



## Math 12.63 – Introductory Calculus for Business & Social Sciences

Spring 2020

Meets: TTh, 6:30 PM to 8:45 PM

Online classes via Zoom

<b>Instructor:</b> Lilit Mazmanyman	
<b>Contact:</b> <a href="mailto:mazmanymanlilit@fhda.edu">mazmanymanlilit@fhda.edu</a>	<b>Office hours:</b> Friday, 4:00 – 5:00 PM, online via Zoom (check Canvas for instructions)

Instructional method is **synchronous**. Lectures will be delivered online via Zoom during scheduled class times. Virtual breakout rooms will be used for group collaboration. Instructions how to connect Zoom lectures can be found on Canvas, which are accessible to you via **MyPortal** as you are enrolled in the course. You can also access Canvas using direct link (<https://deanza.instructure.com>) with your MyPortal login credentials. Communications with students will be maintained via Zoom, announcements on Canvas, and emails.

### Course Description

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

### 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.

### Calculator

- A TI-83 PLUS, TI-84 or TI-84 PLUS graphing calculator is recommended.
- Cell phones or other devices CANNOT be used in place of a permitted calculator on any quiz or examination.
- Graphing calculator, Excel, MATLAB, OR Mathematica can be used for technology based group work.

<b>Homework (HW)</b>	<ul style="list-style-type: none"> <li>• HW will be assigned every week but they will not be collected nor graded.</li> <li>• Quizzes and exams will include similar problems from your homework.</li> <li>• Ask your homework questions before quiz and exam.</li> </ul>
<b>Technology Based Group Work (TBGW)</b>	<ul style="list-style-type: none"> <li>• TBGW must be completed in groups of at least two</li> <li>• Project topics and details will be discussed in class</li> <li>• The project culminates in a written report</li> <li>• MUST be used technology graphing calculators, Excel, MATLAB, OR Mathematica</li> </ul>
<b>Quizzes (Q)</b>	<ul style="list-style-type: none"> <li>• Quiz is online based on classwork and homework</li> <li>• One sheet of notes, HANDWRITTEN, single-sided 8.5 x 11-inch, is allowed</li> <li>• NO MAKE-UP QUIZZES are given</li> <li>• Missed quiz is graded as a zero (0)</li> <li>• The lowest quiz score will be dropped</li> </ul>
<b>Exams &amp; Final Exam (EX, FE)</b>	<p>There will be three (3) examinations</p> <ul style="list-style-type: none"> <li>• EX 1 &amp; EX 2 are one hour each and Final exam is two hours</li> <li>• EX 1 &amp; EX 2 and the FE dates are on the course schedule</li> <li>• Closed book</li> </ul>

	<ul style="list-style-type: none"> <li>• One sheet of notes, HANDWRITTEN, single-sided 8.5 x 11-inch, is allowed for the EX 1&amp;2.</li> <li>• One sheet of notes, HANDWRITTEN, double-sided 8.5 x 11-inch, is allowed for the Final Exam.</li> <li>• There are NO MAKE-UP examinations</li> <li>• An absence from any examination earns a grade of zero (0)</li> </ul> <p>Quizzes and Exams will be assigned via Canvas. Structure of exam will be discussed in class.</p>																																										
<b>Grading</b>	<p>Students will be graded on homework (HW), technology based group work (TBGW), 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.</p> <p><b>Distribution of weights for each category</b></p> <table border="1"> <thead> <tr> <th>Category</th> <th>% Weight on Final Grade</th> </tr> </thead> <tbody> <tr> <td>Quizzes</td> <td>10 %</td> </tr> <tr> <td>Group work</td> <td>10 %</td> </tr> <tr> <td>Exam 1</td> <td>25 %</td> </tr> <tr> <td>Exam 2</td> <td>25 %</td> </tr> <tr> <td>Final Exam</td> <td>30 %</td> </tr> </tbody> </table> <p><b>Grading Scale</b></p> <table border="1"> <tbody> <tr> <td>A+</td> <td>≥99</td> <td>A</td> <td>94-98</td> <td>A-</td> <td>90-93</td> </tr> <tr> <td>B+</td> <td>86-89</td> <td>B</td> <td>82-85</td> <td>B-</td> <td>78-81</td> </tr> <tr> <td>C+</td> <td>74-77</td> <td>C</td> <td>70-73</td> <td></td> <td></td> </tr> <tr> <td>D+</td> <td>64-69</td> <td>D</td> <td>58-63</td> <td>D-</td> <td>50-57</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>F</td> <td>&lt;50</td> </tr> </tbody> </table>	Category	% Weight on Final Grade	Quizzes	10 %	Group work	10 %	Exam 1	25 %	Exam 2	25 %	Final Exam	30 %	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
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### Important Dates and Deadlines

