

West Los Angeles College
Department of Mathematics
Math 245: College Algebra- Fall 2014

Instructor: Carrie Huang

Section: 1500

Time: TuTh 11:10 – 12:35

Room: GC 330

Office: GC 330

Office Hours: TuTh: 12:40 pm – 1: 10 pm

Email: huangcy@wla.edu or mancarrie2003@yahoo.com

Textbook: College Algebra, 7th edition, by Ron Larson and Robert Hostetler

ISBN 10:0-618-64310-9;

ISBN 13: 978-0-618-64310-3

Calculators: A scientific calculator will be allowed for homework, quizzes and exams. Use of a graphing or cell phone calculator will be considered cheating. You must have your own calculator for quizzes or exams—**no sharing and show all necessary computation.**

Prerequisite: Math125 Intermediate Algebra or Math 128 Basic Intermediate Algebra II with a grade of “C” or better or acceptable level of skills as demonstrated in the mathematics placement process.

Course Description: This course covers algebraic, exponential, and logarithmic functions, theory of equations, linear systems, and functions of real numbers, probability and mathematical induction.

Website: <https://sites.google.com/site/carriehuang0703/wlac-math-245>

(Homework, solution of quizzes and exams will be posted here)

Course Objectives:

- Graph linear functions and understand their properties
- Analyze polynomial functions and solve polynomials equations
- Perform algebraic manipulations involving radicals, exponents, rational expressions, and logarithms
- Analyze and graph conic sections
- Use matrices to solve a system of linear equations
- Evaluate determinants and understand their properties.
- Compute and use permutations and combinations
- Compute basic probabilities
- Calculate with arithmetic and geometric sequences and series
- Understand and use the binomial theorem
- Apply mathematical induction

Student Learning Outcomes:

- Identify all intercepts
- Determine the domain and range of a function
- Use the transformations to generate a graph
- Synthesize information about the transformations to generate a function and solve application problems

Institutional Learning Outcomes:

- Critical Thinking: Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.
- Quantitative Reasoning: Identify, analyze, and solve problems that are quantitative in nature
- Communication: Students will show and explain their work in a clear, well-organized manner
- Technical Competence: Utilize the appropriate technology effectively for informational, academic, personal, and professional needs

Math Program Outcomes:

- Apply quantitative thinking processes using basic mathematical operations to solve common academic, workplace, and family problems. (Theme: mathematical operations)
- Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)
- Select appropriate math strategies for solving and handling real life problems involving finance, economics, and family issues. (Theme: mathematical problem-solving)

Grading:

Homework	10%
Exams (4)	40%
Quizzes	15%
Comprehensive Final Exam	35%

Letter Grades: A 89-100%; B 79-88%; C 68-77%; D 58-64%; F below 58%

Final Date and Time: Thursday-- December 18, 2014; 11:30 – 1:30 p.m.

Any student that does not take the final exam will fail the course directly. The final exam cannot be missed and **MUST** be taken at the time scheduled by college.

Attendance: The student is expected to attend every meeting of all classes for which he or she is registered. Whenever absences “in hours” exceed the number of hours the class meets per week, the instructor may exclude a student from class. ***If a student stops attending a class, it is the student’s responsibility to officially drop the class.*** Students missing class are responsible for finding out what they missed and what is due.

Homework: Homework assignments will be assigned on the **website** and it will be collected every **Thursday**. It will be graded based on completeness and neatness. Must be clearly marked with homework number, stapled, and done in pencil on regular paper. You are welcome to collaborate on homework assignments, but the work you hand in should be your own. If I suspect out you have copied an assignment, you will receive no point for that assignment. Late homework will be accepted for a maximum of 50% credit. Any late homework must be handed in before the exam on which material appears.

Quizzes: Quizzes will be given weekly in class. These problems will be related to the previous lecture. Lowest quiz will be dropped. **No in-class make-up quiz.**

Make-up Policy: Make-ups are generally discouraged, but will be considered on a case-by-case basis. No Make-up exam will be given unless notified to the instructor in advance for extraordinary circumstances with official document. In any event, arrangements for a make-up exam must be made before or within 3 days of the scheduled exam date.

Cheating:

Cheating constitutes academic dishonesty and, in general will be used as part of the course grading process. Penalty may range from no credit for the assignment up to and including exclusion and/or an “F” grade for the course.

Disability: Upon the timely request by the student to the instructor, West Los Angeles College is committed to providing educational accommodations for students with disabilities. Verification of the disability must also be provided. Disability Support services functions are a resource for students and faculty in the determination and provision of the accommodations.

CLASS POLICIES

Food and Drink: Food or drink is prohibited in the classroom with the exception of water bottles, which are permitted as long as they remain closed when not in active use, and are kept away from all equipment.

Behavior: You should be alert and prepared to participate when in class. Please no sleeping, text/talking on phones, reading unrelated material, chatting with classmates about unrelated subject matter, surfing internet on phones, laptops or tablets, or listening to MP3 players while in class. Please always be respectful and refrain from disruptive behavior in class! Turn off or silence your cell phones.

