Math 12.05 – Introductory Calculus for Business & Social Sciences
Spring 2017
Meets: MTWThF, 10:30 AM to 11:20 AM
Room: L-64

Instructor: Lilit Mazmanyan	**Office:** E37
Contact: mazmanyanlilit@fhda.edu	**Office hours:** Monday and Wednesday 9:45 AM to 10:15 AM

Course Description
Introduction to limits, differentiation, and integration of single variable functions. Differentiation of multivariate functions. Applications in business, economics, and social science.

Student Learning Outcomes
- Use correct notation and mathematical precision in the evaluation and interpretation of derivatives and integrals.
- Evaluate, solve, interpret and communicate business and social science applications using appropriate differentiation and integration methodologies.

Prerequisites
- MATH 11 or MATH 41.

Textbook
Bittinger, M.L., Ellenbogen, D.J. and Surgent, S.A., *Calculus and its Applications*, 11th ed., Pearson, 2016.

Recommended Reference
Hughes-Hallett et all. *Applied Calculus*, 5th ed. John Wiley and Sons, Inc, 2013.

Calculators and Computer Software
- A TI-83 PLUS, TI-84 or TI-84 PLUS graphing calculator is REQUIRED in class every day
- It is the student's responsibility to obtain a calculator to use if his/her calculator is lost or broken. Library Reserve has calculators for limited loans. The instructor can NOT lend her calculator.
- Cell phones or other devices CANNOT be used in place of a permitted calculator on any quiz or examination

Homework (HW)	• Homework is done online using MyMathLab • Students need to self-register at http://www.pearsonmylabandmastering.com for logging into MyMathLab to access the course • **CLASS KEY** to register on MyMathLab **WILL BE SENT TO STUDENTS BY EMAIL** • The bookstore sells print books and access codes. You can buy the access code online directly which includes the electronic version of the book. Students are responsible to investigate prices and formats to best fit their needs • After the due date/time, HW cannot be submitted for credit • After the due date/time, the answer key is available online
Technology Based Project (TBP)	• TBP must be completed in groups of at least two • Choose your own teams. The instructor may assign any class member to any team • Project topics and details will be discussed in class • The project culminates in a written report • MUST be used technology graphing calculators, Excel, MATLAB, OR Mathematica

Quizzes (Q)

- Closed book
- Based on classwork and homework
- One page of notes, HANDWRITTEN, double-sided 8.5 x 11-inch, is allowed
- NO MAKE-UP QUIZZES are given
- Missed quiz is graded as a zero (0)
- The lowest quiz score will be dropped

Exams & Final Exam (EX,FE)

There will be three (3) examinations
• EX 1 & EX 2 are one hour each and Final exam is two hours
• EX 1 & EX 2 and the FE dates are on the course schedule
• Closed book
• Bring calculator, spare batteries, pencils, ruler, sharpener, and eraser
• If English is the student's second language, a paper English translation dictionary is permitted
• Electronic English translation dictionaries are NOT permitted.
• One page of notes, HANDWRITTEN, double-sided 8.5 x 11-inch, is allowed for the EX 1&2.
• Two pages of notes, HANDWRITTEN, double-sided 8.5 x 11-inch, are allowed for the Final Exam.
• There are NO MAKE-UP examinations
• An absence from any examination earns a grade of zero (0)

Grading

Students will be graded on homework (HW), laboratory work (LW), quizzes (Q), and exams (EX1, EX2, FE).
Grading depends on the clarity of work, interpretations, accuracy and completeness of graphs, and explanations as well as numerical answers.

Distribution of weights for each category

Category	% Weight on Final Grade
Homework	10 %
Quizzes	10 %
TBP	15 %
Exam 1	20 %
Exam 2	20 %
Final Exam	25 %

Grading Scale

A+	≥99		A	94-98		A-	90-93
B+	86-89		B	82-85		B-	78-81
C+	74-77		C	70-73			
D+	64-69		D	58-63		D-	50-57
						F	<50

Extra Credit

During the course you will get extra credit problems. They will be included in coursework, homework, and on exams.

Important Dates and Deadlines

https://www.deanza.edu/calendar/springdates.html

Monday	**April 10**	First day of Spring Quarter 2017**.**
Saturday	**April 22**	Last day to add quarter-length classes. **Add date is enforced.**
Sunday	**April 23**	Last day to drop for a full refund or credit. Last day to drop for a class with no record of grade**. Drop date is enforced.**
Saturday-Monday	**May 27-29**	Memorial Day Weekend (no classes)
Friday	**June 2**	Last day to drop with a "W." **Withdraw date is enforced.**
Wednesday	**June 28**	Final Examination (see schedule) https://www.deanza.edu/calendar/finalexams.html

Attendance, Drops or Withdrawals

- Regular attendance is essential for success in the course
- A student who discontinues coming to class and does not drop the course will automatically receive an 'F' grade for the course
- It is the student's responsibility to drop or withdraw from this course by the college deadlines

Academic Honesty and Discipline Policy:

Students are expected to abide by the DeAnza College Code of Conduct and not participate in academic dishonesty. Academic dishonesty includes:

- Copying from other students (plagiarism)
- Using notes during a quiz or examination that do not meet permitted specifications
- Continuing to write or erase on a quiz or examination after the permitted time has ended
- Using any electronic device other than the approved TI calculator on a quiz or examination
- Sharing a calculator with another student for a quiz or examination

Academic dishonesty can result in a grade of 'F' for that quiz or examination or assignment, or a grade of 'F' for the course and referral to the Dean for academic discipline.

