Pre-Calculus Math 142 Fall 2012 Syllabus

Meeting in MacLean 269 from 3:00 – 3:50 Mon. – Thur.

Professor Tim Harms *Office Phone:* 218-477-4016 Office: MacLean 375F Office hrs: T & R 8:30 – 10:20, 4:00-5:00 M -R along with additional hours available by appointment

e-mail: harms@mnstate.edu

Web page: http://web.mnstate.edu/harms

Required Text & Supplement:

Text: <u>Algebra and Trigonometry</u>, 4th ed. (custom for MSUM), Blitzer.

Required Supplies: Pencil, college lined paper, 3 ring-binder, scientific or graphing calculator (There will be times when calculators are not allowed on assignments & assessments, this will be the case with the prerequisites)

Course Description: Equations, complex numbers, functions, polynomials, exponential and logarithmic functions, and trigonometric functions, equations and applications.

Prerequisites: Students must have successfully completed College Algebra or have an acceptable math placement score.

Course Objectives and Student Learning Outcomes: (MnTC Goal 4)

- 1. Solve a variety of algebraic and trigonometric equations.
- 2. Create and understand graphs.
- 3. Work with a variety of functions.
- 4. Apply a variety of algebraic and trigonometric techniques to real world problems and applications.
- 5. Clearly express mathematical/logical ideas in writing.
- 6. Explain what constitutes a valid mathematical/logical argument(proof).
- 7. Apply higher-order problem-solving and/or modeling strategies.
- 8. Illustrate historical and contemporary applications of mathematical/logical systems.

Student Expectations:

- Regular and active classroom participation.
- Work cooperatively in small groups in the discussion of individual homework and the completion worksheets/Activities.
- Solve problems in mathematics by formulating problems, use different strategies to verify and interpret results, & communicate results.
- If your phone rings audibly during class, I reserve the right to require you to leave the classroom for the remainder of the period. No credit for what is due at the end of the hour if you are dismissed for phone use that day. I strongly suggest that you always remember to turn off your phone so that math is your focus during class.
- Students will act in an **honest** and trustworthy manner in class and on all assignments see <u>http://web.mnstate.edu/sthandbook/policiesprocedures/academichonesty.cfm</u>

Attendance Policy:

- I only give make-up assignments for <u>extreme</u> personal emergencies or for absences which are officially sanctioned by the University. I will expect written documentation in either of these cases.
- Late work will lose 50% of its value for each weekday beyond its due date.
- No make-up on missed quizzes or tests if <u>prior arrangements</u> have not been made with Dr. Harms. Please contact Professor Harms if you are going to be absent <u>harms@mnstate.edu</u> or 218-477-4016

Evaluation:

- 1. Select problems from the activities, textbook, & worksheets 5 -10 pts. each
- 2. Regular quizzes worth 15 20 pts. each (The lowest quiz score will be dropped)
- 3. Three unit Exams worth 100 pts. each on Sept. 18, Oct. 11, Nov. 8
- 4. Comprehensive Final 200 pts. on Dec. 13

Grading Scale:

100-98 A+; 97-93 A; 92-90 A-89-88 B+; 87-83 B; 82-80 B-79-78 C+; 77-73 C; 72-70 C-69-68 D+; 67-63 D; 62-60 D-59%- F

Assistance Available:

If you are having trouble <u>please</u> see Dr. Harms during office hours or make an appointment. The Math Department offers drop in tutoring (no appointments needed) M - F in MacLean 383 M - F from 8:00 - 4:30.

Special Accommodations:

"Students with disabilities who believe they may need an accommodation in this class are encouraged to contact Greg Toutges, Director of Disability Services at 477-4318 (Voice) or 1-800-627-3529 (MRS/TTY), Flora Frick 154 as soon as possible to ensure that accommodations are implemented in a timely fashion."

Course Requirements: You are expected to complete daily homework, complete and submit the worksheets, and take and pass all the exams on the scheduled date.

Do the reading from the sections to be covered **before** coming to class each day. The following are minimum practice problems, additional practice may be needed with you working more problems from the text along with Worksheets provided by Professor Harms

WEEK	DATES	SECTIONS	EXERCISES Assigned and due the next class day
1		P.1, P.2	P.1: 5, 7, 12, 15, 19, 21, 25, 29, 30, 37, 40, 46, 55, 61, 63, 69, 77, 81, 89, 95,
			101, 130, 133
			P.2: 3. 4. 13. 15. 17. 27. 29. 31. 35. 40. 51. 57. 61. 64. 69. 73. 79. 83. 93. 101.
			120, 124, 125, 133, 141
		P.3, P.4	P.3: 1, 3, 5, 9, 15, 18, 25, 29, 37, 41, 46, 51, 57, 65, 73, 75, 85, 87, 93, 99,
			109, 120, 138
			P.4: 7, 11, 13, 15, 19, 27, 34, 40, 49, 53, 61, 69, 76, 81
		P.4, P.5	P.4: 85, 87, 89, 93, 107, 112, 113
			P.5: 3, 7, 11, 15, 19, 23, 32, 35, 39, 43, 45, 49, 55, 57, 59, 62, 65, 73, 77, 79,
			81, 85, 93, 98, 143
		P.6, 1.1	P.6: 1, 4, 7, 11, 15, 19, 23, 27, 30, 35, 40, 45, 51, 54, 57, 61, 63, 67, 73, 87,
			104 & Chapter P Test on p. 88 #1-31 finish WS #4 1. D, e, f 2b
			1.1: 1, 5, 7, 11, 13, 17, 21, 25, 27, 41, 43, 44, 47, 49, 57-60, 75-78, 79, 82
		Review &	Activity 1
		Exam 1	