MATH 1B Calculus II. Course Syllabus

with Professor Zvezdelina Stankova

MWF 9:10am - 10am (Lec 2); 11:10am - 12pm (Lec 1), in-person

Wheeler 150

Updated 1/10/2023

Contents

1. Questions: Whom, Where, When, and How to Ask

Please, refer to the following list to find out whom to contact when you have questions regarding the course. Contacting the "wrong" person will result in redirecting you to another person, and thus, will delay answering your question. If, for example, you send an email to the "wrong" person or for the "wrong" reason, your email will likely remain unanswered.

#	**Type of Questions**	**Person to Ask**	**When, Where, How**
1	enrollment and section placement; course and major advising	Thomas Brown, Hanh Tran, Marsha Snow, peer advising	email or appointment (see Section 3)
2	student's scores and performance	the student's GSI	GSI's OH (see bCourses)
3	missed handouts or announcements	bCourses, Ed Disc., classmates	anytime, anywhere
4	administrative questions not addressed in class, bCourses, or syllabus	GSI → Head GSI → Professor (first) → (second) → (third)	office hours (see bCourses)
5	math questions: be prepared to show how you attempted the problem	any GSI, the Professor, the Adjunct Course Instructors	Ed Discussion, sections, OHs (see bCourses)
6	true emergencies that are **not** caused by you and could **not** be resolved in OHs	GSI → Head GSI → Professor (first) → (second) → (third)	only emergency e-mail: M-F 9AM-5PM

In short, keep this table close at hand at all times and follow it with mathematical precision. :)

1.1. **Email to GSIs, head GSIs, or the professor is only for emergencies.**

(E) **What is an "emergency"?** An "emergency" is an urgent and important situation that is **not** caused by a student's procrastination, negligence, or disorganization.

¬ (E) **What is not an "emergency"?** Examples of "non-emergencies" are math, syllabus, or grading policy questions, routine inquiries, asking for exceptions to the syllabus, etc.

(EE)′ **How long is an "emergency email"?** An "emergency email" is **no longer than 5 lines**! If you are in an emergency, you cannot write long emails!

(∄) **Attachments** are dangerous! ;) No attachments should be emailed to the professor or GSIs until the student has talked to them and they have requested more info as an attachment.

1.2. **Office hours:** Any student is **welcome to visit** any GSI's office hours with questions. The GSIs and Professor's office hours do not overlap: there are lots of office hours during the week when one can get answers to questions. You do **not** have to go only to the Professor's or your own GSI's office hours with questions: all GSIs are qualified to answer math questions related to the course.

Some of the **Head GSI's office hours** may overlap with other GSIs OHs. The Head GSI's office hours OHs are specifically dedicated to *administrative* questions only.

1.3. **Be organized, responsible, and hard-working:** these traits will take you half of the way to performing well and getting a lot out of this course.

2. Instructor, Head GSI, GSIs, and Office Hours

2.1. **Instructor:** Professor Zvezdelina Stankova (Zvezda)

- **Office:** Evans 713[†]; **Phone:** (510) 642-3768
- **Office hours:** (to be finalized by the end of January):
  - 11:10-11:55am: MWF (Free Speech Café), 2pm-3pm: M (Evans 713), 3-4pm W (zoom).
- **Emai:** stankova@math.berkeley.edu ⟶ ONLY FOR TRUE EMERGENCIES that could not be resolved by the student's GSI and by the Head GSI.
- **Personal page:** http://math.berkeley.edu/∼stankova
- **Berkeley Math Circle:** http://mathcircle.berkeley.edu

2.2. **Head graduate student instructor:** David Gonzalez

- **Office:** Evans 1037
- **Office hours:** Mon 10-11am (zoom), Thur 11-12pm (zoom), Fri 11-12pm (Evans 1037)
- **Email:** david_gonzalez@berkeley.edu ⟶ ONLY FOR EMERGENCIES that could not be resolved in OHs or by the student's GSI.

2.3. **GSIs contact information and office hours:** will be posted and updated on bCourses.

- Professor's and GSIs' OHs cover almost the entire week, for 12 hrs/day, and some on Sat.
- If you have an urgent question, you need to come to office hours. The common excuse: "I could not make it to office hours and hence I am writing an email." is **not** acceptable. If your issue is important, you need to make time to come to office hours. Anything that can be resolved in office hours should be resolved in office hours; **not** on email!
- Administrative (non-enrollment) questions should be first directed to the student's GSI, and then to the Head GSI David Gonzalez in his dedicated administrative office hours above. If the question has not been resolved, the Head GSI will contact the Professor for help.

