16th.

Tutoring:
Tutoring services are available through the Math Lab located in the Electronics Technology building room 120. Math Lab hours for this semester are 8:30 am to 8:30 pm Monday through Thursday and 8:30 am to 1:00 pm on Fridays.

Back-up Plan:
You must have a back-up plan for this course in case your primary computer fails during the semester. Please detail the location of the two computers in your student information sheet. The two computers should not be in the same building in case of an internet failure.

Special Needs:
Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Student Success:
The Odessa College Student Success Coaches will help you stay focused and on track to complete your educational goals. If an instructor sees that you might need additional help or success coaching, he or she may submit a Retention Alert or a Starfish Alert. A Student Success Coach will contact you to work toward a solution.

Learning Resource Center (The Library):
The Library, known as the Learning Resources Center, provides research assistance via the LRC's catalog (print books, videos, e-books) and databases (journal and magazine articles). Research guides covering specific subject areas, tutorials, and the "Ask a Librarian" service provide additional help.

Student Email:
Please access your Odessa College Student E-mail, by following the link to either set up or update your account: `http://www.odessa.edu/gmail/`. **All assignments or correspondence will be submitted using your Odessa College email.**

Technical Support:
For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at `https://www.odessa.edu/dept/ssc/helpdesk_form.htm`.

Reasonable Expectations of Engagement for Instructors:

1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
    - provide my contact information at the beginning of the syllabus;
    - respond to all messages in a timely manner through telephone, email, or next classroom contact; and,
    - notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.
2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will

- provide clear information about grading policies and assignment requirements in the course syllabus, and
- communicate any changes to assignments and/or to the course calendar to students as quickly as possible.

3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
   - return classroom activities and homework within one week of the due date and
   - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

Reasonable Expectations of Engagement for Students:

1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
   - attend the course regularly and line up alternative transportation in case my primary means of transportation is unavailable;
   - recognize that the college provides free wi-fi, computer labs, and library resources during regular campus hours to help me with completing my assignments; and,
   - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my personal computer equipment or internet service is unreliable.
2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to,
   - missing class when a major test is planned or a major assignment is due;
   - having trouble submitting assignments;
   - dealing with a traumatic personal event; and,
   - having my work or childcare schedule changed so that my classroom attendance is affected.
3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
   - seek out help from my instructor and/or from tutors;
   - ask questions if I don't understand; and,
   - attend class regularly to keep up with assignments and announcements.

Important School Policies:
For information regarding student support services, academic dishonesty, disciplinary actions, special accommodations, or student's and instructors' right to academic freedom can be found in the Odessa College Student Handbook.

Due Dates:

Assignment(s)	Due Date
Course Information Section 1.1: Angles & Degree Measure 1.2: Radian Measure, Arc Length, & Area	January 27
1.3: Angular & Linear Velocity 1.4: The Trigonometric Functions	February 3
1.5: Right Triangle Trigonometry 1.6: The Fundamental Identity and Reference Angles **Chapter 1 Exam**	February 10
2.1: The Unit Circle & Graphing 2.2: The General Sine Wave	February 17
2.3: Graphs of the Secant and Cosecant Functions 2.4: Graphs of the Tangent and Cotangent Functions	February 24
2.5: Combining Functions **Chapter 2 Exam** 3.1: Basic Identities	March 3
3.2: Verifying Identities 3.3: Sum and Difference Identities for Cosine	March 10
3.4: Sum and Difference Identities for Sine & Tangent 3.5: Double-Angle & Half-Angle Identities	March 24
3.6: Product & Sum Identities **Chapter 3 Exam** 4.1: The Inverse Trigonometric Functions	March 31
4.2: Basic Sine, Cosine, & Tangent Equations 4.3: Multiangle Equations	April 7
4.4: Trigonometric Equations of Quadratic Type **Chapter 4 Exam** 5.1: The Law of Sines	April 14
5.2: The Law of Cosines 5.3: Area of a Triangle	April 21
5.4: Vectors 5.5: Applications of Vectors **Chapter 5 Exam**	April 28
6.1: Complex Numbers 6.2: Trigonometric Form of Complex Numbers	May 5
6.3: Powers & Roots of Complex Numbers **Chapter 6 Exam**	May 12
Final Exam	May 14 by 8:30 pm