

Undergraduate Course Syllabus

MAT 130: Applied Finite Mathematics

Center: Online

Course Prerequisites

None

Course Description

This course is designed to prepare students for other courses in the core curriculum and in their majors and to provide a basis for making decisions in life after graduation. Topics include mathematics of finance, probability and counting, descriptive statistics and basic linear regression. (Students who have successfully completed MAT 120 or MAT 150 may not register for MAT 130).

Course Outcomes

- Estimate a reasonable answer to a problem
- Judge whether an answer seems correct
- Collect, organize, and describe qualitative and quantitative data (Integration, Application, and Reflection and Communication)
- Solve a variety of finance problems (Knowledge of Human Cultures and the Physical and Natural World)
- Distinguish theoretical and empirical probabilities
- Use spreadsheet technology to:
 - Graph data sets
 - Calculate descriptive statistics
 - Create a loan payment schedule

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, <u>MBS Direct</u>, 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.

IMPORTANT: One or more assessments in this course will be remotely proctored. A webcam, a microphone, and Google Chrome are required to complete the exam(s).

MyStatLab Access Code (with access to Statistics: Informed Decisions Using Data)

Pearson Custom

2nd Edition

2013

ISBN: 978-1-269-21141-3

You are required to purchase a MyStatLab access code. Access to MyStatLab includes an electronic copy of the textbook. If, in addition to the electronic copy of the textbook, you would like to purchase a hard copy, you may do so as well, though this is not required. This access code and optional textbook can be purchased through the SNHU
Bookstore. Please note that MyStatLab uses Adobe Flash and therefore cannot be used on an iPad.

Optional Materials

Statistics - With CD (physical textbook)
Sullivan
Pearson Custom
2nd Edition
2013

ISBN: 978-1-256-74221-0

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	1	20	20
Problem Sets	8	100	800
Exams	4	200	800
		Total Course Points:	1,620

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.

	-	Total Points:	1,620	
<u>Grade</u>	Numerical Equivalent	<u>Points</u>	Points Equivalent	
			Lower	Upper
Α	93-100	4	930	1000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
В	83-86	3	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
С	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
ı	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end of term)			
W	Withdrawn			

^{*}Please refer to the <u>policy page</u> 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	Basic Statistics: Data Types and Sampling Methods
	Reading: Statistics: Informed Decisions Using Data, Chapter 1, Sections 1.1–1.4
	1-1 Discussion: Getting Started
	1-2 Discussion: Basic Statistics: Data Types and Sampling Methods (optional)
	1-3 MyMathLab Orientation Activity
	1-4 MyMathLab Problem Set: Module One
	1-5 Getting Started With Proctoring
2	Displaying Data
	Reading: Statistics: Informed Decisions Using Data, Chapter 2, Sections 2.1, 2.2, and 2.4
	2-1 Discussion: Displaying Data (optional)
	2-2 MyMathLab Problem Set: Module Two
	2-3 MyMathLab Exam: Chapters 1 and 2

3	Numerically Summarizing Data				
	Reading: Statistics: Informed Decisions Using Data, Chapter 3				
	3-1 Discussion: Numerically Summarizing Data (optional)				
	3-2 MyMathLab Problem Set: Module Three				
4	Describing the Relation Between Two Variables: Correlation and Regression				
	Reading: Statistics: Informed Decisions Using Data, Chapter 4, Sections 4.1 and 4.2				
	4-1 Discussion: Describing the Relation Between Two Variables: Correlation and Regression (optional				
	4-2 MyMathLab Problem Set: Module Four				
	4-3 MyMathLab Exam: Chapters 3 and 4 (Remotely Proctored)				
5	Rules of Probability				
	Reading: Statistics: Informed Decisions Using Data, Chapter 5, Sections 5.1–5.3				
	5-1 Discussion: Rules of Probability (optional)				
	5-2 MyMathLab Problem Set: Module Five				
6	Conditional Probability and Counting				
	Reading: Statistics: Informed Decisions Using Data, Chapter 5, Sections 5.4–5.6				
	6-1 Discussion: Conditional Probability and Counting (optional)				
	6-2 MyMathLab Problem Set: Module Six				
	6-3 MyMathLab Exam: Chapter 5 (Remotely Proctored)				
7	Mathematics of Finance: Simple and Compound Interest				
	Reading: Statistics: Informed Decisions Using Data, Chapter F, Sections F1 and F2				
	7-1 Discussion: Mathematics of Finance: Simple and Compound Interest (optional)				
	7-2 MyMathLab Problem Set: Module Seven				
8	Mathematics of Finance: Annuities and Loans				
	Reading: Statistics: Informed Decisions Using Data, Chapter F, Sections F3 and F4				
	8-1 Discussion: Mathematics of Finance: Annuities and Loans (optional)				
	8-2 MyMathLab Problem Set: Module Eight				
	8-3 MyMathLab Exam: Chapter F				

Attendance Policy

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

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 <u>full late assignment policy</u>.

SNHU College of Online and Continuing Education Student Handbook

Review the student handbook.

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 <u>full academic honesty policy</u>.

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 <u>full copyright policy</u>.

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.

Assessment Calibration and Student Work Samples

For the purpose of continuous improvement of our educational training, Southern New Hampshire University's College of Online and Continuing Education may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you have any questions or concerns, contact your advisor. If you would like to withdraw permission for use of your work, please contact the assessment calibration administrator at assessmentcalibration@snhu.edu. See this document for more information.