



Stony Brook University

College of Business

Course: MAT 122 Overview of Calculus

Semester: Fall 2020

Instructor: Jae Y. Lee, Ph.D.

Instructor Contact Information:

- *Office:* Omyong Hall, Room B-506
- *Phone:* (132) 626-1960
- *Email:* Jaeyeong.Lee@sunykorea.ac.kr
- *Office Hours:* Tuesdays & Thursdays 10~11 am & 2~3 pm
- *TA Information :* TBD
 - Name
 - Email :
 - *Office :*
 - Office hours :

Meeting Time: Tuesdays & Thursdays 12:30 - 13:50

Location: C-107

Course Description:

The goal of this course is to ensure that you learn the basics of calculus that you will use in Business. This means that we will need to accomplish several things:

- Ensure that you have fluency with functions and graphs.
- Ensure that you are comfortable and conversant with the underlying concepts of Differential and Integral Calculus.
- Be able to apply the above to problems in the business world. Fluency in understanding the language of Calculus is essential for success in Business.

The text is Calculus and it's Applications (11th edition), by Bittinger, Ellenbogen, and Surgent.

Course Prerequisites:

In order to take MAT122, you must have either

- Passed MAP103 with a grade of C or better, or
- Received a score of level 3 or better on the math placement exam.

Homework

-Most weeks you will have paper homework problems that you must hand in at recitation.

Homework is due at the beginning of your recitation class.

-Homework assignments will be posted on the Assignments page in Blackboard or Classting app in your smart phone. You must access the assignments via these links in order for your grade to be recorded in the Blackboard grade book.

-If you are having difficulty understanding a topic, we suggest that you meet with your TA, or go to your professor's office hours.

Exams

-There will be two non-cumulative (mid-term exams 1 & 2) or one cumulative exam (final exam)

-Exam time would in the syllabus and will vary according to the final exam schedule.

We do not give makeup exams but instead replace an exam missed for a valid reason by a grade computed on the balance of the work in the course.

Grading System:

-The table below shows the grading allocation for the course.

-You will need a 90% course average to receive a final grade of A(A- or A), 80% for a B(from B- to B+), and 70% for a C(from C- to C+), etc...

-I will also use plus and minus final letter grades. I do not "curve" grades, meaning that potentially everyone in the class can earn an A.

Midterm 1	Midterm 2	Final Exam	Assignment	Attendance
25%	25%	35%	10%	5%

Blackboard

Please check Blackboard frequently. Assignments, announcements, grades, etc. will be posted on Blackboard. When items are posted, you will receive an email informing you of the fact. At that point, you will be presumed to know what has been posted. We suggest that you check Blackboard before you email your TA or professor.

Class Schedule: MAT-122, Fall 2020 (Blue : on Campus in Person)

Class	Date	Chapter	Topic
1	8/25	R.1	Administrative material
2	8/27	R.2	Functions and Graphs
3	9/1	R.3	Domain and Range
4	9/3	R.4	Slope
5	9/8	R.5	Linear equations and graphs
6	9/10	R.6	Nonlinear Functions and Models
7	9/15	1.1 & 1.2	Limits
8	9/17	1.3 & 1.4	Average rates of change
9	9/22	1.5 & 1.6	Derivative Rules
10	9/24	R.1-1.6	Midterm Exam 1
	9/29	No Class	Chuseok (Korean Thanksgiving)
	10/1	No Class	Chuseok (Korean Thanksgiving)
11	10/6	1.7	The Chain Rule
12	10/8	1.8	Higher-Order Derivative
13	10/13	2.1 & 2.2	The First & Second derivatives
14	10/15	2.5 & 2.7	Maximum-Minimum Problems, Elasticity of Demand
15	10/20	3.1	Exponential/Logarithmic Functions
16	10/22	3.2	Exponential/Logarithmic Functions
17	10/27	3.3 ~ 3.4	Applications
18	10/29	3.5 ~ 3.6	Applications
19	11/3	1.7 ~ 3.6	Midterm Exam 2
20	11/5	4.1	Anti-differentiation
21	11/10	4.2	Anti-derivatives ad Areas
22	11/12	4.3	Area and Definite Integrals
23	11/17	4.4	Properties of Definite Integrals
24	11/19	4.5	Substitution Techniques
25	11/24	5.1	Consumer Surplus & Producer Surplus
26	11/26	5.2	Integrating Growth and Decay Models
27	12/1	5.4	Probability
28	12/3	R.1~5.4	Total Review
	12/8 or 10	Comprehensive	Final Exam (12:30-15:00)