



WEST LOS ANGELES COLLEGE
Mathematics 112- Section -1469
Fall 2015

Instructor : C. Raffel

Class time: Mon/Wed; 1:00 PM - 2: 25 PM ;Location: MSA 009

Office hours: Wed: 2:25 pm – 3:00 pm; MSA 009

Instructor Email address:wijesecc@wlaac.edu

Required Text: Pre-Algebra , Martin-Gay, 6th edition; ISBN: 9780321628862

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

Materials:

- ◆ Textbook in every class meeting
- ◆ Note book
- ◆ Graph Paper
- ◆ Stapler
- ◆ Color pen or pencils

COURSE DESCRIPTION: This course prepares the student for Elementary Algebra. It assumes a thorough knowledge of arithmetic. Course content includes integers, signed fractions, signed decimals, grouping symbols, the order of operations, exponents, and algebraic expressions and formulas. The emphasis is on concepts essential for success in algebra.

COURSE OBJECTIVES: Upon completing this course, a student will be able to:

1. Add, subtract, multiply and divide whole numbers
2. Simplify exponential expressions
3. Use grouping symbols and order of operations to simplify expressions with whole numbers
4. Use the divisibility tests
5. Prime factor whole numbers
6. Use primes and exponents for find the least common multiple
7. Use primes and exponents to find the greatest common factor
8. Use the fundamental algebraic properties

9. Add, subtract, multiply and divide integers
10. Use grouping symbols and the order of operations to simplify expressions with integers
11. Expand and reduce signed fractions
12. Convert improper signed fractions to mixed numbers and vice versa
13. Add, subtract, multiply and divide signed fractions
14. Use grouping symbols and order of operations to simplify expressions with signed fractions
15. Add, subtract, multiply and divide signed decimals
16. Find the square root of a perfect square
17. Estimate to find the square root of a perfect square
18. Determine if a square root is rational or irrational
19. Simplify expressions that include square roots
20. Use perfect square factors to reduce square roots
21. Reduce square roots using prime factorizations
22. Convert a percent to a fraction or decimal
23. Convert a fraction or decimal to percent
24. Convert between fractions, decimals and percents
25. Use zero and negative exponents
26. Simplify products with exponential expressions that have the same base
27. Simplify quotients with exponential expressions that have the same base
28. Simplify powers of powers
29. Simplify a power of a product
30. Recognize numbers written in scientific notation
31. Convert numbers written in standard notation to scientific notation and vice versa
32. Perform operations on numbers written in scientific notation

33. Be familiar with basic vocabulary related to polynomials
34. Determine the degree of a polynomial
35. Add, subtract, multiply and divide polynomials
36. Learn to substitute numeric values for variables in various types of formulas

Student Learning Outcomes (SLOs) Upon successful completion of the course, students will be able to:

- a. **Critical Thinking:** Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.
- b. **Communication:** Effectively communicate thought in a clear, well-organized manner to persuade, inform, and convey ideas in academics, work, family and community settings.
- c. **Quantitative Reasoning:** Identify, analyze, and solve problems that are quantitative in nature.

Official Program SLOs

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

Course Requirements

1. We will cover chapters 1-10. I strongly recommend that you read the material we will cover in class before that class!

2. **Methods of presentation:**

- ◆ Lecture
 - ◆ Class discussions
- ◆ Asking and answering questions
 - ◆ Interactive peer-to-peer activities, projects and group

3. **Attendance:**

I will be taking attendance on daily basis. Students are expected to attend every class. It has been my experience that student who do not attend class regularly perform poorly on the exams. Plan to attend every class meeting on time. For each class meeting during the first 5 -10 minutes will start with a review of the previous homework assignment. This will involve questions by students on specific problems and explanations by the instructor or a student. Next, new topics will be introduced. During the lecture, there will be many examples presented.

Active participation is very important. At this time, you should ask questions and volunteer answers. Individuals will be called upon in class to provide suggestions on how

to proceed with a problem. The methods of instruction in this class will be lecture, discussion, and group learning. You are expected to take an active role in this learning. You are responsible for all information covered in class. **If a student have four hours or more absences, the instructor may drop them from the course and they may receive a grade of a “W”.**

4. **Homework:** The most important part of any mathematic course is the homework. Typically in a Math class, to understand the majority of the information it is necessary to continuously practice your skills. This requires a tremendous amount of effort on the student’s part. Otherwise, it is impossible to succeed in any college level mathematics class. Do your homework as soon as you can after each class meeting. Read the material in the next lessons before class. **In this course you must expect to spend minimum of at least three hours outside of class for each hour spent in class.**
5. **Class Notes:** Students are required to copy notes from the class discussion. Please keep a separate note book for class notes.
6. **Group work:** This is also another method of instruction for this class. At the end of some of the class meetings are composed group work sessions. (Group of 3 to 4 students). For each group work session, at the end of the class all of the papers will be collected but only one paper from each group will be graded or a quiz is given from the group work problems.
7. **Required Homework/ Group Work Format:**
 - ◆ Always present neat work
 - ◆ For every assignment, if your assignment spans more than one page, staple them together
 - ◆ If your paper from a spiral bound notebook, tear off the edge.
 - ◆ Show all adequate steps for the work.
8. **In Class Quizzes and Chapter Exams:** There will be 6 quizzes and 4 chapter exams as outlined on the attached schedule. The lowest quiz grade will be dropped. Therefore you will not be allowed to make up any missing quizzes. Arriving late during a quiz/chapter exam will lead you to have less time to complete the quiz/chapter exam. Each chapter exam will be given a maximum of 100 points. No make-up exams will be given, but your final exam will replace one missed exam. Refer to your course schedule in advance for the dates of the quizzes and chapter exams. Review all the corresponding CLASS NOTES and HW problems before each quiz/chapter exam. **Missed quizzes/chapter exams will be scored as zero.**
9. **Final exam:** There will be a comprehensive departmental final exam on **12/14/2015**. The final exam should be taken seriously and will require a good deal of dedication on your part in terms of study time. Several weeks before the final review your class notes, Chapter exams, quizzes. Homework and class work from the semester.

