

# Math 100 – Elementary Algebra - 15385

## Summer 2010 - American River College

### Course Information

Instructor: Kristin Lui  
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Location: Liberal Arts 164  
Meet Times: MTWR, 10:25 am – 1:00 pm  
Dates: June 7, 2010 – July 29, 2010

### Course Description

This course covers the fundamental concepts and operations of algebra with problem solving skills emphasized. Topics include properties of real numbers, linear equations and inequalities, integer exponents, polynomials, and factoring polynomials. Other topics include rational exponents, rational/radical expressions with associated equations, the rectangular coordinate system, graphs and equations of lines, systems of linear equations/inequalities, and solving quadratic equations.

### Learning Outcomes

Upon completing this course, a student will be able to:

Simplify expressions using the basic operations and properties of real numbers ; solve first degree equations and inequalities ; combine polynomials using the basic operations of polynomials ; factor a polynomial ; simplify rational expressions and solve equations with rational expressions ; solve and graph linear equations and inequalities ; solve systems of linear equations and inequalities ; use roots, radicals, and exponents in simplifying expressions ; solve and graph quadratic equations ; set up application problems and solve the resulting equation(s) using the appropriate method.

### Proof of Prerequisite

Students must have taken Math 32 or Math 39 with a grade of “C” or better or placement through the assessment process. By **June 9, 2010** (third class meeting), you must provide proof of prerequisite. If proof of prerequisite is not received, you will be dropped from the class. Accepted proofs of satisfying the prerequisite are: copy of a Los Rios transcript, evidence of taking the ARC math self-assessment instrument, or a Prerequisite/Placement Verification Form signed by an ARC counselor.

### Grades

Course grades will be determined by:

Letter grades will be assigned by the scale below:

Quizzes (10 x 10 pts)	100 points	A	90% or above
Exams (5 x 100 pts)	500 points	B	80% - 89%
Homework (8 x 25 pts)	200 points	C	70% - 79%
Final Exam	200 points	D	60% - 69%
		F	59% or below
Total Points	1000 points		

### Quizzes

Quizzes will be given during class meetings. There are no make-up quizzes. Two of the lowest quiz scores will be dropped.

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- Exams** There will be five 1-hour exams during the summer session. Exams must be taken in class. Calculators, books, and notes are **NOT** allowed during exams. There are no make-up exams. You have the option of replacing your lowest exam score with your final score.
- Homework** Several homework assignments will be given during the course. Homework will be graded overall completion; no credit will be given for incomplete work or no shown work. No late homework will be accepted. One of the lowest homework scores will be dropped.
- Final Exam** The final exam is cumulative and mandatory. The final will be given on the last day of class: **July 29, 2010**. No make-ups!

### Important Dates (Tentative)

- |                         |                                 |
|-------------------------|---------------------------------|
| ▪ Exam 1.....June 10    | ▪ NO CLASS.....July 5           |
| ▪ Exam 2.....June 22    |                                 |
| ▪ Exam 3.....July 1     | Last day to:                    |
| ▪ Exam 4.....July 15    | ▪ drop with refunds.....June 11 |
| ▪ Exam 5.....July 27    | ▪ enroll.....June 21            |
| ▪ Final Exam....July 29 | ▪ drop without a W.....June 22  |
|                         | ▪ drop with a W.....July 16     |

### Attendance

Attendance is required. I **may** drop students who have 3 or more unexcused absences. Please notify me of any absences in advance either by email or in-person during class (email is best). Students with perfect attendance will earn 30 points of extra credit.

### Special Needs

If you require special needs (health or disability related issues), please contact me to discuss a plan for meeting those needs. If you are using DSP&S and wish to use their testing services, please provide me with the appropriate form.

### Ethical Conduct

Cheating will not be tolerated. Any student caught cheating on any exam or quiz will receive 0 points for that test and possibly a grade of F for the course.

### Disruptions

Please turn your cell phone to vibrate or silent. Do not answer your cell phone or text during class. Do not talk during class. If you are too disruptive in class (excessive talking, repeatedly leaving the class to answer your phone, etc.), I may ask you to leave the class.

### Disclaimer

The instructor reserves the right to alter this syllabus to conform to Los Rios Community College District Policies, state law, or to improve the quality of education offered by the class. Any changes will be announced in class.

Week	Monday	Tuesday	Wednesday	Thursday
1	June 7	June 8	June 9	June 10
	Section 1.1 - 1.3	Section 1.4-1.6	Section 1.7, 1.8	Exam - Chapter 1 Section 2.1, 2.2 Homework 1
2	June 14	June 15	June 16	June 17
	Section 2.3 -2.5	Section 2.6-2.8	Section 3.1, 3.2 Homework 2	Section 3.3, 3.4
3	June 21	June 22	June 23	June 24
	Section 3.5, 3.6	Exam - Chapter 2, 3 Section 4.1, 4.2 Homework 3	Section 4.3, 4.4	Section 4.5, 5.1
4	June 28	June 29	June 30	July 1
	Section 5.2, 5.3 Homework 4	Section 5.4, 5.5	Section 5.6, 5.7	Exam - Chapter 4, 5 Section 6.1, 6.2 Homework 5
5	July 5	July 6	July 7	July 8
	NO CLASS	Section 6.3, 6.4	Section 6.5, 6.6	Section 7.1, 7.2 Homework 6
6	July 12	July 13	July 14	July 15
	Section 7.3, 7.4	Section 7.5, 7.6	Section 7.7, 7.8	Exam - Chapter 6, 7 Section 8.1, 8.2 Homework 7
7	July 19	July 20	July 21	July 22
	Section 8.3, 8.4	Section 8.5, 8.6	Section 8.7, 9.1	Section 9.2, 9.3 Homework 8
8	July 26	July 27	July 28	July 29
	Section 9.4, 9.5	Exam - Chapter 8, 9 Homework 9	Review	Final

