

Applied Business Statistics 52:135:216:90

Syllabus, 2018 Spring

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Office Hours:	By appointment
Class meetings:	Distance Learning

Required Text, Online Tools and Software

The required text for this course is:

Statistics for Business -Decision Making and Analysis (2014, 2nd ed.), by R. Stine and D. Foster
ISBN-13: 9780321890269

Access and purchase of these materials needs to happen through this course space. See Accessing eText and MyLab under Course Dashboard for instructions.

Please note that students who are in the fully online program will be able to access the eText and MyLabs (including the Multimedia Library) at no additional cost. Students who are not part of the fully online program will be required to purchase the eText and MyLab access. (see below)

NOTE: There is no need to purchase the hard copy textbook as MyLab access includes your access to the etext. *If you feel you need a hard copy to study, that is at your own expense and can be purchased at the university book store.*

Accessing eText and MyStatLab

You will also need to access the MyStatLab materials associated with this text. The eBook and MyLab materials for this product are found **in this course**—in the eBook and in Course Home (MSL Quizzes/Tests, MSL Homework, StatCrunch, Tools for Success, and Support). Links to these items are also found in the modules.

Due to different fee structures for online students, access to certain eTexts and course materials is included in their tuition/course fee. How you access these materials in this course depends on your type of enrollment:

- Students who are **fully online students** in the **Bachelor of Arts in Business Administration program** will get access to these materials at **no additional charge**. A fully online student means you are taking all classes toward your degree online.
- Students who are **not** part of that fully online program—students who are on-ground or hybrid—will need to **purchase access from within this course**.

Accessing the eBook and MyStatLab Materials

To initiate access of the materials:

1. Go to any links to the eBook or to any of the MyStatLab materials in this course (e.g., MSL Homework or Tools for Success) in Course Home, or links to these items in any of the numbered course modules.
2. You will be prompted to accept the user agreement and privacy policy, and then you will be prompted to select your access option:
 - *Students who are in the fully online Bachelor of Arts in Business Administration program:* Select "Access Code," then enter the access code that was given to you by your executive coach. If you did not receive your access code, please contact your executive coach at studentsupport@online.rutgers.edu or you can call [866-890-2578](tel:866-890-2578).
 - *Students who are **not** in this fully online program:* Select "Buy Now," then select the link to purchase *MyStatLabPlus for Statistics for Business: Decision Making and Analysis*, 2nd ed. by Stine and Foster.
3. Note that you will only have to do this the first time you access the materials.

If you are unsure about which type of enrollment you fall under, please contact Christine Ebner at Christine.ebner@camden.rutgers.edu

I COURSE GOALS AND OBJECTIVES

This course will provide students of business with additional statistical tools used in all fields for analyzing data in support of decision making. Instead of focusing on theoretical formulae, students will learn to apply these tools for analyzing and interpreting data routinely collected by all entities in order to formulate marketing strategies, business/financial plans and investment decisions. This course will provide the knowledge base, experience in the use of statistical software, and practical examples of how to select and apply appropriate statistical techniques, and to interpret and communicate results. Students will collect and analyze data on a business and present a research report.

By the end of this course, you should be able to:

1. Collecting and analyzing data
2. Use graphs and charts
3. Determine Margin of Error and Sample Size
4. Test Hypothesis and Analysis of Variance
5. Apply Nonparametric Statistical Methods of Data Analysis
6. Explain the utility of Simple Regression & Correlation
7. Explain the utility of Multiple Regression and Time Series Forecasting
8. Design and Manage Questionnaires and Surveys
9. Use online Survey Tools using Excel and other statistical software packages (e.g. SPSS, MiniTab, StatCrunch).

II COURSE DESIGN

This online course is designed to provide a variety of learning experiences and opportunities. Class activities will include some or all of the following: videos, class discussion, lecture, exams, quizzes, and class and group exercises. In order for you to maximize your learning experience, you will need to prepare by reading the assigned material and completing assigned. Lecture coverage of textbook material will be brief, and is intended to introduce you to the principles, theories, concepts, and techniques, rather than to substitute for your independent study of the assigned material.

