

West Los Angeles College  
Mathematics Department  
Spring 2015 Course Syllabus

Course: **Mathematics 123C Elementary and Intermediate Algebra III**  
Section: 1503, 4 Units Instructor: Patricia Arriola  
Email: [arriolp@lacitycollege.edu](mailto:arriolp@lacitycollege.edu)  
Days/Time: TuWTh 9:35-10:50a.m. Room: SC105  
Office Hours: Wednesdays: 8:20 to 9:20a.m. at MSB217.

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This is the third module of a 3-semester combined Elementary and Intermediate Algebra course. The exit level for 123C is the same as Math 125 or Math 128.

**Course Description:**

*Prerequisite:* Mathematics 123B with a grade of "C" or better, or equivalent preparation approved by the Chair of the Mathematics Division.

**Course Requirements:**

The material to be covered this semester will include material from Chapters 10 to 14 of the text.

1. Take advantage of the FREE tutors at the library.
2. Study the respective assigned chapters from the textbook before coming to class.
3. There will be approximately four on campus exams (bring 5 scantrons and 5 exam booklets by the end of the first week, NO scantrons, NO Exam booklets, NO EXAM!, #2 pencil). Each of the three exams is **worth approximately 15%** of your final course grade. **If you are found committing any act of academic dishonesty (cheating), you will receive a negative one hundred percent (-100%) for this test. You will not be able to drop this negative score.**
4. **There is only one make up exam with an excused absence.** Makeup examinations will be given only one day after the original date to those students possessing **documented valid excuses. Advanced notice is mandatory.** Don't miss an examination and then show up. Write me ahead of time and make an arrangement to take the test. In order to be fair to the students who took the exam as scheduled, makeup examinations will always be substantially more difficult than the original.
5. In addition, to the exams, there will be weekly homework assignments. Homework is **worth approximately 10%** of your final course grade. Refer to the page handout on homework for these assignments. **YOU NEED TO SUBMIT YOUR HOMEWORK the day of the Exam ONLY.**
6. There will be one Final exam **worth 30%** of your final course grade. **If you are found committing any act of academic dishonesty (cheating), you will receive a negative one hundred percent (-100%) for this test. You will not be able to drop this negative score.**
7. The instructor has the option of excluding you from the course. If you are not active in class or doing failing work, I will utilize this option at the earliest possible date. Once you have been excluded, there will be no reinstatement.
8. Class participation is expected every class section. Daily attendance will be taken by signing an attendance sheet.

## General Institutional SLO—Student Learning Objectives

A.) Critical Thinking: Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.

C.) Quantitative Reasoning: Identify, analyze, and solve problems that are quantitative in nature

F.) Technical Competence: Utilize the appropriate technology effectively for informational, academic, personal, and professional needs.

## Math Program SLO—Student Learning Objectives

1.) Apply quantitative thinking processes using basic mathematical operations (addition, subtraction, multiplication, division) to solve common academic, workplace and family problems. (Theme: Mathematical Operations)

3.) Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: Mathematical Tools)

5.) Select appropriate math strategies for solving and handling real life problems involving finance, economics, and family issues. (Theme: Mathematical Problem Solving).

## Specific Learning Objectives:

Upon satisfactory completion of the course, a student will be able to: At the completion of this course, the successful student should be able to:

1. List the properties of quadratic functions
2. Graph quadratic functions, including: identifying the vertex, the intercepts, the max or min, the domain and range
3. Solve applications problems involving quadratic equations
4. Solve inequalities involving polynomials and rational expressions
5. Identify when a function is 1-1 and when it is not
6. Given a 1-1 function  $f(x)$ , find its inverse function.
7. Given two functions  $f(x)$  and  $g(x)$ , find  $(f \circ g)(x)$  and  $(g \circ f)(x)$  and their respective domains
8. Graph functions by translating and reflecting simpler, related functions
9. List the properties of exponential functions
10. Graph a wide variety of exponential functions, identifying the domain, range, the intercepts, and the horizontal asymptote
11. List the properties of logarithmic functions
12. Graph a wide variety of logarithmic functions, identifying the domain, range, the intercepts, and the vertical asymptote
13. Explain the inverse relationship between any exponential function and a logarithmic function
14. Solve exponential and logarithmic equations
15. Solve a wide variety of application problems involving exponential and logarithmic functions
16. Explain the basic definitions of the conic sections: parabola, circle, ellipse, and hyperbola
17. Graph and identify all the important features of the conic sections
18. Solve systems of non-linear equations
19. Solve second degree inequalities and systems of non-linear inequalities
20. Sum the first  $n$  terms of arithmetic and geometric sequences
21. Explain and use the Binomial Theorem
22. Explain and use combinations and permutations

## Grading Criteria:

4 Exams (15 % each) 60%

Homework 10%

Final Exam 30%

Your final grade will be a letter grade based on the following percentages:

<b>A</b>	<b>90-100%</b>
<b>B</b>	<b>80-89%</b>
<b>C</b>	<b>70-79%</b>
<b>D</b>	<b>60-69%</b>
<b>F</b>	<b>59% and less</b>

**Attendance:** If you miss more than 2 meeting (a week) of the course, the instructor has the option of excluding you from the course. If you are doing failing work, I will utilize this option at the earliest possible date. Once you have been excluded, there will be no reinstatement. If you miss a class e-mail your instructor before or right away.