Section	Homework 1
1.1	1, 5, 9, 17, 37, 41, 57, 65
1.2	1, 13, 29, 39, 49, 55, 61, 65, 69, 79
1.3	3, 7, 11, 17, 21, 29, 39, 47, 55, 63, 65
1.4	5, 11, 25, 31, 37, 45, 51, 57, 63
1.5	1, 5, 11, 19, 25, 37, 47, 57, 73, 77, 95, 109
1.6	3, 7, 15, 25, 29, 35, 57, 65, 73, 79, 87
1.7	3, 13, 15, 19, 27, 39, 45, 49, 59, 71
1.8	1, 3, 7, 11, 15, 27, 35, 49, 63, 73, 79

Section	Homework 2
2.1	5, 15, 27, 39, 47, 53, 59, 65
2.2	5, 9, 17, 27, 41, 49, 61, 69
2.3	1, 5, 15, 19, 23, 27, 35, 39, 49, 53
2.4	1, 3, 7, 9, 11, 25, 27, 35
2.5	1, 5, 7, 13, 17, 21, 23, 35, 45, 69, 75
2.6	1, 17, 25, 27, 33, 39, 41, 47, 59, 65
2.7	1, 3, 7, 15, 19, 21, 31
2.8	1, 9, 13, 17, 23, 25, 39, 47, 53, 63, 69

Section	Homework 3
3.1	1, 5, 11, 13, 19, 23, 33, 35, 43, 47, 53, 67
3.2	1, 3, 7, 9, 19, 21, 25, 35, 53
3.3	1, 5, 9, 17, 21, 25, 29, 33, 43, 47, 61, 63
3.4	1, 5, 13, 17, 21, 25, 29, 37, 41, 49
3.5	1, 5, 8, 11, 15, 19, 23, 27
3.6	7, 9, 17, 21, 25, 27, 33, 37

Section	Homework 4
4.1	1, 3, 7, 11, 15, 17, 27, 35, 39
4.2	1, 3, 7, 9, 15, 23, 25, 29
4.3	1, 7, 13, 21, 27, 31, 35
4.4	1, 5, 7, 11, 13, 15, 19
4.5	1, 3, 5, 7, 13, 15, 17, 23

Section	Homework 5
5.1	1, 3, 5, 9, 13, 19, 27, 35, 41, 57, 67, 73, 77
5.2	3, 11, 15, 21, 23, 31, 33, 37, 51, 59, 65
5.3	1, 3, 5, 13, 15, 23, 27, 35, 37, 43, 47
5.4	1, 7, 15, 23, 27, 33, 39, 43, 53, 63, 67, 77
5.5	1, 3, 7, 11, 17, 23, 33, 39, 43, 55
5.6	3, 7, 9, 13, 27, 29, 35, 45
5.7	1, 7, 11, 15, 17, 21, 25, 27, 39, 43, 49

Section	Homework 6
6.1	1, 3, 9, 11, 23, 29, 37, 39, 53, 59, 67, 77
6.2	1, 9, 11, 17, 23, 33, 43, 55, 57
6.3	1, 11, 21, 25, 41, 55, 61, 67, 79, 87
6.4	7, 15, 21, 33, 41, 47, 51, 63, 75
6.5	1, 5, 7, 11, 19, 23, 29, 33, 43, 59, 69, 79
6.6	3, 5, 9, 11, 17

Section	Homework 7
7.1	5, 7, 13, 19, 23, 31, 37, 41, 49, 53
7.2	5, 11, 15, 23, 25, 29, 37, 45, 49, 57
7.3	1, 5, 7, 11, 17, 25, 31, 37, 55, 63
7.4	1, 3, 9, 11, 17, 27, 33, 37, 47, 57, 65
7.5	7, 11, 13, 15, 17, 21, 23, 35
7.6	1, 3, 5, 17, 25, 35, 41, 51, 59, 67
7.7	1, 3, 5, 7, 9
7.8	1, 3, 5, 9, 15, 19, 21, 25, 29

Section	Homework 8
8.1	1, 3, 9, 19, 25, 33, 53, 59
8.2	1, 7, 11, 13, 23, 27, 35, 41, 53, 55, 71, 81
8.3	1, 3, 11, 17, 21, 25, 35, 39, 45, 57
8.4	1, 5, 13, 15, 25, 29, 33, 39, 43, 57, 63, 73
8.5	5, 13, 19, 25, 37, 41, 49, 57, 63, 71
8.6	1, 7, 15, 19, 23, 27, 33, 45, 57
8.7	1, 7, 11, 17, 21, 23, 33, 45, 55, 61

Section	Homework 9
9.1	5, 9, 17, 23, 25, 29, 37, 45
9.2	1, 5, 9, 11, 15, 23, 31
9.3	1, 3, 11, 17, 23, 27, 33, 39, 45,
9.4	1, 3, 9, 11, 17, 23, 31, 33, 43
9.5	1, 3, 5, 7, 9, 15, 17