

Framingham State University
Syllabus
MATH 107: BUSINESS STATISTICS
Summer 2018

General Information

Session: Summer 2018(May 28th,2018-June 29th ,2018)

Credit: 4

Teaching Hours: 50 Hours

Time: 2 hours/day, Mon.-Fri.

Instructor: Joann Gu

Home Institution: Framingham State University

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COURSE DESCRIPTION

MATH107: This introductory course provides the students with statistical concepts and models used to conducting quantitative research for business students. Students will explore statistical methods for understanding and manipulating data, planning on data analysis, testing hypothesis, and report statistical analysis results. Students will also be prepared to get hands-on experiences with data analysis using computer software. Credit: 4-hrs.

Prerequisites: Basic math.

The Goal of this course is for students to develop statistical literacy in business related research and be able to understand and conduct basic data analysis.

Learning Objectives By the end of the course, students should be able to:

- Develop an appreciation for the role of statistics in business and commercial research as well as in our everyday life;
- Have a reasonable knowledge about the basic language of descriptive and inferential statistics;
- Understand the conceptual basis for statistics;
- Develop skills to organize and present data using fundamental statistics;
- Conduct basic statistical analysis with SPSS and interpret the results;
- Develop an appreciation for the quality of research and statistics discussed in social research literature, government publications and mass media.

Course Requirements: The content of this course will be delivered in forms of readings, lectures, class discussions, assignments, and exams. A decent calculator and a USB flash drive (>1 GB) are needed in all classes. It is important that you finish reading the chapter contents before each class. You need to have a plan to obtain class notes from other students for the subjects covered should you be absent from any classes.

Class Participation: Active participation in class is an effective way to learn new concepts and internalize knowledge. Read the chapter content before each class so you will be prepared to participate in the class. Needless to say, that attendance is an essential part of this participation.

Classroom Behavior: Classroom behavior that distracts students and faculty is not acceptable, such as using a cellphone, surfing the internet, checking email, and listening to music, etc.

Assignments and Class Exercises: Homework assignments will be given at the end of each chapter. This may include some computer lab exercises. Students are encouraged to do the homework in groups to further the discussions and help each other. Homework assignments need to be turned in before the next class in paper or on Canvas. Homework will only be graded on the effort not the right or wrong answers.

Exams: There will be weekly quizzes and a final exam. They will be in-class and individual work. Make- up exams will only be given in the cases of documented serious illness or serious personal emergency.

Computer Software: A statistical software SPSS (Statistical Package for the Social Sciences www.spss.com) will be

introduced to the class.

EVALUATION OF PERFORMANCE Grades will be determined by the performance of in class participation, assignments, quizzes, and the final exam. All the graded work will be scored out of 100, and the final evaluation for the course work will be weighed as follows:

- Class participation 20%
- Assignment work 30%
- Quizzes (4): 20%
- Final exam: 30%

Grades will be assigned according to the following scale:

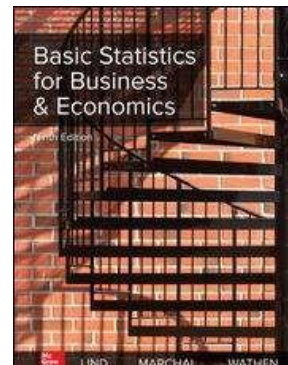
A	93 - 100 points	C	73 - 76
A-	90 - 92	C-	70 - 72
B+	87 - 89	D+	67 - 69
B	83 - 86	D	63 - 66
B-	80 - 82	D-	60 - 62
C+	77 - 79	F	59 or lower

REQUIRED TEXT

Basic Statistics for Business and Economics, 9th Edition
Author: Douglas Lind and William Marchal and Sael Wathen

Publisher: McGraw-Hill Education Copyright
Year: 2019

Rental: also available for \$78
ISBN10: 1260187500 | ISBN13: 9781260187502



COURSE SCHEDULE (subject to adjustment)

