Syllabus

EWMBA 200S: Data and Decisions
Fall B 2017

Instructor: Donatella Taurasi
Office:
Email:
Office hours: By appointment

Class Time: Wednesdays 6:00-9:30pm
Location   N470 (Chou Hall)

Web pages: We have a class page on Canvas https://bcourses.berkeley.edu

GSI: Aisling (Pronounced Ash-ling) Scott

Email:
Office hours: By appointment on Adobe Connect
Please reach out with any question you have to ▮▮▮▮▮▮▮▮▮▮. We ask that you please put "D&D" in the subject line to guarantee a prompt response. If you want to connect for office hours, please put your availability in the email body and the GSI will get back to you with a time that works well for both of you.

Review Session: Sundays 6-7pm on Adobe Connect

Overview: This course is designed for anyone interested in understanding how decisions are made using data, including those with no prior analytics experience. The objective is to make students more intelligent consumers and producers of statistical information and analyses. The emphasis of the course will be on illustrating how finding and/or generating the right data by applying appropriate statistical methods can help solve problems in business.

Required texts: Statistics for Business: Decision Making and Analysis, 3rd Edition, by Robert Stine and Dean Foster, Pearson plus the Pearson online learning platform MyStatLab. Check bCourses for details on how to purchase the textbook and how to access MyStatLab.

Software: Students are required to bring a laptop to class. This course will use Microsoft Excel for several in-class and out-of-class exercises. It's very important that you have Excel and that you have installed the Analysis Toolpak. To activate the Toolpak, from Excel Options go to "Add-Ins" to activate. If you are using Mac, please make sure to use Microsoft Office for Mac 2016, which is available for free to all Haas students. Haas Technology Solutions http://groups-new.haas.berkeley.edu/HCS/index.html has instructions about how to download.

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 is covered in the Preterm Workshops. If you were not able to attend the workshops, please watch the recordings posted on bCourses.

Class norms: We will adhere to the 5 norms identified by Haas students as important for a good learning environment. Failure to adhere to these norms will negatively impact your grade in the course

1. Laptops/tablets/kindles/etc. are not allowed during lecture periods unless otherwise instructed.
2. Smart phones are expected to remain in bags on silent except during the break.
3. Attendance is mandatory. If circumstances arise which do not permit your attendance, please email me with the reason for your absence. Missing more than three days of class will result in automatic failure. Please be in your seat 3 minutes before class starts.
4. Do not arrive late to class.
5. Leaving during class it not allowed expect during personal emergencies.

Preparation: Time does not allow for all topics to be covered in detail in the classroom. Therefore, the textbook readings are a necessary reference you are responsible for all material covered in assigned readings, whether or not we have time to cover it in class. Reading ahead is expected as it will aid your understanding of material presented in class and your ability to make positive contributions. To be prepared for class students are encouraged to

- Read/skim the relevant sections in the text
- Read/skim any supplementary news articles

Homework: There will be weekly assignments to be solved using MyStatLab. These problems are a good opportunity to practice the concepts and techniques from each chapter and will be helpful in preparing for the final exam. Students looking for additional practice of the topics covered in class are welcome to attempt the odd-numbered end-of-chapter questions and problems (solutions are provided at the back of the book).

Quiz: Each week there will be a short quiz covering the material from the previous lecture. The quizzes are designed to ensure that you are learning the material and help us identify any topics requiring further explanation. Quizzes are individual assignments, closed book and no laptops or tablets may be used. You may bring a single $81/2 \times 11$ sheet of paper (double-sided) with notes and any kind of calculator.

There will be no make-up quizzes for any reason; however, you will have the opportunity to drop your lowest score.

Midterm Exam: There is **no** midterm exam.

Final Exam: The final exam is a take-home, open book, open notes. It will be administered through bCourses and will be timed. The exam date and time will be announced on bCourses. The final exam is an individual assignment: You should solve the exam on your own, without consulting anyone else.

Discussion Sections: Discussion sections will be run by the GSI and will take place online on Sundays form 6 to 7pm. We will be using Adobe Connect ▮▮▮ which can be used on any device. You will need to download an app. The main purpose of these sections is to review the homework and lectures from the week. Discussion sections will be held every week, plus an extra review session for the final exam that will be announced by the GSI. If there are particular questions which you want the GSI to cover, please let her know the prior day. Please turn on your microphone and camera at the beginning of the section so you can participate.

Grades: Your overall course grade will be based on Assignments (Quizzes & MyStatLab) and Final Exam according to the following:

Quizzes	35%
MyStatLab	20%
Final Exam	45%
Total	100%

Course outline: Below is a rough outline for the material we will cover in this course. Some topics may run over to the next lecture. Consequently, we may fall behind the listed schedule a bit at some points. Any changes will be announced via email and posted on the course webpage.

Week 1	Topic:	**Course Intro / Samples and Surveys**
	Readings:	Review Chapters 1-12, Chapter 13
	Due:	Quiz 1
Week 2	Topic:	**Sampling Variation and Quality Confidence Interval**
	Readings:	Chapter 14.1-2 Chapter 15
	Due:	Quiz 2 MyStatLab Assignment
Week 3	Topic:	**Statistical Tests**
	Readings:	Chapter 16
	Due:	Quiz 3 MyStatLab Assignment

Week 4	Topic: Case: Readings:	**Comparison** *Hawthorne Case* Chapter 17.1-2 & 17.4
	Due:	Quiz 4 MyStatLab Assignment
Week 5	Topic: Readings:	**Linear and Curved Patterns** Chapter 19 & 20
	Due:	Quiz 5 MyStatLab Assignment
Week 6	Topic: Readings:	**Simple & Multiple Regression Models** Chapter 21 & 23
	Due:	Quiz 6 MyStatLab Assignment
Week 7	Topic: Case: Readings:	**Building Regression Models** *GoodBelly* Chapter 24
	Due:	Quiz 7 MyStatLab Assignment
Week 8	Topic: Case: Readings:	**Predictive Analytics** *Wine Case* No readings
	Due:	Quiz 8 MyStatLab Assignment
Week 9	Topic: Readings:	**Categorical Explanatory Variables & Wrap Up** Chapter 25
	Due:	Quiz 9 MyStatLab Assignment
Week 10	Due	**Take-Home Final Exam**