

# Spring 2017 Math 2B Syllabus

## 1 Class information

Course title : Math 2B Calculus

Course code : 44115

Term : Spring Quarter 2017

Lecture times : Mon Wed Fri 08:00 - 08:50 am

Lecture classroom : SH 134

Discussion sessions :

- (Dis 22) Tue Thu 08:00 - 08:50 am, room ICF 101
- (Dis 23) Tue Thu 12:00 - 12:50p pm, room SST 220A

## 2 Instructor

Name : Leonardo Zepeda-Núñez

Office : RH 510V

Office Hours : Mon Wed 12:00 - 2:00 pm

Email : lzepedan@uci.edu

## 3 Teaching Assistant

Name : Robert Ostrander

Office : RH 410R

Email : ostrandr@math.uci.edu

## 4 Course textbook

The textbook for Math 2B is:

Calculus: Early Transcendentals by James Stewart, 8th edition or UCI Custom Edition, 8th edition.

You can purchase the book as (1) a custom paperback book just containing the Single Variable Calculus part of the book, (2) a hardback book containing the full Single and Multivariable Calculus text, or (3) an e-copy of the book accessible online or as a one-time download. If you will be taking Math 2D and 2E later, you should purchase option (2) or (3). All three options come with an access code for a complete online textbook, including interactive applets, plus an online student solution manual.

Week	Date	Sections	Topics covered	Assessments
1	Mon, Apr 3	4.9	Antiderivatives (Review)	
	Wed, Apr 5	5.1	Area and distances	
	Fri, Apr 7	5.2	Definite integral	
2	Mon, Apr 10	5.3	Fundamental theorem of calculus	Quiz 1 on 4.9, 5.1, 5.2 and 5.3
	Wed, Apr 12	5.4	Indefinite integrals, Net change theorem	
	Fri, Apr 14	5.5	Substitution rule	
3	Mon, Apr 17	6.1	Area between curves	Quiz 2 on 5.4, 5.5 and 6.1
	Wed, Apr 19	6.2	Volumes	
	Fri, Apr 21	6.2, 6.5	cont., Average value of a function	Wwk 1 up to 5.3
4	Mon, Apr 24		Review	Wwk 2 up to 6.1
	Wed, Apr 26		<b>Midterm #1</b>	
	Fri, Apr 28	7.1	Integration by parts	
5	Mon, May 1	7.2	Trigonometric integrals	Quiz 3 on 7.1 and 7.2
	Wed, May 3	7.3	Trigonometric substitution	
	Fri, May 5	7.4	Integration by partial fractions	Wwk 3 up to 6.5
6	Mon, May 8	7.8	Improper integrals	Quiz 4 on 7.3, 7.4 and 7.8
	Wed, May 10	7.5, 8.1	Strategy for integration, Arc length	
	Fri, May 12	11.1	Sequences	Wwk 4 up to 7.3
7	Mon, May 15		Review	Wwk 5 up to 7.8
	Wed, May 17		<b>Midterm #2</b>	
	Fri, May 19	11.2	Series	
8	Mon, May 22	11.3, 11.4	Integral test, Comparison test	Quiz 5 on 11.2, 11.3, 11.4
	Wed, May 24	11.5, 11.6	Alternating series test, Absolute convergence	
	Fri, May 26	11.6, 11.7	Ratio test and root test, Strategy for testing series	Wwk 6 up to 8.1
9	Mon, May 29		Memorial day	Quiz 6 on 11.3, 11.4, 11.5 and 11.6
	Wed, May 31	11.8	Power series	
	Fri, Jun 2	11.9	Representing functions as power series	Wwk 7 up to 11.2
10	Mon, Jun 5	11.10	Taylor and Maclaurin series	Quiz 7 on 11.7 and 11.8
	Wed, Jun 7		Review	
	Fri, Jun 9		Review	Wwk 8 up to 11.8
11	Sat, Jun 10		<b>Final Exam (1:30-3:30 pm)</b>	

## 5 Assessment

- **Webwork** : there will be online homework assignments posted every Thursday on WebWork, due on Friday of the following week at 11 pm. Each assignment will cover the material taught prior to the date it is posted on. There will be a total of 8 Webwork assignments. The first Webwork assignment will be posted on Thursday, April 13 and is due on Friday, April 21.

