

College Algebra

Math 0314/1314.C601

Syllabus

Gina Becker

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Downtown Center B018

806.716.4684

Office Hours: Downtown Center in the Basement, B018 unless otherwise noted.

Monday	Tuesday	Wednesday	Thursday	Friday
8:00 - 9:00	8:00 - 9:00	8:00 - 9:00	8:00 - 9:00	8:00 - 10:30
10:45 - 11:00 B004	10:45 - 11:00 B004	10:45 - 11:00 B004	10:45 - 11:00 B004	
12:45 – 1:00		12:45 – 1:00		

ATTENDANCE

- Attending every class is your best strategy for passing this course..
- Attendance is taken daily. Per South Plains College Math Department policy, missing more than 20% of scheduled class time may result in an administrative drop from the course.
- Using your phone or leaving class for extended breaks disrupts your learning process.
- **No make up Quizzes or Exams due to absence will be offered.**

CLASS STRUCTURE

- This class meets in person daily, four days each week. You should print the notes and bring them with you to class to complete.
- If you must miss class for any reason, the completed notes may be found in Class Notebook and the recorded lecture may be found in Collaborate.

GRADING

	Homework	In Class Practice	Quizzes	Exams
Description	Assigned each day. Due the next day. Assignments will be uploaded to Gradescope.	Assigned each day. Assignments will be uploaded to Gradescope.	Weekly, given on non-exam weeks. Will cover the material from the previous week.	Given at the end of each unit. <i>The review counts as a homework grade.</i>
Number	Math 1314 - 27 homework assignments Math 0314 - 26 homework assignments <i>Late assignments are not accepted.</i>	Math 0314 -22 in class assignments <i>Credit will be given to students in class.</i>	Math 1314 - 8 quizzes Math 0314 - 12 quizzes <i>You must be present to take the quiz. No makeup offered.</i>	Math 1314 – 4 unit exams Math 1314 and Math 0314 – 1 Final Exam <i>You must be present to take the exam. No makeup offered.</i>
Points	Each homework is worth 0.3 points.	Each In Class Practice is worth 0.3 points.	Math 1314 - each quiz is worth 4 points. Math 0314 - each quiz is worth 5 points.	Each exam is worth 10 points. The Final Exam will be worth 20 points
Total Points for Math 1314	Math 1314 – 8 points		Math 1314 – 32 points	Exams 40 points Final Exam – 20 points <i>100 points total</i>
Total Points for Math 0314	Math 0314 – 5 points	Math 0314 – 5 points	Math 0314 – 60 points	Final Exam – 30 points <i>100 points total</i>

Grades assigned by point total:

Math 1314 A: 89.5 – 100 B: 79.5-89.4 C: 69.5 – 79.4 D: 59.5 – 69.4 F: Below 59.5

Math 0314 P: 69.5 – 100 F: Below 69.4

PASS THIS CLASS

Be present in class, both physically and mentally.

Be present in class, both physically and mentally.

Print notes from Blackboard and bring to class. Use a 3-ring binder to keep them organized.

Complete homework on the day it is assigned. Then you will be able to ask questions, if needed.

Ask questions! When you send an email, send a picture of your work.

You may use your homework on your quiz. **Write the title for the assignment on the page.**

To receive full credit on practice problems and exams, you must show all work that leads to your answers. The work must be legible, make sense and be easy to follow. All work and answers should be handwritten.

The best way to study for a math exam is to practice working problems over and over again.

SUPPLIES

- A textbook is not required for this course.
- Homework and notes will be provided on Blackboard.
- pencils, 3 ring binder and notebook paper, 3" x 5" notecards
- Computer or cell phone that you can use to check Blackboard and emails and to upload your homework to Gradescope.
- Scientific Calculator (TI-30X IIS is a good and inexpensive option.)



YOUR HOMEWORK

Print your name at the top of the page and write the question number for each problem. Show all necessary work.

Clearly mark your answer and check the homework answers to ensure you are practicing correctly.

Submit the assignment using the Gradescope app before the deadline. Check the calendar.

