

MATH 1314 – COLLEGE ALGEBRA

Prerequisite – Two units of high school algebra and a score of 75 or better on Accuplacer, or successful completion of the remediation sequence of Math 0315 and Math 0320.

Purpose – A standard course in college-level algebra.

Textbook and Materials – College Algebra, Blitzer, 5th edition with My Math Lab packet; scientific calculator

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Attendance – Regular attendance is essential for successful completion of the course. There is **no distinction between excused and unexcused absences**, so there is no need to bring any type of note documenting your absence. If a student has two consecutive weeks of absences, or any 5 absences, the student will be dropped from the course with a grade of X.

Assignment Policy – Homework will be assigned at each class meeting and will be due at the next class meeting. Homework assignments will not be taken up but it is essential that you do each and every assignment in order to be adequately prepared for the quizzes.

Exams and Quizzes – There will be several regularly scheduled online quizzes and four major exams (see outline). **No make-ups will be given on exams or quizzes.** If a major exam is missed, you will receive a grade of 0 for the missed exam. The final exam is cumulative and is required for each student. If the final exam is higher than the lowest major exam, the lowest major exam grade will be dropped and the final exam will be counted twice. If the final exam grade is the lowest grade, it will NOT be dropped. Quizzes will be taken online using My Math Lab. There are no "extra credit" points given in this class. Your grade is based ONLY on your exams and quizzes. Please do not ask me to give you any extra credit or "bump" your grade.

Lab - The lab time for this course will be integrated into the lecture time and used for taking exams, working homework examples, and as extra teaching time.

Grade Determination – Grades will be averaged according to the following formula:

$$0.83*(\text{Ave. of Exams}) + 0.17*(\text{Ave. of Quizzes}) = \text{Course Grade}$$

Grading Standards – The standard grading scale (90 – 100 = A, 80 – 89 = B, etc.) will be used in this class.

Dropping the Course – The last day to drop is April 24, 2012. If you drop on or before this date you will receive a grade of W.

Disabilities – Students with disabilities including but not limited to physical, psychiatric or learning disabilities, who wish to request accommodations in this class should notify the Special Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his or her disability to the Coordinator of Special Services. For more information, call or visit the Special Services Office in Building 8, rooms 809 and 811 at Reese Center or phone 806.716.4654.

Video Tapes and Tutoring – Videotapes for many of the topics in this course are available in the Video Lab, room #256. Tutoring is also available in Building 8, in the Math building in Levelland, and at the ATC Building at 34th and Ave. Q in Lubbock. Tutoring hours and locations will be posted in the hallways of each building. Videos are also available at My Math Lab.

My Math Lab - Part of your final average is based on homework problems worked online via **My Math Lab**. **These problems will account for the quiz average that is 1/6 of your final grade.** I encourage you to purchase your textbook immediately and use the **Access Code Packet** (bundled with your textbook) to register for this class online.

Things you will need in order to register:

1. Email address
2. **Student Access Code** (in your My Math Lab Packet)
3. Instructor's Course ID: **robinson90952**
4. SPC Zip Code: **79336**

Follow these steps for a painless registration procedure:

1. Go to <http://coursecompass.com> and click the **Register** button.
2. Follow the on-screen instructions to enter your **Student Access Code** and the **Instructor's Course ID**, provide contact information via a valid email address, and create a **Login Name** and **Password**.

After you have registered and enrolled, you are ready to log in to your **My Math Lab** course.

To log in and access your course:

1. Go to <http://coursecompass.com> and click the **Log In** button.
2. Enter the **Login Name** and **Password** you created during registration.

Important Note: The homework problems assigned online via **My Math Lab** are **required** and constitute the quiz average for this class. If you either do not have a personal computer or your computer is in serious need of an upgrade, there are many computer labs on both the Levelland campus and the Reese Center campus which have very liberal hours. Please use only the listed labs to access **My Math Lab** since special plug-ins are required and other labs will not have these plug-ins installed. The labs at the Reese Center campus with the plug-ins are in rooms 207, 823 and 827. Computer

science students have priority in room 827. Hours for these labs will be announced when available. Computers are also available at the ATC building at 34th and Avenue Q.

Course Objectives – Students must be able to factor algebraic expressions, perform operations with rational expressions, and perform operations with exponential and radical expressions. If these skills are deficient, it is recommended that the student enroll in a remedial course in order to gain proficiency in these skills. In order to complete this course and receive a passing grade, the student must show proficiency in the following course objectives:

1. Find solutions for and graph each of the following:
 - a. linear, quadratic, and rational equations and inequalities.
 - b. quadratic equations by factoring, extraction of roots, completing the square, quadratic formula, and graphing.
 - c. quadratic type equations.
 - d. radical equations.
 - e. higher order polynomials and inequalities.
 - f. absolute value equations and inequalities.
 - g. logarithmic and exponential equations and functions.
2. Solve application problems using any of the types of equations listed.
3. Apply midpoint, distance, and circle formulas.
4. Recognize a function given any of the three forms: set of ordered pairs, equations, or graph.
5. Determine the domain and range of functions.
6. Write equations of lines, parabolas, and circles given pertinent information.
7. Identify the basic characteristics of the graphs of polynomial functions and sketch the graph.
8. Find the solutions for systems of linear and non-linear equations and systems of inequalities by using one or more of the following techniques: elimination, substitution, graphing, Cramer's Rule, Gauss-Jordan, or matrix algebra.
9. Expand a binomial raised to an integral power.

Math 1314 – Tentative Class Outline

Week 1	P4 – Polynomials, 8.5 – Binomial Theorem, P5 – Factoring
Week 2	1.2 – Linear Equations, 1.3 – Applications of Linear Equations
Week 3	1.4 – Complex Numbers, 1.5 – Quadratic Equations
Week 4	1.6 – Other Types of Equations, Exam 1
Week 5	1.7 – Inequalities, 2.1 – Functions, 2.3 – Equation of a Line
Week 6	2.3 – Equation of a Line, 2.4 – Parallel and Perpendicular Lines, 2.8 – Equation of a Circle
Week 7	3.1 – Quadratic Functions, Exam 2
Week 8	3.2 – Polynomial Functions, 3.3 – Roots of Polynomial Functions, 3.4 – Complex Roots
Week 9	3.5 – Rational Functions, 3.6 – Quadratic & Rational Inequalities
Week 10	4.1 & 4.2 – Exponential & Logarithmic Functions, 4.3 – Solving Log & Exponential Equations, 4.4 – Applications of Log & Exponential Functions
Week 11	5.1 – 2X2 Systems of Equations, Exam 3
Week 12	5.2 – 3X3 Systems, 5.4 – Non-linear Systems, 5.5 – systems of Inequalities
Week 13	6.1 & 6.2 – Solving Systems using GJE
Week 14	6.5 – Solving Systems using Cramer’s Rule, Exam 4
Week 15	Final Review
Week 16	Final Exam

Subject to change at instructor’s discretion.