

# (UCSC) Math 19A\_Calculus for Science, Engineering, and Mathematics Sum Sess1\_201616

## Syllabus Summer Session 1, 2016 (Math 19A)

### Course Learning Objectives

1. Understand the concept of an instantaneous rate of change and the derivative of a function
2. Learn how to calculate derivatives explicitly and implicitly and to master how derivatives affect the behavior of a function
3. Master the application of the derivative notion to optimization problems

### General Information

<b>Time:</b>	That's up to YOU
<b>Location:</b>	Wherever you have Internet!
<b>Course Authors:</b>	Tony Tromba, Frank Bäuerle
<b>Course Hosts:</b>	UCSC, UC Online
<b>Course Designer:</b>	Katrina Fullman & Laura Rosenzweig
<b>Instructors:</b>	Frank Bäuerle & Tony Tromba
<b>Teaching Assistants (TAs):</b>	Natalya Jackson
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## Office Hours (OH)

**Check the office hour page in the Support Options module.** The instructor and TAs hold weekly office hours both in-person and online Zoom, our webinar software. A range of times are available.

**Discussion Sections/T.A.'s** There are **optional discussion sections** at various times (location TBA) that really are like drop-in hours. You do not need to enroll in them to attend. The tentatively scheduled times are Monday 1-3pm, Wednesday 1-3pm for the on-the ground sections and for the on-line sections we will set up a survey to find a good time.

## E-Textbook and Homework System

The textbook (a customized version of *Calculus, Early Transcendentals, 2nd ed*, by UCLA Professor Jon Rogawski) is located on a web-based platform called Launchpad and the homework assignments can be found there also. We are offering free access this term. **For details on how to access Launchpad, go to the Quick Start Guide.**

## Grading Policy

The grade in this class is comprised of:

<b>On-line Homework (in LaunchPad)</b>	<b>15%</b>	
<b>On-line Quizzes (in LaunchPad)</b>	<b>10%</b>	
<b>Reading Assignments - Progress Check Questions (in LaunchPad)</b>	<b>5%</b>	
<b>Proctored Midterm (in person or online)</b>	<b>30%</b>	
<b>Comprehensive Final (in person or online)</b>	<b>40%</b>	

Some detailed explanation for the grading is in order:

- **Homework:** All homework assignments are on LaunchPad and are due on the dates noted below in the weekly schedule. You have an unlimited number of attempts on all homework questions and most questions provide feedback or hints if you answer incorrectly.
- **On-Line Quizzes:** On-line quizzes are already scheduled (see below for dates) but will be announced also through Canvas announcements and email . On-line quizzes are found in CalcPortal. Unlike regular on-line homework assignments, they are limited in time and do not give hints or feedback for incorrect answers. There will be partial credit (where appropriate) on on-line quizzes. Your TA and instructors will check your answers and may assign partial credit after the computer score has been calculated. That is, your final score on a quiz or other on-line test may be higher than what you see after you submit your test to Launchpad.
- **Reading Assignments:** No, we are not watching you when you read, so your reading score is determined by your performance on the progress check questions in the sections in LaunchPad. You will encounter them regularly when you read the assigned sections in your E-book. All readings are due on the dates noted below in the weekly schedule.

- **Discussion on Piazza and Study Group Participation:** This is a tricky one. Research shows that student success in on-line learning increases with active participation in discussion groups. On the other hand, we understand that not everybody needs help nor may want to collaborate with others. Now if you don't need help, you can still help others, and the fact is that explaining math to others helps you understand the math more deeply, so it is to your benefit also. **Active participation on Piazza is strongly encouraged and can contribute to a grade bump for the final grade.**
- **Final Exam:** The comprehensive final exam is 40% of your grade. In addition, students need to have a sufficiently high score on the final exam to pass the class. Similarly, an exceptionally high score on the final exam can lead to a grade bump.
- **Curve:** We do not curve individual tests, but there **may** be a curve for the class in the sense that grade ranges that lead to certain grades are adjusted based on overall results.

### Tentative Weekly Schedule

Week	Dates	Sections to be covered	Assignments Due
1	6/20-6/26	Introductory Videos & Sections 2.1, 2.2, 2.3, 2.4 and 2.5	<ul style="list-style-type: none"> <li>• Wk 1 Homework and Reading due <b>Tue 6/28 @ 11:59pm</b></li> </ul>
2	6/27-7/3	Sections 2.6, 2.7, 2.8, 3.1, 3.2 and 3.3	<ul style="list-style-type: none"> <li>• Wk 2 Homework and Reading due <b>Sun 7/3 @ 11:59pm</b></li> <li>• Quiz 1 available <b>Fri 7/1</b> between 12am - 11:59pm (you have 90 minutes to complete)</li> </ul>
3	7/4-7/10	Sections 3.5, 3.6, 3.7, 3.8, 3.9, Review and Midterm.	<ul style="list-style-type: none"> <li>• Midterm (online) <b>Fri 7/8</b> by appointment with Proctor U, 1-2:30pm</li> <li>• Midterm Exam (on-campus) <b>Fri 7/8</b>, Time 1-2:30pm, Location Engineering Auditorium 101</li> <li>• Wk 3 Homework and Reading due <b>Sun 7/10 @ 11:59pm</b></li> </ul>
4	7/11-7/17	Sections 3.10, 3.11, 4.2, 4.3, 4.4 and 4.5	<ul style="list-style-type: none"> <li>• Quiz 2 available <b>Fri 7/15</b> between 12am - 11:59pm (you have 90 minutes to complete)</li> <li>• Wk 4 Homework and Reading due <b>Sun 7/17 @ 11:59pm</b></li> </ul>
5	7/18-7/22	Sections 4.6, 4.7, 4.8, Review and Final Exam	<ul style="list-style-type: none"> <li>• Final Exam (on-campus) <b>Fri 7/24</b>, <b>Time 1-4pm</b>, Location Engineering Auditorium 101</li> <li>• Final Exam (online) <b>Fri 7/22</b> by appointment with Proctor U, 1-4pm</li> </ul>

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|  |  |  | <ul style="list-style-type: none"><li>• Wk 5 Homework and Reading due <b>Fri 7/22 @ 11:59pm</b></li></ul> |
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### **Midterm and Final Exams**

See the **Exam Information** page in the Get Started module for information concerning the midterm and final exam dates, times, locations and requirements. Exams are offered on-campus and online.