

**Instructor:** Dr. Kerry Tan  
**Email:** kmtan@loyola.edu  
**Office:** Sellinger Hall 321  
**Office Hour:** Mondays and Wednesdays 2:00PM - 2:50PM, or by appointment

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**Course Website:** <http://moodle.loyola.edu/>

Lecture slides, quizzes, homework assignments, data sets, and other course-related material will be posted on the course website.

**Course Overview:**

This course introduces you to the concepts and applications of statistics used in business. There will be significant emphasis on the use of Microsoft Excel, a popular spreadsheet software. You will learn how to use Excel to illustrate data, calculate descriptive statistics, run regressions, and interpret the results. By the end of this course, you should confidently include your experience with Excel as a skill on your resume and LinkedIn profile, which will help you be more competitive on the job market.

The course objectives are for students to:

- Demonstrate competency in Excel, particularly in the statistical tools in Data Analysis.
- Demonstrate competency in the basics of statistics including sampling, probability, descriptive statistics, estimation, and hypothesis testing.
- Be able to successfully apply these techniques to multiple variable situations found in business disciplines.
- Demonstrate when it is appropriate to apply a specific statistical technique.
- Demonstrate the ability to define a business problem, develop hypotheses, and analyze relevant data with the appropriate statistical methods.

**Textbook:**

David Anderson, Dennis Sweeney, Thomas Williams, Jeffrey Camm, and James Cochran  
*Essentials of Modern Business Statistics with Microsoft Office Excel* (7th Edition), Cengage (2018)  
ISBN: 9781337298292

Note: Earlier editions are acceptable since they are all pretty much the same. Page numbers may differ with other editions, but we can work that out.

## **Grading Policy:**

Grades for this course will be assigned as follows:

Exam 1: 25% (February 13)

Exam 2: 25% (March 25)

Exam 3: 25% (April 29)

Quizzes: 5%

Homework Assignments: 15%

Attendance: 5%

### *Exams:*

There will be 3 exams. Exam 1 will only cover Chapters 1, 2, and 3. Exam 2 will only cover Chapters 4, 6, 8, and 9. Exam 3 will only cover Chapters 12, 14, and 15. The exams are closed book and closed notes; however, you are allowed to use one handwritten 3"x5" notecard.

Makeup exams will *not* be given without documented medical emergency or family emergency. Travel plans are *not* an emergency. It is your responsibility to plan around scheduled exam times.

### *Homework Assignments:*

3 homework assignments will be assigned in this course. The homework (and solutions) will be posted on the course website. Each homework assignment will be worth 25 points and will be graded based on accuracy. Students are encouraged to collaborate in small groups, but each student must turn in his or her own assignment. Students must hand in their homework in class on the assigned due date. No late homework will be accepted without a valid excuse.

### *Quizzes:*

9 Moodle quizzes will be administered throughout the semester. I will drop the lowest quiz grade from your final grade. Each quiz will consist of 10 multiple choice questions. As with the homework assignments, students are encouraged to collaborate in small groups. The same policy regarding makeup exams applies to quizzes.

### *Attendance:*

At the end of each lecture, you will fill out a survey that provides immediate feedback on that day's lecture. You are allowed up to 2 unexcused absences and still get a perfect attendance grade. You will get attendance credit for excused absences conditional on providing relevant documentation.

### *Grading Scale:*

Generally, final letter grades will follow the typical structure of: A (93-100), A- (90-92.99), B+ (87-89.99), B (83-86.99), B- (80-82.99), C+ (77-79.99), C (73-76.99), C- (70-72.99), D+ (67-69.99), D (60-66.99), and F (below 60). I do not typically curve grades nor do I offer extra credit.

### *Re-grade policy:*

If I miscalculated the total number of points you earned, then you can return the exam and/or homework assignment to me and I will recalculate your grade. However, if you believe that I erred in grading your exam and/or homework assignment for any other reason, then you must hand-deliver your original exam and/or homework assignment along with a typed document that outlines the following for each problem that you request to be re-graded: 1) how many points I gave you, 2) how many points you feel you deserve, and 3) a detailed explanation why you feel that you deserve more points than you received. I reserve the right to reject your request.

**Microsoft Excel:**

Students can download Microsoft Office using the following steps:

1. Go to <https://houndmail.loyola.edu/> and log in with you Loyola username and password.
2. Click on the gear icon on the upper right hand corner of the page and click on “Office 365” under “Your app settings”.
3. Click on the “Install status” tab on the left hand side of the page and then click on the “Install desktop applications” link.
4. Click the Install button and double click the installation file when the download is complete.

The Analysis ToolPak is an Excel add-in that provides data analysis tools. To load the Analysis ToolPak add-in, execute the following steps:

1. On the Tools tab, click “Excel Add-ins...”
2. Check the box for Analysis ToolPak and click the OK button.

**Students with Disabilities:**

If you are a student with a disability and you believe you may need accommodations for this course, please submit your accommodation notification request with Disability Support Services. To register for DSS or if you have any questions about disability accommodations, please contact the Disability Support Services Office at (410)617-2750 or [dss@loyola.edu](mailto:dss@loyola.edu). The office is located in Newman Towers 107 West. Please remember that accommodations are not retroactive so it is strongly encouraged you submit your notification request as early in the semester as possible.

**Academic Misconduct:**

All students are expected to understand the meaning of the Loyola Honor Code, which states:

“All students of the Loyola Community have been equally entrusted by their peers to conduct themselves honestly on all academic assignments.

The students of this University understand that having collective and individual responsibility for the ethical welfare of their peers exemplifies a commitment to the community. Students who submit materials that are the products of their own minds demonstrate respect for themselves and the community in which they study.”

Ignorance of the Code is not a valid reason for committing an act of academic dishonesty. The following constitute violations of the Code: cheating, stealing, lying, forgery, plagiarism, and the failure to report a violation. Violations of the Honor Code will be handled by the Honor Council.

**Tentative Schedule:**

<b>Date</b>	<b>Chapter Covered</b>
Jan. 14, 16	Syllabus/Ch 1 - Data and Statistics
Jan. 21	No Classes: Martin Luther King, Jr. Holiday
Jan. 23, 28	Ch 2 - Descriptive Statistics: Tabular and Graphical Displays
Jan. 30, Feb. 4	Ch 3 - Descriptive Statistics: Numerical Measures
Feb. 6	Excel Lab - Ch 1, 2, and 3
Feb. 11	Review for Exam 1
Feb. 13	EXAM 1
Feb. 18, 20	Ch 4 - Introduction to Probability & Ch 6 - Continuous Probability Distributions
Feb. 25, 27	Ch 8 - Interval Estimation
Mar. 4, 6	No Classes: Spring Break
Mar. 11, 13	Ch 9 - Hypothesis Tests
Mar. 18	Excel Lab - Ch 4, 6, 8, and 9
Mar. 20	Review for Exam 2
Mar. 25	EXAM 2
Mar. 27, Apr. 1	Ch 12 - Tests of Goodness of Fit, Independence, and Multiple Proportions
Apr. 3, 8	Ch 14 - Simple Linear Regression
Apr. 10, 15	Ch 15 - Multiple Regression
Apr. 17	Excel Lab - Ch 12, 14, and 15
Apr. 22	No Classes: Easter Break
Apr. 24	Review for Exam 3
Apr. 29 Special Date	Exam 3