

**Math 112 Section 1469 MW 1:00-2:25 Fall 13 location M SA009 (E-mail: [feinerh@wlac.edu](mailto:feinerh@wlac.edu) Math 112 in subject area.) Office hours MW 2:30-3:30 and TTh 9:30-11:00**

**Professor:** H. Feiner, office MSB219.(Phone 310-287-4543)

**Text:** Prealgebra (Martin-Gay) (4<sup>th</sup> edition, Prentice Hall) ISBN: 0-13-144520-0 **Rented**

### **Requirements:**

Welcome to Etudes -- a teaching, learning, and collaboration environment

Please review system requirements below:

1. [Computer \(PC and Mac\) and Connectivity Requirements](#)
2. Be sure you are using a supported browser. They are free downloads.
  - o PC Users: [Internet Explorer 7 SP2](#) or [Firefox 3](#). IE 8 is not yet supported. For more information, see: [PC Supported Browsers](#).
  - o Mac users: Download [Firefox 3](#). Mac users must be running OSX 10.3 or above. For more information, see: [Mac Supported Browsers](#).
3. Configure your browser's cache. 99% of problems are due to incorrect "cache" browser settings.
  - o [PC Browser CACHE Settings](#)
  - o [Macintosh Browser CACHE Settings](#)
4. Configure [cookies](#), [JavaScript](#), [pop-up blocker](#).
5. Accept Etudes-NG [SSL certificate and settings for alerts](#).

Other ISP & browser considerations:

6. [IMPORTANT note for AOL Users!](#) Do NOT use AOL's browser.
7. **Satellite ISP's are NOT recommended!** Users who are using **Direcway** or **Hughes Satellite ISP's** might encounter technology problems and intermittent issues with Etudes-NG that are beyond our control.
8. **Use of Multiple Browser Windows is a no-no!** Do NOT open more than one Etudes-NG browser window while being logged into the system. It is easy to log yourself out of one and get logged out of the others, losing what you were working on - assignments, tests, etc. You will be prompted to log back in!

### **Course Description:**

Math 112, Pre-Algebra, is delivered partially by Etudes on line and as a regular lecture class. Students choose the course as a face-to-face course. Students must be registered with WLAC in Culver City, CA, and follow all rules, regulations, and deadlines. This includes the admonition that you must **withdraw officially before the deadline** in case you abandon the class. Failure to withdraw will result in failure of the course. All students have an Etudes account to be used.

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.

**Students stay in touch with the professor and each other through discussion and/or private messages on this Etudes website.**

**Warning:**

If your math 112 course grade is below a B (yes, a B) you can **expect difficulties** in algebra. Make your best effort in this course. Do homework regularly when assigned. You need to reach the point where you can do homework without help from any source. Form study groups.

**Expected Outcomes:**

- Ability to perform arithmetic with whole numbers.
- Ease of following the order of operations.
- Capability to solve equations and application problems.
- Facility with fractions.
- Facility with decimals.
- Skill in identifying and manipulating ratios and proportions.
- Competence in computing with percents and applying concepts to applications.
- Brief introduction to statistics.
- Success in graphing lines.
- Proficiency in basic geometric concepts.
- Introduction to basic algebra.

**Course Format:**

**The course is delivered in small sections through modules in Etudes and through textbook sections.**

**Familiarize yourself with the material in the section presently covered in the textbook. Examine the supplementary notes in the Etudes module under discussion. Read the textbook section before coming to class, work out the examples with pencil and paper. Rework the examples if necessary till you can reproduce them without help from any source. Now you are ready for the homework from the textbook. Do every other odd numbered problem, as many as needed.**

**You can go through suggested problems in the official textbook.**

**Take the tests when scheduled.** Make-ups are given within a week of the scheduled test for extenuating circumstances. Show enough work on paper so that your reasoning can be followed without additional oral explanations and associate each piece of scratch work with a problem number. Box in answers on paper.

Visit the restroom before the test. If you need to go, visit the nearest restroom and return promptly. Visiting the restroom during testing puts you under suspicion of cheating.

Turn off all music and other electronic devices during testing. Clear your desk of all objects, especially phones. If the student next to you is taking the test, move as far away as possible, Put cell phones on vibrate.

