

***West Los Angeles College***  
**Department of Mathematics**  
**Math 125: Intermediate Algebra- Spring 2015**

**Instructor:** Dan Guo (Michelle)

**Section:** 7592

**Time:** MW 9:15-11:50 am

**Room:** LAPD ARTC

**Office Hours:** MW 9:00-9:15 & 11:50-12:05 in LAPD

**Email:** danguo829@gmail.com or guod@wlaac.edu

**Textbook:** Intermediate Algebra, Lial, Hornsby, McGinnis, 11th ed, Addison Wesley Pearson, 2012.  
ISBN-13: 9780321715418 and ISBN-10: 0321715411

**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:** Mathematics 115 or 118 with a grade of 'C' or better, or appropriate placement level demonstrated through math assessment process.

**Course Description:** Manipulative skills in algebra are developed and strengthened in this course. The topics include rational exponents, the complete number system of algebra, algebraic and graphical solutions to linear and quadratic equations, logarithmic and exponential functions, elementary theory of equations and inequalities and conics.

**Student Learning Outcomes:**

- Demonstrate facility with operations involving real and complex numbers, algebraic expressions, and functions
- Use appropriate techniques to solve equations, including: linear, quadratic (or quadratic in form), exponential and logarithmic equations; equations involving rational or radical expressions or absolute value, and those involving factorable polynomials; and systems of linear and non-linear equations.
- Use functions and systems of equations to model data and solve 'story' problems
- Solve and graph linear and non-linear inequalities in one and two variables
- Graph and analyze functions (linear, quadratic, rational, radical, exponential, logarithmic) and conic sections
- Write, evaluate, and apply arithmetic and geometric sequences and series
- Be prepared to succeed in a transfer-level mathematics course

### **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 (addition, subtraction, multiplication, division) to solve common academic, workplace, and family problems. (Theme: Quantitative thinking; mathematical operations)
- Analyze and interpret spatial and graphic data (schedules, maps, and tables, graphs) to plan and organize daily routines. (Theme: spatial and graphic data).
- Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)
- Apply advanced mathematical concepts and tools (algebra, calculus) essential in upper division academic work and/or workplace tasks. (Theme: advanced mathematical operations—algebra, calculus)
- 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 (5)	40%
Quizzes	10%
Notes	3%
Attendance	2%
Group work	5%
Comprehensive Final Exam	30%

**Letter Grades:** A 90-100%; B 80-89%; C 70-79%; D 60-69%; F below 60%

### **Final Date and Time: Jun 1 (Monday) 9:15-11:15am**

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 every class and it will be collected **every Wed.** 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.

**Quizzes:** Quizzes will be given weekly in class. These problems will be related to the previous lecture. **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.

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

## Homework Format

Please include your **full name, class number, and Math 131** in the upper right hand corner of the first page of your homework assignment.

1. Please **label** and **highlight** the start of each **numbered lesson** with the **page number and title**.
  
2. Before you begin your work, fold your paper in half vertically, creating two columns of space to work in. Show **ALL your work** presented in a logical manner, progressing **vertically** down the first column. When you reach the end of the first column, start at the top of the second column.
  
3. Homework assignments should be **completed neatly**; each problem should be labeled, starting by writing the question. (You do NOT need to write out the whole word problem, but you should write the important information down.)
  
4. Homework assignments may be completed using **both sides of the paper**.
  
5. Homework should have **four clean edges**; if you complete your assignments in a spiral binder, please cut off the ragged edges before turning in the homework assignment.
  
6. Each answer should be **boxed, highlighted, or circled** at the conclusion of each question.
  
7. Skip one line between each question.
  
8. Each homework assignment should be **stapled, in order**, in the upper left hand corner **BEFORE** coming to class.
  
9. Each new assignment must begin on a clean sheet of paper.
  
10. Odd: 1,3,5,7,9... Even: 2,4,6,8,10... Eoo: 1, 5,9,13...

*An example of correct homework formatting:*

	Dan Guo #1 Math125 HW1
○	2.4:1-30 all
	1. $100 \div 5 \times 2$
	= $20 \times 2$
	= 40
	2. $46+15-10+6$
	= $61 - 10 + 6$
○	= $51 + 6$
	= 57
○	

## Math125 HW List

2.1: 11– 43 odd	6.1: 9- 57 e.o.o	9.2: 9-45 odd
2.5: 9- 33 odd	6.2: 9- 61 e.o.o	9.3: 21-81 e.o.o
2.6: 7-61 e.o.o	6.3: 9- 77 e.o.o	9.4: 9-49 e.o.o
2.7: 67- 101 odd	6.4: 9- 69 e.o.o	9.5: 21-35 odd
3.1: 35-55 odd	6.5: 9- 61 e.o.o	9.6: 23-43 odd
3.2: 45-65 odd	7.1: 25-93 e.o.o	9.7: 5-47 odd
3.3: 45-73 odd	7.2: 49-89 e.o.o	10.1: 9-19 odd
3.4: 7-37 odd	7.3: 5-27 odd	10.2: 5-25 odd
3.5: 9-53 e.o.o	7.4: 1-45 e.o.o	10.3: 5-45 e.o.o
3.6: 25-53 e.o.o	7.5: 9- 61 e.o.o	10.4: 21-49 e.o.o
4.1: 21-69 e.o.o	7.6: 21-57 e.o.o	10.5: 21-45 e.o.o
4.2: 5-41 e.o.o	8.1: 1-65 e.o.o	10.6: 1-57 e.o.o
4.3: 13-45 e.o.o	8.2: 13-101 e.o.o	11.1: 9-37 e.o.o
4.4: 3-25 odd	8.3: 17-93 e.o.o	11.2: 5-37 e.o.o
5.1: 65-161 e.o.o	8.4: 1-53 e.o.o	11.3: 1-33 e.o.o
5.2: 45-85 e.o.o	8.5: 29-105 e.o.o	11.4: 13-37 e.o.o
5.3: 13-49 e.o.o	8.6: 17-61 e.o.o	11.5: 9-31 odd
5.4: 13-93 e.o.o	8.7: 17-81 e.o.o	12.4: 1-41 odd
5.5: 9-49 e.o.o	9.1: 13-81 e.o.o	