



## Math 12.23Z – Introductory Calculus for Business & Social Sciences

Spring 2022

Meets: TTh, 1:30 PM to 3:45 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, 10:30 – 11:30 AM, online via Zoom (check Canvas for instructions)

This is an online class and instructional method is **synchronous**. Lectures will be delivered online via Zoom during scheduled class times. Virtual breakouts 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. We will communicate via Canvas Inbox, discussion board, Zoom office hours, and emails. Check periodically Canvas announcements. Instructions to access Zoom for office hours can be found on our Canvas course. Information about Canvas, Zoom, and Online Education Orientation can be found in Canvas on the Student Resources page: <https://deanza.instructure.com/courses/3382>. The Student Online Resources hub with extensive information and tips can be found at [deanza.edu/online-ed/students/remotlearning](https://deanza.edu/online-ed/students/remotlearning).

### Course Description

Introduction to limits, differentiation, and integration of single and multivariate functions, with applications in business, economics, and social sciences.

### Requisites

- *Prerequisite:* MATH 31, 31H, 41, or 41H.
- *Advisory:* EWRT 211 and READ 211, or ESL 272 and 273.

### 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 for this course.
- If you do not have graphing calculator you can use online graphing calculator via website as <https://www.desmos.com>

Weekly course lectures and assignments, and other resources, grades and announcements will be published on our Canvas course (<https://deanza.instructure.com>).

<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>Group Work (GW)</b>	<ul style="list-style-type: none"> <li>• GW will be assigned randomly during the class times.</li> <li>• GW must be completed in groups of at least two and no more than four.</li> <li>• Topics and details will be discussed in class.</li> <li>• Work with details must be uploaded on Canvas as one document.</li> <li>• Due date will be announced in class.</li> </ul>

<b>Quiz (Q)</b>	<ul style="list-style-type: none"> <li>• Quizzes are online through Canvas based on classwork and homework.</li> <li>• Quizzes are timed and they are assigned on Thursday due Saturday.</li> <li>• It is recommended to have ready one sheet of notes.</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 are 3 examinations through Canvas during scheduled class time.</p> <ul style="list-style-type: none"> <li>• EX 1 &amp; 2 are one hour each and Final exam is two (2) hours.</li> <li>• EX 1 &amp; 2 and the FE dates are on the course schedule.</li> <li>• It is recommended to have ready two sheets of notes.</li> <li>• There are NO MAKE-UP examinations.</li> <li>• An absence from any examination earns a grade of zero (0).</li> <li>• You MUST take the final exam to pass the course.</li> </ul> <p>Check the announcements for instructions and follow the course schedule on Canvas.</p>																																				
<b>Grading</b>	<p>Students will be graded on quizzes (Q), group work (GW), 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" data-bbox="425 997 1143 1207"> <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" data-bbox="425 1266 964 1407"> <tbody> <tr> <td></td> <td></td> <td>A</td> <td>94-100</td> <td>A-</td> <td>90-93</td> </tr> <tr> <td>B+</td> <td>87-89</td> <td>B</td> <td>83-86</td> <td>B-</td> <td>80-82</td> </tr> <tr> <td>C+</td> <td>77-79</td> <td>C</td> <td>70-76</td> <td>D</td> <td>60-69</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>F</td> <td>&lt;60</td> </tr> </tbody> </table> <p><b>Extra Credit</b> During the course you will have opportunities for extra credit assignments.</p>	Category	% Weight on Final Grade	Quizzes	10 %	Group work	10 %	Exam 1	25 %	Exam 2	25 %	Final Exam	30 %			A	94-100	A-	90-93	B+	87-89	B	83-86	B-	80-82	C+	77-79	C	70-76	D	60-69					F	<60
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**Important Dates and Deadlines** <https://www.deanza.edu/calendar/>

<b>Wednesday</b>	<b>April 6</b>	First day of Spring Quarter 2022
<b>Saturday</b>	<b>April 16</b>	Last day to add classes
<b>Sunday</b>	<b>April 17</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>April 29</b>	Last day to request "Pass/No Pass" for full-length classes
<b>Friday</b>	<b>May 27</b>	Last day to drop classes with a "W"
<b>Sat.-Monday</b>	<b>May 28-30</b>	Memorial Day Weekend – no classes
<b>Monday</b>	<b>June 20</b>	Juneteenth Holiday - no classes
<b>Tuesday</b>	<b>June 21</b> <b>1:45 – 3:45 PM</b>	Final examination <a href="https://www.deanza.edu/calendar/final-exams.html">https://www.deanza.edu/calendar/final-exams.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 7 Syllabus/Chapter R Functions, Graphs, and Models
Week 2	April 12 Chapters R&1 Differentiation	April 14 Chapter 1 Quiz 1
Week 3	April 19 Chapters 1&2 Applications of Differentiation	April 21 Chapter 2 Quiz 2
Week 4	April 26 Chapter 2	April 28 Chapter 2 Exam 1 (one hour): Chapters R,1,2
Week 5	May 3 Chapter 3 Exponential & Logarithmic Functions	May 5 Chapter 3 GW
Week 6	May 10 Chapter 3	May 12 Chapter 3 Quiz 3
Week 7	May 17 Chapter 4 Integration	May 19 Chapter 4 Quiz 4
Week 8	May 24 Chapter 4	May 26 Chapter 5 Exam 2 (one hour): Chapters 3-4
Week 9	May 31 Chapter 5 Applications of Integration	June 2 Chapter 5 GW
Week 10	June 7 Chapters 5&6 Functions of Several Variables	June 9 Chapter 6 Quiz 5
Week 11	June 14 Chapter 6	June 16 Chapter 6 Review Problems
Week 12	June 21 Final Exam (two hours): Chapters R,1-6 1:45 PM - 3:45 PM	

- 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.
- HW and GW 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.