



Syllabus EWMBA 200S: Data and Decisions

Fall B 2017

Instructor: Veselina Dinova

Office: [REDACTED]

Email: [REDACTED]

Office hours: 7-8 pm Monday, Wednesday, Friday (via Skype or Adobe Connect) and by appointment

GSI: Adam Pugh

Email: [REDACTED]

Online discussion sessions: 8-9pm Tuesdays on Adobe Connect:

[REDACTED]

Class time

Saturdays: 9 am – 1 pm and 2 pm – 6 pm (cohorts alternate mornings and afternoons each week)

Location: Chou Hall N370

Course Objective

The objective of the course is to provide an understanding of the role of data and statistical analysis in managerial decision-making. We focus on the role of managers as both consumers and producers of information, illustrating how finding and/or developing the right data and applying appropriate statistical methods can help solve problems in business.

Course Website

We will use bCourses for all course materials – lecture slides and exercises, discussion sections materials, team assignments, practice problems and exams. We will also use bCourses for quizzes and other communication.

Required Textbook

The required text is Statistics for Business: Decision Making and Analysis, 3rd Edition, by Robert Stine and Dean Foster, Pearson plus the Pearson online learning platform MyStats Lab. Please check bCourses for details on how to purchase the textbook and how to access MyStats Lab.

Excel

We will often use Microsoft Excel for in-class and out-of-class exercises. It is important that you have Excel, and that you have enabled the Data Analysis Toolpak add-in.

Prerequisites

Students are expected to understand the material in chapters 1–12 in the Stine and Foster textbook prior to the first day of class. The material in these sections includes describing categorical and numerical data, probability, random variables, associations between random variables and the normal probability model. These topics are covered in the Pre-term Workshop prior to the beginning of the course. If you were not able to attend the workshops please watch the recordings posted on bCourses.

Homework

The best way to learn the course material is to solve problems. For each chapter we have chosen a selection of problems that illustrate the main concepts. These are assigned as homework on MyStats Lab. You can also practice with the odd-numbered end-of-chapter questions and problems, for which the book has answers at the back of the book.

The homework assignments on MyStats Lab are graded for completion and this is part of your course grade. Additional practice with the end of chapter problems is optional, but is helpful in preparing for the quizzes and the final exam.

Quizzes

There will be a short quiz on the material from each of the textbook chapters covered in class. The quizzes are designed to ensure that you are learning the material and help us identify any topics requiring further explanation. The quizzes are individual, take-home assignments, administered on bCourses. The quizzes are on the material already covered in class, must be completed before the next class and are timed. You can use your book, your class notes and excel to answer the questions, but you must not consult your classmates. There will be no make-up quizzes for any reason; however, you will have the opportunity to drop your lowest score.

Final Exam

The final exam is take-home, open book, open notes, and will utilize excel. It will be administered through bCourses and will be timed. The exam date and time will be announced on the first day of class. The final exam is an individual assignment and you must not consult anybody and must not share your work with others.

Class Attendance

Class attendance is required.

Classroom Norms

Our expectation is that you are in your seats ready to begin the discussion when class starts. Because of the way our classrooms are designed, it is disruptive when students arrive late so please be courteous to your fellow classmates and arrive on time. In addition, please do not leave class during the lecture and/or discussion. We will provide a mid-class break that will allow you to get a drink, use the restroom, or check on an important email.

Class Participation

We will come to class each day with a teaching plan, which necessitates, and is greatly enriched by, effective participation. The plan will attempt to achieve a logical progression through the key ideas in the readings. Thus, during discussions, quality is what matters, not quantity. Be concise, thoughtful, and ready to engage other participants. Originality and persuasiveness matter. Effective class participation moves the discussion forward by building on previous comments.

Discussion Sections

The discussion section will be run by the GSI, Adam Pugh, and will be held via Adobe Connect. The main purpose of the online sections is to review the class concepts, homework problems, quizzes, and team assignments from the week. The discussion sections are optional, but will likely greatly enhance your learning experience and we recommend you attend if you can. All discussion sections will be recorded. There will be an extra review session for the final exam and we will announce the details the last day of class.

Team Assignments

There will be a number of in-class team assignments. All team members are expected to contribute fully to the team effort. The team assignments will not be graded, but we will be discussing the solutions in class and your team may be asked to present.

Grades

Student performance will be graded as follows:

- Quizzes – 30% of the final grade
- Homework on MyStats Lab – 10% of the final grade
- Class participation – 10% of the final grade
- Final exam – 50% of the final grade

Grade Dispute Policy

You can request a regrading of your final exam not later than 48 hours after the grades are posted. Your request should be in written form and clearly document the specific issue you have with the grading and be well reasoned. Please note that we reserve the right to re-grade the whole exam and your grade may change up or down.

Good and Bad Data Analysis

Data analysis is everywhere, and much can be learned from good and bad use of data in the popular press. If you come across something interesting, please share it with us.

Honor Code

As members of the UC-Berkeley community, our expectation is that you will adhere rigorously to the UC-Berkeley Honor Code. Anyone caught cheating on a quiz or exam in this course will receive a failing grade in the course and will also be reported to the University Center for Student Conduct.

Class schedule

Class 1, October 14

Topic: Course Introduction, Chapters 1-12 review, Samples and Surveys (chapter 13)

Pre-class readings: review chapters 1-12 and the pre-term materials, chapter 13

Class 2, October 21

Topic: Sampling Variation and Quality (chapter 14) and Confidence Intervals (chapter 15)

Pre-class readings: chapters 14 and 15

Class 3, October 28

Topic: Statistical tests (chapter 16) and Comparison (chapter 17)

Pre-class readings: chapters 16 and 17 (sections 1, 2 and 4)

Class 4, November 4

Topic: Linear and Curve patterns (chapters 19 and 20)

Pre-class readings: chapters 19 and 20

Class 5, November 18

Topic: Simple regression (chapter 21) and Multiple regression (chapter 23)

Pre-class readings: chapters 21 and 23 (sections 1 and 2)

Class 6, December 2

Topic: Multiple regression (chapter 23) and Building regression models (chapter 24)

Pre-class readings: chapter 23 (sections 3, 4 and 5) and chapter 24

Class 7, December 9

Topic: Categorical variables (chapter 25) and course wrap-up

Pre-class readings: chapter 25

Note: Additional readings or assignments may be announced in class or via bCourses.