MATH 101

Spring, 1997

Textbook: Ruud and Shell, *Prelude to Calculus*, 2nd Edition, PWS Publishing Co.

Instructor: (Mrs.) Janice Astin Office: 104 Few Hall Phone: 784-8472

Office Hours: 2:00 - 4:00 Mon., Wed., Fri.; other times by appointment

Course Purpose and Content: The purpose of this course is to prepare students for academic success in college calculus. The work includes simplifying algebraic expressions, solving algebraic equations and the study of algebraic and transcendental (trigonometric, inverse trigonometric, exponential and logarithmic) functions and their graphs. Specific topics (by days) are listed at the end of this syllabus.

Grading: The student's final course grade will be determined as follows:

Major tests (4 @ 100 points)	400 points
Quizzes (best 10 @ 15 points)	150 points
Final Exam	200 points
Total	750 points

In general, letter grades will be determined as follows:

A: 675 or more points (90% or better)
B: 600-674 points (80% - 89%)
C: 525-599 points (70% - 79%)
D: 450-524 points (60% - 69%)
F: below 450 points (below 60%)

Credit and Advancement: (1) Math 101 is for elective credit only; this course does not count toward satisfying the distribution requirements of Oxford College in Natural Science/ Mathematics. (2) Students who have received credit for Math 100C and who subsequently pass Math 101 will receive a total of four semester-hours for the combination of Math 100C and Math 101 toward the 64 academic hours required for the A.A. degree and continuation to Emory College. Both courses, however, count in the student's total number of semester hours and in computing the student's grade point average. (3) A grade of "C" or higher is required for continuation to Math 111 (Calculus I).

Homework: Assignments of exercises from the text and from handouts will be made on a regular basis. The most important factor contributing to success in the course is the regular, successful completion of the exercises. Regular: done at least every other day. Successful: problems must be completed correctly and with some degree of confidence. (Staring at problems or watching others do them does not count.) You are expected to come to class prepared. In general you should expect to spend at least two hours on homework assignments for every hour of scheduled instruction.

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Major Tests: The four tests will be given outside the regular class time, as follows:

Test 1: Thursday, February 6, at 8:00 a.m.
Test 2: Tuesday, February 25, at 8:00 a.m.
Test 3: Thursday, March 27, at 8:00 a.m.
Test 4: Tuesday, April 15, at 8:00 a.m.

Unless otherwise stated, calculators are not permitted on tests.

Quizzes: Most quizzes are to be taken in class. However, there may be an occasional take-home quiz. There will be at least 13 quizzes, of which the best 10 will count. There will be no makeup quizzes.

Tutoring: Student tutors will be available. A schedule of the tutors' schedule will be announced early in the semester.

Help Sessions: Help sessions will be scheduled at appropriate times during the semester, usually a few days before a test. Attendance is optional.

Class Attendance: You are responsible for the course material discussed in class. Therefore, you are expected to attend all classes. An inordinate number of absences will be handled in accordance with the College's policies.

Test Attendance: You are expected to take tests at the scheduled times. Any conflicts or problems will be handled on an individual basis by the instructor.

THE HONOR CODE OF OXFORD COLLEGE APPLIES TO ALL WORK SUBMITTED FOR CREDIT IN THIS COURSE. BY YOUR SIGNATURE ON SUCH WORK YOU PLEDGE THE WORK TO BE YOURS AND YOURS ALONE.

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Topics Calendar, Spring, 1997

Wed., January 15	Sec. 1.1: Real Numbers; Coordinate Line; Absolute Value; Inequalities
Fri., January 17	Sec. 1.2: Algebraic Expressions
Mon., January 20	*NO CLASS - M. L. King Holiday*
Wed., January 22	Sec. 1.3; Algebraic Functions
Fri., January 24	Sec. 1.3, cont.; Sec. 1.4: Algebraic Equations
Mon., January 27	Sec. 1.4, cont.
Wed., January 29	Sec. 1.5: Inequalities
Fri., January 31	Sec. 1.5, cont.
Mon., February 3	Sec. 2.1: Coordinate Geometry; Lines and Circles
Wed., February 5	Review
Thurs., February 6	**TEST 1 at 8:00 a.m.**
Fri., February 7	Sec. 2.2: Functions
Mon., February 10	Sec. 2.3: Graphs of Functions
Wed., February 12	Sec. 2.4: Linear and Quadratic Functions
Fri., February 14	Sec. 2.5: Graphing Functions
Mon., February 17	Sec. 2.6: Operations with Functions
Wed., February 19	Sec. 2.7: Inverse Functions
Fri., February 21	Sec. 4.1: Exponential Functions; Sec. 4.2: Natural Exponential Function
Mon., February 24	Review
Tues., February 25	**TEST 2 at 8:00 a.m.**
Wed., February 26	Sec. 4.3: Logarithmic Functions
Fri., February 28	Sec. 4.3, cont.
Mon., March 3	Sec. 4.4: Exponential and Logarithmic Equations
Wed., March 5	Sec. 5.1: Trigonometry of Right Triangles
Fri., March 7	Sec. 5.2: Angle Measure; Unit Circle
March 10 - 14	*SPRING RECESS*
Mon., March 17	Sec. 5.3: Trigonometric Functions
Wed., March 19	Sec. 5.4: Trigonometric Functions
Fri., March 21	Sec. 5.4, cont;: Graphs of Trigonometric Functions
Mon., March 24	Sec. 5.5: General Trigonometric Graphs
Wed., March 26	Review
Thurs., March 27	**TEST 3 at 8:00 a.m.**
Fri., March 28	Sec. 6.1: Trigonometric Identities
Mon., March 31	Sec. 6.1, cont.
Wed., April 2	Sec. 6.2, 6.3: Trigonometric Identities
Fri., April 4	Sec. 6.4: Inverse Trigonometric Functions
Mon., April 7	Sec. 6.5: Trigonometric Equations

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Topics Calendar, cont.

Wed., April 9	Sec. 6.5, cont.	
Fri., April 11	Review	
Mon., April 14	Review	
Tues., April 15	TEST 4 at 8:00 a.m.	
Wed., April 16	Sec. 10.1: Systems of Linear Equations	
Fri., April 18	Sec. 10.6: Systems of Nonlinear Equations	
Mon., April 21	Sec. 11.1, 11.2: Sequences and Summation	
Wed., April 23	Sec. 11.4: Binomial Theorem	
Fri., April 25	Review for final exam	
Mon., April 27	Review for final exam	
Thurs., May 1	FINAL EXAM	9:00 - 12:00 for 12:00 class
	FINAL EXAM	2:00 - 5:00 for 1:00 class
Wed., May 7	FINAL EXAM	9:00 - 12:00 for 9:00 class