

Springfield Technical Community College
Department of Mathematics

Department: Mathematics
Course Title: Algebra 2
Course Number: MAT-097
Semester: Spring 2020
Credits: 3 Non-Graduation Credits
Prerequisites: Completion of MAT-087 or MAT-089 with C- or better, or Placement Level MAT-091
Textbook: **(REQUIRED) MyMathLab Student Access Kit**
(OPTIONAL) Introductory Algebra through Applications, 3rd Edition, Akst and Bragg, 2012, Pearson Education, ISBN: 9780321746696
Instructor: Antonio C. Silvestri
Office: 17/333
Office Hours: MWF 10:10am
Tuesday: 11-11:50am
Meeting Times: D02 MWF 9:05am
D10 TTh 12:30pm
E-Mail: silvestri@stcc.edu
Phone: 413-755-4621
Course Websites: <http://www.mymathlab.com> and <https://cs.stcc.edu/algebra>

COURSE DESCRIPTIVE GUIDE

ORGANIZATION OF THE COURSE

This is a web-assisted course. The teaching methodology employed in this course utilizes a lecture approach, encouraging student participation, and interactive computer learning and assignments.

COURSE DESCRIPTION

This is a pre-college level lecture course in elementary algebra. Topics include operations with rational expressions, solving rational equations, applications and problem solving, and simplifying complex rational expressions, graphing linear equations, slopes, equations of lines, and graphing inequalities in two variables. Additional topics are systems of linear equations, applications and problem solving, radical expressions, radical equations and applications, the quadratic formula, graphs of quadratic equations, and functions. **This is a developmental course. Credit for this course is not counted toward fulfilling graduation requirements at STCC.**

ATTENDANCE

You are strongly advised to come to class. If you are not already proficient in algebra, not coming to class is not going to make you succeed. A student absent from class bears full responsibility for all subject and

procedural information discussed in class, including any changes in exam dates and assignments. **Be advised that there are no individualized tutoring services offered by the instructor.**

TESTING AND GRADING

All assignments are done on the mymathlab website. As this is an online resource, students can do homework and quizzes anywhere a computer is available.

The final grade will be based 20% on homework, 20% on the quiz average, 36% on the 3 midterm exams, and 24% on the final. **Students must achieve a minimum overall average of 70% in this course in order to pass and progress to college level math.**

- Homework and Quizzes should be completed before the exam they are designed to support is taken. These assignments can be completed at home. You are encouraged to do homework and quizzes with another student if you believe it can help you understand the material.
- **Exams will be made available after the material is covered.** Exams can also be taken at home. They have a due date. Exams submitted before the due date receive full credit. Exams submitted afterward get a 10 point reduction. You get 2 takes on exams. The greater of the two gets entered in the system.

Any homework, quiz or exam not taken will be zeroed and averaged into the final grade. You will not be able to complete any assignments after the course is over.

SUPPORTING MATERIALS

There are online tutorials available at the website which provides lecture presentations on units in the text.

All course announcements and correspondence will be done through the cs.stcc.edu website. Also check your school issued **student.stcc.edu** email accounts for important course updates. It is your responsibility to visit this course page and check your email at least once every two days. It is unacceptable to say that you are not aware of something happening in the course.

STCC POLICY ON DISRUPTIVE BEHAVIOR

Behavior, which disrupts the establishment or maintenance of the learning environment, may result in the student being dropped from the class. The student may be subject to further punitive action by the Dean of Students.

Late arrival to class, early departure, listening to music, and talking on the on the phone in class constitute disruptive behavior

DISABILITY SERVICES

If you have a disability and need assistance, please notify your instructor and make an appointment with the Office of Disability Services (Building 19/Room 141) or call 755-4785. Academic accommodations become effective when Disability Services, the instructor, and the student complete all paperwork and may not be used to alter a grade on previous course work.

Supplemental Instruction

The college has a new program called Supplemental Instruction (SI). Through this program, you will have the opportunity to meet weekly with our SI Leader, who will provide weekly review sessions for all interested students. The Leader is a current student who has recently taken the course and done well. They will be in class with you every day, hearing what you hear, and reading what you read. During each review session, you will have a chance to get together with your classmates to compare notes, discuss concepts that might be confusing, review material for tests and quizzes, and ask any questions that you might have.

Sessions will begin the week of January 27th, and run through the end of the semester. You can attend as many review sessions as you like; each one will be different because you will have new material to discuss. SI sessions are informal – bring any notes you have, your textbook, or a classmate! By coming to these sessions, you will be able to develop a better understanding of the course content as well as more effective ways of learning.

If you are unable to attend the group session, but would like to meet with the SI Leader, you can set up an individual time to meet with them. You can let them know you would like to make an appointment with them when you see them in class, or feel free to send them a note through their college email.

I am thrilled that we have this new opportunity for you, and I am hopeful that you take advantage of this program.

Our SI leader is **Nyya Samuels** and her email address is nsamuels0001@student.stcc.edu.

COURSE OUTLINE

Chapter 6A: Factoring Polynomials

- 6.1 Common Factors
- 6.2 Factoring Trinomials with Leading Coefficient of One
- 6.3 Factoring Trinomials with Leading Coefficient Other than One

Quiz 6A

Chapter 6B: Factoring Polynomials

- 6.4 Factoring Perfect Square Trinomials and Difference of Squares
- 6.5 Solving Quadratic Equations by Factoring

Quiz 6B

Exam 1 – Chapter 6

Chapter 7A: Rational Expressions and Equations

- 7.1 Rational Expressions
- 7.2 Multiplication and Division of Rational Expressions

Quiz 7A

Chapter 7B: Rational Expressions and Equations

- 7.3 Addition and Subtraction of Rational Expressions
- 7.4 Complex Rational Expressions

Quiz 7B

Chapter 7C: Rational Expressions and Equations

- 7.5 Solving Rational Equations
- 7.6 Ratio and Proportion

Quiz 7C

Exam 2 – Chapter 7

Chapter 8A: Radical Expressions and Equations

- 8.1 Introduction to Radical Expressions
- 8.2 Addition and Subtraction of Radical Expressions

Quiz 8A

Chapter 8B: Radical Expressions and Equations

- 8.3 Multiplication and Division of Radical Expressions
- 8.4 Solving Radical Equations

Quiz 8B

Chapter 9A: Quadratic Equations

9.1 Solving Quadratic Equations by the Square Root Property

9.3 Solving Quadratic Equations Using the Quadratic Formula *

Quiz 9A

Chapter 9B: Quadratic Equations

9.4 Graphing Quadratic Equations

Quiz 9B

Exam 3 – Chapters 8 and 9

Final Examination

This final examination is comprehensive, including all units covered this semester.