

Syllabus for Math 1B Calculus
Fall 2015
Physical Science, Mathematics and Engineering
Division

Course: Math 1B Calculus, 5 units, CRN 22588

Instructor: Lance Lund

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Office Hours: Tuesday 5:30-6:30 pm, Room E37

Text: Calculus Early Transcendentals, 7th Edition by James Stewart with a code for WebAssign

Optional / Recommended Materials: Plotting calculator such as TI-83 or TI-84

Class Hours and Location: 6:30 – 8:45 pm Tues and Thurs, Room MLC 260, De Anza College

Prerequisites: Completion of Math 1A (with grade of C or better) or equivalent

Grading:	Class Participation	5%
	Homework	20%
	2 Midterm Tests (Chapters 5-8)	50%
	Final Exam (Comprehensive, Chapters 5-9)	25%

	Total	100%

Course Description:

The course will cover Integrals, methods and applications of integration, 1st order differential equations, and hyperbolic functions.

The following sections in the textbook cover the topics and the order in which they will be discussed: Chapter 5 sections 1-5, Chapter 6 sections 1-5, Chapter 3 section 11, Chapter 7 sections 1-8, Chapter 8 sections 1-5, and Chapter 9 sections 1-4.

Student Learning Outcome Statements (SLO)

- Analyze the definite integral from a graphical, analytical, and verbal approach, using correct notation and mathematical precision.
- Formulate and use the Fundamental Theorem of Calculus.
- Apply the definite integral in solving problems in analytic geometry and the sciences.

Course Objectives:

- Analyze and evaluate the definite integral as a limit of a Riemann sum and examine its properties
- Examine the Fundamental Theorem of Calculus
- Find definite, indefinite, and improper integrals using various techniques
- Examine applications of the definite integral in mathematics
- Examine some applications of the definite integral to other subjects such as physics, economics, and biology. Required applications include probability and center of mass.
- Analyze hyperbolic functions
- Examine differential equations

Expectations:

Students are expected to attend class on time and prepare for each lecture by reading the appropriate sections of the textbook and posted lecture notes to better understand the material presented in class. Students are expected to participate in class discussions and are encouraged to ask questions about any of the material. Notify me by email or in person prior to any expected absences.

Homework:

All homework will be done on WebAssign and must be completed by the due date specified on WebAssign. Each student is expected to keep a notebook showing all work leading to a solution. Collaboration on homework is allowed and encouraged. Each homework assignment in the notebook should be legible and clearly labeled with the problem number and due date in the top left corner of the page. The notebook will be collected after each Midterm test and graded. The combination of homework scores from WebAssign and the notebook grade will contribute equally to the homework grade. The homework grade counts as 20% of the final grade.

Student Help Resources:

In addition to instructor office hours, the following student resources are available:

Need help? Meet with tutors and attend workshops in the Student Success Center: www.deanza.edu/studentsuccess.

Can't make it to campus? Free online tutoring available to all De Anza students. Just login to [MyPortal](#), go to the Students tab, and find the Smarthinking link. You can work with a tutor live (hours vary by subject) or post a question or piece of writing for a response. Smarthinking tutors can also help you with personal statements for transfer! For more information, go to deanza.edu/studentsuccess/onlinetutoring/

Course Lecture Notes:

Copies of all course lecture notes will be posted on the online tool Course Studio in MyPortal.fnda.edu.

Midterm Tests

Two midterm tests will be given. The midterm tests are "open book and open notes" tests. Make-up tests will not be given for midterm tests. Each midterm test counts as 25% of the final grade.

Final Exam:

The final exam will be an "open book and open notes" comprehensive exam. Make-up tests will not be given for the final exam. The final exam counts as 25% of the final grade.