Disruptive Behavior:

The use of cell phones and other noise emitting devices is disruptive. Students must keep their cell phones and other noise making devices in the off-mode, and keep them off the desk and out-of-sight.
Disruptive behavior includes:

- Engaging in an activity not related to the classroom activity
- Eating or drinking during class
- Monopolizing discussion time
- Late arrivals or early departure

Tutoring

The Math, Science and Technology Resource Center is located in S43 on the De Anza Campus, (408) 864-8683.
Hours of operation: Monday - Thursday 8:30 am - 6:30 pm, Friday 8:30 am - 12:30 pm.
Student Success Center: http://deanza.edu/studentsuccess/mstrc/

Students with Disabilities

Students with disabilities who qualify for academic accommodations must provide a notification from the Disability Support Services (DSS) and discuss their specific needs with the instructor at the beginning of the quarter.
For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) please contact Disability Support Services (DSS). DSS is located in Student Community Services Building, Room 141. Phone number is (408) 864-8753; TTY (408) 864-8753.
Disability Support Services: https://www.deanza.edu/dss/

Tentative Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	April 10 **Syllabus/Chap R** Functions, Graphs, and Models	April 11 **Chapter R**	April 12 **Chapter R**	April 13 **Chapter R**	April 14 **Chapter R**
Week 2	April 17 **Chapter 1** Differentiation **Quiz 1**	April 18 **Chapter 1** **HW 1 due**	April 19 **Chapter 1**	April 20 **Chapter 1**	April 21 **Chapter 1**
Week 3	April 24 **Chapter 1** **Quiz 2**	April 25 **Chapter 1** **HW 2 due**	April 26 **Chapter 2** Applications of Differentiation	April 27 **Chapter 2**	April 28 **Chapter 2**
Week 4	May 1 **Chapter 2** **Quiz 3**	May 2 **Chapter 2** **HW 3 due**	May 3 **Chapter 2**	May 4 **Chapter 2** **Review Problems**	May 5 **Exam 1** **Chapters R, 1-2**
Week 5	May 8 **Chapter 1-2** Review of Exam 1	May 9 **Chapter 3** Exponential & Logarithmic Functions **HW 4 due**	May 10 **Chapter 3**	May 11 **Chapter 3**	May 12 **Chapter 3**
Week 6	May 15 **Chapter 3** **Quiz 4**	May 16 **Chapter 3** **HW 5 due**	May 17 **Chapter 3**	May 18 **Chapter 4** Integration	May 19 **Chapter 4**
Week 7	May22 **Chapter 4** **Quiz 5**	May 23 **Chapter 4** **HW 6 due**	May 24 **Chapter 4**	May 25 **Chapter 4**	May 26 **Chapter 4**
Week 8	May 29 Memorial Day Holiday **No class**	May 30 **Chapter 3-4** **Review Problems** **HW 7 due**	May 31 **Exam 2** **Chapters 3-4**	June 1 **Chapter 3-4** Review of Exam 2	June 2 **Chapter 5** Applications of Integration
Week 9	June 5 **Chapter 5** **Quiz 6**	June 6 **Chapter 5** **HW 8 due**	June 7 **Chapter 5**	June 8 **Chapter 5**	June 9 **Chapter 5**
Week 10	June 12 **Chapter 5** **Quiz 7**	June 13 **Chapter 6** Functions of Several Variables **HW 9 due**	June 14 **Chapter 6**	June 15 **Chapter 6**	June 16 **Chapter 6**
Week 11	June 19 **Chapter 6** **Quiz 8**	June 20 **Chapter 6** **HW 10 due**	June 21 **Chapter 6** **TBP**	June 22 **Review Problems** **TBP**	June 23 **Review Problems** **TBP**
Week 12	June 26 No class	June 27 No class	June 28 No class	June 29 **Final Exam** **9:15-11:15 AM**	June 30

- TBP - Technology Based Project
- Any change in schedule is announced during class. Students are responsible for keeping track of schedule changes.
- Final Exam date/time is the college mandated official final exam date/time.
- Course materials (syllabus, lecture presentations and answer keys) are uploaded on "My Courses/Course Studio." It is accessible to you via MyPortal as you are enrolled in the course.