Syllabus for Precalculus (MATH 115)
Fall 2013 (Aug 22 – Dec 16), Section 2
Department of Mathematics
University of South Carolina - Columbia

Instructor	Danny Rorabaugh
Office	LeConte 123B
Email Address	rorabaug@email.sc.edu
S.I. Leader	Chelsea Coleburn
Office Hours / S.I. Sessions	(see page 4)
Classroom	Callcott SSC #003
Mon, Wed	08:30 – 09:20 am
Tue, Thu	08:30 – 09:45 am

Overview

The prerequisite for Precalculus (Math 115) is either qualification through placement or a grade of C or better in Math 111 or 111I. This course will cover various topics in algebra and trigonometry, including polynomial, rational, inverse, logarithmic and exponential functions and analytic trigonometry.

Learning Outcomes

In Math 115, students will gain a mastery of the topics in algebra and trigonometry, specifically in preparation for calculus. Furthermore students will achieve a greater ability to represent real-life situation in numerical forms and use mathematics to solve real-life problems.

Course Materials

Your textbook package for this class is available in the bookstore for $184.70. It includes a custom version of the textbook listed below and an access code for MyMathLab – http://www.mymathlab.com – the online system we will be using for homework. To register for our class, the Course ID is **rorabaugh66298**. Access to MyMathLab is **required** for this course. However, since the online system comes with an eBook, the textbook itself is *optional*. If you choose not to purchase the bookstore package, then you can purchase access online for $91.30 when you enroll. Temporary free access is available for 17 days if are not prepared to pay or are waiting for your textbook package with the access code.

> Textbook: *College Algebra and Trigonometry: A Unit Circle Approach* 5e
> Mark Dugopolski
> ISBN: 9780321644770

The eBook in MyMathLab is listed under both *Chapter Contents* and *Multimedia Library*. Also on MyMathLab, various handouts and other class-related materials will be posted under *Tools > Document Sharing* and grades will be posted under *Gradebook*. In addition, emails regarding the class will be sent through MyMathLab. Please ensure that the email tied to your account is one you check regularly.

A scientific or graphing calculator is necessary for many parts of this course, and should be brought to class every day. However, CAS/symbolic calculators (e.g., TI-89 and TI-92) will not be permitted on quizzes or tests.

Electronics in Class
No electronic distractions are to be used in class. This includes laptops, cell phones, and mp3 players. Calculators, watches, pacemakers, hearing aids, etc. are obvious permitted. If you take notes on a laptop or tablet, please check with me first.

Grading
Your grade will be based on attendance, online assignments, regular quizzes, four or five midterm exams, and one final exam. The weight designated for each is as follows:

Attendance	4%
Assignments	18%
Quizzes	18%
Midterms	40%
Final Exam	20%

Letter Grades
An 'A' in the class reflects superb mastery of the concepts; a 'B' reflects mastery; a 'C' demonstrates an average understanding of the material; a 'D' or 'F' shows a below average understanding of the material. Below is the quantitative breakdown of the aforementioned grades.

A+	[95%, 100%]	A	[90%, 95%)
B+	[85%, 90%)	B	[80%, 85%)
C+	[75%, 80%)	C	[70%, 75%)
D+	[65%, 70%)	D	[60%, 65%)
		F	[0%, 60%)

Attendance
Even though attendance only counts toward 4% of your grade, it is necessary to regularly attend class in order to stay on top of the material. By standard policy, students missing more than 10% of the class meetings can have their overall grade lowered. After the fifth (5th) absence, each absence will result in a loss of 0.5 of the 4.0 percentage points allocated to attendance. **Do not forget to initial the roll sheet at the end of each class session.** Leaving class early counts as an absence. Your five penalty-free absences should be saved for the unforeseen emergencies of life; I will not accept doctors' notes or other excuses aside from extenuating, long-term situations.

Assignments
Assignments make up 18% of your grade. All assignments will be completed online in MyMathLab. In most cases, you will be provided with multiple attempts and problem solving resources on the problems. However, keep in mind that these resources will not be available on quizzes and tests. It is your responsibility to work through the homework problems in their entirety in order to gain mastery of the material. Students are encouraged to work together on homework, but each student must personally submit his or her own solutions in MyMathLab. I will drop each student's lowest homework grade at the end of the course. There will be no make-up assignments.

