Math 104G: Precalculus II - Trigonometry and Geometry

Spring 2011 Instructor: Diana Webb CRN: 11554 E-mail: dtwebb@hawaii.edu

Room: K 106 (next to the swimming pool)

Hours: MWF 10:30-11:30 and by appt.

Course Information: Math 104G is the second course of a year long Precalculus sequence. We will cover trigonometric functions $(\sin x, \cos, x, \tan x \text{ etc.})$, analytic trigonometry (proving and using various trigonometric identities), polar coordinates, and parametric functions.

Prerequisite: C or better in Math 104F, or recommendation from Math Placement Exam

Required Text: Precalculus - Functions and Graphs by Mark Dugopolski, Custom Edition for University of Hawaii, Hilo

Calculator Use: A TI-84 graphing calculator (or similar model) is required for this course, and will be used throughout, including exams.

Tests: (450 points) We will cover chapters 5-7 with a test (worth 100 points each) at the end of each chapter. There will also be a cumulative final exam worth 150 points.

Homework and quizzes: (150 points) Homework will be assigned weekly and due every Friday. Both online and paper/pencil homework will be assigned. You will have your choice as to which assignment to complete with a few exceptions where a paper/pencil assignment will be the only option. The online homework will be assigned through CourseCompass/MyMathLab. The course id is webb79704. Late homework will only be accepted for online assignments with a deduction in points for each day it is late.

Several in-class quizzes will be given throughout the course. These quizzes will be announced one class period in advance. The lowest 2 (maybe more depending on how many quizzes we have time for) homework/quiz scores will be dropped. There will be no make-up quizzes.

Grading Standards: Your grade will be determined as follows.

- A 540-600 points
- B 480-539 points
- C 420-479 points
- D 360-419 points
- F below 360 points

Learning Outcomes: The successful Math 104G student will be able to

- use the unit circle to evaluate trigonometric expressions
- graph trigonometric functions and their transformations
- solve applied trigonometric problems involving right triangles
- simplify trigonometric expressions and verify trigonometric identities
- use various trigonometric identities (half-angle, double-angle, etc.)
- solve equations involving trigonometric expressions
- convert between rectangular and polar coordinates and graph polar equations

Tentative Course Schedule:

Weeks	Sections Covered	Test Dates and Holidays
1-5	chapter 5	Test 1 (F 2/11)
6-10	chapter 6	President's Day (M 2/21)
		Test 2 (F 3/18)
11-15	chapter 7	Spring Break (3/21-3/25)
		Good Friday (F 4/22)
		Test 3 (F 4/29)
16	review	last day of class (W 5/4)
Finals Week		Final Exam (Wednesday 5/11 11:50-1:50)

Math Tutoring Lab: Free walk-in tutoring is available in PB 22- 102. The best way to learn math is by practicing, so it may prove very helpful to spend regular hours in the lab doing homework, meeting with others in the class, etc.

Attendance and Class Conduct: Students are expected to be in class everyday. If you miss class, you will be responsible for retrieving homework assignments and any other announcements. All students are expected to follow the UHH Student Conduct Code.

Disability Statement: Any student with a documented disability who would like to request accommodations should contact the Disability Services Office - Hale Kauanoe A Wing Lounge, 933-0816 (V), 933-3334 (TTY), uds@hawaii.edu - as early in the semester as possible.