Mathematics 1B 002, Calculus — Fall 2019 — Course Info and Policies

Instructor: Michael Christ. 809 Evans Hall, `mchrist@berkeley.edu`.

Course control number: 22630.

Office hours: W 12-1, F 11-12.

GSIs and office hours
Haoren Xiong, W 5-7 PM in 1040 Evans Hall
Jake Anderson, W 9-11 AM in 866 Evans Hall
Yiheng He, M 9:30-10:30 AM and Th 9-10 AM in 866 Evans
Kathleen Lamont (209 and 217), W 9-10 AM, F 11:30-12:30 AM in 866 Evans
Truyen Le, M 1-3 PM in 866 Evans
Frederick Huang, MW 4-5 PM in 869 Evans
Upadhi Vijay, F 10 AM - 12 PM in 866 Evans
Michael Seaman, W 1-2 and 6:10-7:10 PM in 852 Evans

bCourses site. Essential information and announcements will be systematically posted on bCourses, including problem sets, solutions to exam and selected homework problems, lecture outlines, and scores for exams and problem sets.

Lectures: MWF 3:10–4:00 in 2050 VLSB.

Text: *Single Variable Calculus. Math 1A,B at UC Berkeley*, 8th edition, by James Stewart. *Calculus: Early Transcendentals*, 8th edition, by Stewart will work equally well.

Prerequisites: Math1A or equivalent.

Required Work: Final exam, two midterm exams, five quizzes. Weekly problem sets, ordinarily due on THURSDAYS.

Discussion sections: TTh, 80 minutes.

Topics: Techniques and applications of integration. Numerical approximation of integrals. Infinite sequences and series. Taylor polynomials. Ordinary differential equations of first order; linear ordinary differential equations of second order. All incarnations of Math 1B follow a standardized syllabus set by the Mathematics department, based on Chapters 7,11,9,17 of the text.

Examinations: Two **midterm exams**: Monday, September 30 and Wednesday, October 30, in VLSB 2050, 3:10 to 4:00. **Final exam**: Tuesday, December 17, 7:00-10:00 PM, location TBA.

All exams are closed book. In principle, exams are based on *all material* discussed in lectures, problem sets, and assigned readings from the text. However, exams will focus primarily on material emphasized in lectures. Practice exams will be provided.

Quizzes: 5 **quizzes**, each approximately 20 minutes in duration, will be given in discussion sections. T 9/12; Th 9/24; Th 10/10; Th 10/24; T 11/19.

The lowest score will be dropped, that is, your total quiz score equals the sum of your four highest scores. Makeup quizzes are permitted if authorized in advance of the quiz, or under exceptional circumstances, at the discretion of GSIs. *Ordinary cold/flu is not such an exceptional circumstance*; the policy of dropping one quiz score is intended to accommodate minor illnesses.

Grading: HW = 10%, Quizzes = 15%, MT1 = 15%, MT2 = 15%, Final = 45%. Total course points will be calculated according to this scheme, then converted into letter grades.

Add/drop deadline: Wednesday, September 18.

Problem Sets: Problem sets will generally be due each Thursday in discussion sections, and will generally be posted six to seven days before they are due. Assignments submitted late, without prior authorization from GSIs, will be accepted only under exceptional circumstances. Problem

sets are a device to help you to master course material, not to evaluate mastery, so homework scores will be based on the number of sets submitted on which a substantial effort has been made.

You may freely discuss problem sets with other students, but should submit your own writeup. In this and all courses, acknowledge the contributions of others to your written work. (e.g. "I worked with Fred and Emily")

Assigned Readings: Students are responsible for reading assigned portions of the text. The most important points will be discussed in lecture, but there is insufficient time to discuss everything in class. The text contains a fuller treatment, more examples, and supplementary material. It treats the subject in greater depth than is possible in an oral presentation. (Though math books can be challenging to read, your text can be of value when used in conjunction with other learning tools.)

Lecture notes: If you miss a lecture or are unsure of what was said, the course notes on bCourses may help. The course will be podcast, but without accompanying video; see webcast.berkeley.edu.

Missed Exams and special circumstances: **Students must take all exams at the scheduled times** except for pre-authorized absences or exceptional circumstances beyond a student's control. There will be **no makeup exams.** Everyone must take the final exam as scheduled.

Authorization for any absences from midterm exams must be obtained from Professor Christ by the end of the second week of instruction. Exceptions will be granted on a case by case basis for participation in official university activities, and for religious observance. Exceptions without prior authorization may also be granted for unforseeable circumstances beyond a student's control. Anyone who has fallen behind on coursework or has not regularly attended discussion sections is ineligible for accommodation. If you encounter an emergency or extraordinary hardship situation during the semester, contact Professor Christ **promptly**. (If you wake up halfway through a scheduled exam, report to the exam room at its conclusion.)

Attendance: Attendance at lectures and discussion sections will not be recorded. It is your prerogative, and your responsibility, to manage your time.

Incomplete grades: I grades are permitted only in exceptional circumstances, such as serious illness. Only students with passing grades are eligible. Consult ls.berkeley.edu for details of university policy.

Students with disabilities: Your instructors will seek to accommodate students with special needs. Students requiring special examination arrangements, note takers, or other accomodations should please consult the Disabled Students Program (DSP) office promptly at the beginning of the semester, and should notify their GSIs of any recommended accommodations. DSP will provide assistance and evaluation of needs, and will communicate specific recommendations to Professor Christ. Adequate advance notice is necessary for arrangement of exam accommodations.

Email: Professor Christ has 400 students enrolled in this class alone, so it is not possible for him to respond to non-essential email messages. Your first contact for routine course business should be your GSI.

Documents: Documents produced for this course, including lecture notes, problem set solutions, practice exams, exams, and exam solutions, are supplied for the personal use of enrolled students and authorized auditors. Personal use includes consultation of tutors, Student Learning Center staff, or study partners. Sharing these documents for other purposes, posting them on the internet, or otherwise distributing them is not authorized by their author, and is a violation of copyright law.

Alternatives: This same course, Math 1B, is also taught this Fall by Professor Simon Tuesday-Thursday 8:10–9:30. Two other first-year calculus tracks are offered. Math16AB is designed for less quantitatively oriented majors and is not intended as preparation for more advanced math courses. Math 10AB is specifically designed for the biological sciences, and has a somewhat

different syllabus, with less calculus, but more probability/statistics. Math 53 (multivariable calculus), 54 (linear algebra), and 55 (discrete mathematics) are natural options after completion of 1AB.