



## **Math 1A: Differential Calculus**

**Fall 2019, CRN 24173, Section 63, 5 Units**

**Tuesday and Thursday 6:30 PM to 8:45 PM**

**Classroom Location: (E Quad, Room 36)**

### **Instructor Information**

<b>Instructor:</b>	Andrew Jianyu YU
<b>Email:</b>	yujian@fhda.edu
<b>Office Location:</b>	E37 (E Quad, Room 37)
<b>Office Hours:</b>	Tuesday and Thursday 1 PM to 1:30 PM; 3:45 PM to 4 PM; 6:15 PM to 6:30 PM

### **Course Description**

Fundamentals of differential calculus

### **Prerequisite**

MATH 43 or MATH 43H (with a grade of C or better), or appropriate score on Calculus Placement Test within the past calendar year.

### **Textbook**

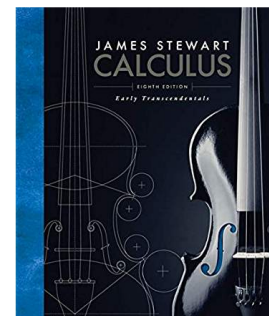
Calculus: Early Transcendental, by James Stewart, 8th Edition; Book Length 1368 pages; ISBN-10:

9781285741550, ISBN-13: 978-1285741550, ASIN

1285741552; Publisher: Cengage Learning; Publication date: February 4th, 2015

*This textbook is a full version, which contains chapter 1 to chapter 17. It is sufficient for the entire calculus sequence.*

*Math 1A covers chapters 1, 2, 3, and 4. Math 1B covers chapters 5, 6, 7, 8, and 9. Math 1C covers chapter 11, 12, and 13. Math 1D covers chapter 14, 15, and 16.*

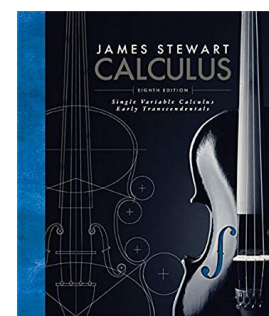


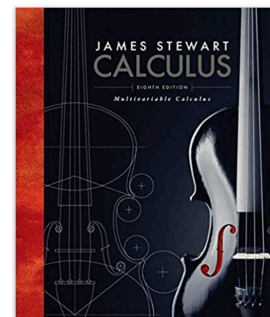
Single Variable Calculus: Early Transcendental, by James Stewart, 8th Edition; Book Length 960 pages; ISBN-10:

9781305270336, ISBN-13: 978-1305270336; Publisher:

Cengage Learning; Publication date: January 1st, 2015

*This textbook contains chapters 1 to 11 of the full Calculus version, which is only sufficient for Math 1A and 1B.*





**Calculator**

Graphing calculator is optional but recommended for the course and the entire Calculus sequence. You may rent a TI-83 Plus in the bookstore for about \$20 per semester/quarter.

You are required to bring a physical calculator to the exam, and sharing calculator is considered as cheating incident. Using the calculator apps on your phone is strictly prohibited on the exam. Do not purchase the TI-Nspire Graphing Calculator (around \$150) because it is too advanced for this course. Instructions will not be provided for TI-Nspire.

TI-83 Plus    TI-84 Plus    TI-84 Plus CE    TI-Nspire



**Technical Requirements**

- **Your Email:** Please check your email regularly. If possible, connect your email with an app in your smartphone. I will send the homework, lecture notes, and announcement through email. Note that these materials will also be posted on Canvas. You are welcome to ask me any questions related to lecture, homework, or personal emergency through email.

**Subject of my emails “Math 1A: \_\_\_\_\_”**

Please keep a record of all the email with the subject above until the semester/quarter is officially finished. You are required to use the same subject time when you send me an email because I have more than 100 students every semester/quarter.

- **Canvas:** All the lecture notes, homework, solutions, and announcements will be posted on Canvas under the “File” tab.

**Lectures and Expected Preparation**

We will use a template for every section in the textbook. A template contains definitions, formulas, graphs, and examples. The answers to all the problems and examples are not included. Your instructor will solve each problem in class. You are expected to take notes in class. You should plan to spend a minimum of two hours outside of class for each hour spent in class to learn and make satisfactory progress in the class.

**Attendance**

Attendance will be taken each day using a sign in sheet. The instructor may drop a student who accrues 3 or more absences without notice.

**Homework, 20% of the Course Grade**

Problems will be assigned to each section. There is no online homework in this class. You are expected to fully demonstrate all your work on paper. Homework will be assigned and collected in a weekly basis. It reflects everything you learned in a week. Scores for homework assignment will be based on completeness, clarity, promptness, and accuracy. The lowest homework grade will be dropped at the end of the course.

**Quiz & Pop Quiz, 20% of the Course Grade**

A quiz will be given in class at the due date on every homework assignment. You are expected to get 2 to 3 short problems on the quiz. Quiz questions are based on the homework due on that day. For example, if the first homework contains 4 sections, the quiz problems are based on those 4 sections. If the first homework is due next Thursday, then first quiz will be held on the next Thursday. Quiz is closed book and closed notes, but calculator is allowed. Pop quiz will be given when the attendance is low. Pop quiz problems are based on the lecture of that day. The lowest quiz grade will be dropped at the end of the course.