[†]How to remember my office number and why come to office hours? Have you carefully read Harry Potter, Book 1?! Vault 713 is a high security vault at Gringotts Wizarding Bank in London, England. It is located hundreds of miles underground and requires a Gringotts goblin to pass its finger along the length of the door, in order for the door to melt away. It hosted the Philosopher's Stone. Conclusion: there must be something very valuable in Evans 713. Fortunately, you won't need such a high security protocol to enter. Come to office hours! ☺

3. Enrollment, Section Switching, and General Course/Major Advising

3.1. **For enrollment questions:** e.g., how to get into math classes/sections, etc.,

- **visit**: math.berkeley.edu/programs/undergraduate/advising#Enrollment%20Questions
- **email**: enrollment@math.berkeley.edu

3.2. **For *quick* advising questions:** email ug-advising@math.berkeley.edu or your adviser:

- **Thomas Brown:** Last Name "A-K" students, thomasbrown@berkeley.edu
- **Hanh Tran:** Last Name "L-N" students, hanhmtran@berkeley.edu
- **Marsha Snow:** Last Name "O-Z" students, snow@math.berkeley.edu
- **Peer Advising:** peeradvisors@math.berkeley.edu

3.3. **For *in-depth* advising:** make an appt M-F 10AM–12Noon & 1–4PM via Google Hangouts:

- Current UCB students: schedule an appt via Cal Central's "My Academics" tab.
- Prospective UCB students: email directly your adviser above (by your last name).

3.4. **To switch discussion sections,** go to CalCentral at **https://calcentral.berkeley.edu**

- The switch will be possible only if there is room in the section.
- **No access to enrollment:** Do **not** ask the Professor or GSIs to switch you to another section or to enroll you in the class. We have no control over enrollment in the class/sections.

4. Online Platforms and Requesting Access

4.1. **Five Online Platforms in MATH 1B.**

- **bCourses:** HW assignments, course materials, and administrative announcements.
- **Gradescope:** HWs and grading of exams.
- **Ed Discussion:** math and light admin. questions, answered by GSIs and classmates.
- **Poll Everywhere:** lecture polls (optional, possibly for a few bonus points – TBA later)
- **Zoom:** half of the office hours and reviews for exams. Zoom links will be listed on bCourses.

4.2. **Which Platforms are for Communication by Students?**

- **Ed Discussion** is the primary online communication platform for students.
- **Warning:** bCourses will be used only by Professor and GSIs to run the course, **not** by students for communications. To ask questions online, follow the guidelines of Ed Discussion and ask questions there, or better: ask them in office hours!

4.3. **Access to bCourses and Other Platforms:** will be granted only to officially registered students in the MATH 1B classes or in MATH 49. Students **on the wait list** or auditors will **not** be added to the bCourses or other platforms. Until officially registered, you need to:

- Ask a classmate to share with you their class materials.
- The course staff will **not** be sharing course materials with individual students who are not officially registered for the class, join late, miss part of the class, lose materials, etc.

If you are registered for MATH 1B or MATH 49 but not added to a course platform, ask your GSI and/or the Head GSI to add you to the platform.

5. Prerequisites

5.1. **Required:** MATH 1A, N1A, or equivalent.

6. Textbooks

6.1. **Required:** *"Single Variable Calculus,"* Math 1A,B at UC Berkeley, by Stewart, Cengage Learning, 8th edition, ISBN: 978-1-305-76527-6. You need this exact edition of the textbook in order to do the assigned HW problems. The exact exercises are essential to be the same as the assigned HW. So, if you get another edition of the textbook (even if it is the 8th edition but not the special version published exclusively for UCB), you take the full responsibility for matching the problems from the textbook with the assigned HW problems.

6.2. **Recommended:** *"A Decade of the Berkeley Math Circle,"* volume I, edited by Stankova and Rike, MSRI/AMS, for learning proofs and problem-solving techniques, to prepare you for higher-level courses and help you understand the logic of reading, solving, and writing in a mathematically coherent and correct way, as well as to think imaginatively about mathematics.

