

MA 107 - PRECALCULUS - SS1 2009
North Carolina State University - Department of Mathematics

GENERAL INFORMATION

Instructor:	Mr. Wang	E-mail address:	qwang5@ncsu.edu
Phone Number:	515-0667	Webpage:	http://www4.ncsu.edu/~qwang5
Office:	SAS 3145	Office Hours:	T 9-11AM and by appointment
Class Will Meet:	MTWTHF 1:40-3:50PM in HA 272 (Section 002)		

GOALS AND OBJECTIVES

Students will study real numbers, polynomials, rational, exponential, logarithmic, and trig functions and graphs. MA 107 can be taken as a prerequisite for MA 121 or MA 131. It can be followed with MA 108, and the two courses will serve as the equivalent of MA111, which is a prerequisite for MA 141.

TEXTBOOK

Algebra & Trigonometry Enhanced with Graphing Utilities, 5th edition by Sullivan. Prentice Hall, 2009.

COURSE GRADE

The final grade is based on 3 tests (55%), WebAssign (15%), quizzes and worksheets (5%) and the final exam (25%). As per the NCSU requirement, we will use the plus/minus grading system.

NO CURVES. NO RETESTS. NO EXAM EXEMPTIONS.

–**Homework** will be done using WebAssign. WebAssign problems make up a large portion of your final grade, so do not fall behind or skip ANY of these. You must purchase an **ACCESS CODE** at <http://webassign.ncsu.edu>. Due dates are posted on WebAssign, and I will remind you of them in class. Assignments are due at the specified time even if you were absent from class. **Extensions can be requested on the WebAssign homepage ONLY-** you will lose 5% of unearned points on the assignment EACH TIME you request an extension.

–**Quizzes** will be given periodically in class and in lab. There is **NO MAKE-UP** available for missed quizzes!

–**Test dates** are set by the university and are as follows:

Test 1–Thursday May. 28, 2009

Test 2–Tuesday Jun. 9, 2009

Test 3–Wednesday Jun. 17, 2009

Final Exam –Tuesday, Jun. 23, 2009 (1-4PM, HA 272—Yes, in the same room)

Test make-up policy is in accordance with the University policy

(http://www.ncsu.edu/policies/academic_affairs/pols_regs/REG205.00.4.php)

- All anticipated absences **must be excused in advance of the test date**. These include University duties or trips (certified by an appropriate faculty or staff member), required court attendance (certified by the Clerk of Court), or religious observances (certified by the Department of Parent and Family Services 515-2441). You need to schedule a time to take the test **BEFORE** the test date.
- Students who miss one test due to an emergency (illness, family emergency, etc.) will use the final exam grade to replace the 0 score on this test (i.e., no make-up test will be given after the test date).
- Students who miss 2 tests and have university approved excuses must provide documentation **for both test dates** and will be given a cumulative test covering material from both tests. The score on this test will count for one test grade, while the final exam score will count for the other.
- Make-ups for oversleeping, car trouble, or any excuse **not** approved by the university may **ONLY** be given **ON THE DAY OF THE TEST!** Get in touch with me **AS SOON AS POSSIBLE** on that day.
- TI-89 and TI-92 calculators are **not allowed on tests or quizzes**. Cell phones, ipods, diskmans, and any other electronic devices may not be used and must be kept in your book bags during test.

- **Corrections to Grading:** If you feel that an error was made in the grading of a test, present and explain the error in writing on the outside of the test to the instructor.
- **At the end of the semester, ALL students can replace their lowest test grade with the final exam grade, if it is higher. This includes replacing a 0 score from a missed test.**

***Academic Integrity Statement:** Academic dishonesty amounts to the giving, taking, or presenting of information or material by a student with the intent of unethically or fraudulently aiding oneself or another person on any work which is to be considered in the determination of a grade or the completion of academic requirements. More specific definitions are set in the NCSU Code of Student Conduct. I expect student to adhere to this code, and will tolerate violation.

