MATH 1210: PRECALCULUS II

UVa–Wise. Department of Mathematics and Computer Science. Spring 2016.

BASIC INFORMATION

Class meetings: Monday, Wednesday, Friday, 10:00–11:00 or 12:00–12:50 in Darden 214B.

Instructor: Dr. Matthew Harvey

Office: Darden Hall 235

Office phone: 276-376-4571

Office hours:

- Monday 9:00–10:00, 11:00–12:00
- Tuesday 9:30–12:00
- Wednesday 9:00-10:00, 11:00–12:00
- Thursday 9:30–12:00
- Friday 9:00-10:00, 11:00-12:00

Email: msh3e@uvawise.edu

Web: www.mcs.uvawise.edu/msh3e/

COURSE DESCRIPTION

The prerequisite for this course is satisfactory performance on the placement test or successful completion of Math 1110 with a grade of C or better.

This is the second course in the pre-calculus sequence. The purpose of both courses in the sequence is to prepare the student for calculus. The focus of this course is on the six trigonometric functions and their inverses. We will study the properties and applications of these functions. In addition, we will end the semester by studying a few techniques for solving systems of linear equations. In more detail, course topics will include:

- angle measurement
- the unit circle
- trigonometric functions
- graphs of trigonometric functions
- trigonometric identities
- trigonometric equations
- inverse trigonometric functions
- applications of trigonometry
- the laws of sines and cosines
- substitution and elimination methods
- solving linear systems with matrices

By the end of the semester, you should be able to evaluate trigonometric functions at special values on the unit circle. You should be able to use transformations to graph trigonometric and inverse trigonometric functions, particularly sine and cosine. You should be able to solve equations and verify identities. You should be able to interpret word problems in a geometric context and use trigonometry to solve them. You should be able to solve 2×2 and 3×3 systems of equations using substitution, elimination, and matrix row reduction methods.

The textbook for this course is *Precalculus*, 9th ed., by Michael Sullivan. We will cover the material in from section 6.1 through section 8.3 of this book as well as sections 11.1 and 11.2. In addition, you will need a basic scientific or graphing calculator for this class.

THE EVERYDAY CLASS

Your presence in class is expected. In class, you are expected to pay attention and contribute. At the very least, you must not be a distraction to your fellow classmates. Please silence all electronic devices. Disruptive behavior will not be tolerated. If I feel that you are a distraction to the rest of the class, I will ask you to leave.

GRADES

Your daily progress will be monitored in several ways. You will have homework assigned regularly. Some assignments will be selected from problems from the book, to be turned in. Others will be through MyLab, an online component of our textbook. In addition, we will have occasional in-class quizzes. We will cover a lot of material in this class, and it is imperative that you do not fall behind. You should expect to spend at least six hours per week outside of class working on these problems.

During the semester there will be three in-class tests (see the attached schedule). They are tentatively scheduled for the weeks of February 1, February 29, and April 4, although the exact dates are still to be decided. A typical test will consist of approximately 15 short answer questions.

- No make-up exams will be given unless you can present a valid documented excuse. In this case, you will either take a make-up exam or be given a grade based on other assignments, whichever I feel is more appropriate.
- Your final exam grade may be used to replace you lowest test grade.
- At the end of the semester you will have a comprehensive final exam.
- Course grades will be assigned according to these percentages:
  homework and quizzes: 20%
  tests: 60%
  final exam: 20%

DISABILITY SERVICES

If you need course adaptation or accommodation because of a disability or if you have emergency medical information to share with me, please make an appointment to talk with me as soon as possible. To make inquiries regarding disability services, please contact Whitney Wells, Director of Disability Services, at 276-328-0265 or wew3x@uvawise.edu, or visit the Academic Support Center in Zehmer Hall.

TITLE IX

The University of Virginia's College at Wise strives to provide a working and educational environment for all faculty, staff and students that is free from sexual misconduct and harassment. Sexual harassment, sexual assault and other acts of sexual misconduct are forms of sex discrimination prohibited by Title IX. The College reaffirms its commitment to maintain a campus environment emphasizing the dignity and worth of all members of the college community. To view UVa-Wise's sexual misconduct and harassment policy visit: www.uvawise.edu/compliance/TitleIX. If you have questions or concerns, please immediately contact:

Tabitha Smith, Title IX Coordinator
Office of Compliance and Conduct
1 College Avenue, Wise, VA 24293
Office: 276-328-0131
Cell: 276-870-5065
Fax: 276-376-4876
Email:tabitha.smith@uvawise.edu

CHEATING

Cheating will not be tolerated. Any student caught cheating will receive a zero on the assignment, will be reported to the Honor Court, and if found guilty may receive an F for the course.