7. Attendance. Course Capture, Zoom Recordings, and Orientation Event

7.1. **Enrollment:** Each student must enroll in a discussion section for their lecture time. Every week, quizzes will be given in sections in person and no other quiz options will be available. Thus, sign up for a section that you can attend in person.

7.2. **Attendance:** Lectures and discussion sections are mandatory and must be attended in person. Attendance checks will **not** be performed.

7.3. **Course captures:** of lectures will be posted on bCourses (barring any tech difficulties) after they have been edited and processed, which could take a day or so. Do not rely on course capture to learn the material: come to lectures in person.

No course capture or recordings of sections will be posted, regardless of whether the sections are in person (the default mode) or online (in an emergency). Thus, go to your discussion sections!

7.4. **Zoom recordings.** Recordings of several events will be posted on bCourses (barring any tech difficulties) after they have been edited and processed, including DSP captioning. We do not know how long this will take. Thus, plan on attending these few zoom events synchronously:

- **MATH 1B Orientation zoom meeting:** Jan 16, 12:10PM-2PM, zoom link: https://berkeley.zoom.us/meeting/register/tJEvcO2tqD0iGNBl9VyjiuNyJaKbJt16fFqU
- Reviews for exams (times and zoom link TBA).

8. Homework

8.1. **Assigned/Due:** HW will be posted on bCourses every week, usually right before or after each lecture. HWs must be submitted to Gradescope by 11:59PM (PST) the following Monday. HW Solutions are posted 12:01am (PST) on Wednesdays, and the quizzes are usually on Thur/Fri. Thus, NO late HW will be accepted, as the solutions will be posted for everyone to see. No exceptions: Gradescope closes promptly. (This also applies to DSP students with HW accommodations: they must contact their GSI 24 hrs ahead of the HW deadline to work out a procedure.)

8.2. **HWs in Final Grade:** The top 35 of about 38 total HW scores will be included in the final grade; i.e., a week worth of HW will be dropped. No more HWs will be dropped, for any reason. HW will be graded on completion, for a total of 8% of the final grade.

8.3. **Homework solutions will be:**

- **Posted** on **bCourses** at 12:01am (PST) on Wednesdays. Do **not** ask for solutions to be posted earlier: you must attempt to do your homework without help from posted solutions.
- **Accessible in viewing mode only:** Students will be given only viewing access to solutions. Trying to download, print, take photos or screenshots, or any other ways to take the solutions off bCourses will violate the Student Honor Code.

9. Reading Assignments

It is the students' responsibility to read carefully and thoroughly the assigned textbook section(s) and review their class notes after each class. If you missed a lecture or a discussion section, ask your classmates for their notes.

The instructor may, at her discretion, post her own lecture notes AFTER the lecture is over.

10. Quizzes

10.1. **How Many and When:** There will be about 14 quizzes in discussion sections in person (no "online" options!), given once a week, usually on Thurs/Fri, during the last 10 minutes of section.

10.2. **Quizzes in Final Grade:** Only the top 10 quiz scores will be included in the final grade; i.e., a month worth of quizzes will be dropped. No more quizzes will be dropped, for any reason.

10.3. **No Make-Up Quizzes:** If you miss the time of your quiz, you cannot retake it at another time or in another section, and your quiz score will be 0. Thus, when you miss your quiz (for whatever reasons, including being sick, having a family emergency or a job interview, etc.), keep in mind that exactly **the top 10** quiz scores will be counted. No exceptions will be made to this policy: please, do **not** send notes to the course staff be excused from quizzes.

10.4. **Why Drop Any Quizzes?** Keep the few times when you miss a quiz only for true emergencies. The quizzes to be dropped are not intended as a back-up for slacking off, lagging behind the material, or catching up due to unsatisfactory academic performance on previous quizzes. The dropped quizzes are meant to help you in case of an emergency. No further quizzes will be dropped.

10.5. **Joining the course late and quizzes:** Again, 10 quiz scores will be used towards the final grade, including some possible 0s if fewer than 10 quizzes have been taken.

10.6. **Content and Grading of Quizzes:** Quizzes will be based on the current or previous HWs and class/section problems. Ordinarily, each quiz will be graded out of 12 points and will consist of one problem for 10 points and 2 True/False or Multiple Choice questions. Each T/F and M/C question will be graded as follows: 1 point for correct answer, 0 for incorrect or blank. The T/F and M/C questions on the quizzes are intended to prepare you for a problem with many T/F and M/C questions on each exam. One of the T/F or M/C questions on each quiz may be on administrative matters reflected in the syllabus or discussed in lecture or in section. Thus, you must read the syllabus and be updated on any administrative announcements and in-class discussions. Quizzes will be graded on being correct, complete, and clearly written, for a total of 12% of the final grade.