**Exams, 35% of the Course Grade (Two Exams in this Course)**

There are two exams in this course. The exam date will be announced at least one prior the exam. Review problems will be provided, discussed, and solved in class. Exam problems are similar to the review problems. Although exams are closed book and closed notes, your instructor will provide a formula sheet during the exam. The formula sheet will be sent along with the review problems. You are not allowed to modify the content of the formula sheet. Sharing calculator during the exam is considered at cheating. Your exam will

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not be graded if cheating incident is found. Your lowest exam score will not be  
dropped. Both exams are individual assignments.

### **Final Exam, 25% of the Course Grade**

The final exam will be comprehensive. The Final Exam is an individual assignment. Exam topics will be announced in advanced. A formula sheet will be provided during the review session. The same formula sheet will be provided during the exam date. You are not allowed to modify the content of the formula sheet. Please bring your own calculator to the exam. Sharing calculator, using a smartphone or tablet with internet access, looking at your neighbor's exam, or communicating with your neighbor are considered as cheating incident, which will not be tolerated. Assistant seeker will receive a zero on the exam, and assistant provider will be reported to the college.

### **Grading Rubrics**

Your course grade will be assigned in the following standard:

A: 100% to 92%	A-: 91% to 90%	
B+: 89% to 86%	B: 85% to 82%	B-: 81% to 80%
C+: 79% to 74%	C: 73% to 70%	
D: 69% to 60%	F: below 60%	

### **Extra Credit Assignment**

There are no extra credit assignments in this course to improve your grade. Please do not ask for any.

### **Academic Integrity**

Academic dishonesty will not be tolerated. Any student attempting to defraud the instructor on a quiz, exam, final exam, or any other assessment item designated as an individual assignment will receive a zero on that assignment. This score is irreplaceable. If a cheating incident is detected on your work, the rest of your works in the course will be closely monitored and examined.

### **Available Support Services**

The Math Tutorial Center in S43 has free tutoring for this course. If you need help in studying the class materials, please seek for a math tutor in the learning center immediately. Do not wait until the last minute to seek for help.

**Academic Adjustments for Students with Disabilities**

Please see instructor during office hours to discuss your situation confidentially if you have accommodations; see the instructor during the first week of class or as soon as you receive approval from the appropriate support service. For information about eligibility, support services or accommodations due to physical or learning disability see:

- Disability Support Service (DSS): [www.deanza.edu/dss](http://www.deanza.edu/dss) Location: SCS-141 (408) 864-8753; TTY (408) 864-8748
- Educational Diagnostic Center (EDC): [www.deanza.edu/edc](http://www.deanza.edu/edc) Location: LCW 110; (408) 864-8839
- Special Education Division:; [www.deanza.edu/specialed](http://www.deanza.edu/specialed) (408) 864-8407

**Classroom Code of Conducts**

- Video recording is strictly prohibited, but audio recording is welcome. Please ask for instructor's permission before you record anything.
- No talking or chatting about anything not related to the class materials.. Even one side conversation can carry throughout the room and distract other students. Students who are disruptive will be removed from the course.
- Please be on time and stay for the duration of the class.
- If you plan to leave early, please sit close to the door.
- Computer, Tablet, or phone usage is allowed for class materials only.

**Warning: You will be asked to leave the class immediately if you act or behave any of the followings:**

- Late to class more than 10 minutes frequently
- Use any electronic devices for anything not related to this class
- Missing classes without notify your instructor
- Stand up and leave the class in the middle of a lecture
- Sleeping during lecture

**Course Content**

The following topics will be covered in this course:

- Limits and Derivatives
- Differentiation Rules
- Applications of Differentiation
- Antiderivatives

**Important Dates to Remember**

September 23	First day of fall quarter
October 5	Last day to add classes
October 6	Last day to drop classes for full refund or credit Last day to drop classes without a W It is student's responsibility to complete this process.
October 18	Last day to request "Pass/No Pass" for 12-week classes
November 11	Veterans Day holiday: Campus closed
November 15	Last day to drop classes with "W" It is student's responsibility to complete the withdrawal process. Instructors are forced to give a letter grade after this date. No exceptions.
November 28 to December 1	Thanksgiving holiday: Campus closed
December 1	Last day to file for fall degree or certificate
December 9 to 13	Final exam's week
December 13	Last day of fall quarter

**College Policy:** If the student chooses not to complete the class, it is the STUDENT'S RESPONSIBILITY to drop or withdraw by the college deadlines. If you stop attending but do not withdraw or drop you may fail with a grade of F.

*The professor reserves the right to make changes to the syllabus, including project due dates and test dates (excluding the officially scheduled final examination), when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.*

**Student Learning Outcome(s):**

- \*Analyze and synthesize the concepts of limits, continuity, and differentiation from a graphical, numerical, analytical and verbal approach, using correct notation and mathematical precision.
- \*Evaluate the behavior of graphs in the context of limits, continuity and differentiability.
- \*Recognize, diagnose, and decide on the appropriate method for solving applied real world problems in optimization, related rates and numerical approximation.