Applied Business Calculus

BUS 1100

Instructor Information

Phone:
Email:

Office Location:

Office Hours

Course Description

This course is an introduction to differential and integral calculus as applied to business. Topics include rational, exponential, and logarithmic functions, modeling, limits, graphing equations, differentiation, and integration. Emphasis is placed on how these tools can be used to solve business problems.

Pre-Requisite(s): MATH 1050 or MATH 1090.
Semester(s): All

This course is an introduction to Calculus as applied to business related problems. The course will examine the concepts of functions and limits, graphical characteristics of equations, differentiation and integration and their applications, and specific applications of calculus in solving business related problems. Topics such as, functions and mathematical modeling, differentiation, integration and their applications, differentiation and integration of exponentiation and logarithmic functions and their applications will be examined in detail. Also, use of computers in modeling and analysis of these problems will be introduced.

Course Student Learning Outcomes

- Use functions to model problems related to business.

- Find the rate of change of a function using the process of differentiation.

- Use differentiation to solve problems related to business.

- Work with exponential and logarithmic functions.

- Find the area under a curve using the process of anti-differentiation (integration).

- Use integration to solve problems related to business.

- Solve business problems using calculus during class discussions and in groups.

- Use technology to assist in solving calculus problems related to business.

College Wide Student Learning Outcomes

- ASLO Course Objectives/Student Outcomes Assessments 1. Acquiring substantive knowledge in the field of their choice 1. Analyze the theorems of derivatives and integration. 1. Apply derivatives to maximum revenues and minimum costs business problems. 2. Communicating effectively 2. Contrast and compare the different approaches in solving business problems by using Calculus techniques 2. Measure students' understanding of Calculus techniques by student oral participation in class discussions. 3. Developing quantitative literacies 3. Perform numerous real-world problems during class discussions by using the rules of differentiations and integration. 3. Appraise students' understanding by five tests during the semester. 4. Thinking critically 4. Relate the problems solved in class to business applications. 4. Evaluate students' understanding by evaluating their comments in class discussions. 5. Developing the knowledge and skills to be civically engaged 5. Challenge the Calculus students to be math tutors for middle and high school students. 5. Judge the students' involvement in civic affairs at

Course Prerequisites

Prerequisites: Math 1050/1090 or equivalent

Transfer/Certification/Licensure/Employment Information

This course is required for Accounting majors and also for some transfer students to 4 year institutions.

Communication Plan

Example language:

I will respond to email within 24 hours

I will offer feedback on major assignments in one week

The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

Keys for Success (how to succeed in the course)

You should practice the problems from each section of the chapters we are going to cover. The answers to add numbered problems are provided in the back of your book. You should try these odd number problems. You must do the odd numbered problems from each section of the chapter before doing the homework and other assignments.

Homework will consist of text reading and problem assignments. The odd problems from each section to be covered should be done by the student.

This is a course where you must do the practice test problems to learn the material. If you choose not to do the practice tests, plan on doing poorly on exams.

Course Content Warnings/Trigger Warnings

This is a course where you must do the practice test problems to learn the material. If you choose not to do the practice tests, plan on doing poorly on exams.The course modules have a number of resources including examples, videos, and help showing step-by-step solutions to the problems you may have questions on. You also have practice tests and solutions of these practice tests for each chapter in the modules.Make

sure to explore each course module. Take advantage of the resources available in the course. This is the best way to achieve success in the course and score high on the tests.

Required Text or Materials

Title: Calculus and Its Applications
Subtitle: Calculus And Its Applications Plus MyMathLab with Pearson eText, 11/e (available from course web-site)
ISBN: This is an all inclusive course. THe course material is available through the course website.
Authors: M.L. Bittinger, David Ellenbogen, and Scott A. Surgent
Publisher: Pearson Education
Publication Date: 2016
Edition: Eleventh Edition
OID: N/A

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Brief Description of Assignments/Exams

