INSTRUCTOR:

Dr. Harry S. (Steve) Mills, EDBH 134K, 970-339-6238. (E-Mail: Use Course Website)

CATALOG DESCRIPTION:

Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence.(3 CREDITS)

PREREQUISITES: "C" or better in MAT 090, or EA 61-84 or ACT (Math) 19 or SAT 460.

REQUIRED MATERIALS:

- 1. **Textbook:** Martin-Gay, Elayn. INTERMEDIATE ALGEBRA. 5TH edition. Pearson, Prentice-Hall. 2009. ISBN:9780136007296 (Greeley bookstore prices: \$110.50 (used) and \$147.50 (new)).
- 2. **Scientific Calculator:** It should display the expression before you enter it, and let you scroll back and edit expressions you've already entered. The TI-30X IIS (ti-30x iis) is Graphing calculators are *prohibited* on quizzes and tests. Cell phone calculators are *prohibited* on quizzes and tests. Cell phones are prohibited in class, for that matter..

LEARNING OUTCOMES: From State of Colorado Common Course Numbering System.

- 1. Acquire an understanding of trigonometric vocabulary. (Reading I)
- 2. Measure angles in degrees and radians.
- 3. Calculate the values of trigonometric functions of acute angles using right triangles.
- 4. Evaluate trigonometric functions for general angles.
- 5. Use reference angles to evaluate trigonometric functions.
- 6. Construct the graphs of the trigonometric functions.
- 7. Read and interpret angular and linear velocity type problems. (Reading III, Writing II)
- 8. Read, interpret, and use a drawing to solve survey type problems. (Reading III, Writing II)
- 9. Recall and apply the reciprocal, quotient, Pythagorean, and even-odd identities to simplify expressions.
- 10. Use the fundamental identities to verify trigonometric identities.
- 11. Employ the formulas for sums and differences to find exact values of the trigonometric functions for selected angles, and to simplify expressions.
- 12. Derive and use the double-angle and half-angle formulas.
- 13. Use the product and sum formulas, and graph combinations of sine and cosine functions.
- 14. Describe the relationship between the trigonometric functions and their inverses. (S/L II)
- 15. Calculate solutions for trigonometric equations with variable side conditions.
- 16. Solve right triangles.
- 17. Use the law of sines to solve a general triangle, including the ambiguous case.

DISABILITY ACCESS CENTER: Any student who feels s/he may need an accommodation based on the impact of a disability should contact Disability Access Services (DAS) privately to discuss her/his specific needs. Please be aware that before accommodations can be allowed in class they must be approved through the DAS Office. Students should contact DAS at 970-339-6251 or disabilities@aims.edu to set up an appointment to discuss the process of requesting reasonable accommodations. The DAS Office is located in the College Center.

GENERAL STUDENT CONDUCT: Students are expected to practice academic honesty. Each student is responsible for contributing to a positive learning environment in classroom situations. Students who conduct themselves contrary to the best interest of the class as a whole may be dropped from the roster. This includes, but is not limited to, cell phones and beepers being left on, conversations with those around you in a voice that interrupts or interferes with other's learning, leaving and then returning to the classroom or continually arriving late or leaving early from class without a legitimate reason. Students should refrain from expressing derogatory opinions concerning race, gender, ethnicity, and should avoid using obscene language. They must refrain from any form of cheating, plagiarism, or knowingly furnishing false information to the college.

Because respect for the learning process is critical, no behavior that disrupts another student's ability to learn will NOT be tolerated. The first example of such behavior will result in a warning. The second incident will result in expulsion.

CONDUCT IN PARTICULAR: If you follow your common sense and exercise common courtesy and honesty in all our dealings, you will not have any student conduct problems.

Cell phone (voice or text) usage during class is prohibited. This includes using your cell phone as a calculator.

Coming to class *promptly* is mandatory, and working on your math in class is mandatory. If you can't make it to class, you are still accountable for what was covered. Send me an e-mail explaining your absence, and hand in your work on time, and we will have few problems. Your attendance is measured by the homework you turn in, so at LEAST turn in at least one page with your name on it every day that homework is due.

Arriving late to class counts as an absence. Better late than never, though – just be unobtrusive.

Grades:

Homework: 20% Quizzes: 40% Midterm: 20% Final: 20%

Makeup Tests: Documented illness and funeral obligations are the only excused absences on test days.

My Weekly Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
7:10 - 8:00		Office	Office		
8:10 – 9:00	122 G11 BH 140		122 G11 BH 140	Prep	122 G11 BH 140
9:10 – 10:00	099 G12 BH 129	099 G12 BH 129	099 G12 BH 129	Office	099 G12 BH 129

10:10 - 11:00	Office	- Prep	Office		Office
11:10 - 12:00	Lunch		Prep		Lunch
12:10 - 1:00	203 G11 BH 131	203 G11 BH 131	203 G11 BH 131	Prep	203 G11 BH 131
1:10 - 2:00		Office	Office		
2:10 - 3:00					

Appointments are available if you can't make my office hours. If I start getting regular appointments at unlisted hours, I reserve the right to modify this schedule. Hours marked "Office" are times I set aside for students, specifically.

Office hours are set up to get 'most everyone help before or after class meets, to help those who are commuting to class with their schedules. I'm also setting office hours on Tuesday and Thursday, for students who have that block of time open, otherwise.

Any time you drop by and I'm in my office, I'm usually ready to help you with questions, and I'm in and around the office most of the day.