10.7. **Cheat Sheet on Quizzes:** One page (one side of a regular sheet of paper), hand-written by the students. No copying and pasting of typed text from anywhere, unless the student has a registered disability that allows for typed or other specially prepared texts.

11. Exams

11.1. **Times of the three exams: in person (no "online" options!)**

(a) **Midterm 1:** Wed, Feb 22, in class

(b) **Midterm 2:** Wed, April 5, in class

(c) **Final exam:** in person

- Lec 2 (mid-morning lectures): Mon, May 8th, 7pm-9pm.
- Lec 1 (late-morning lectures): Tue, May 9th, 7pm-9pm.

- DSP students take the exams in person, proctored by the DSP center or a MATH 1B GSI.

11.2. **No make-up midterms or final exams:** Every student must take the midterms and the final exam on the dates and at the times above, in person.

11.3. **Scheduling or avoiding conflicts with exams?** The three BIG NO-NOs:

- Do **not** buy tickets to travel and do **not** schedule other events during the days of exams: you must take the exams at the announced times.
- Do **not** ask for different dates/times for the final exam due to flight reservations or other reasons: the final exams are assigned campus-wide and there will be no personal exceptions.
- Do **not** take this class if you have a conflict with any of this exam schedule. MATH 1B must be taken in person. You *cannot* sign up for another class during the same time.

11.4. **Exam Content.** A substantial part of the exams will be based on versions of problems from:

- **Homework:** problems, both regular and bonus.
- **Class:** problems, theory, and ideas discussed in class.
- **Quizzes:** quiz problems from random sections.

11.5. **Are the exams comprehensive?**

- **Midterms:** The topics for each midterm exam will be based on the portion of the course between exams. Thus, formally, midterms are **not** comprehensive. Yet, you cannot forget previous material since parts of it may come up in the solutions to midterm problems.
- **The final exam is comprehensive:** Anything covered in the course is fair game.

11.6. **Cheat Sheet on Exams:** One page (one side of a regular sheet of paper) for midterms and two pages (two sides of a regular sheet of paper) for the final exam, hand-written by the students. No copying and pasting of typed text from anywhere, unless the student has a registered disability that allows for typed or other specially prepared texts.

12. Final Grade Components

12.1. **Grading scheme.** The final grades will be computed by taking:

(1) 8% homework: each of the top 35 HWs will be worth $\approx 0.23\% = 0.0023$ of your final grade.
(2) 12% quizzes: each of the top 10 Quizzes will be worth $1.2\% = 0.012$ of your final grade. At the instructor's discretion, quiz medians of all sections may be uniformized at the end.
(3) 20% midterm 1.
(4) 20% midterm 2.
(5) 40% final exam.

12.2. **Resurrection final.** The final exam will resurrect **one or both** midterms.

- This means that the final exam may count as 60% or 80% instead of 40%.
- It is up to the instructor to decide if some of the three exams will be rescaled to the same statistics, so as to give them comparable weights in the final grade.

12.3. **Class curve.** The final letter grades will be based on a curve, which is *not* known ahead of time and will be determined *after* the final exam. Individual scores so-far and class statistics will be provided to each student after each midterm and before the final exam. Statistics from previously taught classes (with approximate grade cut-offs) will be presented at the orientation meeting and included in the follow-up presentation file on bCourses.

12.4. **Missing one or both midterms:** will result in no option of an incomplete grade, as the student will **not** qualify for an incomplete grade by university guidelines (see Section 15).

12.5. **Missing the final exam:** will result in automatic failure of the course, unless valid reasons are provided for requesting an incomplete grade (see Section 15).

12.6. **Possible Bonus through Polls on Poll Everywhere:** We will experiment with 2 polls in lectures on Poll Everywhere. Although we have had excellent experience with polls in all classes for the last 2.5 years, the sheer numbers in the two MATH 1B classes may present unforeseen technical difficulties. Thus, to keep the situation fair and beneficial for everyone, we will count these two polls per lecture only as bonus points.