The date for taking the final is fixed by the college.

### **Communication with professor/students:**

All communications online happens within the Etudes course site. Post your question(s) in the appropriate forum under Discussion & Private Messaging. There is no quota for messaging. Up to **5% extra credit** will be added to the students with the most pertinent messages ( questions and answers). Extra credit for other student messages will be pro-rated.

### **Hints:**

When answering test questions, budget your time. Ten problems solved in 50 minutes allows five minutes per question. Don't spend more time on the first go-around. Answer questions in order and show reasoning on scratch paper. Identify each piece of scratch work with a problem number.

A grade is adjusted in case of clerical error (check additions, etc.)

### **Scoring and Evaluation:**

Homework (about 60 sections) turned in with the final: (20 points depending on neatness and following instructions. I do not want to see wrong answers or answers without supporting reasoning).

5 Tests: (10 chapters) 100 points per test.

Final: 300 points.

Extra credit: Max: 5%

A: 90.1% - 100%

B: 80.1% - 90%

C: 70.1% - 80%

D: 60.1% - 70%

F: Below 60%

The grade of Incomplete will be issued only if the student is prevented from taking the final due to a **verifiable emergency before the final**. A student who is not passing the class or has personal issues affecting performance needs to withdraw before the withdrawal deadline.

### **Attendance:**

You can be dropped from class if you **miss three class sessions**, but the ultimate responsibility for officially withdrawing is yours. . The last day to drop for this class with no fee owed is Tuesday, February 21, 2012. The last day to drop without a "W" is Friday, March 2, 2012. The last day to drop with a "W" is Friday, May 4, 2012

**Week 1A: (1.2) Place value and names for numbers, (1.3) Adding whole numbers and perimeter.**

**Week 1B: (1.4) Subtracting whole numbers, (1.5) Rounding and estimating, (1.6) Multiplying whole numbers,**

**Week 2A: (1.7) Dividing whole numbers. (1.8) Exponents & order of operations. (1.9) Variables & algebraic expressions.**

**Week 2B: (2.1) Introduction to integers.**

**Week 3A: (2.2) Adding integers, (2.3) Subtracting integers.**

**Week 3B: (2.4) Multiplying and dividing integers, (2.5) Order of operations,**

**Week 4A: Test 1. (3.1) Simplify algebraic expressions. (3.2) Solve equations: addition property.**

**Week 5A: (3.3) Solve eq.: multiplication property, (3.4) Solve linear equations in 1 variable. (3.5) Linear eq. in 1 variable. Problem solving,**

**Week 5B: , (4.1) Intro to fractions. Equivalent fractions. (4.2) Factors and simplest form..**

**Week 6A: (4.3) Multiplying and dividing fractions. (4.4) Adding/subtracting like fractions and LCD.**

**Week 6B: (4.5) Adding/subtracting unlike fractions. (4.6) Complex fractions. Order of operations.**

**Week 7A: (4.7), Solving equations containing fractions., (4.8) Operations on mixed numbers..**

**Week 7B: Test 2. (5.1) Intro to decimals, (5.2) Adding/subtracting decimals. (5.3) Multiplying decimals. Circumference of a circle.**

**Week 8A: (5.4) Dividing decimals, (5.5) Estimating. Order of operations.**

**Week 8B: (5.6) Fractions and decimals. (5.7) Equations containing decimals. (5.8) Square roots and the Pythagorean Theorem.**

**Week 9A: (6.1) Ratios, (6.2) Rates.**

**Week 9B: (6.3) Proportions, (6.4) Proportions and problem solving. (6.5) Congruent and similar triangles.**

**Week 10A: Test 3. (7.1) Percents, decimals, and fractions,**

**Week 10B: (7.2) Solving % problems with equations. (7.3) Solving % problems with proportions. (7.4) Applications of %.**

**Week 11A: (7.5) % problem solving: sales tax, commission, discount. (7.6) Interest.**

**Week 11B: Test 4. (8.1) Pictographs, bar graphs, line graphs. (8.2) Circle graphs. (8.3) Rectangular coordinate system.**

