MATH 115-011 Fall 2018

Instructor: Mr. Robert R. Vandermolen   OFFICE HOURS:
Office: LeConte 317-N   MTWR: 1:00pm-2:30pm
e-mail: robertv@math.sc.edu   and by appointment.

Textbook and materials:

- Precalculus, Second custom edition for the University of South Carolina, by Mark Dugopolski.
- Homework will be ON-LINE!! You will need an access code for http://www.MyMathLab.com, the online homework software we will be using in this class. To register for our class the Course ID is vandermolen52616. Access to MyMathLab is required for this course. However, since the online systems comes with an eBook, the textbook itself is optional. If you choose not to purchase the bookstore package, then you can purchase the access online for $99.95 when you enroll.
- *Calculator*: Any solar (non-scientific) calculator will be allowed.

Prerequisite: An appropriate Algebra Placement Test Score, or earned a C or better in Math 111/111i or by the precalculus placement test.

Objectives: To give students the algebra and critical thinking tools necessary to engage effectively the technical paradigms of today's global information society: Or to make you stop worrying and fall in love with the bomb….(you're in college now know things)

Outcomes: Students should be prepared for Math 141 (Calculus I) OR TAKE OVER THE WORLD!!!

Learning Outcomes: Upon successful completion of this course, students should be able to:

- Increase their skills with algebra and trigonometry
- Work with mathematical terms such as linear, quadratic, exponential, logarithmic, inverse polynomial, rational, circular, and trigonometric functions and express these terms in correct context.
- Apply the methods of algebra to solve applications involving intercepts, rates of change, inequalities, system of equations, rational functions, and interest growth
- Develop various properties graphically and formulaically (domain, range, inverse functions, unit circle, Pythagorean identities, reciprocals, half-angle, and transformations).
- Students will tackle problems that require more than on step to solve.

Grading: The student's final grade will be weighted as follows:
Test grade: 45%
Quizzes: 10%
Homework: 10%
FINAL exam: 25%
Attendance/Participation: 10%

A: 90% – 100% B: 80% – 89.99% C: 70% – 79.99 D: 60% –69.99% F: below 60% You will receive a B+, C+, or a D+ if your grade is at least an 87, 77, or 67 respectively.

LAST DAY to withdraw with a grade of W: August 29th

FINAL EXAM DATE: December, 10th 9:00 am
Always (as in for every class and every year) can be found here: Exam Schedule

CLASS POLICIES:
1. **Absences from tests**: excused absences for a test will only be in an emergency basis, and the student will need to provide proper documentation. As always the instructor maintains the right to make the final decision.
2. YOU are responsible for what goes on in class, whether you are there or not. If you miss a day of class, the instructor WILL NOT PROVIDE NOTES, get the notes from someone in class and always check blackboard
3. Homework will be assigned at the end of every class. Assignments will be done online. Details will be given out in class.
4. Please turn off all electronic devices before entering class. If you must text, please go outside the classroom.
5. **NO late assignments will be accepted**, see the grading policy, I drop some quizzes and homework, these will be used instead of late assignments.
6. If you have a **Learning Disability** which will affect this class, you should contact SDS at https://www.sa.sc.edu/sds/ A student that may apply should contact the SDS as soon as possible concerning accommodations one needs, also contact the instructor as well and these will be accommodated.
7. Keep all your tests. Errors in the computer cannot be changed unless you have the originals.
8. Do not use red or pink ink or red or pink pencils on tests. Blue or black pencils or pens preferred. You are expected to bring pencils or pens sufficient to complete the test.
9. I will expect you to conduct yourselves following the Carolina Creed, which can be found at http://www.housing.sc.edu/creed/index.html
10. **MATH LAB**: there is a free walk-in tutoring lab in Leconte 105, open Monday-Friday. There are also paid one-on-one math tutors available. For more information about either the lab or hiring tutors, see http://www.math.sc.edu/math-tutoring-center
11. Student Success Center: In partnership with UofSC faculty, the Student Success Center (SSC) offers a number of programs to assist you in better understanding your course material and to aid you on your path to success. SSC programs are facilitated by professional staff, graduate students, and trained undergraduate peer leaders who have previously excelled in their courses. Resources available to students include:
      - **Peer Tutoring:** make a one-on-one appointment with a Peer Tutor by going to www.sc.edu/success. If a course is not on the semester's supported-course list, there is a process for requesting assistance. The full schedule of days/times/locations for drop-in and Online Tutoring hours can also be viewed on the SSC website.
      - **Supplemental Instruction (SI):** attend SI Sessions to focus on the most difficult content being covered in class. SI Leaders are assigned to specific sections of courses and hold three weekly study sessions that can serve as "built-in study time." The schedule is posted on the SSC website each week and will also be communicated by the SI Leader.
      - **Peer Success Consultations:** make a one-on-one Success Consultation with a Peer Consultant to work on developing study skills, setting goals, and connecting to a variety of campus resources. Your instructor may communicate with the SSC via Success Connect, an online referral system, regarding your progress in the course. If contacted by the SSC, please schedule a Success Consultation. Success Connect referrals are not punitive and any information shared by your professor is confidential and subject to FERPA regulations.

SSC services are offered to all UofSC undergraduates at no additional cost. You are invited to call the Student Success Hotline at (803) 777-1000, visit www.sc.edu/success, or come to the SSC in the Thomas Cooper Library (Mezzanine Level) to check schedules and make appointments.

