Southern New Hampshire University

Undergraduate Course Syllabus

MAT 210: Applied Calculus I

Center: Online

Course Prerequisites

None

Course Description

This is an introductory course in single-variable calculus. Topics include limits, continuity, derivatives, differentiation, integration and the Fundamental Theorem of Calculus. Students will gain experience solving real-world problems involving calculus, including problems in business, economics, natural sciences and social sciences. Students may not take both MAT 210 and MAT 225 for credit.

Course Outcomes

- Find limits of functions
- Determine whether and where a polynomial, rational, logarithmic and exponential function is continuous
- Compute derivatives of polynomial, rational, logarithmic and exponential functions
- Compute integrals of polynomial, rational, logarithmic and exponential functions
- Recognize and solve problems requiring the Fundamental Theorem of Calculus.
- Calculate and interpret a variety of applied calculus problems.

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, MBS Direct, rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

Access code for MyMathLab, which includes the following eBook:

MAT-210: MyMathLab Access Code
Pearson Custom
12th Edition
2011
ISBN: 978-1-269-21017-1

Optional Materials

Additional Calculus Topics for Calculus for Business, Economics, Life Sciences & Social Sciences (physical textbook)

Barnett

Prentice Hall, Inc.

12th Edition

2011

ISBN: 978-0-321-65509-7

Calculus for Business, Economics, Life Science, and Social Sciences (physical textbook)

Barnett

Prentice Hall, Inc.

12th Edition

2011

ISBN: 978-0-321-61399-8

Technology Requirements/Recommendation

Graphing calculator highly recommended.

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions forum in Blackboard so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussion	8	25	200
MyMathLab Homework Problems	6	50	300
Final Project	1	200	200
MyMathLab Final Exam	1	300	300
		Total Course Points:	1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Undergraduate

		Total Points.	1,000	
Grade	**Numerical Equivalent**	**Points**	**Points Equivalent**	
			Lower	*Upper*
A	93-100	4	930	1000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
B	83-86	3	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
C	73-76	2	730	769
C-	70-72	1.67	700	729
D+	67-69	1.33	670	699
D	60-66	1	600	669
F	0-59	0	0	599
I	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end of term)			
W	Withdrawn			

*Please refer to the policy page for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. Assignments and discussion board posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Linear Equations and Graphs *Calculus for Business, Economics, Life Sciences, and Social Sciences*, Chapters 1 and 2 1-1 Discussion: Module One Discussion 1-2 Final Project: Introduction 1-3 Homework One: MyMathLab Orientation

2	Limits *Calculus for Business, Economics, Life Sciences, and Social Sciences*, Sections 3.1-3.3 2-1 Discussion: Module Two Discussion 2-2 Final Project: Ideas 2-3 Homework Two: MyMathLab	
3	The Derivative *Calculus for Business, Economics, Life Sciences, and Social Sciences*, Sections 3.4-3.7 3-1 Discussion: Module Three Discussion 3-2 Final Project Milestone One: Topic and Overview 3-3 Homework Three: MyMathLab	
4	Additional Derivative Topics *Calculus for Business, Economics, Life Sciences, and Social Sciences*, Sections 4.1-4.4 4-1 Discussion: Module Four Discussion 4-2 Final Project: Continue Working 4-3 Homework Four: MyMathLab	
5	Graphing *Calculus for Business, Economics, Life Sciences, and Social Sciences*, Sections 5.1-5.3 5-1 Discussion: Module Five Discussion 5-2 Final Project Milestone Two: Outline 5-3 Homework Five: MyMathLab	
6	Graphing Continued, Optimization, Antiderivatives *Calculus for Business, Economics, Life Sciences, and Social Sciences*, Sections 5.4-6.1 6-1 Discussion: Module Six Discussion 6-2 Final Project: Continue Working 6-3 Homework Six: MyMathLab	
7	Integration *Calculus for Business, Economics, Life Sciences, and Social Sciences*, Sections 6.2-6.5 7-1 Discussion: Module Seven Discussion 7-2 Final Project Milestone Three: Final Project Submission 7-3 Homework Seven: MyMathLab	
8	Work Time and Reflection 8-1 Discussion: Module Eight Discussion 8-2 Final Exam: MyMathLab	

Attendance Policy

Online students are required to post to the Blackboard discussion board during the first week of class. If a student does not submit a posting to the discussion board during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the full attendance policy.

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the full late assignment policy.

SNHU College of Online and Continuing Education Guide to Student Success

Review the guide to student success.

Diversity and Disability Statement

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as possible. We will work with you and your instructor to address needs and concerns. We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services.

SNHU does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, citizenship, marital status, gender identity or expression, sexual orientation, veteran/military status, or genetic information in its programs and activities. Requests for disabilities accommodations within COCE should be directed to:

Disability Resource Center (DRC)
(866) 305-9430
(877) 520-8916 (fax)
drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns. We look forward to hearing from you.

Complaints regarding discrimination and accommodations should be directed to:

(603) 645-9664
(603) 645-9717 (fax)
adacompliance@snhu.edu

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the full academic honesty policy.

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the full copyright policy.

SNHU College of Online and Continuing Education Withdrawal Policy

Review the full withdrawal policy.

Southern New Hampshire University Policies

More information about SNHU policies can be found on the policy page.