**Calculators:**

In this and future courses, the use of calculators is permitted and encouraged. I advise you to buy a scientific calculator. **You may not use your cell phones or any other electronic device as calculators during quizzes or examinations!!! Get a scientific calculator!!**

**Cell Phones:**

Cell phone use is strictly forbidden in the classroom. If you possess a cell phone, it must be set on silent vibrate mode. If you absolutely must take an emergency call, please exit the classroom quietly and do so outside.

**Extra Help.**

There is tutoring available in HLRC and Online tutoring will be done via email, a message board, a white board and by phone. The tutoring link is at <http://www.wlac.edu/online>.

**For those of you who have a physical or learning disability**, there is extensive variety of services through the Office of Disable Students Programs and Services located in the students services building SSB 320 (PHONE 310-287-4450). If you think that you qualify for their services, contact the office immediately to better ensure such accommodations are implemented in a timely fashion.

**Academic Honesty: will be strictly and vigorously enforced- NO CHEATING- PLAGIARISM or OTHER FORMS OF DISHONESTY WILL BE TOLERATED.**

Any cases of either will be referred to the Dean of Students for disciplinary action. For more on acceptable behavior, read *Standards of Student Conduct* on page 119 of the Schedule of Classes.

**Text**

Beginning & Intermediate Algebra by Lial, Hornsby & McGinnis.

The Bookstore has a WLAC Custom Edition which is basically the regular 5th ed (2012, ISBN-9780321715869) We will cover chapters 10-14 in this course, but the final exam is cumulative and covers the entire text. You can get the 5th edition (used or in electronic form) much more cheaply on-line.

**On Campus Final Exam Date:**

Wednesday 06/03/2015 Time: 10:15a.m.-12:159.m. (Room SC105).

Cumulative Department Final Exam  
Chapters 1- 14.

## Mathematics 123C Tentative Course Schedule

### Homework

The homework assignments consist of several problems in each section. Homework assignments are due on the day of the Exam ONLY. **I DO NOT ACCEPT LATE HOMEWORKS.** Refer to the page handout on homework for these assignments.

	Week of	Tuesday	Wednesday	Thursday
1	2/10- 2/12	Course Introduction	10.1	10.2
2	2/17 -2/19	10.3	10.4	10.5
3	2/24-2/26	10.6	10.6	10.7
4	3/3-3/05	Chapter 10 Review	11.1	<b>Exam (Ch 10)</b>
5	3/10-3/12	11.2	11.2	11.3
6	3/17-3/19	11.4	11.5	11.6
7	3/24-3/26	11.7	11.8	Chapter 11 Review
8	3/31-4/02	<b>HOLIDAY</b>	<b>Exam (Ch 11)</b>	12.1
	4/7-4/19	<b>SPRING BREAK</b>	<b>SPRING BREAK</b>	<b>SPRING BREAK</b>
9	4/14-4/16	12.2	12.3	12.4
10	4/21-4/23	12.5	12.6	13.1
11	4/28-4/30	Chapter 12 Review	13.2	<b>Exam (Ch 12)</b>
12	5/05-5/07	13.3	13.4	13.5
13	5/12-5/14	Chapter 13Review	14.1	<b>Exam (Ch 13)</b>
14	5/19-5/21	14.2	14.3	14.4
15	5/26-5/28	<b>Cumulative Review</b>	<b>Cumulative Review</b>	<b>Cumulative Review</b>
16	6/03		<b>FINAL EXAM June 3 10:15-12:15p.m.</b>	

The above course schedule is subject to change any day.

### Important! Drop Date Information

The deadline to drop without a "W" is the last day of Week 2 (of the semester), which is Friday, February 20<sup>th</sup> for Spring 2015. If you must drop a course, drop before the specified deadline for dropping a class without a grade of "W." Dropping *after* Week 2 will result in a "W" on your transcript. **Effective July 1, 2012** students will only have 3 attempts to pass a class. If a student gets a "W" or grade of "D", "F", "I", or "NP" in a class, that will count as an attempt. *A student's past record of course attempts district wide will also be considered.* Therefore, before the end of Week 2 you should carefully consider if you can reasonably manage this course with the other factors in your life (e.g. work, family, course load). **If you think you will not be able to complete this course with a C or better, drop by Friday February 20<sup>th</sup> for Spring 2015.** If you have any questions, please don't hesitate to talk to me. You may also see a counselor in the Counseling Center