EXPECTATIONS

- Leave all distractions (newspapers, ipods, work for other courses, etc) at home or in your book bag!
- **TURN OFF ALL CELL PHONES AND BEEPERS DURING CLASS!**
- Chewing Tobacco is not permitted in classroom!
- Bring your book, a calculator, paper and a pen or pencil to EVERY class!

Attendance is expected every day! Because this is a 100 level class, attendance must be kept.

– What counts as an absence:

- * Sleeping during class
- * Doing work for other classes
- * Reading the newspaper, listening to headphones, etc.
- * Playing or working on your laptop while I am teaching
- * Missing lab
- * Missing class for ANY reason (excused or not, you are still not here!)

– What counts a tardy: (2 tardies=1 absence)

- * Arriving late
- * Leaving early

– There are non-negotiable.

- The attendance policy is consistent with the Academic Regulations and can be found at http://www2.ncsu.edu/unity/project/www/ncsu/provost/info/academic_regulations/attend/reg.htm
- **As a bonus reward for students with good attendance records, those students missing 5 or fewer class days will receive 5 bonus points on their final exam.**

****NOTE: Both excused and unexcused absences count against this bonus.**

This means that if you miss class for a sporting event or sickness, or for ANY reason, you can make up work missed, but it still counts as one of your absences. This is just a bonus.

STUDENTS WITH DISABILITIES

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disabilities Services at 1900 Student Health Center, Campus Box 7509, 515-7653 **AND THEN** meet with me prior to the test date. I cannot make accommodations if we have not met to discuss them ahead of time. Please see the Academic Accommodations for Students with Disabilities Regulations (REG02.20.1).

YOU MUST TAKE RESPONSIBILITIES FOR SEEKING HELP WHEN NEEDED.

Communication with your instructor is essential to your success and I do want to help you. Please make use of my office hours. For additional help, form study groups, or use the university's tutorial services: One-on-one tutoring is available on a first-come, first-served basis at the Undergraduate Tutorial Center in 1005K Ricks Hall Addition (see their web site: http://www.ncsu.edu/tutorial_center/), and the Multi-Media Center in SAS 2103 has video taped lectures of MA 107, computer assisted tutorials and drop-in tutoring on a limited basis (see tutoring schedule at <http://www.math.ncsu.edu/mmc/>). Take advantage of these learning resources early!

Tentative Course Schedule
(Algebra & Trigonometry Enhanced with Graphing Utilities, 5th edition by Sullivan)