- **Instructions** will be sent to all students and mock-polls will be launched for practice.
- **Answers to the polls** can be seen in the lectures' course captures (provided we have time to discuss them in class). The polls are a great way to evaluate your understanding of the material in real time and to prepare for T/F and M/C questions on the upcoming exams.
- **Remote participation in polls:** If you miss lecture, you can participate in polls remotely as long as you submit the answers during the time the polls are open during your own lecture.
- **Bonus credit:** At the instructor's discretion, between 0%-5% bonus credit may be awarded towards the final grades: TBA in due time.
- **All final grade cut-offs** will be determined based on the regular score as described in subsection 12.1. Any bonus points due to polls will be added afterwards. In other words, bonus points will **not** affect the class curve and will **not** affect anyone else's final grade.

13. Special Situations. DSP Students. Athletes

13.1. **Skipping a midterm(s).** You may skip one or both midterms (but **not** the final exam!) without any penalty. You do **not** have to provide any documentation: in such a case, your final exam will resurrect one or both midterms. Letting your GSI know that you are OK will be good so they do not worry what happened during the midterms with you. However, skipping the final exam will automatically lead to a failing grade. There are no make-up midterms or final exams.

13.2. **Disabled Student Program (DSP) students.**

- **Timing your DSP request**: If you are a student with **a disability registered by the DSP** on UCB campus and require special arrangements during exams and quizzes, we must receive the official DSP accommodation from the DSP office at least **14 days (2 weeks)** in advance. Given the expected large number of DSP students in the two MATH 1B classes (about 140 students), we will **not** be able to accommodate anyone in less than 14 days; if late, the student will have to take the exam along with everyone else under the regular conditions provided for the class. The earlier we are informed about your DSP status, the easier it is to provide appropriate accommodations for you.
- **Questions about your DSP accommodations:**
  - regarding *quizzes* should be directed to your GSI ahead of time;
  - regarding your *exams* should be directed to the Head GSI in the administrative OHs. The Head GSI will arrange for your DSP exams and contact you with the arrangements;
  - that could *not* be resolved by your GSI or the Head GSI should be directed to the Professor in OHs.

13.3. **Taking the final exam "on the road" for athletes.**

- If you have a scheduled athletic competition as a member of an official UCB sports team during the final exam, you must inform the Head GSI in OHs **at least 14 days prior to the final exam**. Given the expected large number of athlete students in the two MATH 1B classes, we will **not** be able to accommodate anyone in less than 14 days; if late, the student will have to take the final exam along with everyone else under the regular conditions provided for the class. The earlier we are informed about the situation, the easier it is to provide the appropriate accommodations for you.

- Final exams "on the road" are **not** automatically granted: certain conditions must be satisfied and the Professor needs to speak with your coach who will be with you and proctoring the exam. Thus, if you do not inform the Head GSI at least 14 days prior to the final exam, you will **not** be granted the privilege of taking the final exams under such special conditions. Take this seriously and act fast and responsibly to ensure that communication has reached the Head GSI ASAP.

14. Letter Grades, Pass/No Pass, and More

Neither the instructor nor the GSIs can predict the final grade cut-offs or whether a student is likelier to get, say, a B^- than a C^+: we will not know the final grade cut-offs until after the final exam. The decision to drop the course or switch between P/NP and letter grade options will be entirely yours and you will have to make it based on your first several quizzes and the first midterm (if its score is available at that point).

Keep in mind that neither the GSIs nor the Professor will reveal the letter grade to a student who has taken the P/NP option, regardless of whether you need the letter grade for a future program or something else. If this happens, you will have to go through official channels (not through the instructor or the GSIs) in order for a letter grade, if at all possible, to be sent directly to another UCB program. Thus, discuss all of your options (current and future) with your adviser *before* choosing between a P/NP or a letter grade option.

15. Incomplete Grades

15.1. **University policies:** Please, consult the university policies regarding incomplete grades.

15.2. **Reasons for Incomplete:** An Incomplete "I" grade is rarely given.
The only justifications for an I grade are:

- **documented serious medical problem,** or
- **a genuine personal/family emergency.**

15.3. **Conditions for giving an incomplete.** When requesting an incomplete, the student must:

- have a passing grade (C^- or above) up to that point in the class.
- have completed at least 2/3 of the course work up to that point (thus, essentially, completed everything but the final exam).
- present a formal document regarding the nature of the emergency or the medical problem.