From on campus, go to <http://homework.ps.uci.edu/webwork/>

From off campus, WebWork needs to be accessed using a VPN. Information on this can be found at <http://www.oit.uci.edu/vpn/>

I will send you additional informations on how to log in next week via email.

- **Quizzes** : there will be 7 quizzes during discussion, one every Thursday except during exam weeks. The first quiz will take place on Thursday, April 13. The lowest quiz grade will be dropped. There will be no make-up quiz. Each quiz covers the material taught in class up to the previous Monday included.
- **Midterms** : there will be 2 midterms during regular class time :
  - Midterm 1 will take place on Wednesday, April 26.
  - Midterm 2 will take place on Wednesday, May 17.

Except in the event of an emergency, there will no make-up midterm. The two midterms will take place in our regular classroom.

- **Final exam** : the final exam is common to all Math 2B classes and will take place on Saturday, June 10 between 1:30 and 3:30 pm. The room will be announced later in the quarter.

**NO calculator** will be allowed during the quizzes or exams.

The final grade will be computed according to the following distribution :

Course requirement	Percentage of grade
Final exam	40%
Midterm 1	20%
Midterm 2	20%
Quizzes	10%
Webwork	10%

The overall course grades will not be curved.

## 6 Common Final Exam - Make up policy

You can find all the informations regarding the department's policy on make-up final exams on the following webpage : <http://www.math.uci.edu/undergrad-courses/calculus-2a2b-resources/common-final-exam>.

## 7 Resources

### 7.1 Suggested homework

**On Mondays, problems from the book will be assigned, covering the sections that will be treated during the week.** You can find them on the Canvas page of the class in the "Files" section, in the pdf file named "Suggested Homework Problems". Those problems will not be collected or graded. But you are strongly recommended to work on them, as the quizzes will be based on similar exercises. It is only by practicing that you will be able to succeed in this Calculus course.

**Detailed solutions** to those problems can also be found on the Canvas page of the class in the "Files" section. I will upload them on the same day as the assigned problems. I purposefully write very detailed solutions so that you can check your answers and understand your mistakes. It is crucial that you try and solve the problems first without the solutions then check your answers. If you need any help or have any question, do not hesitate to go to the tutoring center, talk to Robert or come to my office hours.

### 7.2 Sample exams

Before every exam I will provide you with sample exams and their answer sheets. Those samples reflect very closely what the exams will look like. I thus strongly encourage you to work on them and come to me or Robert if you have any question or need any help solving them.

### 7.3 UCI Calculus Website

You can find extra suggested homework problems, algebra and trigonometry review materials, sample midterms and sample final exams on the **UCI Calculus Website** found at

<http://www.math.uci.edu/undergraduate/courses/calculus-2a2b-resources>.

### 7.4 Tutoring Center

Besides office hours, you can get help at the **Tutoring center** located in Rowland Hall:

- Center 1 RH 592-594,
- Center 2 RH 248, 250A and 250B

The center is opened Monday through Thursday between 9am and 5pm and on Fridays between 9am and 3pm.

## 8 Department add/drop policy

All enrollment is handled on-line, by the student, through the student's WebReg account. Students can add classes up until the end of the second week of the quarter.

After this date, the department will not authorize any more adds. Students can drop classes up until the end of the second week. After this date, students can petition the department's Undergraduate Coordinator (through the student's WebReg account) to drop a course provided they have a legitimate excuse. Instructors do NOT at any time approve students for adds, nor do they approve students for drops. For any information regarding enrollment or the add/drop policy of the department please refer to the following link : <http://www.math.uci.edu/undergrad-courses/course-registration-and-placement-information>.