Statistics for Business Analytics
OMSBA 5112 | 3 credit hours

Fall 2019

Instructor:
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COURSE DESCRIPTION

This course helps you develop the analytical skills you will need to critically evaluate business research throughout your career, and place you on a firm footing for the subsequent OMSBA courses. Through the readings, videos, online discussion, problem sets, and a case study, you will develop your skills in several areas: manage and prepare data for analysis, apply statistical decision-making tools using R, and interpret and communicate quantitative information.

LEARNING OUTCOMES

On successful completion of this course (i.e. by passing this course), you will be able to:

- manage and prepare data for analysis using R
- identify and apply the appropriate applications of multiple regression using R,
- effectively communicate the results of your findings,
- use these tools and/or their results in the management decision-making process.

TEXTS AND MATERIALS

- *R for Data* Science by Garrett Grolemund and Hadley Wickham. Materials can be found at https://r4ds.had.co.nz/

- *Happy Git and GitHub for the user* by Jenny Bryan. Materials can be found at https://happygitwithr.com/

- *An Introduction to Statistical Learning with Applications in R* by Gareth James, Daniela Witten, Trevor Hastie and Robert Tibshirani. Book can be found at http://faculty.marshall.usc.edu/gareth-james/ISL/

- *Introductory Econometrics: A Modern Approach* by Jeffrey M. Wooldridge. Both 6th and 7th editions are acceptable.

COURSE OUTLINE

1. Software Introduction and Data

2. Wrangling Data

3. Exploring Data and Basic Statistics Review

4. Simple Linear Regression

5. Multiple Linear Regression – Introduction

6. Multiple Linear Regression – Diagnostics

7. Multiple Linear Regression – Model Specifications

8. Residual Analysis – Resampling Methods

EVALUATION AND GRADING

Assignment	Percentage
Problem Sets	60%
Data Translation Challenge	40%
Total	**100%**

Point scale	Letter grade	Point scale	Letter grade
94.0% and higher	A	77.0% - 79.9%	C+
90.0% - 93.9%	A-	74.0% - 76.9%	C
87.0% - 89.9%	B+	70.0% - 73.9%	C-
84.0% - 86.9%	B		
80.0% - 83.9%	B-		

COURSE POLICIES

ATTENDANCE

Attendance in an online course is evidenced by logging into, and being an active participant, in our online course site. Active participation is an essential and intrinsic element of the education process. Absence affects the learning experience and erodes the program's norms for quality. Inactivity in the course may result in a grade reduction at the discretion of the instructor(s).

INTERNET ACCESS

We will use a variety of online applications to communicate and collaborate. As such, you will need a reliable, high-speed Internet connection for the duration of this course. If you are traveling to countries such as China, Vietnam, Saudi Arabia, Iran, Burma, and others, some content in this course may be blocked. Please contact me immediately if you will be traveling to a country that may block Internet access during any portion of this class.

LATE WORK

You are expected to turn in work on time. No late work will be accepted.

UNIVERSITY RESOURCES & POLICIES

ACADEMIC RESOURCES

- [Library and Learning Commons](#) - Research Services, Learning Assistance, Writing Center, Math Lab, Media Production Center

- [Academic Integrity](#)

ACADEMIC POLICIES

- [Academic Integrity](#)

- [Academic Grading Grievance Policy](#)

- Support for Students with Disabilities
  If you have, or think you may have, a disability (including an "invisible disability" such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to arrange support services and/or accommodations through Disabilities Services staff located in Loyola 100, (206) 296-5740. Disability-based adjustments to course expectations can be arranged only through this process.

- Office of Institutional Equity
  Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in educational programs or activities that receive Federal financial assistance. This prohibition includes sexual misconduct, which encompasses sexual harassment and sexual violence. Seattle U remains committed to providing a safe and equitable learning, living, and working environment. Seattle U offers emergency, medical, and other support resources, as well as assistance with safety and support measures, to community members who have experienced or been impacted by sexual misconduct.

  Seattle U requires all faculty and staff to notify the University's Title IX Coordinator if they become aware of any incident of sexual misconduct experienced by a student.

  For more information, please visit https://www.seattleu.edu/equity/. If you have any questions or concerns, you may also directly contact the Title IX

Coordinator in the Office of Institutional Equity by email: oie@seattleu.edu or phone: (206) 296-2824.