OTHER INFORMATION

- **Communication:** Any questions or comments should be sent using SPC email. I will do my best to respond to your email within 24 hours of receipt. Any email sent on a weekend may not be answered until Monday.
- **Blackboard:** This course syllabus, as well as any class handouts and assignments may be accessed through Blackboard. Login at <http://southplainscollege.blackboard.com>. The username and password should be the same as the MySPC and SPC email.

Username: first initial, last name, and last 4 digits of the Student ID

Password: Original CampusConnect Pin Number (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to blackboard@southplainscollege.edu or by telephone 806-716-2180.

- **SPC Tutoring Options: In Person:** Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, get to know the tutors and view tutoring locations.
<http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php>
- **Tutor.com** You also have 180 FREE minutes of tutoring with tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tutor.com link on the left-hand tool bar and grab a session with a tutor. You can access tutor.com tutors during the following times: Monday – Thursday: 8pm-8 am Friday 6 pm –Monday morning 8am Free tutoring is available through the college. Check Blackboard for additional information about tutoring.
- **Withdrawal from course:** Fill out the Student Initiated Drop Form found at <https://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php>. SPC might not permit an undergraduate student to drop a total of more than six courses (including any course a transfer student has dropped at another institution of higher education.)

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

Tentative Schedule

Week	Monday	Tuesday	Wednesday	Thursday
1	August 24 Course Introduction	August 25 Course Introduction	August 26 SC 1.1 Integers, Exponents and Combining Like Terms	August 27 1.1 Review Integers, Order of Operations, Exponents
2	August 31 SC 1.2 Multiplying Binomials and Solving Linear Equations SC Quiz 1	September 1 1.2 Operations on Polynomials; Linear Equations	September 2 Review 1.1 and 1.2	September 3 SC 1.3 Linear Inequalities, Interval Notation; Absolute Value Equations and Inequalities Quiz 1
3	September 7 Labor Day Holiday	September 8 1.3 Linear Inequalities, Absolute Value Equations and Inequalities	September 9 SC 1.4 Factoring SC Quiz 2	September 10 1.4 Summary of Factoring Quiz 2
4	September 14 SC 1.5 Square Roots and Radical Equations Introduction to Complex Numbers SC Quiz 3	September 15 1.5 Roots, Radical Expressions and Complex Numbers 1.6 Review	September 16 Exam 1 Review	September 17 Exam 1
5	September 21 SC 2.1 Basics of Functions; Evaluating Functions and Symmetry	September 22 2.1 Functions: Basics of Functions, Analyzing Graphs; Evaluating; Symmetry,	September 23 SC 2.2 Functions: Transformations, Piecewise Functions; Combinations	September 24 2.2 Functions: Parent Graphs and Transformations; Increasing and Decreasing, Piecewise; Combinations Quiz 3
6	September 28 SC 2.3 Functions: Domain Composite Functions; Inverse Functions SC Quiz 4	September 29 2.3 Functions: Domain; Compositions; Inverse	September 30 SC 2.4 Linear Functions; Graphing; Intercepts; The Slope Formula; Slope-Intercept and Point-Slope Form; Parallel and Perpendicular Lines	October 1 2.4 Linear Functions: Slope, Graphing; Parallel and Perpendicular Lines Quiz 4
7	October 5 SC 2.5 Solving Quadratic Equations; Solving Radical Equations SC Quiz 5	October 6 2.5 Quadratic Equations and Radical Equations	October 7 SC 2.6 Parabolas and Their Properties; Graphing Quadratic Equations	October 8 2.6 Graph Quadratic Functions 2.7 Review Quiz 5
8	October 12 Unit 2 Exam Review	October 13 Exam 2	October 14 SC 3.1 Synthetic Division, Rational Zeros	October 15 3.1 Synthetic Division; Polynomial Equations
9	October 19 SC 3.2 Graphing Polynomial Functions SC Quiz 6	October 20 3.2 Graphing Polynomial Functions	October 21 SC 3.3 Domain of Rational Expressions; Solving Rational Equations and Simplifying Rational Expressions	October 22 3.3 Rational Expressions and Rational Equations Quiz 6
10	October 26 SC 3.4 Graphing Rational Functions SC Quiz 7	October 27 3.4 Graphing Rational Functions	October 28 SC 3.5 Polynomial and Rational Inequalities	October 29 3.5 Polynomial and Rational Inequalities 3.6 Review Quiz 7
11	November 2 Review for Exam	November 3 Exam 3	November 4	November 5 4.1 Exponential Functions

