## Math 1B: Calculus – Winter 2018

Tues. & Thur. 1:30-3:45 in S-16

Instructor:	Cheryl Jaeger Balm	Office Hours:	Mon. 1:30-2:20 p.m.
	Office: S-76D		Tues. – Fri. $10:00-10:25$ a.m.
	$Email: \verb"balmcheryl@fhda.edu"$		Wed. <b>via email</b> 9:30-10:30 p.m.

Textbook: 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 two primary online resources for you associated this course.

- Instructor's website: http://www.deanza.edu/faculty/balmcheryl/math1B\_winter18.html
- Canvas, which you can access through MyPortal to check grades, get solutions, etc.

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

- 1. Analyze the definite integral from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.
- 2. Formulate and use the Fundamental Theorem of Calculus.
- 3. Apply the definite integral in solving problems in analytical geometry and the sciences.

<u>Calculators</u>: A scientific calculator **without** graphing capabilities is required for this class and should be brought with you to each lecture. In addition you may need either a graphing calculator or access to the website desmos.com or the Desmos app for some assignments.

<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.

**Homework:** 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 11 in-class quizzes. Quizzes will be open-note, but you must show all your work on each problem to 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 10 quiz grades (15 points each). There are no make-up quizzes.

**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 (as a percent). A missed exam will count as 0 points.

## Midterm exam dates:

- Thursday, February 1
- Tuesday, February 27
- Tuesday, March 20

## Final exam: Tuesday, March 27, 1:45 – 3:45 p.m.

**Project:** Two projects will be assigned during the course and will be worth 50 points each. Projects may be done alone or in groups of 2 or 3. You may not work with the same person on both projects. Project due dates are **Tues.**, **Feb. 13** and **Tues.**, **Mar. 6**. You may seek help outside of class on your projects. In fact, your group *must* meet briefly with your instructor within a week of each project being assigned, but your instructor will *not* be available for assistance on either project at any time following the class before it is due. Details on the projects and how they will be graded will be explained when the first project is assigned.

#### Grades will be assigned as follows:

Assignments	Points	Total points	Percent	Grade
Quizzes (10 @ 15 points)	150	630-700	$\geq 90$	А
Projects $(2 @ 50 points)$	100	560 - 629	$\geq 80$	В
Exams $(3 @ 100 \text{ points})$	300	490-559	$\geq 70$	С
Final exam	150	420-489	$\geq 60$	D

<u>Attendance</u>: 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, work-shops 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.

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.

**Disability Statement:** 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 2018:

- Sun., Jan. 21: Last day to drop for a full refund or credit and with no record of grade.
- Fri., Feb. 2: Last day to request pass/no pass grade.
- Fri., Mar. 2: Last day to drop with a "W."
- Tues., Mar. 27: Final Exam 1:45 3:45 p.m.

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

	Mon	Wed
<b>Wk 1</b> 1/9-11	Introduction and Areas (5.1)	Riemann sums & definite integrals
		(5.2)
<b>Wk 2</b> 1/16-18	Fundamental Theorem of	Hyperbolic functions;
	Calculus; Logarithms	Indefinite integrals $(3.11, 5.4)$
	(5.3, App. G); <b>Quiz 1</b>	Drop deadline Sunday
<b>Wk 3</b> 1/23-25	Substitution Rule; Average value	Area between curves $(6.1)$
	(5.5, 6.5); Start Project 1;	
	Quiz 2	
Wk 4	Work (6.4); Review for exam;	Exam 1
1/30 - $2/1$	Quiz 3	P/NP deadline Friday
<b>Wk 5</b> 2/6-8	Integration by parts; Trig	Trig substitution; Integrating
	identities $(7.1, 7.2)$	rational functions $(7.3, 7.4);$
		Quiz 4
<b>Wk 6</b> 2/13-15	Integration strategies; Table of	Approximating integrals $(7.7)$
	integrals $(7.5, 7.6);$	
	Project 1 due;	
	Start Project 2; Quiz 5	
<b>Wk 7</b> 2/20-22	Improper integrals; Arc length	Volumes of revolution (start $6.2$ );
	(7.8, 8.1); <b>Quiz 6</b>	Review for exam; Quiz 7
Wk 8	<b>Exam 2</b> ;	Cylindrical shells; Surfaces of
2/27 - $3/1$	Volumes of revolution (finish 6.2)	revolution $(6.3, \text{ start } 8.2)$
		Withdrawal deadline Friday
<b>Wk 9</b> 3/6-8	Surfaces of revolution; Center of	Probability (8.5)
	Mass (finish $8.2, 8.3$ );	
	Project 2 due; Quiz 8	
Wk 10 3/13-15	Differential equations; Separable	Slope fields & Euler's method
	equations (9.1, 9.3); <b>Quiz 9</b>	(9.2); Review for exam; <b>Quiz 10</b>
Wk 11 3/20-22	<b>Exam 3</b> ;	Review for final; Quiz 11
	Population growth (9.4)	
Wk 12 $3/27$	Final exam	Have a great break!
	Tuesday 1:45-3:45 p.m.	