For each topic covered, an outline in the form of a PowerPoint presentation will be posted on Canvas. Please note that the outlines are not sufficient for performing well on exams, you will need to read and understand the material in your text. The exams will require in-depth knowledge of the assigned material in your textbook and other readings.

III STUDENT EVALUATION

Summary of Assessment Points and Grading Scale

Student grades for this course will be calculated as follows:

Discussion Board	10%
Case Study	10%
Midterm Exam	15%
Final Exam	20%
Quizzes	20%
Homework	25%
Total	100 pts

Grading will be based on a 100 point scale, and final grades will be determined using the following scale:

Letter Grade	Points Range	Definition	Numerical Equivalent
A	90-100	Outstanding	4.0
B+	85-89	Very Good	3.5
B	80-84	Good	3.0
C+	75-80	Satisfactory	2.5
C	70-74	Acceptable	2.0
D	60-69	Poor	1.0
F	Below 60	Failing	0.0

IV ASSIGNMENTS

Discussion Board Activity (10% of grade)

There will be discussion board activities in this course. Discussions may involve any combination of prepared materials, journal articles, textbook readings, videos, or other resources each week.

Students are expected to create at least **one Discussion Thread by Day 4 (Thursday) of each week that a Discussion topic is assigned and then by Day 7 (Sunday) have responded to at least two other posted threads by other students in the class.** All postings including responses are to be substantive and further the discussion of the topic of interest.

Postings on the discussion board must reflect student's reading and comprehension of the assigned readings and/or related discussion activity. Discussion postings must reflect the ability to synthesize concepts presented through writing at a college level. The minimum length of a post is 100 words not including references listed.

Written Case Study (10% of grade)

For this assignment, you will be given a business to perform an analysis. Your paper must be central to business models and the statistical methods/calculations used in determining the financial decisions and health of an organization. In Week 3 of the course the instructor will provide the name of an organization to perform your research. The data in your study needs to be supported by acceptable references (Wikipedia and Blogs are not acceptable references). You are to use your knowledge of business statistics to provide the basis for your study. Your study will be graded using the criteria noted in the rubric.

Grading Criteria	Maximum Points
Clearly stated (in the introduction) the primary area or areas student is providing for his/her detailed analysis on company selected.	10
Provided relevant financial data that business leaders would use to understand the financial health of their organization. Also provided data that business leaders would be able to use to make sound business decisions.	20
Provided an analysis of the current financial health of the organization. Provided analysis on what strategies were successful and which failed. Statements were well supported by peer reviewed or scholarly references. Research was thorough and appropriate for business analysis. Embedded financial	25

analysis in a narrative	
Generated alternative strategies that the organization may take to better position their business in their market segment or segments Clearly indicated student's decision criteria for the alternative strategies you proposed.	15
Provided sound recommendations and conclusions.	15
APA format, Bachelor-level writing, Written in clear and concise manner, Flawless spelling, punctuation, grammar, Must use proper file naming convention when submitting paper (i.e. Google – Smith)	15
Total	100

Formatting guidelines for written case analysis paper are as follows:

- Written in MS Word
- Maximum 6 pages in total (excluding Appendix), double-spaced, 12 font
- Title Page- 1 page
- Written Analysis - 4 pages total. **The following headings must be used:**
 - Introduction
 - Company Background and main Competitors
 - Financial Data
 - Analysis of Financial Data
 - Business Decisions/Rationale
 - Alternate Business Decisions/Rationale
 - Recommendations and Conclusion
- Reference Page – 1 page
- Appendix – As many pages as required to support analysis
- APA style and formatting required. However, no abstract is required for this paper
- Appendix page(s) to include relevant financial and key decision-making analysis relevant to the case analysis. Analysis of the financial data presented in the case is expected.
- When submitting the paper to Canvas use the following file convention: **Company Name - Student Name (i.e. Google – Smith). 5 Points will be taken of if not named properly.**

* APA Formatting: <http://www.apastyle.org/>; <http://owl.english.purdue.edu/owl/resource/560/01/>

Exams (35% of grade)

There are 2 Exams in this course (Midterm and Final). The exams will include the material covered in the textbook, lectures, PowerPoints, and Videos. MyStatLab will be used for each of the exams. The Midterm and Final Exams will be scheduled for the full period of 2 hours and 40 minutes.