Quizzes
Quizzes make up 18% of your grade. There will be at least one quiz per week, usually at the beginning of class. The quizzes are intended to test you on material that has been covered in class and on homework, and to prepare you for the sorts of questions that will be on your exams. I will drop each student's lowest quiz grade at the end of the course. There will be no make-up quizzes.

Exams

Exams make up 60% of your grade. We will have a midterm approximately every three (3) weeks, each worth 10% of the final grade. The final exam is worth 20% of the final grade. By university policy, students must attend the final exam to pass the course.

Midterm 1	Tue 09/17
Midterm 2	Tue 10/08
Midterm 3	Tue 10/29
Midterm 4	Tue 11/26
Final Exam	Mon 12/16, 09:00 am

Course Topics

Dates	Section(s)	Topic
08/22 – 08/29	P.1-P.6	Prerequisites/Review
09/03 – 09/12	1.1-1.2	One-Variable Equations
	1.3-1.4	Two-Variable Equations
	1.6	Quadratic Equations
	1.7	Inequalities
	2.1	Functions (Fun. for short)
	2.6	Fun. with Variations
09/18 – 10/03	2.2-2.4	Fun. Graphs and Operations
	2.5	Inverse Fun.
	3.1	Quadratic Fun.
	3.2-3.3	Zeroes of Polynomials
	3.4-3.6	More Fun.
10/09 – 10/24	4.1	Exponential Fun.
	4.2-4.3	Logarithms
	4.4	Applications of Exponentials and Logarithms
	8.1-8.2	Systems of Linear Equations
	8.3	Nonlinear Systems of Equations
	8.4	Partial Fractions
	8.5	Systems of Inequalities
10/30 – 11/21	5.1	Angles
	5.2-5.5	Trigonometric Fun.
	5.6	Right Triangle Trigonometry
	6.1-6.6	Trigonometric Identities and Equations
	7.1-7.2	Law of Sines and Law of Cosines
12/02	7.6	Polar Equations

Academic Honesty

Cheating and plagiarism will not be tolerated. You may discuss all assignments with others, but the work you submit must be your own. Exams are always independent tasks. Violations of this policy will be dealt with according to University guidelines. You can find the University Honor Code at http://sc.edu/academicintegrity/. The following are examples - not a comprehensive list - of actions considered as academic dishonesty:

- Turning in work copied (whole or in part) from another student or resource (print or electronic) as your own.
- Communicating with other persons or using unauthorized resources during tests and quizzes.

Additional Help

If you are having any trouble in the course, or just want some extra help, the following resources are available.

Instructor Office Hours

My office is LeConte 123B. My office hours are Monday and Thursday, 11:45 am to 1:15 pm. Office hours are a time when the professor is available and no appointments are necessary. If you want to meet any other time, email me and we can schedule and appointment.

S.I. – Supplemental Instruction

The Student Success Center offers S.I. (http://www.sa.sc.edu/ssc/supplementalinstruction/) for Math 115 .The S.I. leader for Section 2 is Chelsea Coleburn: coleburn@email.sc.edu. She will be joining our class every Tuesday and Thursday and will host study sessions each week, listed below. She will also lead a special review session before each exam.

Tuesday 4 – 5 pm	Gambrell 103A
Wednesday 6 – 7 pm	Coker 104
Thursday 5 – 6 pm	William-Bryce Building 124

Math Tutoring Center

Free drop-in tutoring is available at the Math Tutoring Center in LeConte 105 (http://www.math.sc.edu/?q=undergrad/mathlab). This service is available Monday through Thursday, 11 am to 3 pm. The site also provides a list of private tutors if you wish to pay for private tutoring.

Student Success

The Student Success Center (http://www.sa.sc.edu/ssc/) provides numerous other student resources, including Peer Tutoring, Online Tutoring, Academic Recovery and Early Intervention. They also have free tutoring sessions at the following satellite locations. On Thursday, you can find Chelsea in Patterson 103.

Bates House	Mon – Thu 7:30 – 10 pm
Columbia Hall	Mon – Thu 7:30 – 10 pm
Patterson Hall	Mon – Thu 7:30 – 10 pm
Swearingen Engineering Center	Mon, Wed 12 – 5 pm