<https://www.deanza.edu/calendar/>

<b>Monday</b>	<b>April 13</b>	First day of Spring Quarter 2020
<b>Saturday</b>	<b>April 25</b>	Last day to add classes
<b>Sunday</b>	<b>April 26</b>	Last day to drop classes with no record of "W" Last day to drop classes for full refund or credit
<b>Friday</b>	<b>May 8</b>	Last day to request "Pass/No Pass" for full-length classes
	<b>May 23-25</b>	Memorial Day Weekend - Campus Closed
<b>Friday</b>	<b>June 5</b>	Last day to drop classes with a "W"
<b>Thursday</b>	<b>June 25</b> <b>6:15 – 8:15 PM</b>	Final examination <a href="https://www.deanza.edu/calendar/finalexams.html">https://www.deanza.edu/calendar/finalexams.html</a>

### Online Education Center

- [Student Resource Hub](#): Visit this site for tips, guides and answers to your questions about using Canvas, Zoom and other online learning tools that your classes may be adopting.
- [Staying Organized](#): This webpage has advice for planning and staying on top of your online coursework.
- [Canvas Help](#): Need technical support with Canvas? This page has information on how to get help.
- [More Student Resources](#): Visit this page for more links and tips.

**California Virtual Campus**

- [Get Ready for Online Learning](#): This website has videos about getting "tech ready," managing your time, communicating with instructors and more.

**Student services and support**

<https://www.deanza.edu/online-spring/#Services>

- Tutoring and Library Help
- Computers and Tech Products
- Internet Access
- Food and Financial Assistance
- Health and Psychological Services

**Attendance, Drops or Withdrawals**

- Regular online attendance is essential for success in the course.
- You must not miss a class in the first week of the quarter or you will be dropped.
- A student who discontinues coming to class and does not drop the course will automatically receive a '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.

[https://www.deanza.edu/policies/academic\\_integrity.html](https://www.deanza.edu/policies/academic_integrity.html)

**Student Success Center**

<http://deanza.edu/studentsuccess/mstrc/>

Hours of online Zoom Tutoring Center are Monday to Thursday 9:00-6:00 PM and Friday 9:00 AM-12:30 PM.

The SSC provides free tutoring services such as individual, drop-in, groups, in-class and workshops.

For individual tutoring, fill out a weekly individual application:

[http://deanza.fhda.edu/studentsuccess/mstrc/weekly\\_ind.html](http://deanza.fhda.edu/studentsuccess/mstrc/weekly_ind.html)

For group tutoring, contact to Helen at [nguyenhelen@deanza.edu](mailto:nguyenhelen@deanza.edu).

**Disability Support Services**

<https://www.deanza.edu/dsps/dss/>

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).

Phone number: (408) 864-8753

Email: [dss@deanza.edu](mailto:dss@deanza.edu)

## Tentative Schedule

	Tuesday	Thursday
Week 1	April 14 <b>Syllabus/Chapter R</b> Functions, Graphs, and Models	April 16 <b>Chapter 1</b> Differentiation
Week 2	April 21 <b>Chapter 1</b>	April 23 <b>Chapter 1</b> Quiz 1
Week 3	April 28 <b>Chapter 1</b>	April 30 <b>Chapter 2</b> Applications of Differentiation Quiz 2
Week 4	May 5 <b>Chapter 2</b>	May 7 <b>Chapter 2</b> <b>Exam 1 (one hour): Chapters R,1,2</b>
Week 5	May 12 <b>Chapter 2</b> TBGW 1	May 14 <b>Chapter 3</b> Exponential & Logarithmic Functions Quiz 3
Week 6	May 19 <b>Chapter 3</b>	May 21 <b>Chapter 3</b> Quiz 4
Week 7	May 26 <b>Chapter 4</b> Integration	May 28 <b>Chapter 4</b> Quiz 5
Week 8	June 2 <b>Chapter 4</b>	June 4 <b>Chapter 4</b> <b>Exam 2 (one hour): Chapters 3-4</b>
Week 9	June 9 <b>Chapter 5</b> Applications of Integration	June 11 <b>Chapter 5</b> Quiz 6
Week 10	June 16 <b>Chapter 5</b> TBGW 2	June 18 Review Problems
Week 11	June 23	June 25 <b>Final Exam (two hours): Chapters 1-13</b> <b>4:00 – 6:00 PM</b>

- 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.
- TBGW – Technology-based group work
- **HW** assignments can be found on **Canvas**.
- Course materials (syllabus, lecture presentations, quiz/exam answer keys and additional resources) are uploaded onto *Canvas*. It is accessible to you via MyPortal as you are enrolled in the course. You can also access into Canvas using direct link (<https://deanza.instructure.com>) with your MyPortal login credentials.

**Student Learning Outcome(s):**

\*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.