math 112
Elementary Functions
Fall 2009
INTO OSU/Department of Mathematics
Oregon State University

Instructor Information:
Keith Schloeman
Office: Kidder 290
Office Hours:
  Monday 3:00 – 4:00
  Wednesday 1:00 – 1:50
  Thursday 10:00 – 11:00
  Friday 11:00 – 11:50

Course Information:
CRN 19613/19614
Tuesday 8:00 – 9:50
Thursday 8:00 – 9:50
HECKRT 209

Text: Brief Calculus 4th Edition by Larson
Calculator: You will need to have access to a calculator with graphing capabilities. Calculators may be used on exams.

Objective/Course Outcomes: Trigonometry is a topic of vital importance in mathematics and has powerful applications in astronomy, geography, physics, engineering and elsewhere. In this course we will accomplish the following:
  - Explore the trigonometry of right triangles
  - Study the trigonometric functions
  - Motivate and study the inverse trigonometric functions
  - Study trigonometric identities
  - Analyze solving equations involving trigonometric functions
  - Extend triangle trigonometry to oblique (non-right) triangles via the Law of Sines and the Law of Cosines
  - Introduce vectors, parametric equations and the polar coordinate system
  - We will introduce and revisit applications throughout the course.

Grades: Your final course grade is determined as follows:
  Homework 15% A 93 – 100% C 73 – 76%
  Activities 15% A- 90 – 93% C- 70 – 72%
  Quizzes 5% B+ 87 – 89% D+ 67 – 69%
  Midterm 30% B 83 – 86% D 63 – 66%
  Final Exam 35% B- 80 – 82% D- 60 – 62%
                     C+ 77 – 79% F < 60%

http://www.science.oregonstate.edu/~schloemk/Math112INTO.htm
**Homework:** There will be a homework assignment every week. Homework will be due in class on Tuesdays and will cover the material presented the preceding week. Every homework assignment is worth 10 points with 5 being awarded for completeness and 5 points awarded for correctness.

**Activities:** There will be an in class activity during the second hour of class every Thursday. These activities will be based on the material covered that week and are due the following Thursday (if not completed during class). Activities are designed to be completed as part of a group, but every student needs to submit their own version of the activity.

**Quizzes:** We will have a couple of quizzes throughout the course as needed. Quizzes will always be announced at least one week in advance. The first quiz is scheduled for Thursday October 15.

**Exams:** There will be a midterm exam on Thursday October 29 and a final exam on Thursday December 10 at 12:00. The final will be cumulative, but will be weighted towards material covered after the midterm. Calculators will be allowed on both exams. One side of a 3 x 5 note card with notes will be allowed on the midterm and a 3 x 5 note card with notes on both sides will be allowed on the final.

**Tips for Excelling in Math 112:**
- Read over the text before and/or after lecture
- Start homework assignments as soon as the section is covered
- Always complete your homework assignments
- Participate fully in the activities
- Get help from the instructor in his office whenever you need it
- Visit the Math Learning Center (MLC) in Kidder 108 for drop in help with homework or reviewing topics.
- Work together in groups on homework and studying

**Students with special needs:** Accommodations must be a collaborative effort between the student, the instructor and Services for Students with Disabilities (SSD). Students with accommodations approved by SSD must contact the instructor during the first week of classes to discuss arrangements. Students who believe that they are eligible for accommodations but have not yet obtained approval through SSD must contact SSD immediately to initiate the process.

**Academic Dishonesty:** You will be expected to conduct yourself in a professional manner. Academic dishonesty such as plagiarism and cheating will not be tolerated. Therefore, students are expected to be honest and ethical in their academic work. Academic dishonesty is defined as an intentional act of deception in one of the following areas:
- cheating- use or attempted use of unauthorized materials, information or study aids
- fabrication- falsification or invention of any information
- assisting- helping another commit an act of academic dishonesty
- tampering- altering or interfering with evaluation instruments and documents
- plagiarism- representing the words or ideas of another person as one’s own.

For more information about academic integrity and the University’s policies and procedures in this area, please refer to the Student Conduct at http://www.orst.edu/admin/stucon/achon.htm and the section on Academic Regulations in the OSU Schedule of Classes.

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