15.4. **Invalid reasons for requesting an incomplete.**

- Falling behind in this course or a heavy work load in other courses are not acceptable reasons for requesting an incomplete.
- If you miss a midterm (for whatever reasons), you will **not** qualify for an incomplete, as your grade before the final exam will include a 0 on that midterm, which will not have been "resurrected" by the final at the time of requesting the incomplete grade.

16. Ed Discussion Site for MATH 1B classes

16.1. **Who will moderate Ed Discussion?** Several GSIs will be assigned to monitor the Ed Discussion site. Other GSIs may occasionally check the posts on Ed Discussion.

16.2. **For whom is Ed Discussion?** The Ed Discussion site is open only for students enrolled in the course, and the topics discussed are restricted mainly to the math content of the course: the Ed Discussion site is a math site. It is not a "political" forum or forum for other classes or subjects.

16.3. **What is not allowed on Ed Discussion?**

- **No *full* solutions to a problem are allowed.** You *cannot* just ask how to solve a problem without having tried it and without describing where you have difficulty.
- **No "questioning, discussing, or arguing about" the structure and policies of the class:** these are the prerogative of the Professor, are *not* up for discussion, and will be applied equally to everyone.
- **Questions answered elsewhere are not welcome.** You should *not* post questions that have been answered in the syllabus, in lectures/sections, or in the announcements: if you miss something, you must fill in the blanks by watching the lecture recordings, re-reading the syllabus and other course materials and announcements on bCourses, and asking your classmates, instead of publicly asking on Ed Discussion.

16.4. **What can be posted on Ed Discussion?** Posting ideas, partial calculations, and other math discussion is OK. Ed Discussion is for math questions and some quick logistics questions that have *not* been answered elsewhere (and you have *not* missed lectures or sections).

16.5. **Posting anonymously on Ed Discussion.** While we will disable the ability for students to post anonymously to the MATH 1B staff, we do not wish that to dissuade you from feeling comfortable asking any honest and relevant question. You can post anonymously to your classmates.

16.6. **Illegal postings on Ed Discussion.** Any posting of links or references on how to obtain unauthorized or pirated copies of the textbook or other copyrighted materials directly violates the course syllabus about plagiarism. Posting such content is illegal, and any student who does so faces academic and other sanctions. Students *cannot* post pictures from the textbooks, the HW Solutions, Discussion Worksheets, Exams, etc.: no materials or pictures of these materials from our class can be posted (in whole or in parts) on Ed Discussion, on any other media used by the class, on email, or on the internet. If you want to refer to some problem, say, in the textbook, site the section and number of the exercise, and that will be sufficient.

17. Academic Integrity

The Mathematics Department, and in particular, the Professor and the GSIs in this course, expect that students in mathematics courses will not engage in cheating or plagiarism.

- **Specific Honor Code and Exam Instructions** for exams and quizzes in this course will be provided in due time.

The following is adapted from the Math Department web page to our course. Read it for general understanding of cheating and honor code and adapt it to the present circumstances by following the Specific Honor Code and Exam Instructions that will be provided by the Professor.

17.1. **What does cheating mean?** Broadly speaking, cheating means violating the policies of a course or of the university in order to gain an unfair advantage over fellow students. A particular kind of cheating is plagiarism, which means taking credit for someone else's work. Cheating and plagiarism hurt your fellow students in the short term, they hurt the cheater in the long term, and they will not be tolerated. On exams, the most basic type of cheating is copying off of someone else's paper. Graders easily spot when two exam papers look unusually similar, or have similar (wrong or correct) answers, calculations, ideas, or thought structure, even if written in different words or order of words. Even glancing at someone else's paper to check your answer is cheating. If you write the correct answer to a computational problem without any justification or with a bogus justification leading to that answer, this raises strong suspicions that you cheated, on top of not receiving any credit anyways due to the lack of correct justification.

17.2. **Electronic devices on exams/quizzes.** Electronic devices such as phones, calculators (electronic, mechanical, or any other type), and other devices* are not allowed on exams/quizzes,

*Tablets/ipads are allowed in lectures/sections of MATH 1B, but only to take notes, and phones to answer lecture polls. Anyone doing other things on electronic devices will be asked to leave to finish up whatever they are doing.

not even to tell the time. There are too many ways to cheat using software and the Internet. Exams are not intended to test your ability to find the answer by any means necessary. The questions might be too easy for that! Rather, exams/quizzes test your understanding of the course material, which you will need in order to use math correctly in subsequent courses and in the real world.