Academic dishonesty

Students may find FAQs about the University's policy on academic dishonesty (which I will abide if an incident occurs) at http://www.housing.sc.edu/academicintegrity/stufaq.html

Schedule

The following schedule is tentative and subject to change, considering pacing and other considerations.

Date	Section	Title
Thursday, August 23, 2018	P.1	Real Numbers and Their Properties
Monday, August 27, 2018	P.2	Integral Exponents and Scientific Notation
Tuesday, August 28, 2018	P.3	Rational Exponents and Radicals
Wednesday, August 29, 2018	P.4	Polynomials
Thursday, August 30, 2018	P.5	Factoring Polynomials
Monday, September 03, 2018	LABOR DAY	NO CLASS
Tuesday, September 04, 2018	P.6	Rational Expressions
Wednesday, September 05, 2018	1.1	Linear, Rational, and Absolute Value Equations
Thursday, September 06, 2018	1.2	Constructing Models to Solve Problems
Monday, September 10, 2018	1.3	Equations and Graphs in Two Variables
Tuesday, September 11, 2018	8.1 & 8.2	Systems of Linear Equations
Wednesday, September 12, 2018	2.1	Functions
Thursday, September 13, 2018	2.1	Functions
Monday, September 17, 2018	2.2	Graphs of Relations and Functions
Tuesday, September 18, 2018	1.4	Linear Equations in Two Variables
Wednesday, September 19, 2018	**EXAM 1**	**EXAM 1**
Thursday, September 20, 2018	2.3	Families of Functions, Transformations, and Symmetry
Monday, September 24, 2018	2.3	Families of Functions, Transformations, and Symmetry
Tuesday, September 25, 2018	2.3	Families of Functions, Transformations, and Symmetry
Wednesday, September 26, 2018	2.4	Operations with Functions

Thursday, September 27, 2018	2.5	Inverse Functions
Monday, October 01, 2018	1.5	Quadratic Equations
Tuesday, October 02, 2018	3.2	Zeros of Polynomial Functions
Wednesday, October 03, 2018	3.3	Multiplicity and Conjugates
Thursday, October 04, 2018	3.4	Graphs of Polynomial Functions
Monday, October 08, 2018	3.5	Rational Functions and Inequalities
Tuesday, October 09, 2018	3.5	Rational Functions and Inequalities
Wednesday, October 10, 2018	4.1	Exponential Functions and Their Applications
Thursday, October 11, 2018	4.1	Exponential Functions and Their Applications
Monday, October 15, 2018	4.1	Exponential Functions and Their Applications
Tuesday, October 16, 2018	REVIEW	REVIEW
Wednesday, October 17, 2018	**EXAM 2**	**EXAM 2**
Thursday, October 18, 2018	BREAK	FALL BREAK
Monday, October 22, 2018	4.2	Logarithmic Functions and Their Applications
Tuesday, October 23, 2018	4.3	Rules of Logarithms
Wednesday, October 24, 2018	4.4	More Equations and Applications
Thursday, October 25, 2018	5.1	Angles and Their Measurements
Monday, October 29, 2018	5.2	The Sine and Cosine Functions
Tuesday, October 30, 2018	5.3	The Graphs of the Sine and Cosine Functions
Wednesday, October 31, 2018	5.4	The Other Trigonometric Functions and Their Graphs
Thursday, November 01, 2018	5.5	The Inverse Trigonometric Functions
Monday, November 05, 2018	5.6	Right Triangle Trigonometry
Tuesday, November 06, 2018	Election Day	NO CLASS
Wednesday, November 07, 2018	6.1	Basic Identities
Thursday, November 08, 2018	6.2	Verifying Identities
Monday, November 12, 2018	6.2	Verifying Identities
Tuesday, November 13, 2018	6.3 & 6.4	Sum & Difference Identities, Double-Angle & Half-Angle Identities
Wednesday, November 14, 2018	6.5	Product and Sum Identities
Thursday, November 15, 2018	6.6	Conditional Trigonometry
Monday, November 19, 2018	7.1	The Law of Sines

Tuesday, November 20, 2018	7.2	The Law of Cosines
Wednesday, November 21, 2018	Thanksgiving	THANKSGIVING BREAK
Thursday, November 22, 2018	Thanksgiving	THANKSGIVING BREAK
Monday, November 26, 2018	7.6	Polar Equations
Tuesday, November 27, 2018	**EXAM 3**	**EXAM 3**
Wednesday, November 28, 2018	11.1	Sequences and Arithmetic Sequences
Thursday, November 29, 2018	11.2	Series and Arithmetic Series
Monday, December 03, 2018	11.2	Series and Arithmetic Series
Tuesday, December 04, 2018	11.3	Geometric Sequences and Series
Wednesday, December 05, 2018	11.3	Geometric Sequences and Series
Thursday, December 06, 2018	REVIEW	REVIEW
Monday, December 10, 2018	**FINAL**	**FINAL EXAM - COMPREHENSIVE**

EXTRA CREDIT: extra credit will be available before each test, for additional points on students' tests, absolutely no other extra credit will be available! A student asking for additional extra credit may be subject to losing class participation points for not thoroughly reading the class syllabus, or listening to the instructor.

Finally I would like to thank you for reading all of this and stay hip and cool and all that jazz, and watch old Disney movies not reality tv.