

CODE: _____ Your name for posting of grades. Copy it from first day sign in sheet.

1. Instructor: Cyndi Crumb

Office Hours: Monday 2 – 5:30 pm, Wednesday 9 am to noon & 3:30 – 5:30 pm, and by appointment.

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Goals and Objectives:

The course description for MA 115 in the 2010-2011 Bulletin on page 228 is:

Study of elementary functions, their graphs and applications, including polynomial, rational, algebraic, exponential, logarithmic, and trigonometric functions. This fast-paced course is designed as a review of the algebra and trigonometry needed in calculus. Prerequisite: Sufficient mathematics placement test score. **Core Course.**

Learning objectives from Math/Stat Departmental Web page for MA 115:

1. Recognition of function model groups by name, equation, and general graph shape: linear, quadratic, cubic, general polynomial, rational, trigonometric, inverse trigonometric, exponential, and logarithmic.
2. Recognition of conic sections by their equations, both Cartesian and polar. Use of completion of the square for Cartesian and equivalent fractions for polar coordinates to put the equation in standard form. Use of the standard form to sketch the graph of the conic.
3. Vocabulary used to describe graphs including, but not limited to: domain, range, increasing, decreasing, x-intercept, function zero y-intercept, maximum, minimum, asymptote, vertical, horizontal, axis, scale, coordinates, vertex, axis of symmetry, center, focus, foci, period, amplitude, phase shift, vertical shift, end behavior.
4. Real number line and solving inequalities to describe number sets on that line.
5. Complex number arithmetic and application of the fundamental theorem of algebra to factor polynomials.
6. Algebraic techniques for problem solving together with reasoning and argumentation skills to present mathematical arguments and proofs.

Assessment pertaining to the student's mastery of the learning objectives will involve the following:

- Questions which require the student to show step by step use of algebraic manipulations and mental calculations.
- Questions which require the student to readily identify specifics between the graph and the terms and numbers in the equation for that function or relation of variables.
- Questions which require the student to read word descriptions of applications and produce from those words equations and graphs which he or she uses to solve questions pertaining to the problem application.
- The student will need to gain and use in class and in written work the necessary mathematics vocabulary to describe graphs, names for graphs, trigonometric functions, and algebraic tools.
- The student will explain using words and entries how the calculator can be employed to obtain numeric answers, check work, and check graphing done by hand.
- Questions which require the student to display reasoning and logic in presentation of mathematical arguments in which theorems are used to make assertions about functions.

I believe that the student needs to acquire patterns of work to insure accuracy. I have many requirements that I hope force the student to learn how to check work and learn to check work.

2. Copies of **first day handout** with **course calendar** will be sent to jag mail addresses using official class lists and is available on Math/Stat Departmental webpage. The course calendar provides specific sections of the text by class period and includes planned exam dates.
3. **Roll** will be **taken**. Arrive on time. Fewer than 3 absences produces 4% extra credit in final grade calculation.
4. This course has an internet **homework** component with the Distance Learning e-Companion. This site is accessed from the USA Homepage Quick Links to Distance Learning Campus. The course name is MA 115-102. Login information will be sent to you via jag email. Internet homework has listed date due. A four hour class on a two day per week schedule requires that more than one section be covered on many class days. Homework assignments are completed outside of class time. The gateway necessary to receive a grade of A, B, or C in the course is an average performance level of 80% for the complete set of assignments and minimum performance level of 65% on any single assignment. A single attempt for each assignment is allowed. You are expected to work all homework problems fully and bring to class on listed turn in dates.

5. **In class examinations** are to be given on the dates indicated on the course calendar and are more often than not completed entirely without the use of a calculator. Any time calculators are employed, it is for specific problems which are done after the rest of the exam has been turned in. The Take Home Exam listed on the calendar is a compilation of function and equation graphs assigned as the course progresses. The student is expected to graph by hand and make use of a graphing calculator for verification and assistance in accuracy for this work.
6. The student is expected to be awake and engaged in learning during class, taking notes by hand. We want to establish a learning atmosphere from day one and continue it for the entire term. Computers are not allowed in use in the classroom without prior permission from C. Crumb given only in very unusual circumstances.
7. **Quizzes are listed on the course calendar together with due dates for home work which will be collected each at the beginning of the class period.** Attendance is required for the entire period for quizzes and exams as well as class.
8. The **weighting for grade** averaging is: Internet Homework 10%, In-Class Quizzes and Written Homework 20%, In-class and Take Home Exams 45%, Comprehensive Final 25%. The Final examination is scheduled to occur at **3:30 pm -5:30 pm Tuesday, December 14, 2010.**
9. Grades on all assignments will be determined using the **grade scale:**
91% and higher: **A**, 81% - 90%: **B**, 71% - 80%: **C**, 61% - 70%: **D**, below 61%: **F**.
10. If you have a specific disability that qualifies you for academic accommodations as described on page 25 of the 2010 – 2011 Bulletin, please notify me and provide certification from the Office of Special Student Services. The Office of Special Student Services is located in the Student Center, Room 270, Phone (251) 460-7212.
11. Plan to keep up with the work, reading the section assigned before it is covered in class.
12. **Text:** Precalculus, Fourth Edition, J. Douglas Faires & James DeFranza, ISBN 0-495-01269-6.
13. **Supplies:** Text, graphing calculator which you will learn to use outside of class time, set of 8 colored pencils, loose-leaf notebook paper, graph paper with 5 squares to the linear inch, and 6" or longer straightedge or ruler. **All needed for all class periods.** Two folders of a pale color with pockets and brads are needed for graphing projects.
14. Notification of any changes in policies or schedules will be given orally in class, written by email on jag platform, written in announcements on University of South Alabama Math/Stat web page, or written in internet announcements.
15. 1.1 – 6.7, with supporting materials in trigonometric equations and identities. Please see schedule calendar.
16. Free mathematics tutoring is available in ILB 456. Schedules will be posted on lab doors and outside ILB 325 after the first week of class in each term. Bring or report any problems with e-College to me immediately.
17. Grades are given in class or posted using CODE names. Record yours above. No term grades by phone. Use PAWS.
18. JagSuccess is a program intended to help students be successful in 100 – 200 level courses. If you are not doing well in MA 115, you will receive an email in week eight of the Fall 2010 term instructing you to see your professor along with instructions to access an online tutorial intended to help with common problems affecting academic performance.
19. Before you make a decision to drop, come see me Cyndi Crumb, Dr. Steve Brick (Assistant to the Chair of the Department of Mathematics and Statistics), or Dr. Scott Carter (Chairperson of the Department of Mathematics and Statistics). We can frequently show you a way to success in the course!

**I will plan to make any adjustments to our schedule,
send homework assignments, send quiz keys, send pretests,
and other communications to you using the jaguar1 email.**

**I will have a very busy day Tuesday and Thursday
so you need to expect that I can send and read mail most regularly
on other days of the week.**

Check your jaguar email account daily.