

**Syllabus for Math 111, Section 003
Spring 2023**

Instructor: Chase Fleming
E-mail: cf17@email.sc.edu
Office: Leonte 114
Office Hours: Monday, Wednesday 2:30 - 3:30

I: Evan Rockford
crockfoj@email.sc.edu

Course Description

MATH 111 - Basic College Mathematics
Credits: 3

Basic college algebra; linear and quadratic equations, inequalities, functions and graphs of functions, exponential and logarithm functions, systems of equations. Credit may not be received for both MATH 111 and 115.

Prerequisites: Qualification through the Math Assessment of Prerequisites (MAP) test score of 4 or higher:
https://sc.edu/study/colleges_schools/artsandsciences/mathematics/study/math_placement/index.php

Class Meetings and Schedule:

This is an in-person class. We will meet in person on Monday, Wednesday, and Friday at 1:10PM to 2:00PM in WMBB Nursing 133.

Text: Stewart, Redlin, and Watson, *College Algebra*, 7th Edition, 2016. ISBN: 978-1-305-11554-5 (eBook strongly recommended)

Online Homework System: WebAssign (<http://www.webassign.net>) (Required)

Sections: Sections P.1-P.9, 1.3-1.4, 1.7, 1.10, 2.1-2.8, 4.1-4.6 (3.1 and 5.1 if time allows)

Students are required to purchase WebAssign access. Students are strongly encouraged to purchase WebAssign with eBook access for this course. (See Getting Started with WebAssign handout.) **Students do not need a hard copy of the text.**

Attendance and Participation: Regular attendance and participation is expected. In accordance with university policy, a letter grade may be deducted for each 10% of classes missed (unexcused). Attendance will be taken daily.

Withdrawal: Any student wishing to withdraw from the class should do so by Monday, March 27. Students dropping after this date will receive a WF for the course.

Cell Phones/Laptops/ Smart Watches: In accordance with AS policy, I will ask that all cell phones be turned off (or at the very least be put on vibrate) during class. Also, please refrain from texting during class – it is disrespectful and distracting. **Your cell phone should not be out at any time during a test or quiz.** The use of any laptop during class for anything other than class participation is prohibited. Smart watches should not be worn on test or quiz days.

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

Factor various polynomial expressions using the methods: finding a common factor; using special formulas, including difference of squares and sum or difference of cubes; factoring a quadratic whose leading coefficient is 1; factoring a quadratic whose leading coefficient is not 1; and factor by grouping.

Solve polynomial equations using factoring and solve quadratic equations using factoring, completing the square, and the quadratic formula.

Work effectively with rational expressions including simplification of sums, differences, products, and quotients and solving equations involving rational expressions.

Use order of operations, properties of exponents, function notation, properties of logarithms

Find and interpret the average rate of change of a function using an equation, a table of values, or an equation.

Write the equation of a linear or exponential function using two points, a table of values, or a general description of the function. Write equations of vertical, horizontal, parallel, and perpendicular lines.

Distinguish between the growth or decay of linear and exponential functions. Solve real-world applications involving linear and exponential functions.

Differentiate between interest compounded annually, interest compounded continuously, and other types of compound interest. Convert from one form to the other and understand the difference between the nominal and effective rates.

Tests: There will be three tests and a cumulative final exam. The *tentative* dates for these are:

Test 1: Monday, February 13 on Sections P.1-P.9, 1.3

Test 2: Monday, March 20 on Sections 1.4, 1.7, 1.10, 2.1-2.6

Test 3: Monday, April 17 on Sections 2.7-2.8, 4.1-4.6, (Possibly 3.1, 5.1)

Final: Monday, May 1 in Nursing 133

Make-up exams will be available in the event of a documented illness/family emergency. Those with acceptable excuses must contact me within 24 hours of the scheduled exam time to schedule a make-up. **Tests given in class must be made up in person.**

Testing: All tests will be administered during the face-to-face class session.

Test Description: All three tests and the final exam will be a combination of short answer questions and applications where you will work out math problems. You will be graded based on a completely correct solution – not just the final answer. All steps must be correct for full credit.

WebAssign Homework: Graded Assignments will be given once a week and graded via WebAssign. Students must complete each assignment online before the due date. The lowest graded assignment grade will be dropped regardless of excuse. If you have a legitimate excuse for missing more than one graded assignment, please come talk to me.

WebAssign Graded Assignment Description: Graded assignments will be posted once a week and graded via WebAssign. If you miss a question on a Graded Assignment, you will have 2 more chances to get the question correct, but you will not be able to view tutorials or hints. Graded assignments are usually due on Sunday by 11:59PM. You will be able to access the key to these solutions after the due date, and you should review the problems you missed before the quiz on Friday.

Suggested Problems: Suggested problems from the textbook can be found at the end of each section. These problems are great practice. You are encouraged to work on some of these problems before starting the homework.

In-Class Quizzes: Quizzes will be given weekly during class sessions on Friday and will be based on the homework. The lowest quiz grade will be dropped regardless of excuse. If you miss more than one quiz, make-up quizzes will be available for those with **documented** excuses, but you must contact me within 24 hours of the scheduled quiz time to schedule a make-up. **Make-up quizzes must be taken in person.**

In-Class Quiz Description: Quizzes will be given once a week and will be based on the most recent WebAssign Graded Assignment and Notes. Quizzes will be 1-3 problems and should take between 15-20 minutes at the end of class. Questions will be a combination of short answer questions and applications where you will work out math problems. You will be graded based on a completely correct solution – not just the final answer. All steps must be correct for full credit.