17.3. **Expectations on exams, quizzes, and HW.** Exams and quiz papers are expected to be your own work. In this class we encourage collaboration on homework, as it will be graded for "completeness" only; but you are carrying your personal responsibility to learn how to do the HW problems independently so as to be able to solve similar problems on exams and quizzes by yourself. When allowed, if you use proofs or calculations from textbooks or class notes, you need to cite these sources, even if you have rewritten the material in your own words; otherwise it is plagiarism.

17.4. **How to avoid cheating?** It is your responsibility to take reasonable precautions to prevent cheating. In exams, you should sit as far away from other students as the room permits, and hold your exam papers in such a way that they are not easily visible to other students.

17.5. **What to do in a case of cheating?** If you suspect that other students are cheating, you should immediately inform the Professor/GSIs. Students may be cheating in ways that the professor/GSI has never heard of (unlikely, but possible). Even if you don't know any names, the sooner you inform the Professor/GSI what is going on, the sooner they can take measures to put a stop to it. You can further report any cheating at: http://sa.berkeley.edu/conduct/reporting/academic

17.6. **Resolution to cheating.** If you are suspected of cheating, the Professor may pursue a variety of actions depending on the particular nature of the incident. If you accept responsibility for academic miscondict, the matter can often be resolved between you and the Professor with possible academic sanctions ranging from losing points on an exam/quiz to failing the class, and a report will be sent to the Mathematics Department and/or Center for Student Conduct. It is not necessary for the Professor to determine whether the student(s) has a passing knowledge of the relevant factual material. It is understood that any student who knowingly aids in cheating is as guilty as the cheating student.

In serious incidents, or if you maintain that you are not responsible for academic misconduct, the Professor has the freedom and responsibility to impose any academic sanctions within the course that she deems appropriate, and the case will very likely be forwarded to the Center for Student Conduct. In such a case, more stringent actions (e.g., dismissing the student from the university) can be initiated by the Office of Student Conduct.

17.7. **Conclusion.** We hope that the above clarifications will help prevent cheating. If you have any questions about the rules or expectations, you should not hesitate to ask the Professor/GSI, or the vice chair for undergraduate affairs in the Mathematics Department.

18. Conduct Sanctions and Grade Deductions for Illegal Postings

This section concerns what will happen when a student pirates course materials and posts them on-line, including but not limited to coursehero.com, or assists someone else in doing that. Apparently, the problem is pervasive, it encourages plagiarism, and in the long-run it hurts everyone by undermining and jeopardizing their learning process.

Here are the relevant sections from the **University-wide Code of Conduct** and this is what **UCB Student Conduct Committee** will use to apply sanctions to students who have posted course materials on-line or elsewhere without explicit permission from the corresponding Professors:

102.23 Course Materials - Selling, preparing, or distributing for any commercial purpose course lecture notes or video or audio recordings of any course unless authorized by the University in advance and explicitly permitted by the course Professor in writing. The unauthorized sale or commercial distribution of course notes or recordings by a student is a violation of this Code whether or not it was the student or someone else who prepared the notes or recordings.

Copying for any commercial purpose handouts, readers or other course materials provided by a Professor as part of a University of California course unless authorized by the University in advance and explicitly permitted by the course Professor or the copyright holder in writing (if the Professor is not the copyright holder).

As in other classes on campus, any unauthorized by the instructor postings of any course materials, including but not limited to any handouts, syllabus, bCourse pages, quizzes, discussion worksheets, midterm reviews, exams, presentations, lecture notes, pictures, video, etc., will be:

- **Subject to a letter grade deduction of the final course grade, left entirely to the Professor's discretion, AND**
- **Formally reported to the University Student Conduct Committee.**

The instructor had never felt the need to impose such strict rules until she was given the opportunity to see the damage that such mis-conduct causes to all students in classes on campus and elsewhere.

In case of doubt, before posting any materials related to the course, ask the instructor or your GSIs. As a rule of thumb, anything that the instructor or the GSIs have prepared for the course, anything on the bCourses site, etc., *cannot* be posted by you or anyone else online. Be advised that there is a simple way to track down who has posted materials.

