

## MA 113-105    **Precalculus Trigonometry**    Fall 2011

**Instructor:** Yorck Sommerhäuser

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**Class meetings:** Monday, Wednesday, Friday 13:25 pm–14:15 pm, ILB 345

**Office hours:** Monday, Wednesday, Friday 12:25 pm–13:25 pm

**Prerequisites:** C or better in MA 112 or sufficient mathematics placement test score.

**Textbook:** M. L. Bittinger/J. A. Beecher/D. J. Ellenbogen/J. A. Penna: *Precalculus—Graphs and Models*, 4th edition, Pearson/Addison-Wesley, Boston, 2009, ISBN: 0-321-53013-6.

**Course description:** The course is a continuation of MA 112. It treats numerical, graphical, and algebraic properties of trigonometric functions. Furthermore, it covers right angle trigonometry, inverse trigonometric functions, polar coordinates, and conic sections. Credit for both MA 113 and MA 115 is not allowed.

**Objectives:** During the course, the student will develop understanding of trigonometric functions in terms of ratios of lengths of sides in a right triangle and in terms of arc length on the unit circle. He will acquire the algebraic skills necessary to solve equations involving trigonometric functions and to obtain standard forms for conic equations. He will also acquire the reasoning and sketching skills needed for applications of trigonometry or for graphing conics from standard form equations.

**Coverage:** We cover Chapters 6, 7, 8, and 10 of the textbook, with the exception of Sections 8.3, 8.5, 8.6, 10.4, and 10.7.

**Attendance:** Attendance is required and contributes to the final grade. Three classes may be missed without affecting this grade. Absence in more than half of the classes results in failing the whole course, regardless of any scores.

**Exams:** There will be two midterm exams and a comprehensive final exam. No make-up exams will be offered. Calculators and other electronic devices must not be used during the exam unless explicitly stated otherwise. The midterm exams take place on Friday, September 16 as well as Friday, October 14. The final exam takes place on Wednesday, December 14, 13:00 pm–15:00 pm.

**Homework:** The daily homework assignment will consist of a reading assignment and a problem assignment. Part of the daily problem assignment has to be completed online via the MyMathLab system of Pearson Education, available at the web page <http://pearsonmylabandmastering.com> under the course id sommerhaeuser68245. The time frame for this completion begins after the lecture in which the problem was assigned and ends before the next lecture. The online homework contributes 15% to the final grade. A student who has attempted less than half of the online homework problems automatically fails the course, regardless of his other scores.

**Quizzes:** There will be a short quiz every week on Friday. No make-up quizzes will be offered. However, the two lowest quiz grades will be dropped.

**Grading weights:**

Attendance:	5%
Online homework:	15%
Quizzes:	15%
Midterm exams:	17.5% each
Final exam:	30%

**Grading scale:**

A:	90% – 100%
B:	80% – 89%
C:	70 % – 79%
D:	60% – 69%

**Policies:** Eating, drinking, and smoking is not permitted in the classroom. The use of electronic devices such as laptops, i-pods, cellphones, or calculators is not allowed unless explicitly stated by the professor. Cellphones may be brought to class, but must be completely off and stowed away. They must not be used during class at any time. In addition, the policies described in the student handbook ‘The Lowdown’ apply.

**Tutoring:** The tutoring laboratory in ILB 456 provides additional help for this course.

**JagSuccess:** JagSuccess is a program intended to help students be successful in 100 and 200 level courses. If you are not doing well, you will receive an email instructing you to see your professor and academic advisor. You will also receive a link to an online survey regarding class habits and study skills. Based on your survey score, you will receive recommendations for improving your performance. Watch for the JagSuccess email during week 7 of this semester.

**Disabled students:** If you have a specific disability that qualifies you for academic accommodations, please notify me and provide certification from the Office for Special Student Services, which is located at 5828 Old Shell Rd. (Tel. 460-7212).