Week	Textbook Sections and Objectives	Text	Suggested Practice Problems From Text
May 18	Overview of course, textbook, resources available, etc. Hand out syllabus		
	3.1 Objectives 1, 2, 3, 4 (briefly & omit domains)	3.1	3.1: 19,27,32,33,39,51,55,57,61 (omit domain), 73, 75, 80, 83, 89, 104 (Include review of interval notation!)
May 19	3.2 Objectives 1, 2. Refer also to sect 1.1, objective 3	3.2	3.2: 9, 25
	3.3 Objective 3, 4, 6	3.3	3.3: 11-20,[21,22,25,26](omit d),29-32,61, 73, 79
May 20	4.1 Objectives 1, 4	4.1	4.1: 37, 39, 45, 47, 49
	3.4 Objectives 1, 2 (omit greatest integer function). Focus on piecewise word problems	3.4	3.4: 9-16,25,29,37,41,43,47, 53, 61-65 odd
May 21	3.5 Objectives 1, 2, 3	3.5	3.5: 7-26,27,31,33,39-47 odd,51,57,59,69
	3.6 objective 1 (might combine with 4.3)	3.6	3.6: 1,5,25
May 25	NO SCHOOL		
May 26	4.3 Objectives 2, 3, 4	4.3	4.3: 11-18,31,33,35,43,45,51,53,77,83 Review solving systems of equations by substitution
	4.4 Objective 1	4.4	4.4: 3,7,9
May 27	Cumulative review page 279		Omit #13, 15j, 19
	Supplement: Calculus Related Factoring		
May 28	Test Review		
	TEST 1 – Thursday, May 28		Covering Chapter 3 and 4 and factoring
May 29	5.1 Objectives 1, 2, 3, 4 (skip completing the square)	5.1	5.1: 11,13,19,23,25,33,35,37,39,45,49,55,61,64 [65, 73] (make a good sketch without using graphing utility)
	5.2 Objectives 1, 2, 3 (omit oblique asymptote) (include limits)	5.2	5.2: 13,15,17,23,24,28,29,31,37,41
Jun 1	5.4 Objectives 1, 2 (cover briefly in lab in conjunction with 3.2 graphs)	5.4	5.4: 21,23,25,29,33,37,39
	5.5 Objectives 1, 2, 6	5.5	5.5: 11,13,15,21,27,39,43,47,73,85,87
Jun 2	5.6 Objectives 1. Cover briefly. Discuss graphs with imaginary zeros and possible ways of finding them. Do not find.	5.6	5.6: 7,11 Also see R.6, page 53 # 117-126
	6.1 Objectives 1	6.1	6.1: (omit finding domains) 11, 15, 29, 33, 35, 45, 53, 57, 65, 67, 71
Jun 3	6.2 Objectives 1, 2, 3, 4	6.2	6.2: 13,17,19,27,31,49,53,57,63, 81,83
	6.3 Objectives 1, 2, 3, 4	6.3	6.3: 21,23,29-36,37,39,51,53,63,75,77,81-84,95,99
Jun 4	6.4 Objectives 1, 2, 3, 4, 5	6.4	6.4: 9, 13, 15, 19, 23, 25-37, 39, 43, 57, 63-70, 71, 73, 87, 92, 99, 101, 120, 123
Jun 5	6.5 Objectives 1, 2, 3, 4, 5	6.5	6.5: 7, 9, 12, 13, 19, 27, 29, 39, 41, 43, 47, 51, 55, 59, 65, 71, 81, 85
	6.6 Objectives 1, 2. Include solving for x and y intercepts of exponential and log functions	6.6	6.6: 9,14,17,29,39,43

Week	Textbook Sections and Objectives	Text	Suggested Practice Problems From Text
Jun 8	6.6 cont.	6.6	
	Cumulative Review page 399		Omit #10, #11 (test for symmetry), 20
Jun 9	Test Review		
	TEST 2 – Tuesday, Jun 9		Covering Chapter 5 and section 6.1-6.6
Jun 10	6.7 Objectives 1, 2, 3	6.7	6.7: 3,11,13,21,27,31,35,41,45
	6.8 Objectives 1, 2	6.8	6.8: 1,3,5,9
Jun 11	Exp and log worksheet		
	Cumulative Review Pages 504-505		Omit 10c & 15
Jun 12	Supplement: Regions Bounded By Curves (Instructors get handouts in HA 255)		
	7.1 Objective 3 (cover briefly in lab)	7.1	7.1: 11-21 odd,35,43,47,49
Jun 15	7.2 Objectives 1, 2, 3, 4	7.2	7.2: [11,15,21,25,27,29](also find angle in degrees), 33,38,39,40, 41,55
	Supplement text with using calculator to find the acute angle given 2 sides of a triangle.		
Jun 16	7.3 Objectives 1, 2, 3, 4	7.3	7.3: 5,7-16,17,19,25,26,27,29-45 odd, 71,73,74
	9.1 Objectives 1, 2	9.1	9.1: 9,19,23,25,38
Jun 17	Review for test		
	Test 3 – Wednesday, Jun 17		Covering 6.7, 6.8, 7.1-7.3, 9.1, regions bounded by curves
Jun 18	7.4 Objectives 3, 4, 5, 6	7.4	7.4: 33-40, 41, 43,45, 51,55, 59,65,67,83-91
	Course Evaluations (ONLINE?)		
Jun 19	Review for Final Exam		
Jun 23	Final Exam-Tuesday Jun 23. 1-4PM		HA 272. Yes, same room.