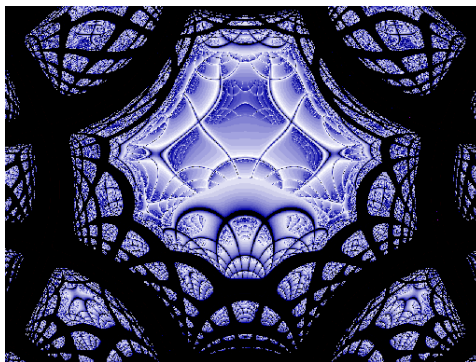


Math 100C
Spring/2009
Senior Lecturer: Mrs. Susan Riner



Thoughts on mathematics.....

The study of mathematics is apt to commence in disappointment.... We are told that by its aid the stars are weighed and the billions of molecules in a drop of water are counted. Yet, like the ghost of Hamlet's father, this greatest science eludes the efforts of our mental weapons to grasp it. Alfred North Whitehead

The mathematical sciences particularly exhibit order, symmetry, and limitation; and these are the greatest forms of the beautiful. Aristotle

Life is good for only two things, discovering mathematics and teaching mathematics.
Siméon Poisson (My personal favorite)

Math 100C
Spring, 2009
Mrs. Susan Riner, Senior Lecturer
Office: 120B Pierce Hall
Phone. 784.8316

Text: Algebra and Trigonometry by Keedy/Bittinger, 6th edition

Purpose: This course is designed to prepare students for Math 120 (Pure Mathematics), Math 107 (Statistics), Math 109 (Graph Theory), and Math 110A (Calculus). **Only those students who make an A or high B in Math 100C should take Math 110A.** Math 100C will provide each student with an opportunity to increase his or her proficiency in and understanding of the basic concepts of Algebra, graphing, combinatorics, probability, and basic trigonometry. You may not drop Math 100C after January 21st.

Goals and Objectives: Students should - without the aid of a calculator – demonstrate the following: proficiency in algebraic and trigonometric calculations, graphing lines, parabolas, absolute values, hyperbolas, circles, sine and cosine curves, logarithmic and exponential functions; rules of probability and methods of counting; retention of algebraic and trigonometric formulas; understanding of basic concepts, rules, and theorems in algebra, trigonometry, probability, and counting.

Attendance: Students are expected to arrive on time and attend all classes and are responsible for all material covered in class as well as any changes made in the attached schedule regarding topics, homework, quizzes, and test dates. Attendance and consistent preparation for class will determine the success or failure the student realizes in this course. Missing classes, tests, assignments, etc. due to the observance of religious holidays should be worked out in advance with the professor.

Homework: Homework problems will not be collected but are assigned to benefit you. You will need to study 2-3 hours outside of class for every hour spent in class.

Tutoring: Student tutors are scheduled for a limited amount of time per week in the afternoons and evenings in the Mathematics Center. You may want to consult tutors if you are having trouble with homework problems. Tutoring schedules are posted in the mathematics classrooms, mathematics offices, Mathematics Center, and on the Oxford website.

Labs: There will be four Math 100C labs. During these labs, students will work in groups on problems related to the material currently being covered in class. Students may use textbooks, calculators, and class notes. Each group will turn in one lab and receive one grade. Attendance is mandatory. Since lab assignments are to be done as a group rather than individually, **there is no provision for making up a missed lab.**

Honor Code: **The Honor Code of Oxford College applies to all work submitted for credit. You will pledge with your signature that the work you submit for credit is yours and yours alone.**

Assessment Procedures: Tests will be given on Tuesdays during the lab period. Quizzes will be given during class time. Labs not used for tests will be used for graded group assignments. Each test should be passed with 70 points or more with provisions made for one re-test per section. 70 will be the highest grade given on a re-test. If any student needs special accommodations, the appropriate paperwork should be turned in to the professor and arrangements made prior to the first graded assignment. There is no provision for making up tests. **If a student has a note from a doctor or a documented family emergency**, that student may take the re-test. The lowest quiz grades will be dropped. Therefore, **there is no provision for making up a quiz.**

A STUDENT MUST MAKE 70% OR ABOVE ON THE FINAL EXAM IN ORDER TO PASS MATH 100C.

Points will be distributed as follows:

4 Tests	100 points each	400 points
4 Labs	25 points each	100 points
Quizzes	100 points total	100 points
<u>Final Exam</u>	<u>200 points total</u>	<u>200 points</u>
Total		800 points

Grades will be assigned as follows:

A (90 - 100):	720-800 points
B (80 - 89):	640-719 points
C (75 - 79):	600-639 points
D (70 - 74):	560-599 points
F:	Below 560 points

Math 100 - Topics

Wed., Jan.14	1.2 - Exponential Notation
Fri., Jan.16	1.3, 1.4 - Algebraic Operations
Wed., Jan.21	1.5 - Factoring
Fri., Jan. 23	1.6 - Rational Expressions
Mon., Jan. 26	1.6 – (continued)
Tue., Jan. 27	Lab I
Wed. Jan. 28	1.7 - Radical Notation
Fri., Jan. 30	1.8 - Rational Exponents
Mon., Feb. 2	Review
Tues., Feb. 3	Test I

Wed., Feb.4	2.1 - Solving Equations
Fri., Feb.6	2.2 - Rational Equations
Mon., Feb. 9	2.5 - Quadratic Equations
Wed., Feb.11	2.7 - Radical Equations
Fri., Feb. 13	2.8 - Equations Reducible to Quadratic
Mon., Feb.16	3.1 - Graphs, Equations
Tues., Feb. 17	Lab II
Wed., Feb. 18	3.2 - Distance, Circles
Fri., Feb. 20	3.3 – Functions
Mon., Feb. 23	Review
Tues., Feb. 24	Test II
Wed., Feb.25	3.4 – Lines
Fri., Feb.27	3.7 - Combinations of Functions
Mon., Mar. 2	3.8 - Transformations
Wed., Mar.4	4.1 - Quadratic Functions
Fri., Mar. 6	4.2, 4.3 - Absolute Value, Interval Notation
Mar. 9 – 13	Spring Break
Mon., Mar. 16	5.2 - Exponential Functions
Wed., Mar. 18	5.3 - Logarithmic Functions
Fri., Mar. 20	5.4 - Properties of Logarithmic Functions
Mon., Mar.23	5.7 - Solving Equations/Natural Logs
Tues., Mar.24	Lab III
Wed., Mar. 25	6.1, 6.2 - Unit Circle
Fri., Mar. 27	6.3 - Trigonometric Functions
Mon., Mar. 30	Review
Tues. Mar. 31	Test III
Wed., Apr. 1	6.4 - Angles
Fri., Apr. 3	6.5 - Triangles
Mon., Apr. 6	6.7 - Trigonometric Graphs
Wed., Apr. 8	11.5 - Fundamental Counting
Fri., Apr. 10	No class
Mon., Apr. 13	11.5 - Permutations
Tues., Apr. 14	Lab IV
Wed., Apr. 15	11.6 - Combinations
Fri., Apr. 17	11.7 - Binomial Theorem
Mon., Apr. 20	Review
Tues., Apr. 21	Test IV
Wed., Apr. 22	11.8 - Probability
Apr. 24, 27	Exam Review