The exams will be provided via MyStatLab. Students are reminded to adhere to the university's academic integrity policy. Any violations to academic integrity policy may result in receiving a failure for the course.

Quizzes (20% of grade)

There will be 4 Quizzes during the semester. The quizzes will include the material covered in the textbook, lectures, PowerPoints, and Videos. MyStatLab will be used for each of the quizzes. Students are reminded to adhere to the university's academic integrity policy. Any violations to academic integrity policy may result in receiving a failure for the course.

Homework (25% of grade)

Homework will include the material covered in the textbook, lectures, PowerPoints, and Videos. MyStatLab will be used for all homework assignments. Students are reminded to adhere to the university's academic integrity policy. Any violations to academic integrity policy may result in receiving a failure for the course.

V COURSE COMMUNICATION

All updates or changes to the syllabus and other important communications will be posted on the course website at <https://onlinelearning.rutgers.edu/canvas-login>. Developed materials will be made available on the website as well.

Please go to <https://onlinelearning.rutgers.edu/canvas-login> as soon as possible after the beginning of the semester and ensure that you are able to access the course. If you are properly registered for the course, this class should appear on your Canvas - Rutgers Online homepage after you have logged in (using your assigned username and password).

Email communication should be sent from your Rutgers University email address. You will need to check your Rutgers University email regularly. This will ensure that messages that I send to the class through the system will be forwarded to your email address.

VI ATTENDANCE

You will be required to post all assignments for the week when due and take an active part in the threaded discussions as scheduled. This means that you will be expected to post at least 3 substantive postings (min 100 words) in the threaded discussions during the course.

VII ACADEMIC INTEGRITY

Academic integrity requires that all academic work be wholly the product of an identified individual or individuals. Joint efforts are only legitimate when the assistance of others is explicitly acknowledged...The principles of academic integrity entail simple standards of honesty and truth. Each member of the university has a responsibility to uphold the standards of the community and to take action when others violate them...Students are responsible for

knowing what the standards are and for adhering to them. Students should also bring any violations of which they are aware to the attention of their instructors.

Students are expected to know, understand and adhere to the policies on academic integrity outlined above. Procedures for violation of these policies outlined in the University Code of Academic Conduct will be followed.

Any act of dishonesty in any of the students work constitutes academic misconduct. Violations of the Student Code of Conduct are considered serious infractions of student behavior and subject to penalties relative to the level of the matter. Academic integrity matters are handled directly by the academic units. Non-academic matters are handled by the Associate Chancellor for Student Affairs. Student Policies, including the Student Code of Conduct, procedures and definitions, can be found at:

https://deanofstudents.camden.rutgers.edu/student_conduct

- In all cases, you are responsible for preparing and entering your own work and properly referencing the work of others. Cheating, plagiarism, and other types of misconduct are not acceptable. Penalties can include expulsion from the University. For the policy on Academic Integrity please see: <https://deanofstudents.camden.rutgers.edu/academic-integrity>

VIII DISABILITY STATEMENT

Students requiring accommodation should visit the website <https://learn.camden.rutgers.edu/disability-services> or contact the Camden campus Disability Coordinator (email: disabilityservices@camden.rutgers.edu). Please let me know whether you require any individual needs to support your efforts in the class.

IX INCLEMENT WEATHER CLOSING HOTLINE

Since this course is an online course, inclement weather will not impact your ability to attend class. However, here is the Inclement weather website:

<http://www.camden.rutgers.edu/about/operating-status>

The Operating Status at Rutgers University–Camden provides operating information regarding emergency and weather alerts, class cancellations, campus closures, and more.