Grading System

Assignment Category	# of Assign.	Points Per Assignment	Total Points	% of Total Grade
Quizzes	5	20	100	10%
HW	20		100	10%
Classwork	10	5	50 EC	(5% EC)
Chapter Exams	4	150	500	60%
Final Exam	1	200	200	20%
Grand Total		-	1000	100%
900 - 1000 = A	800 - 899 = B	700 - 799 = C	600 - 699 = D	599 and below = F

Cellphone Policy: Students may not use their cell phones to accept or make calls while in class (no cell phones on the desk). If cell phones and beepers are brought to class, they must be turned to silent or vibration mode. Students who do not adhere to this policy will be asked to leave the class. If it happens a second time, the student will be referred to the Vice President of Student Services, and will return to class only after the Vice President has cleared him/her to return.

Children in class: By directives of Academic Affairs, students are not allowed to bring their children to class. Childcare arrangements need to be made outside of class time.

Disability Policy: If you have a disability and might need accommodations in this class, please contact Heldman Learning Resources Center (HLRC) 121, DSP&S office. I accommodate all necessities you might need in this class upon receiving the required direction from the center. Please contact (310) 287-4450 for more information.

Cheating Policy: Cheating constitutes academic dishonesty and in general will be handled as part of the course grading process. The penalty may range from on credit for assignment up to and including exclusion and/or an "F" grade for the course.

Disclaimer: Although every effort will be made to adhere to the policies, procedures, and schedules outlined in this syllabus, the instructor reserves the right to revise any information without prior notice.

Important Dates:

Deadlines:

Last day to add: June 15th

Drop classes with a refund; June 19

Drop classes without a "W" ;June 19

Dropclasses with a "W" ; July 6th

Apply for Pass/No Pass deadline: Sept 12

Internet Resources:

West Los Angeles College www.wlac.edu

WolframAlpha <http://www.wolframalpha.com/>

Purple Math <http://www.purplemath.com/>

Math TV <http://www.mathtv.com/>

Khan Academy <http://www.khanacademy.com>

Please write the phone number and email address of at least three of your classmates in spaces provided here. Having some contact information from your classmates will help you during the semester.

Name: _____ Phone #: _____
email: _____

Name: _____ Phone #: _____
email: _____

Name: _____ Phone #: _____
email: _____

I, _____, read and completely understood the content of this syllabus. If there are questions or disagreement with the content, I will contact me, on or before Sep.30th.

Your Initials: _____

WESL LOS ANGELES COLLEGE

Math 112; Fall 2015

C. Raffel Lecture OUTLINE (This schedule is tentative. It is subject to change.)

Week	Monday	Wednesday
Week 1 8/31- 9/4	INTRODUCTION Section 1.1 Section 1.4	Section 1.5-1.8
Week 2 9/7- 9/11	Holiday	Quiz # 1; Chapters 1
Week 3 9/14- 9/18	Section 2.1, 2.2	Sections 2.3, 2.4
Week 4 9/21- 9/25	Sections 2.5-2.6	Quiz # 2 Sections 2.6; Chapter 2 review
Week 5 9/28- 10/2	EXAM #1; Chapters 1&2	Chapter 3.1 -3.2
Week 6 10/5- 10/9	Chapter 3.3 -3.4	Section 4.1-4.2
Week 7 10/12- 10/16	Section 4.3-4.4	Section 4.5 -4.6
Week 8 10/19- 10/23	Sections: 4.7- 4.8	EXAM #2; Chapters 3&4
Week 9 10/26- 10/30	Section 5.1-5.2	Sections: 5.3
Week 10 11/2- 11/6	Sections: 5.4-5.5	Section 5.6-5.7
Week 11 11/9- 11/13	Section 6.1-5.2	Sections: 6.3 -6.4
Week 12 11/16- 11/20	Sections: 6.5	Chapters 5 & 6 review
Week 13 11/23- 11/27	EXAM #3; Chapters 5 & 6	Sections: 7.1-7.2
Week 14 11/30- 12/4	Sections: 7.3- 7.4	Section 7.5-7.6
Week 15 12/8- 12/12	EXAM #4; Chapter 7	Review for Final
Week 16 12/14- 12/18	Review for Final FINAL EXAM Chapters 1- 7	

