Math 127
College Algebra
Summer 2007 Syllabus

Meeting M – F from 12:00-1:35 in Hagen 325, Section #000045

Instructor: Dr. Tim Harms   *Office*: Science Lab Basement room 003E
Office Phone: 477-4016   *Office hrs*: Monday-Friday 10:00-11:30
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Webpage: http://www.mnstate.edu/harms Select the Math 127 link

Required Text & Supplement:
Text: Algebra & Trigonometry, Swokoski and Cole, Custom Edition, 2006.

Required Supplies:
Three ring binder, pencil, & scientific or graphing calculator

Course Description:
Exponents, factoring, equations, inequalities, functions, exponential and logarithmic functions, systems of equations, and matrices. Prerequisite: PDEV 100 or a minimum ACT Math score of 24 or a minimum MNSCU math placement score of 15. Some prior knowledge of algebra is expected.

Course Objectives and Student Learner Outcomes:
   Upon completion of the course, students will be able to do the following:

- Demonstrate application of inductive and deductive reasoning.
- Evaluate complex relations using symbolic abstraction and generalization.
- Demonstrate problem solving using symbolic representation and manipulation.

Course Goals:
The student-learning goals of Math 127 include learning to work with exponents, radicals, polynomials, fractional expressions, exponentials, logarithms, and matrices; and applications of all of these. It will prepare students for either Math 229 Fundamentals of Applied Mathematics or Math 143 Trigonometry. Students who need to take Math 261 - (Calculus I) will need to take Math 143 before Calculus.

Class Activity:
With the exception of exam days, each class day will start with discussion of the homework problems followed by a lecture period for which guided notes will be provided. The guided notes are basically an outline of what I will cover during that day, the details of which you will have to fill in during the lecture. They save some time in copying the problems from the board, but still serve to keep your attention on the lecture and help with being able to think about why I am solving problems as I am, instead of just routine copying. The guided notes also include practice problems that are to be completed mostly in-class to give you a chance to work problems before doing the book assignment.

In addition to the Guided Notes, there are homework assignments for each section. It is in your best interest to do all the homework even though most will not be graded it is your opportunity to get the practice that is needed to become proficient on the material.

Course Outline:

Date	Section(s)	Topic(s)
July 5	1.1	Intro. & Real Numbers
July 6	1.2 &1.3	Exponents, Radicals, and Algebraic Expressions
July 9	1.4	Fractional Expressions
July 10	2.1	Linear Equations
July 11	**Test 1**	
July 12	2.2	Applied Problems
July 13	2.3 & 2.4	Quadratic Equations & Complex Numbers
July 16	2.5	Solving absolute value equations, radical equations, and quadratic type equations
July 17	2.6	Inequalities
July 18	2.7	Non-linear Inequalities
July 19	**Test 2**	
July 20	3.1 & 3.2	Graphs of Equations
July 23	3.3	Linear Equations
July 24	3.4	Functions
July 25	3.5 & 3.6	Operations on Functions & Quadratic Functions
July 26	5.1	Inverse Functions
July 27	5.2 & 5.3	Exponent and Logarithmic Functions
July 30	**Test 3**	
July 31	9.1 & 9.2	Systems of Equations
Aug. 1	9.5	Systems of Linear Equations
Aug. 2	9.6	Algebra of Matrices
Aug. 3	9.7	Inverse Matrices
Aug. 6	9.8 & 9.9	Determinants and their Properties
Aug. 7	1.1-9.9	Review
Aug. 8	**Test 4**	**Final Exam**

Assignments are posted and regularly updated on the course Webpage listed above, and student grades are posted within D2L. Bonus problems will be available on each test, but no extra credit assignments will be available.

Attendance Policy:
Attendance is mandatory in the sense that you will not be given an opportunity to make up work from class that you miss, and it is up to you to learn the material on your own. For a known absence due to military duty, jury duty, or other legal requirement, you must give me notice as soon as feasible and prior to the absence if it will require missing an exam or quiz. For an absence due to personal reasons such as illness or family emergencies, you should notify me as soon as feasible, before the absence in most cases. In order for a makeup exam to be graded, written documentation of the reason for the absence will be required. Examples are: a note from the doctor saying you were seen (it does not have to say what you were seen for), a copy of the police report for a minor car accident, funeral program or obituary, etc..

Absences due to family vacations, reunions, weddings, etc., are not excused absences. I expect you to inform me of scheduled unexcused absences by Friday, July 6, 2007. Unexcused absences will result in no credit on homework and quizzes missed, but you will receive copies of these missed works to study from if you provide the requested notification. I count on you to plan to attend such events around your class schedules if they come up during the session, especially since the exam dates are already set.

Academic Honesty:
You are expected to do your own work. You may certainly work with others and get help on homework assignments and labs, but the work you submit should be your own work. Note that during exams you will not be allowed to get help from others. Make sure that you learn the material while you do the homework and labs - that is the purpose of the assignments. Then during the exam you can demonstrate your knowledge - that is the purpose of the exams. Cheating and plagiarism will not be tolerated in any college course (or any course at any level). See the MSUM Academic Honesty policy for more information and possible consequences of cheating.

Evaluation:

1. Three Cumulative Unit Tests: 75-100 pts/each
2. Quizzes will occur about every other day: 10-15 pts/each
3. Select problems from the textbook, handouts, & Guide Notes: 5-10 pts/each
4. Comprehensive Final: 150 pts given Aug. 8th

Grading Scale:
-98 A+; 97-92 A; 91-90 A-
89-88 B+; 87-82 B; 81-80 B-
79-78 C+; 77-72 C; 71-70 C-
69-68 D+; 67-62 D; 61-60 D-
59%- F

Assistance Available:

If you are having trouble please see Dr. Harms during office hours from 10:00-11:30 or make an appointment. Study sessions are scheduled July 9th, 17th, 27th and Aug. 6th to provide extra test preparation with Professor Harms, times to be announced. One-on-one tutoring is available at no cost through Career Services and if you would like to take advantage of that see Professor Harms. Drop in tutoring through the Math Department is available in Lommen 90-A from 9:00-1:00 M – F.

Special Accommodations:

Students with disabilities who believe they may need an accommodation in this class are encouraged to contact Greg Toutges, Coordinator of Disability Services at 477-5859 (voice) or 1-800-627-3529 (MSR/TTY), CMU 114 as soon as possible to ensure that accommodations are implemented in a timely fashion.

Cell Phones:

Please turn off your cell phone while in class to show respect to your classmates. If you use your cell phone for a calculator and watch please make arrangements to get a scientific calculator and watch.