

West Los Angeles College

Department of Mathematics

Math 110: Introduction to algebraic concepts - Spring 2015

Instructor: Carrie Huang

Section: 4455

Time: TuTh 4:30pm – 7:00pm

Room: MSA 003

Office: MSA 003

Office Hours: TuTh 4:00pm – 4:30pm

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

Textbook: Pre-algebra by Elayn MARTIN-GAY, (6th ed.)

Calculators: A calculator is not necessary, but will be allowed for some activities. If you bring one, you can learn to use it appropriately.

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

Course Description: This course prepares students for algebra. It discusses abstract ideas necessary for understanding algebra and reviews selected topics in arithmetic relevant to algebra. Introduces fundamental notions of algebra including signed numbers, variables, simple equations, proportional reasoning, applications, and modeling. This course also includes group instruction in mathematics study skills.

Website: <https://sites.google.com/site/carriehuang0703/wlac-math110>
(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 89-100%; B 79-88%; C 68-78%; D 60-67%; F below 60%

Final Date and Time: June 2 (Tuesday), 2014: 4:00pm – 7:00pm

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 110 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	Monday	Wednesday
1	2/10 Introduction, 1.1, 1.2	2/12 -- 1.3, 1.4
2	2/17 – 1.5, 1.6, 1.7	2/19 –1.7, 1.8, 2.1
3	2/24 – 2.1, 2.2, 2.3	2/26 – 2.4, Quiz#1 (chapter 1)
4	3/3 – 2.5, 2.6, 3.1	3/5 – 3.1, 3.2, 3.3
5	3/10 – 3.4, Review	3/12 -- Review, Exam #1 (chapter 1 & 2)
6	3/17 – 3.5, 3.6	3/19 – 3.7, 3.8, 3.9

7	3/24 – 4.1, 4.2, 4.3	3/26 – 4.4, Quiz # 2 (chapter 3)
8	3/31 – 4.5, 4.6, 4.7	4/2 – 4.8, 4.9, 5.1
10	4/14 – 5.2, 5.3, Review	4/16 -- Review, Exam# 2 (Chapter 3 & 4)
11	4/21 – 5.4, 5.5, 5.6	4/2 – 5.7, 5.8, 5.9
12	4/28 – 6.1, 6.2, 6.3	4/8 – 6.4, 6.5, 7.1
13	5/5 – 7.2, 7.3 Review	4/15 -- Review, Exam#3 (Chapter 5 & 6)
14	5/12 – 7.4, 7.5, 7.6	4/22 – 7.7, 8.1, 8.2
15	5/19 – 8.3, 8.4, 8.5	4/29 – 9.1, 9.2, 9.3
16	5/26 – 9.4, 9.5, 9.6	5/6 -- Exam#4 (Chapter 7 & 8)
17	6/2 -- Final Review	5/13 -- Final

Important Dates:

February 16th-Washington's Day Holiday

April 6 - 10 Spring break

- Last day to DROP for a refund, February 20, 2015
- Last day to DROP without notification on record, February 20, 2015
- Last day to DROP with a "W," May 8, 2015