

## Plane Trigonometry Math 1316

**Instructor:** Crystal Rust

**Office hours:** My hours are 4:30 – 5:30 p.m. Mon., Wed. and Fri. and 11 a.m. – 12:30pm. on Tuesday and Thursday at the Town and Country campus. For the Town and Country campus, see me for place to meet. Most likely it will be in the library

**Phone Number:** My phone number is 713-718-5847. The best way to contact me is through my e-mail at [mathdoctor1999@yahoo.com](mailto:mathdoctor1999@yahoo.com). Our department number is 713-718-5511 our secretary, Evone, can always locate me.

**Textbook:** Trigonometry 7<sup>th</sup> edition by Lial, Hornsby and Schneider

**Course Intent:** This course is intended for students whose curriculum requires trigonometry as a prerequisite for higher mathematics courses. It can also be used as a review of trigonometry, or as a first course in trigonometry. The transferability of this course as either a mathematics credit or elective is at the discretion of the school to which the student intends to transfer.

**Course Objectives:** By the end of the course students should be able to do:

1. Recognize the six basic trigonometric functions.
2. Evaluate the functions at special angles.
3. Find reference or related angles and coterminal angles.
4. Use a calculator to find the value of trig functions of any angle.
5. Solve right triangles.
6. Convert degrees to radian and vice-versa.
7. Solve problems dealing with the application of radian measures.
8. solve problems relating to linear angular velocities.
9. Know the amplitude, period and phase shift for sine and cosine functions.
10. Sketch functions exhibiting the above properties.
11. Recognize the various trig identities.
12. Prove trig identities.
13. Solve trig equations and inverse equations.
14. Find areas of triangles.
15. Rewrite a complex number in polar form.
16. Use DeMoivre's theorem
17. Find the  $n$ th root of a complex number.
18. Solve problems dealing with vectors.

**Attendance:** Try to attend class. If you come late, try not to disturb the class.

**Grading policy:** You will have a total of four exams, 3 semester exams and 1 final exam, each worth 100 points. The homework (see below) will also count as 100 points. So your course grade will be determined by adding up the highest 3 exam grades, and homework and then divide by 4. Grading scale is 90 – 100 is an A, 80 – 89 is a B, 70 –

79 is a C, below 70 an IP will be given. **There will be no make-up exams, unless you notify me 24 hours by email ahead of time about a problem.**

**Important:** On exam days, if you are more than 10 minutes late you will not be allowed to take the exam. It is very important for you to be on time on exam days

**Homework:** Try to do the odd problems and keep them in a notebook. I will take up the notebooks on exam days. If you do not turn in your notebook, you will not receive homework credit.

**Cheating and grade disputes:** Cheating on an exam will give you a 0 on the exam. Final grade disputes should follow the guidelines in the student handbook.

**Special Needs:** If there are any problems the student needs accommodations for, let me and a counselor know, and we will make reasonable accommodations. There are **math tutors** available in the TLC, as well as, videotapes. Feel free to go there to get help and/or extra information.

**Course Calendar:** (Upon occasion we may need to change.)

**Tuesday and Thursday:**

January: 14 sections 1.2 - 1.3  
16 sections 1.4 – 1.5  
21 sections 2.1 – 2.2  
23 sections 2.3 – 2.4  
28 sections 2.5 and 3.1  
30 sections 3.2 – 3.3

February: 4 review for exam 1  
**6 take exam 1**  
11 section 4.1  
13 section 4.2  
18 section 4.3  
20 sections 5.1 – 5.2  
25 sections 5.3  
27 sections 5.4

March: 4 section 6.1  
6 sections 6.2 – 6.3  
11 section 6.4  
13 review for exam 2  
17 - 23 **Spring Break**  
**25 take exam 2**  
27 sections 7.1 – 7.2

April: 1 section 7.3

3 No class  
8 section 7.4  
10 section 7.5  
15 sections 8.1 – 8.2  
17 sections 8.3 – 8.4  
22 section 8.5  
24 review for exam 3  
**29 Take exam 3**

May:       1 Review for final  
**6 Final Exam at 9 a.m.**