**Week 12A: (8.4) Graphing linear equations. (8.5) Mean, median, mode. (8.6) Omitted.**

**Week 12B: (9.1) Lines and angles, (9.2) Linear measurement. (9.3) Perimeter.**

**Week 13A: (9.4) Area and volume (9.5) Weight and mass. (9.6) Capacity. (9.7) Conversion between U.S. and metric systems.**

**Week 13B: (10.1) Adding and subtracting polynomials. (10.2) Multiplication properties of exponents.**

**Week 14A: (10.3) Multiplying Polynomials. (10.4) Intro to factoring polynomials.**

**Week 14B: Test 5**

**Week 15A: Review**

**Week 15B: Review.**

**Week 16A: Final.**

**Week 16B: Final.**

**Conduct:**

You are adults and will be treated accordingly. Likewise, you will behave accordingly. I will not tolerate any student or classroom situation that distracts from a positive learning environment. That includes eating/drinking in class (except for water) and talking. You could be suspended for one or two days by the professor. You could also be sent to the Dean of Student Services for these and other violations for disciplinary action, including longer suspension and expulsion.

**Board Rule 9803.17 Interference with Peace of College**

The malicious or willful disturbance of the peace or quiet of any of the Los Angeles Community Colleges by loud or unusual noise or any threat, challenge to fight, or violation of any rules of conduct as set forth in this Article. Any person whose conduct violates this section shall be considered to have interfered with the peaceful conduct of the activities of the college where such acts are committed.

**Dishonesty Policy:**

Cheat once, get an F on the test. The incident will be reported to the Dean of Student Services. Cheat again, fail the course and get reported.

**Recording devices:**

State law in California prohibits the use of any electronic listening or recording device in a classroom without prior consent of the instructor and college administration. Any student who needs to use electronic aids must secure the consent of the instructor. If the instructor agrees to the request, a notice of consent must be forwarded to the Vice President of Academic Affairs for approval.

**Disciplinary action:**

Violation of Board Rules shall result in student discipline imposed in accordance with the Student Discipline Procedures as stated in Board Rule 91101. Discipline includes warning, reprimand, disciplinary probation, suspension or termination of financial aid, suspension, withdrawal of consent to remain on campus, expulsion subject to reconsideration, and permanent expulsion.

**Student grievance procedure:**

The purpose of the student grievance procedure is to provide a prompt and equitable means of resolving student grievances. The procedure enumerated in Administrative Regulation E-55 shall be available to any student or

applicant for admission who believes a college decision or action has adversely affected his or her status, rights, and/or privileges as a student. Education Code Section 76224(a) governs grievances relating to course grades.

**Disabled students programs & services:**

West Los Angeles College recognizes and welcomes its responsibility to provide an equal educational opportunity to all disabled individuals. The Office of Disabled Students Programs and Services (DSP&S) has been established to provide support services for all verified disabled students pursuing a college education. All services and equipment are provided free of charge to any qualifying disabled student. The DSP&S Office is located in the Heldman Learning Resources Center (HLRC), room 119. The Office is open Monday through Thursday, 9:00 a.m. to 5:30 p.m., and Friday, 9:00 a.m. to 12:00 p.m. Early morning and evening appointments can be made by special arrangement. The telephone number is (310) 287-4450. The following services are offered: Note taking assistance. • Classroom accommodations for students with disabilities.

- Registration assistance.
- Special parking permits.
- Academic and career guidance counseling.
- Adaptive equipment and technology aids.
- Specially adapted computers.
- Test proctoring and related accommodations.
- Instructor liaison.
- Learning strategies and study skills classes

The DSP&S Office also maintains a liaison with the California Department of Rehabilitation and other public agencies such as the Regional Center and Westside Center for Independent Living.

These guidelines may be changed to improve or further class atmosphere.