Calculators: A scientific or graphing calculator is required for the course. (Students should be able to evaluate exponential and logarithmic functions.) Use of the TI-83/84 is strongly recommended. Use of the TI-89, TI-Nspire, or other calculator with a built-in AS (computer algebra system) is prohibited. **You may NOT use your cellphone as a calculator.**

Note: You may NOT store notes or formulas of any kind on your calculator. You will be asked to clear the memory on your calculator before each test. Also, you may not share calculators during a test or quiz.

Grading:

Your final grade will be determined by a weighted average given the following categories:

Quizzes	15%
WebAssign Graded Assignments	10%
Attendance	10%
3 Tests	45% (15% each)
Final Exam	20%

Letter grades will be given according to the following scale:

A :	90-100%
B+:	85-89%
B :	80-84%
+:	75-79%
:	70-74%
D+:	65-69%
D :	60-64%
F :	below 60%

Additional Help: For (free!) additional assistance, visit the math lab. Tutors there will be able to answer most questions. The [Math Tutoring enter](#) is located in Le onte 102. Tutoring in the math lab is open to all students enrolled in a 100-level MATH class. You do not need an appointment – you can drop in whenever the lab is open. In addition, look for peer tutoring resources, including online tutoring, at the Student Success enter <http://www.sc.edu/success/> Finally, you are always welcome to come ask me questions. My office is Le onte 114. If you cannot make it during office hours, just send me an email to request an appointment. The university offers many options for help. Do not wait until you are completely lost to seek assistance!

supplemental Instruction: SI sessions are led by an undergraduate student who has taken this course and excelled in the course material. Your SI leader will facilitate a discussion and activities that encourage you to practice, discuss, and ask questions about the most current course material. Each SI leader holds three sessions per week.

Minimum Technical skills and Technology Requirements

Minimal technical skills are needed in this course. All graded homework assignments in this course must be completed and submitted online via WebAssign. In addition, course handouts and examples are posted on Blackboard. Therefore, students **must** have consistent and reliable access to a computer and the Internet. Before starting this course, students must feel comfortable doing the following.

The minimal technical skills students should have include the ability to:

- organize and save electronic files,
 - use email and attached files,
 - check email and Blackboard daily,
 - register for and submit assignments via WebAssign.
- (See Getting Started with WebAssign handout.)

If you have problems with your computer, please contact University Technology Support (UTS) Help Desk at 803.777.1800 or helpdesk@sc.edu. The UTS Help Desk is open Monday – Friday from 8:00 AM – 6:00 PM. If you have problems with WebAssign, please visit the Student Support section of WebAssign <https://webassign.com/support/student-support/>

Academic Integrity

All students must review the Office of Academic Integrity sanctions. This information may be found at https://www.sc.edu/about/offices_and_divisions/student_conduct_and_academic_integrity/index.php

One or more of the following sanctions may be imposed for Academic Integrity violations: 1) Expulsion from the University; 2) Suspension from the University for a period of no less than one semester; and/or Probation. A combination of the above sanctions may be implemented. It should be noted that submitting someone else's work is cheating and against the Carolina Code of Ethics. Cheating, or any other Academic Integrity violations, will result in failure of the course for all involved parties. All parties will also be referred to the Office of Academic Integrity for additional retribution.

Copyright – As an instructor, I will provide citations and acknowledgement of any instructional materials that I use in this course that I do not create myself. All materials in this course are copyrighted and you as a student may not distribute them in any format outside of this course. This includes all materials provided either electronically or as class handouts.

Student Disability Services

Students with disabilities should contact the Office of Student Disability Services. The contact information is below:

MAIN OFFICE
1705 College Street
Rose-Hipp, Suite 102
Columbia, SC 29208
Phone: 803-777-6142 Fax: 803-777-6741
Email: sadrc@mailbox.sc.edu
Web: <http://www.sa.sc.edu/sds/>

These services provide assistance with accessibility and other issues to help those with disabilities be more successful. Additionally, students should review the information on the Disabilities Services website and communicate with the professor during the first week of class. Other academic support resources may help students be more successful in the course as well.

Library Services (http://www.sc.edu/study/libraries_and_collections)

Writing Center (<http://www.cas.sc.edu/write>)

Student Technology Resources (<http://www.sc.edu/technology/techstudents.html>)

Tentative Course chedule

Week	Sections	Topics
	P. -P.3	Modeling the Real World with Algebra and Real Numbers, Integer Exponents and Scientific Notation
2	P.4-P.5	Integer Exponents and Scientific Notation, Rational Exponents and Radicals and Algebraic Expressions
3	P.6-P.7	Factoring, Rational Expressions
4	P.8-P.9	Solving Basic Equations, Modeling with Equations
5	.3	Lines and Review
6	.4	Solving Quadratic Equations, Solving Other Types of Equation with Factoring
7	.7, . 0, 2.	Solving Inequalities, Modeling Variation, Functions
8	2.2-2.5	Functions, Graphs of Functions, Getting Information from the Graph of a Function, Average Rate of Change of a Function, Linear Functions and Models
9	2.6	Transformations of Functions and Review
0	2.7-2.8	Combining Functions, One-to-One Functions and Their Inverses
	4. -4.3	Exponential Functions and The Natural Exponential Function, Logarithmic Functions
2	4.4-4.6	Laws of Logarithms, Exponential and Logarithmic Equations, Modeling with Exponential Functions
3		Catch up and Review
4		Review for the Final Exam