How to Become Successful in Math 245 Class:

1. Attend every class session and be on time
2. Be an active participant in the classroom activities
3. Preview new material
4. Do the homework on a regular basis
5. Make friends in class
6. Ask for assistance (classmate, instructor, tutoring center)
7. Believe in your ability to succeed
8. Be neat, accurate and well organized
9. Persevere
10. Prepare for the tests and the final exam

Note: Syllabus is subject to change at the discretion of the instructor.

Week	Tuesday	Thursday
1	Introduction, 2.1	2.2
2	2.3	2.4, Quiz # 1(2.1 - 2.2)
3	2.5	2.6 , Quiz # 2 (2.3 - 2.4)
4	2.7	3.1, Quiz # 3 (2.5 – 2.6)
5	3.2, Review	Test # 1 (Chapter 2)
6	3.3	3.4, No quiz
7	4.1	5.1, Quiz # 4 (3.1-3.3)
8	5.2, Review	Test # 2 (3.1- 3.4, 4.1)
9	5.3	5.4, Quiz # 5 (5.1 – 5.2)
10	6.3	7.1, Quiz # 6 (5.3 – 5.4)
11	7.2	7.3, Quiz # 7 (7.1 – 7.2)
12	8.1, Review	Test#3 (5.1 – 5.4, 6.3)
13	8.2	8.3 Quiz # 8 (7.3- 8.1)
14	8.5	Holiday – no class. Study and review for test#4
15	Test#4 (7.1 – 7.3, 8.1 –8.3)	Final Review
16	Final week—No Class	Final 11:30 am – 1:30 pm

Homework: **(Version # 8)**

=====

(Version # 7)

2.1 page 179--- 9, 19, 23, 27, 35, 43, 45, 55

2.2 page 195---7, 19, 37, 51, 55, 61, 66, 67, 79

2.3 page 207---9, 11, 15, 19, 23, 41, 45, 75

2.4 page 217---29, 33, 37, 57, 59

2.5 page 224---(just graph) 15, 17, 25, 31, 41, 49

2.6 page 234---9, 15, 17, 29, 41, 45

2.7 page 245--11, 25, 49, 57, 63, 75

3.1 page 266---15, 19, 23, 25, 35, 47, 53, 63

3.2 page 279--9, 17, 19, 41, 49, **(just graph the polynomial functions)**

3.3 page 290--11, 15, 27, 35, 55, 59, 67, 81

3.4 page 303--9, 13, 15, 19, 25, 29, 33, 45, 55,

4.1 page 337--9, 13, 16,21, 29, 31, 33

5.1 page 388--13, 15, 17, 23, 25, 31, 33, 51-57

5.2 page 398--11-19, 25, 27, 33, 37, 51, 65, 67, 71, 75, 85-91
61, 65, 69, 79-85

5.3 page 405-- 13, 15, 23, 29-43, 49-59, 73-77

5.4 page 415-- 5, 13-23, 29-43, 55-59, 81, 87, 93, 99
85, 89

6.3 page 475 --- 8, 11, 13, 21, 25, 31, 35

7.1 page 529 --- 63-75

7.2 page 544 --- 7, 11-21, 25, 29, 33, 39, 47

7.3 page 555 --- 5-9, 13, 15, 37, 37, 38

8.1 page 597 --- 9-19, 33, 35, 47-53, 63, 67, 73, 77-89, 97, 103, 105
61, 65-77, 75, 89, 91

8.2 page 607 --- 5, 7, 9, 15, 21, 23-27, 33, 37, 41,51
35, 39, 61

8.3 page 617 --- 7, 9, 17, 19, 29, 35, 45, 67, 87, 93, 97
79, 83

2.1 page 183 - 1, 11, 15, 19, 23, 31, 33, 43

2.2 page 197 - 1, 13, 25, 37, 41, 47, 52, 53, 67

2.3 page 210 -- 1, 3, 8, 11, 15, 33, 35, 63

2.4 page 220 -- 19, 23, 27, 43, 45

2.5 page 228 -- 9, 11, 19, 25, 31, 37

2.6 page 238 -- 5, 11, 13, 25, 35, 39

2.7 page 248 -- 5, 15, 39, 49, 55, 67

3.1 page 270 -- 11, 13, 17, 19, 29, 43, 49, 61

3.2 page 284 -- 1, 9, 11, 33, 41

3.3 page 295 -- 5, 9, 19, 25, 45, 49, 57, 69

3.4 page 308 -- 1, 5, 7, 11, 17, 21, 25, 37, 47

4.1 page 341 -- 5, 9, 12, 17, 25, 27, 29

5.1 page 392 -- 7, 9, 11, 18, 19, 25, 27, 45-51

5.2 page 402 -- 5-13, 19, 21, 27, 31, 45, 59,

5.3 page 409 -- 7, 9, 17, 23-37, 43-53, 67-71

5.4 page 419 -- 1, 9-19, 25-39, 51-55, 75, 79,

6.3 page 479 -- 2, 5, 7, 15, 19, 25, 29

7.1 page 534 -- 51-62

7.2 page 549 -- 1, 5-15, 19, 23, 27, 34, 41

7.3 page 560 -- 1-5, 11, 13, 41, 42

8.1 page 601 -- 1-11, 23, 25, 37-43, 51, 55,

8.2 page 611 -- 1, 3, 5, 11, 17, 19, 21, 25, 31,

8.3 page 621 -- 3, 5, 11, 13, 21, 27, 35, 53, 73,