**Tentative schedule:**

M 8-26 :1.1-1.4	W 8-28: 1.5-1.7	M 9-02 :Holliday	W 9-04: 1.8-1.9
M 9-09: 2.1-2.3	W 9-11: 2.4-2.5	M 9-16: <b>Test 1</b>	W 9-18: 3.1-3.2
M 9-23 : 3.3-3.5	W 9-25: 4.1-4.2	M 9-31: 4.3-4.4	W 10-02: 4.5-4.6
M 10-07 : 4.7-4.8	W 10-09: <b>Test 2</b>	M 10-14 : 5.1-5.3	W 10-16: 5.4-5.6
M 10-21 : 5.7,5.8,6.1	W 10-23: 6.3-6.5	M 10-28: <b>Test 3</b>	W 10-30: 7.1-7.3
M 11-04: 7.4-7.6	W 11-06 : 8.1-8.3	M 11-11: Holliday	W 11-13: 8.4-8.6
M 11-18: <b>Test 4</b>	W 11-20: 9.1-9.3	M 11-25: 9.4-9.7	W 11-27: 10.1-10.2
M 12-02: 10.3-10.4	W 12-04: <b>Test 5 (?)</b>	: Final ??	Final ??

Form study groups. Homework: state the problem, show steps, including scratch work, check answers.

**Options if a scheduled class does not meet.**

A scheduled class is canceled (campus closed for some reason - electrical failure or other emergency, ..., professor breaks a leg, ...) **You are still responsible for the material, as if the class had been conducted. Communicate with your professor through e-mail within the Etudes website.**

**Make sure the college has your latest e-mail address, phone number, other personal information.**

**If the professor is late (traffic, car accident, personal emergency, ...) stay in class and work on the planned section(s) in the textbook as much as possible. Help each other.**

## Course Objectives

1. Write and interpret fractions, and represent common fractions in multiple ways.
2. Add, subtract, multiply, and divide common fractions and mixed numbers.
3. Solve applications problems involving common fractions.
4. Read, write, round off, and compare decimal fractions.
5. Add, subtract, multiply, and divide decimals.
6. Convert among common fractions, decimals, and percents.
7. Write, interpret, simplify, and convert ratios and rates.
8. Solve problems involving proportions and percents.
9. Calculate powers and rational roots (where they exist) of rational numbers.
10. Read, construct, and interpret line graphs, bar graphs, and scatter plots.
11. Calculate and interpret the absolute value of a number.
12. Add, subtract, multiply, and divide integers.
13. Add, subtract, multiply, and divide non-integral rational numbers.
14. Identify and correctly use algebraic properties (commutative, associative, distributive; additive and multiplicative identities and inverses).
15. Use and manipulate variable representations in abstract and applied contexts.
16. Use basic properties of integer exponents to simplify expressions.
17. Add, subtract, multiply polynomials; divide a polynomial by a non-zero monomial.
18. Solve linear equations using the addition, subtraction, multiplication, and division.

## Math Program SLOs

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)

<p align="center"><b><u>Course SLO</u></b></p> <p>One sentence that describes a major piece of knowledge, skill, or ability that students can demonstrate by the end of the course</p> <p><i>Finish the sentence, "At end of the course, the successful student will be able to... "</i></p>	<p align="center"><b><u>Assessment Method</u></b></p> <p>Major assignment, project or test used to demonstrate or apply outcome</p> <p><i>Remember to have a mix of qualitative and quantitative assessment methods.</i></p>	<p align="center"><b><u>Criterion Level</u></b></p> <p>Reflects satisfactory performance on the SLO</p> <ul style="list-style-type: none"> <li>• <i>At least X percent of students achieve this course SLO.</i></li> <li>• <i>All students achieve at least the Y level on this SLO.</i></li> <li>• <i>At least X percent of students achieve the Y level on this course SLO.</i></li> </ul>
<p>1. Solve elementary practical applications using fractions and decimals.</p>	<p>Students will answer questions embedded in a common assessment tool. on a final exam. A scantron scanner will be used to access the results for each of the relevant questions</p>	<p>Each question will be answered correctly by at least 50% of students (fractions, mixed numbers) or 60% of students (decimal numbers).</p>
<p>2. Construct variable representations in abstract and applied contexts.</p>	<p>Students will answer questions embedded in a common assessment tool. on a final exam. A scantron scanner will be used to access the results for each of the relevant questions</p>	<p>Each question will be answered correctly by at least 40% of students.</p>
<p>3. Solve problems involving proportions and percents</p>	<p>Students will answer questions embedded in a common assessment tool. on a final exam. A scantron scanner will be used to access the results for each of the relevant questions</p>	<p>Each question will be answered correctly by at least 50% of students.</p>