Math 107
Course Information Sheet

Textbook: Hutchinson, Bergman, Baratto, Prealgebra, 3rd Ed., McGraw Hill, 2010. ISBN 987-0-07-340623-7.

Course Outline of Record: Most of the sections in Chapters 1-9 (see below) are required to cover all of the material as listed on the Course Outline of Record. It is our contract with our transfer institutions, with each other and our students about what the course will detail. Failure to follow the outline puts your students at a disadvantage in their next course and leads to discrepancies across the sections. Any instructor who does not attempt to follow the course outline carefully risks the possibility of not being able to teach that course again at LPC. All course outlines of record can be found on the Las Positas College Website under Programs/Courses.

http://www.laspositascollege.edu/programs/course_outlines/math_index.php

Example Syllabi and Calendars to aid in pacing of the material can be obtained by contacting Lilia Camino, our Division Assistant at (925) 424-1184.

Suggestions regarding content: Chapters 1 – 9

1) Students are **required** to purchase the software ALEKS. The best value for students is to purchase a new book with the ALEKS software included. You should use ALEKS during the lab time each week. It is recommended that two lab hours per week are spent using ALEKS.
2) Cover all of chapters 1-8
3) Cover at least 9.1 and 9.2 and all of 9 if time.
4) Chapter 2 is a particularly difficult chapter for students. Signed numbers and equations are introduced. Be sure to leave plenty of time in your syllabus for this chapter.
5) Chapters 3 and 4 are also particularly challenging chapters for students. Student struggle greatly with fractions, especially with the addition and subtraction of unlike fractions. When preparing exams for these sections, it is strongly advisable to prepare a separate exam for Chapter 3 and Chapter 4 to avoid overwhelming students with too much challenging material at once.
6) Suggest presenting and testing 'math' vocabulary
7) Suggest incorporating Study Skills labs into class. (Some are available from Dale Boercker.)
8) Consider requiring students to keep a binder (perhaps as a means to earn extra credit)
9) Consider assigning a semester project to allow students to experience the communicative power of mathematics. (Howard Blumenfeld is a good resource for ideas in this area.)

Student Learning Outcomes: Student Learning Outcomes, SLOs, are learning proficiencies the Department feels every student enrolled in our math classes should be encouraged to master. The specific Student Learning Outcomes for Math 107 are listed below:

- Upon successful completion of Math 107, a student should be able to perform order of operations to simplify expressions involving signed integers. (Communication)
- Upon successful completion of Math 107, a student should be able to set up and solve applications involving ratios, rates and proportions. (Modeling)

The math department SLO's are as follows:

- Students demonstrated the ability to use symbolic, graphical, numerical, and written representations of mathematical ideas.

- Students demonstrated they could read, write, listen to, and speak mathematics with understanding.
- Students demonstrated the ability to use mathematical reasoning to solve problems and a generalized problem solving process to work word problems.

Math 107 Lab: This class meets three lecture hours per week and three lab hours per week. It is our experience in developmental classes that students typically have short attention spans and need to engage in a variety of activities, both lecture-based and non-lecture based. Students need to be involved in actually working problems, discussing the material, and/or actual hands-on activities as much as possible. 'Lab Time' can occur at any time in the class period and should not be limited to the time stated in the schedule. Labs used by previous instructor can be obtained from the course coordinator for Math 107. For Fall 2009 this is Howard Blumenfeld, email hblumenfeld@laspositascollege.edu ; phone 925-424-1342; office 2130.