Last update: 3/6/2018

Week	Date	Class Topics	Reading
1	May 28	Course introduction Syllabus & logistics Basic math MS Excel & SPSS	Prologue
1	May 29	What is Statistics? Role of statistics in the research process Research terminologies Levels of measurement	Lind CH1
1	May 30	Describing Data: Frequency Tables, Frequency Distributions, and Graphic Presentation	Chapter 2
1	May 31	Describing Data: Numerical Measures	Chapter 3
1	Jun 1	Review of Chapters 1-3, Quiz #1	
2	Jun 4	Describing Data: Displaying and Exploring Data, Measure of Dispersion	Chapter 4
2	Jun 5	Describing Data: Normal Curve	Chapter 4
2	Jun 6	A Survey of Probability Concepts	Chapter 5
2	Jun 7	Discrete Probability Distribution	Chapter 6
2	Jun 8	Review of Chapters 4-6, Quiz #2	
3	Jun 11	Continuous Probability Distribution	Chapter 7
3	Jun 12	Sampling Methods and the Central Limit Theorem	Chapter 8
3	Jun 13	Estimation and Confidence Intervals	Chapter 9
3	Jun 14	Estimation and Confidence Intervals	Chapter 9
3	Jun 15	Review of Chapters 7-9, Quiz #3	
4	Jun 18	One-Sample Tests of Hypothesis	Chapter 10
4	Jun 19	One-Sample Tests of Hypothesis	Chapter 10
4	Jun 20	Two-Sample Tests of Hypothesis	Chapter 11
4	Jun 21	Two-Sample Tests of Hypothesis	Chapter 11
4	Jun 22	Review of Chapters 10-11, Quiz #4	
5	Jun 25	Correlation and Linear Regression	Chapter 13
5	Jun 26	Correlation and Linear Regression	Chapter 13
5	Jun 27	Multiple Regression Analysis	Chapter 14
5	Jun 28	Multiple Regression Analysis	Chapter 14
5	Jun 29	Review of Chapters 13-14, Final Exam	

All students are expected to be familiar with the academic regulations, including those regarding Academic Integrity, for Salem State University as published in the university catalog.

Academic Integrity

The University assumes that all students come to Framingham State University with serious educational intent and expects them to be mature, responsible individuals who will exhibit high standards of honesty and personal conduct in their academic life. All members of the Salem State University academic community have a responsibility to ensure that scholastic honesty and academic integrity are safeguarded and maintained. Cheating and plagiarism are unfair, demoralizing, and demeaning to all of us. Cheating, plagiarism, and collusion in dishonest activities are serious acts which erode the University's educational role and cheapen and diminish the learning experience not only for the perpetrators, but also for the entire community. It is expected that Salem State University students will understand and subscribe to the ideal of academic integrity and that they will be willing to bear individual responsibility for their work. Materials (written or otherwise) submitted to fulfill academic requirements must represent a student's own efforts.

Please refer to definition of plagiarism and cheating found on the FSU website:
http://catalog.framinghamstat.edu/content.php?catoid=19&navoid=2098#Academic_Integrity

Critical Emergencies

In the event of a critical emergency, please refer to the alternative educational plans for this course. Students should review the plans and gather all required materials before an emergency is declared.

Equal Access

Framingham State University is committed to providing equal access to the educational experience for all students in compliance with Section 504 of The Rehabilitation Act and The Americans with Disabilities Act and to providing all reasonable academic accommodations, aids and adjustments. Any student who has a documented disability requiring an accommodation, aid or adjustment should speak with the instructor immediately. Students with disabilities who have not previously done so should provide documentation to and schedule an appointment with Disability Services and obtain appropriate services.

Statement of Inclusivity

This class respects and welcomes students of all backgrounds, identities, and abilities. If there are circumstances that make our learning environment and activities difficult, if you have medical information that you need to share with me, or if you need specific arrangements, please let me know. I am committed to creating an effective learning environment for all students, but I can only do so if you discuss your needs with me as early as possible. I promise to maintain the confidentiality of these discussions.