

# West Los Angeles College Department of Mathematics Math 112: Pre-algebra - Summer 2015

Instructor: Carrie Huang Section: 1456 Time: MTuWTh Room: MSA 009 Office: MSA 009 Office Hours: MTuWTh 7:20-8:00 MSA 009 Email: huangcy@wlac.edu or mancarrie2003@yahoo.com

**Textbook:** Pre-algebra by Elayn MARTIN-GAY, (4th ed) (students may use 6<sup>th</sup> Edison)

**Calculators:** A calculator is not necessary, but will be allowed for come activities. If you bring one, you can learn to use it appropriately. It is not allowed for any quizzes, tests and final exam.

**Prerequisite:** Mathematics 105 with a grade of 'C' or better or appropriate placement level demonstrated through math assessment process.

**Course Description**: This course bridges the gap between arithmetic and algebra. It reviews arithmetic and introduces concepts of algebra including signed numbers, variables, exponents, mathematical sentences and linear equations.

**Website**: <u>https://sites.google.com/site/carriehuang0703/wlac-math112</u> (Homework, solution of quizzes, exams will be posted here)

## **Course Objectives:**

- 1. Arithmetic operations with common fractions, mixed numbers, and decimals, and their applications
- 2. Percent's, ratios, rates, proportions and their application
- 3. Operations and applications with signed numbers
- 4. Number sense and basic quantitative reasoning skills
- 5. Uses of variables in Algebra as unknowns, in modeling, and in formulas
- 6. Equations and inequalities
- 7. Definitions and applications of basic algebraic properties
- 8. Graphical representations
- 9. Geometrical concepts
- 10. Study Skills
- 11. Operations with polynomials
- 12. Solid geometry
- 13. Graphing linear equations

#### **Student Learning Outcomes:**

- Calculate fluently (by hand) with signed whole and decimal numbers and fractions
- Model and solve problems using variables and simple linear equations and inequalities.
- Solve problems involving proportional reasoning(including percent)

#### **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:

- 1. 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)
- 2. Analyze and interpret spatial and graphic data (schedules, maps, tables, graphs, and geometric figures). (Theme: spatial and graphic data).
- 3. Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)
- 4. Apply advanced mathematical concepts and tools (algebra, calculus) essential in upper division academic work and/or workplace tasks. (Theme: advanced mathematical operations—algebra, calculus)
- 5. Select appropriate math strategies for solving and handling application problems involving (for example) finance, science, economics, and family issues. (Theme: mathematical problem-solving)

## Grading:

Homework	10%
Exams (4)	40%
Quizzes	20%
Comprehensive Final Exam	30%

Letter Grades: A 89.5-100%; B 79.5-89.4%; C 69.5-79.4%; D 60.5-68.4%; F below 60.4%

## Final Date and Time: July 24 (Thursday), 2015: 8:00am – 10:00am

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.

<u>Attendance</u>: 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 <u>website</u> and it will be collected on each quizzes and tests dates as announced. 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.

<u>Quizzes</u>: Quizzes will be given weekly in class. These problems will be related to the previous lecture. No inclass make-up quiz.

<u>Make-up Policy</u>: 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 <u>official document</u>. 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.

## Instructional Support (Tutoring) & Learning Skills Center

Heldman Learning Resources Center (HLRC) | (310) 287-4486 Improve your reading, language, vocabulary, spelling, math fundamentals and chemistry knowledge with convenient, self-paced computer-aided courses in the Learning Skills Center. Increase your knowledge and learning success: sign up for tutoring in various college subjects (WLAC College Catalog).

#### Library Services

Heldman Learning Resources Center (HLRC) | (310) 287-4269 & (310) 287-4486 The WLAC Library provides instruction on how to use the online catalog, periodical and research databases. In addition to a large collection of books, periodicals and videos the WLAC Library has course textbooks which students may use while in the Library. Web access is available in LIRL as well as meeting rooms. The upper floors provide a beautiful view ideal for study (WLAC College Catalog). http://www.wlac.edu/academics/pdf/WLAC\_12-14Catalog\_Policies.pdf

## **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 112 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

Week	Monday	Tuesday	Wednesday	Thursday
1	6/15	6/16	6/17	6/18
	Introduction,	1.5, 1.6, 1.7	1.8, 2.1, 2.2	2.3, 2.4 Quiz#1 (chapter 1)
	1.2, 1.3, 1.4	worksheet for $(1.2-1.5)$		
2	6/22	6/23	6/24	Review,
	2.5, 2.6, 3.1	3.2, 3.3, 3.4	4.1, 4.2, 4.3	Exam#1 (chapter 1 & 2)
		worksheet for (2.1-2.5)		
3	6/29	6/30	7/1	Review,
	4.4, 4.5, 4.6	4.7, 4.8, 5.1	5.2, 5.3, 5.4	Exam # 2 (chapter 3 & 4)
		worksheet for $(3.1-3.5)$		
4	7/6	7/7	7/8	Review,
	5.5, 5.6, 5.7	6.1, 6.2, 6.3	6.4, 6.5	Exam#3 (chapter 5 & 6)
		worksheet for (4.1-4.5)		
5	7/13	7/14	7/15	7/16
	7.1, 7.2, 7.3	7.4, 7.5, 7.6	8.1, 8.2, 8.3, 8.4	8.5, 9.2, 9.3
				Quiz# 2 (chapter 7)
6	7/20	Review	Final Review	7/24/2015
	10.1, 10.2	Exam# 4 (chapter 7 & 8)		Final exam : 8am – 10:00am

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

## **Important Dates:**

- Last day to DROP for a refund, June 19, 2015
- Last day to DROP without notification on record, June 19, 2015
- Last day to DROP with a "W," July 6, 2015