



# Math 34

## Course Information Sheet

**Textbook:** Bittinger, Ellenbogen, Calculus and Its Applications, 9<sup>th</sup> ed., Pearson/Addison Wesley, 2008. ISBN 0-321-39534-4 (Student Edition) ISBN 0-321-44894-4 (Instructor's Edition.)

**Course Outline of Record:** Every section of Math 34 is required to cover all of the material as listed in the Course Outline of Record. It is our contract with our transfer institutions, with each other and our students about what the course will include. 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 follow the course outline carefully risks the possibility of not being allowed 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.laspositacollege.edu/programs/course\\_outlines/math\\_index.php](http://www.laspositacollege.edu/programs/course_outlines/math_index.php)

**Calculators:** A TI 83 or higher graphing calculator is required. A scientific (non-graphing) calculator may be used for routine calculations. (Exams may contain graphing calculator and scientific calculator only portions.)

### Departmental Suggestions regarding content:

- **Review Chapter:** Most students strongly need this algebra review. (Requirement for Math 34 is only Math 55.) R.6: Modeling provides a little exposure to what real world data may look like. The Appendix also contains a Review of Basic Algebra.
- **Ch 1:** All
- **Ch 2:** May omit Sec 2.3
- **Ch 3:** All
- **Ch 4:** May omit Sec 4.6, 4.7
- **Ch 5:** May omit Sec 5.3 – 5.6
- **Ch 6:** May omit Sec 6.6

**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 course-level SLOs for Math 34 connect with our program level SLOs of: **Communication, Multiple Representations and Problem Solving**. These course level SLOs should be listed in your syllabus for the course. Please refer to the Mathematics Department website for more SLO information.

Upon successful completion of Math 34, a student should be able to demonstrate the following:

- the ability to graph an elementary function by using the 1st and 2nd derivatives (Multiple Representations)
- the ability to write the equation of the tangent line to a curve at a point. (Problem Solving)
- the ability to describe marginal cost, profit, revenue (Communication)

**Math Lab Requirements:** There is a required to be arranged (TBA) lab hour attached to this course, part of the course outline of record. To allow for maximum flexibility, the hour is TBA, rather than scheduled. To satisfy their lab requirement, students must go to the **Open Math Lab** in the **Integrated Learning Center (ILC)** to work on lab assignments. The Open Math Lab provides a place

for students to get the help they need to succeed in Math. Your syllabus must state that students are required to attend the lab for one hour per week for a minimum of 17 lab hours over the semester. We recommend a minimum of eight lab assignments be given. (Students may be given more than one week to complete an assignment.) Lab assignments must be something more than doing homework. Suggestions for lab assignments: technology (graphing calculator) problems and applications, practice exams, and corrections for in-class examinations.