Finally, no one in the classes can take audio or video, or pictures of the boards/screens or anyone in class, without my explicit permission and without the corresponding DSP accommodation presented to the instructor in advance. Such audio, video, or picture materials are subject to the same rules of non-posting and usage strictly by the corresponding DSP student.

19. Disrupted Examinations

The following has been adapted from the Mathematics Department advising materials to faculty.

19.1. **State law during fire alarms.** Over the years, several final examinations have been disrupted by false fire alarms. State law requires that buildings must be evacuated during alarms, and the police department suggests that classes do so in an orderly, efficient fashion so that students can return to work as quickly as possible.

19.2. **Penalties for false alarms.** A false alarm is a misdemeanor, with a penalty of up to $1,000 in fines and up to one year in county jail. If the alarm results in bodily injury (e.g., someone has a heart attack), a false alarm can be a felony with a penalty up to $5,000 in fines and three years in state prison.

19.3. **When an alarm does sound during an exam,** we will use the following guidelines:

• If an alarm is pulled after the exam has been going on for more than 2/3 of the overall allotted time, the exam will be considered complete and the grading scale will be adjusted accordingly at the discretion of the Professor.

• If an alarm has been pulled after the exam has been going on for less than 15 minutes, we will evacuate and the students will leave the exams on their desks. After the alarm has been taken care of, the students will proceed back to the classroom and resume the exam. Anyone found carrying his/her exam outside the classroom will not be allowed to continue the exam, and the Professor will be given the freedom to decide how and whether to grade this student's exam.

• During an evacuation, the Professor and the GSIs will visibly monitor the students to cut down on casual exchanges of exam information.

• For exams that have been going on between 15 minutes and less than 2/3 of the total allotted time, the students will leave their papers in the classroom and evacuate. It will be up to the Professor to decide if there is enough time to resume the exam or to reschedule it.

20. Tentative Topics of the Course

1. Overview of Calculus II. Review of Integration Techniques
2. §7.1. Integration by Parts
3. §7.2. Trigonometric Integrals
4. §7.3. Trigonometric Substitution
5. §7.4. Integration by Partial Fractions
6. §7.5. Summary of Integration Techniques
7. §7.7. Approximate Integration
8. §7.8. Improper Integrals
9. §8.1. Applications of $\int$ to Arc Length
10. §8.2. Area of Surface of Revolution
11. §8.5. Applications to Probability
12. §11.1. Sequences I
13. §11.1. Sequences II. §11.2. Series I

    Midterm I: in-class
14. §11.2. Series II
15. §11.3. Integral Test
16. §11.4. Comparison Test
17. §11.5. Alternating Test
18. §11.6. Absolute, Ratio and Root Tests
19. §11.6. Rearrangements. §11.7. Summary of Series Tests
20. §11.8. Power Series
21. §11.9. Representations of Functions as Power Series
22. §11.10. Taylor and Maclaurin Series I
23. §11.10. Taylor and Maclaurin Series II
24. §11.11. Applications of Taylor Polynomials
25. §11.11. More Applications. Summary of Power Series
26. §9.1. Modeling with Differential Equations
27. §9.2. Direction Fields and Euler's Method
28. §9.3. Separable Equations

    Midterm II: in-class
29. §9.4. Models for Population Growth I
30. §9.4. The Logistic Equation. §9.5. Linear Equations I
31. §9.5. Linear Equations II. §9.6. Predator-Prey Systems I
32. §9.6. Predator-Prey Systems II. Summary of Differential Equations
33. §17.1. Homogeneous 2nd-Order Linear DE w/ Constant Coefficients
33. §17.1. Initial/Boundary-Value Problems. §17.2. Non-Homogeneous DEs I
36. §17.2. Non-Homogeneous 2nd-Order Linear DEs II
37. §17.3. Applications of Second-Order DEs to Spring Systems
38. §17.4. Series Solutions of DEs
39. RRR week: Review 1 for Final Exam
40. RRR week: Review 2 for Final Exam
41. RRR week: Review 3 for Final Exam

    Final Exam Lec 2: May 8, 7-9PM

    Final Exam Lec 1: May 9, 7-9PM

In order to match the course pace, particular dates for some topics and the topics themselves may somewhat change/shift as the semester progresses. Always refer to the HW assignments and other lecture materials on bCourses for the updated topics and dates. The numbers in column 1 refer to the number of actual (41) lectures with the instructor. The four unnumbered rows refer to exams.