You are required to complete and turn-in homework, quizzes, and exams for the course. These are to be completed and submitted online using My Math Lab. The due dates for the homework, quizzes, and exams are provided in the weekly schedule in Canvas Course home page.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Any Questions? (optional)	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
12/7	Test 5 (Sections 2.5, 3.3, 3.4, 4.1 to 4.4 and 5.1,5.2))	Assignment	30
8/30	Home Work 1 CHAPTER R (SECTIONS R.1, R.2,R.3)	Assignment	38
8/30	Introductory Discussion	Discussion	10
8/30	QUIZ 1 Chapter R (Sections R R.1 R.2 R.3)	Assignment	20
9/6	Home Work 2 CHAPTER R (SECTIONS R.4, R.5,R.6)	Assignment	30
9/6	QUIZ 2 Chapter R (Sections R R.4 R.5 R.6)	Assignment	20
9/13	Test 1 Chapter R (Sections R	Assignment	50
9/20	Home Work 3 CHAPTER 1 (SECTIONS 1.1, 1.2,1.3)	Assignment	20
9/20	QUIZ 3 Chapter 1 (Sections 1.1,1.2,1.3)	Assignment	20

| 9/27 | [Home Work 4 CHAPTER 1 (SECTIONS 1.4, 1.5,1.6)](#) | Assignment | 25 |

Due Date	Assignment Name	Assignment Type	Points
9/27	QUIZ_4 Chapter 1 (Sections 1.4,1.5,1.6)	Assignment	20
10/4	Chapter 1 Discussion	Discussion	10
10/4	Test 2 Chapter 1 (Sections 1.1 to 1.6)	Assignment	41
10/11	Home Work 5_CHAPTER 2 (SECTIONS 2.1, 2.2)	Assignment	13
10/11	QUIZ_5 Chapter 2 (Sections 2.1,2.2)	Assignment	10
10/18	Home Work 6_CHAPTER 2 (SECTIONS 2.4, 2.5)	Assignment	20
10/18	QUIZ_6 Chapter 2 (Sections 2.4,2.5)	Assignment	10
10/25	Chapter 2 Discussion	Discussion	10
10/25	Test 3 Chapter 2 (Sections 2.1, 2.2, 2.4 and 2.5)	Assignment	22
11/1	Home Work 7_CHAPTER 3 (SECTIONS 3.1, 3.2)	Assignment	28
11/1	QUIZ_7 Chapter 3 (Sections 3.1,3.2)	Assignment	25
11/8	Home Work 8_CHAPTER 3 (SECTIONS 3.3, 3.4)	Assignment	20

| 11/8 | [QUIZ_8 Chapter 3 (Sections 3.3,3.4)](#) | Assignment | 15 |

Due Date	Assignment Name	Assignment Type	Points
11/15	Chapter 3 Discussion	Discussion	10
11/22	Home Work 9_CHAPTER 4 (SECTIONS 4.1,4.2,4.3.4.4)	Assignment	40
11/22	QUIZ_9 Chapter 4 (Sections 4.1.4.2,4.3,4.4)	Assignment	32
11/29	Home Work 10_CHAPTER 5 (SECTIONS 5.1, 5.2)	Assignment	10
11/29	QUIZ_10 Chapter 5 (Sections 5.1,5.2)	Assignment	13
12/6	Chapter 4 Discussion	Discussion	10
12/6	Test 4_ Chapter 3 (Sections 3.1, 3.2, 3.3 and 3.4)	Assignment	25

Grading Scale

Grades will be assigned based on a percentage of points earned throughout the semester.

Exams and Assignments	Points
Discussion	5%
Home Work Assignments	20%
Quizzes	20%
Mid- Term Exams (Tests 1 to 4) 55.0% 10.	35%
Final Exam	20%
Total	100%

93.0 - 100 A	80.0 - 82.9 B-	67.0 – 69.9 D+
90.0 - 92.9 A-	77 .0 - 79.9 C+	63.0 – 66.9 D
87.0 - 89.9 B+	73.0 - 76.9 C	60.0 – 62.9 D-
83.0 - 86.9 B	70.0 -72.9 C-	< 60.0 E

How to Navigate to Canvas

Online Tutoring

Students at SLCC have access to online tutoring through Canvas. From your Canvas course click Online Tutoring in the course navigation and follow the steps to set up an appointment. If this is your first time using the Online Tutoring we recommend you click "Take a Tour" to familiarize yourself with the service.

Note that students only receive 480 minutes of tutoring time each semester. After that we encourage you to use the resources found through this link: https://www.slcc.edu/tutoring/index.aspx

If you have any additional questions reach out to elearningsupport@slcc.edu.

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements.

By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar