Math 1A: Calculus – Fall 2017

Tues. & Thur. 1:30-3:45 in G-5

Instructor: Cheryl Jaeger Balm Office Hours: Mon. & Wed. 1:30-2:20 in S-76D

Office: S-76D Tues. & Thur. 12:30-1:20 in S-43

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<u>Textbook</u>: Stewart, Calculus Early Transcendentals (8th edition)

- We will **not** be using WebAssign in this class.

- You are *not* required to bring your book to class unless otherwise instructed.

<u>Class Websites</u>: There will be three primary online resources for you associated this course.

- Instructor's website: http://www.deanza.edu/faculty/balmcheryl/math1A_fall17.html
- Canvas, which you can access through MyPortal to check grades, get solutions, etc.
- desmos.com, a graphing website you can use if you do not have a graphing calculator

Student Learning Outcomes (i.e. course goals):

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

<u>Calculators</u>: A scientific calculator **without** graphing capabilities is permitted, but not required, for this class and can be brought with you to each lecture. In addition you will need either a graphing calculator or access to the website desmos.com or the Desmos app for some homework problems.

<u>Cell phones</u>: Cell phones, tablets, laptops and other electronic devices should not be used, seen or heard during class time unless otherwise instructed. **Your cell phone is not considered a calculator for the purposes of this class**, and you will not be allowed to use a cell phone or tablet during quizzes or tests. If I see or hear your cell phone or you using it during class time, I may confiscate it until the end of that class meeting.

<u>Homework</u>: You will be given a list of suggested homework problems. The homework will NOT be collected or graded. However, solving these problems is essential for keeping up with the class. Moreover, the exams and quizzes will be of the same spirit as the homework and will often contain identical problems. You are expected to work on all the assigned problems corresponding to a lecture before you come to the next lecture.

Quizzes: There will be 10 weekly in-class quizzes (usually on Thursdays). Quizzes will be open-note, but you must show all your work on each problem you receive full credit. The material that each quiz will focus on will be announced in class the lecture before the quiz. Your lowest quiz score will be dropped, so there will be 9 quiz grades (15 points each). There are no make-up quizzes.

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Exams: There will be three midterm exams (one-hour each, in class) and a two-hour final exam. Each of the midterm exams will focus the material covered since the previous test. The final exam will be cumulative. Books, notes and graphing calculators will **not** be permitted during any exam. Your lowest midterm exam grade will be replaced by your grade on the final exam if that grade is better. A missed exam will count as 0 points.

Midterm exam dates:

- Tuesday, October 17
- Tuesday, November 7
- Thursday, November 30

Final exam: Tuesday, December 12, 1:45 – 3:45pm.

Project: A peer-learning project will be assigned later in the course and will be worth 50 points.

Grades will be assigned as follows:

Assignments	Points	Total points	Percent	Grade
Quizzes (9 @ 15 points)	135	≥ 585	≥ 90	A
Project	50	≥ 520	≥ 80	В
Exams (3 @ 100 points)	300	≥ 455	≥ 70	\mathbf{C}
Final exam	165	≥ 390	≥ 60	D

Attendance: Students enrolled in the course are expected to be present for all class meetings. If you miss a class, you are responsible for covering the material before you return to class. You should read the corresponding section(s) of the text book and get notes from a classmate. You are also responsible for knowing about any changes to the syllabus and/or schedule that may be announced in class.

Student resources:

- Your classmates: Form study groups and learn from one another.
- MSTRC (Math, Science and Technology Resource Center): Located in S-43, see http://www.deanza.edu/studentsuccess/mstrc/ for hours.
- Your instructor: Make use of office hours and email. If you are not available during office hours, please make an appointment to see me at another time. **Do not wait until you are drowning to get help!** Please come by my office hours for help or to talk about your grade. That is what I am there for!
- Student Success Center: See http://www.deanza.edu/studentsuccess/ for online tutoring, workshops and much more.

Grade discrepancies: If you have any questions regarding your grade on any assignment, you must discuss the matter with your instructor before leaving the room with the graded material. Once the graded material has left the classroom, no grading changes will be made.

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Academic Integrity: Academic dishonesty will not be tolerated. If a student is found cheating and/or copying on any assignment, or violating any other code of academic integrity, he or she will receive a 0 on the assignment and may receive failing grade for the course and/or be reported to the Dean of the PSME Division. Those caught twice will be expelled from the class with an F.

<u>Disability Statement:</u> De Anza College makes reasonable accommodations for people with documented disabilities. Please notify Disability Support Services (DSS) if you have any physical, psychological or other disabilities, vision, hearing impairments or ADD/ADHD. DSS is located in the Registration and Student Services Building, RSS Room 141. Phone number: 408-864-8753. Website: http://www.deanza.edu/dss/.

Important Dates for Winter Quarter 2016:

- Sun., Oct. 8: Last day to drop for a full refund or credit and with no record of grade.
- Fri., Oct. 20: Last day to request pass/no pass grade.
- Fri., Nov. 17: Last day to drop with a "W."
- Thur., Nov. 23: Thanksgiving no class.
- Thur., Dec. 7: Last day of (our) class.
- Tues., Dec. 12: Final Exam 1:45-3:45

<u>Tentative class schedule</u> (subject to change):

	Mon	Wed
Wk 1 9/26-28	Introduction and "Review" Day	"Review" Day 2, ROC and tan-
	1 (1.1-1.4)	gent lines (1.5, 2.1); Quiz 1
Wk 2 10/3-5	Limits and limit laws (2.3, 2.4)	One-sided limits and continuity
		(2.2, 2.5) Quiz 2
		Drop deadline Sunday
Wk 3 10/10-12	Infinite limits and asymptotes	Derivatives (2.7); Review for
	(2.6)	exam; Quiz 3
Wk 4 10/17-19	Exam 1 (2.1-2.6);	Polynomial, exponential,
	Derivative function (2.8)	product and quotient rules (3.1,
		3.2); Quiz 4
		Pass / No Pass deadline
Wk 5 10/24-26	Trig and chain rules (3.3, 3.4)	Implicit differentiation and or-
		thogonal trajectories (3.5);
		Quiz 5
Wk 6	Logarithmic differentiation and	Linear approximation and
10/31 - 11/2	related rates (3.6, 3.9)	Newton's method $(3.10, 4.8)$;
	Happy Halloween	Review for exam; Quiz 6
Wk 7 11/7-9	Exam 2 (2.7-3.9);	Extrema and Mean Value
	l'Hôpital's Rule (4.4)	Theorem $(4.1, 4.2)$; Quiz 7
Wk 8 11/14-16	Curve sketching Part 1 (4.3);	Curve sketching Part $2 (4.5)$;
	Project assigned	Quiz 8
Wk 9 11/21-23	Optimization (4.7)	No class - Happy Thanks-
		giving
Wk 10 11/28-30	Project due; Antiderivatives	Exam 3 (3.10-4.8);
	(4.9); Review for exam; Quiz 9	Parametric equations (10.1)
Wk 11 12/5-7	Project peer evaluations	Review for final; Quiz 10
	due; Derivatives of parametric	
	equations (10.2)	
Wk 12 12/12	Final exam Tuesday 1:45-	Have a great break!
	3:45pm	