Students can also sign up for Emergency Text Alerts. Rutgers–Camden sends emergency text alerts to subscribed users via the Emergency Notification System. You can register your cell phone number to receive alerts in the event of a campus emergency.

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52:135:216:90 Applied Business Statistics Course Calendar – Spring 2018

Due dates imply deadline of 11:59 p.m. All times are Eastern Standard.

Module	Readings	Assignments / Assessments	Due Dates
1	Chap 7-8 Lecture, PowerPoint, Videos	Set-Up MyLab MyLab: Chap 7-8: Review Subjects in Statistics (Probability) Canvas: Discussion Module 1: Student Introductions	Sunday 1/21/18
2	Chap 9-11 Lecture, PowerPoint, Videos	MyLab: Chap 9-11: Review Subjects in Statistics (Probability and Variables) Quiz 1 (Chap 7-11) Opens Monday at 00:00am and closes Sunday at 11:59pm Canvas: Discussion Module 2: Probability, Variation	Sunday 1/28/18
3	Chap 13, 14 Lecture, PowerPoint, Videos	MyLab: Chap 13: Samples and Surveys Chap 14: Sampling Variation and Quality	Sunday 2/4/18
4	Chap 15, 16 Lecture, PowerPoint, Videos	MyLab: Chap 15: Confidence Intervals Chap 16: Statistical Tests Quiz 2 (Chap 13-16) Opens Monday at 00:00am and closes Sunday at 11:59pm	Sunday 2/11/18
5	Chap 17, 18 Lecture, PowerPoint, Videos	MyLab: Chap 17: Comparison Chap 18: Inference for Counts Canvas: Discussion Module 5: Inference - Samples, Surveys, Statistical Tests	Sunday 2/18/18
6	Chap 26 Lecture, PowerPoint, Videos	MyLab: Chap 26: Analysis of Variance Midterm (Chap 13-18) Opens Monday at 00:00am and closes Sunday at 11:59pm	Sunday 2/25/18

7	Chap 19, 20 Lecture, PowerPoint, Videos	MyLab: Chap 19: Linear Patterns Chap 20: Curved Patterns Canvas: Discussion Module 7: Analysis of Variance, Linear and Curved Patterns	Sunday 3/4/18
8	Chap 21 Lecture, PowerPoint, Videos	MyLab: Chap 21: Simple Regression Model Quiz 3 (Chap 19-21, 26) Opens Monday at 00:00am and <u>closes Friday</u> at 11:59pm	Friday 3/9/18
		Spring Recess (Mar 10 - Mar 18)	
9	Chap 22 Lecture, PowerPoint, Videos	MyLab: Chap 22: Regression Diagnosis	Sunday 3/25/18
10	Chap 23 Lecture, PowerPoint, Videos	MyLab: Chap 23: Multiple Regression	Sunday 4/1/18
11	Chap 24 Lecture, PowerPoint, Videos	MyLab: Chap 24: Building Regression Models Canvas: Discussion Module 11: Regression Models	Sunday 4/8/18
12	Chap 27 Lecture, PowerPoint, Videos	MyLab: Chap 27: Time Series Quiz 4 (Chap 22-24, 27) Opens Monday at 00:00am and closes Sunday at 11:59pm	Sunday 4/15/18
13	Lecture, PowerPoint, Videos	Canvas: Written Case Study	Sunday 4/22/18
14	Chap 25 Lecture, PowerPoint, Videos	MyLab: Chap 25: Categorical Explanatory Variables Canvas: Discussion Module 14: Data Analysis	Sunday 4/29/18
		Reading Day(s)	Tue-Wed 5/1/18- 5/2/18
15	Lecture, PowerPoint, Videos	MyLab: Final Exam (Chap 19-27) Opens Thursday at 00:00am and closes Sunday at 11:59pm	Thu-Sun 5/3/18- 5/6/18

