

## Math 102A Precalculus

Spring 2006

Hobbs 221

MWF 10:00am-10:50am

**Instructor:** Dr. Mike Coco

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**Homepage:** [http://coco\\_m.web.lynchburg.edu](http://coco_m.web.lynchburg.edu)

**Office Hours:** TR 10:00am-12:00pm or by appointment

**Textbook:** Precalculus Third Edition. *by Faires and DeFranza*

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### Course Description

This course includes the study of a variety of functions and their graphs and transformations, including linear, quadratic, rational, polynomial, logarithmic, exponential, and trigonometric functions. The study of trigonometry will include both the right triangle and the unit circle approach. The course is intended to strengthen the algebra and trigonometry skills required for the study of calculus.

### Course Objectives

Through this course the student will gain working knowledge of general function theory. This will include recognizing and using function notation, manipulation of graphs of functions, combining functions to form new functions, and deriving and graphing inverse functions.

The student will be able to apply these general ideas to explore the properties of linear, polynomial, rational, exponential and logarithmic functions.

These ideas will also be applied to Trigonometric functions. The student will be able to evaluate the six trig functions, recognize and manipulate their graphs, and find their inverse functions. Many fundamental identities and formulas will be discovered.

### Course Outline

We will cover almost every section from Chapters 1 through 5.

**Attendance**

Attendance will not be taken. However since a lot of material will be covered each day, some of you may find it difficult to pass this course if you do not attend class. (*Keep reading.*)

**Homework**

Homework will be assigned everyday. It will not be collected or checked. I suggest you take advantage of these assignments and do as many exercises as possible. (*Keep reading.*)

**Quizzes**

There will be a quiz every Wednesday. Your quiz average will be  $\frac{1}{5}$  of your final grade. Each quiz will cover any new material up to and including the previous Friday. In other words, anything covered in the previous week. They will usually consist of two or three problems taken directly from the homework assignments. I reserve the right to give pop-quizzes whenever the mood strikes me. There will be no quiz make-ups. To compensate for this the two lowest quiz scores will be dropped. *Consequently, if you come to class and keep up with the homework assignments, you should have no problem with the quizzes. However, if you do not come to class you might miss a quiz, and if you don't do the homework you might fail a quiz you could have easily passed.*

**Tests**

There will be three semester tests. Each test will be worth  $\frac{1}{5}$  of your final grade. Their tentative dates are:

Test 1 Friday February 3

Test 2 Friday March 3

Test 3 Friday April 14

Test make-ups will not be given. If you miss a test for a legitimate reason that test will be dropped and the final exam will be counted twice in its place. If you miss a second test for a legitimate reason and are still capable of passing the course special arrangements will be made.

**Final Exam**

The final exam will be comprehensive, covering the entire content of the course, and will make up  $\frac{1}{5}$  of your final grade. Under no circumstances will the final exam be given early. *Make travel plans accordingly.* The scheduled date, time and place of the final are:

**Thursday May 4 9:00am Hobbs 221**

**Grading**

Course grades will be assigned using a 10-point scale. That is,

A 90-100

B 80-89

C 70-79

D 60-69

F 0-59

Your grade will be calculated using the following formula:

**Important Dates**

- 1/23 End of add period
- 2/3 End of 3-week withdrawal period
- 2/10 Pass/fail deadline
- 3/4-12 Spring Break
- 3/31 End of 10-week withdrawal period
- 5/2 Last day of classes

**Calculators**

A graphing calculator is strongly recommended for this course. A TI-83 will be most useful later in Calculus.

**PASS**

PASS stands for Peer Assisted Study Sessions. These sessions are designed to help you understand concepts covered in class, work through homework problems, and prepare for quizzes and tests. In general, students who attend PASS do better on tests than they would otherwise. I recommend you attend as many PASS sessions as possible. Once the PASS schedule is set by you and your PASS leader it will be posted on the class website.

**Quality of work**

In general, it is difficult to do Math neatly in pen since it is not possible to erase mistakes. I strongly suggest doing most of your work in pencil, or that you, at least, always have a pencil with you in class. Any work turned in to me (i.e. quizzes, tests, etc.) must be done neatly.

**Special Needs**

The College will make reasonable accommodations for persons with documented disabilities. Students should immediately contact the Support Services Coordinator located in the Academic Advising Office (extension 8419) to make arrangements for their accommodations and faculty notification.