	SC Quiz 8		SC 4.1 Introduction to Exponential Functions and Logarithmic Functions	
12	November 9 SC 4.2 Factoring Review, Exponent Review Logarithm Properties SC Quiz 9	November 10 4.2 Logarithmic Functions	November 11 SC 4.3 Solving Exponential Equations and Logarithmic Equations	November 12 4.3 Exponential and Logarithmic Equations 4.4 Review Quiz 8
13	November 16 Review for Exam SC Quiz 10	November 17 Exam 4	November 18 SC 5.1 Solving Systems of Linear Equations	November 19 5.1 Solving Systems of Linear Equations
14	November 23 SC 5.2 Solving Systems of Linear Equations in 3 Variables; Matrices and Gaussian Elimination SC Quiz 11	November 24 5.2 Systems of Linear Equations in Three Variables; Matrices, Gaussian Elimination and GJE	November 25 Thanksgiving Break	November 26 Thanksgiving Break
15	November 30 SC 5.3 Determinants and Cramer's Rule SC Quiz 12	December 1 5.3 Determinants and Solving Systems with Cramer's Rule Quiz 9	December 2 Final Exam Review	December 3 Final Exam Review Last Day to Withdraw
16	December 7 Final Exam Math 1314 8:00 – 10:00			

South Plains College
Common Course Syllabus: MATH 1314 and Math 0314

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1314

Course Title: College Algebra

Available Formats: conventional, hybrid, internet, and ITV

Campuses: Levelland, Downtown Center, Plainview Center, and Dual Credit

Course Description: In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

Prerequisite: Minimum score of 350 on the TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, a successful completion with a grade of 'C' or better in MATH 0320, or successful completion of NCBM-0114.

Credit: 3 **Lecture:** 3 **Lab:** 1

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

Course Number: MATH 0314

Course Title: College Algebra Support Course

Available Formats: conventional, hybrid, and internet

Campuses: Levelland, Downtown Center, and Plainview Center

Course Description: Math 0314 is to be taken concurrently with MATH 1314. Background topics which are necessary for a student to successfully complete MATH 1314 will be covered, with an emphasis on fractions, factoring polynomials, functions, exponents, and operating with radical and rational expressions.

Prerequisite: Minimum score of 340 on the TSIA1, minimum diagnostic score of 3 on the TSIA2, a successful completion with a grade of 'C' or better in MATH 0315, or a successful completion of NCBM-0105.

Credit: 3 **Lecture:** 3 **Lab:** 1

This course partially satisfies a Core Curriculum Requirement: None

Core Curriculum Objectives addressed:

- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomial and rational functions.
5. Recognize, solve and apply systems of linear equations using matrices.

Student Learning Outcomes Assessment: A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

Course Evaluation: There will be departmental final exam questions given by all instructors.

Attendance/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor may remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student cannot receive an X, the instructor will assign an F.

Academic Integrity (Plagiarism and Cheating Policy): "Complete honesty is required of the student in the presentation of any and all phases of course work. This idea applies to quizzes of whatever length as well as to final examinations, to daily reports, and to term papers" (SPC General Catalog).

Plagiarism violations include, but are not limited to, the following:

1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill,
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation,
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;

3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another's work during an examination or on a homework assignment;
8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

For information regarding official South Plains College statements about intellectual exchange, disabilities, non-discrimination, Title IX Pregnancy Accommodations, CARE Team, Campus Concealed Carry, and Covid-19 please visit <https://www.southplainscollege.edu/syllabusstatements/>.

SPC Bookstore Price Match Guarantee Policy: If you find a lower price on a textbook, the SPC bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store. See store for details.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.