Math 115: Elementary Algebra


Other Necessities: Scientific calculator, graph paper & Common Final Practice Packet.

Distractions: In order to encourage/promote a positive learning environment: only assistive electronic devices are permitted. All others must be turned off and put away.

Topics:
- Ch 1 Concepts of Algebra
- Ch 2 Algebraic Expressions
- Ch 3 First Degree Equations
- Ch 4 Formulas, Problem Solving
- Ch 5 Exponents & Polynomials
- Ch 6 Factoring & Solving Equations
- Ch 7 Algebraic Fractions
- Ch 8 Graphing & Linear Systems
- Ch 9 Roots & Radicals
- Ch 10 Quadratic Equations
- Ch 11 Functions (2 sections)

Learning Outcomes: Upon completion of this course, the student will be able to:

1) Categorize numbers
2) Manipulate numbers using numerical operations
3) Evaluate arithmetic expressions with exponents.
4) Solve first-degree equations and inequalities.
5) Solve formulas for a given variable.
6) Recognize and solve proportions problems; analyze and solve word problems.
7) Simplify, and perform operations on polynomials.
8) Simplify expressions containing negative exponents.
9) Factor polynomials using appropriate methods
10) Apply factoring techniques to solve quadratic equations
11) Factoring polynomials using a variety of techniques
12) Solve equations & word problems via factoring.
13) Manipulate and simplify algebraic fractions.
14) Solve equations containing algebraic fractions.
15) Graph equations in two variables.
16) Determine equations of lines.
17) Solve systems of equations.
18) Determine roots; simplify, & perform operations on radicals.
19) Solve equations containing radicals.
20) Solve quadratic equations using completing the square and the quadratic formula.
21) Define and evaluate relations and functions.

Requirements:

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<tr>
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<th>Assigned Homework/Quizzes/Group</th>
<th>Math Center Tutoring (at least 15 hours)</th>
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<tbody>
<tr>
<td>Six Exams</td>
<td>60%</td>
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<tr>
<td>Final</td>
<td>30%</td>
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Grades:
- A 90–100
- B 80–89
- C 70–79
- D 60–69

Exam and Due Dates (excluding quizzes):

- First Exam: February 20
- Second Exam: March 5
- Third Exam: March 19
- Fourth Exam: April 9
- Fifth Exam: April 23
- Sixth Exam: May 14

Department Common Final Exam at the Bungalows: May 31 @ 10:15–12:15 PM

Please Note: This is a Saturday! Students are required to arrive at 10:00 AM with a valid picture I.D., two #2 pencils and a scientific calculator!

Also, backpacks, graphing calculators, and Cell Phones are not permitted.

Other Important Dates for Semester:

- Last Date to Drop w/o W: March 3
- Last Date to Drop with a W: May 5

Final Note: This is a mathematics course!! Every student starts with an “A”! In order to keep that “A” you need to do the homework, attend class regularly, and take notes carefully. What looks easy on the board may not be so easy at home (without good notes). Your questions are not only welcome, they are strongly encouraged. Consider this: whenever you ask a question you do so on behalf of a number of students who also would like to know the answer! Please take advantage of the free tutoring and textbook video services provided in the Learning Assistance Center and Math Center on campus—definitely a privilege! Furthermore, the computer disc included with your textbook has been extremely helpful with comprehension and grades! Remember that College Policy is that a student can be dropped after missing three classes BUT it is your responsibility to drop the course if something unforeseen occurs. Homework will only be accepted promptly at the first of class. Make-up exams and quizzes will not be given, so make arrangements to attend regularly now!