Dr. Samuel L. Seaman

DESC 593-14MS

Applied Data Analysis
Fall Trimester, 2015, Session A

Thursday

1:00 PM – 5:00 PM

Malibu Campus

SYLLABUS
Applied Data Analysis (Evidence-based Decision Making)
DESC 593-14MS
FALL 2015, Session A

Day and Class Times: Thursday, 1:00 PM – 5:00 PM, Session A
Campus Location: Malibu Campus

Professor: Dr. Samuel L. Seaman
Office: #324
Phone: 310.506.4401
E-mail address: samuel.seaman@pepperdine.edu
Fax #: 310.506.4126

Introduction
Today’s managers operate within dynamic environments that are constrained by highly competitive markets. To manage well under such circumstances requires both rigorous analytical tools and a sophisticated understanding of how to balance the demands of oft-times conflicting constituencies. Using a mix of theory, case studies, and practical laboratory experiences, this course seeks to develop students’ technical skills and their intuition for extracting information from legitimate data sets with an emphasis on the use of such information for structuring managerial decisions in competitive environments.

Course Description
The course covers the essential concepts and techniques of Applied Statistics and Research Design - exploratory data analysis, estimation, probability, correlation & regression, forecasting, advanced regression techniques, and ANOVA. Students will learn to apply these concepts and techniques in a spreadsheet environment using Excel software (and certain add-ins), to make better informed decisions.

Course Objectives
1. Challenge students to think analytically and critically about business problems and the decision making process – and to model those problems in a spreadsheet environment.
2. Encourage students to use an integrated approach when making decisions, calling upon their expertise in all other substantive business disciplines.
3. Provide students with an intuitive understanding of the essential theories and analytical tools that can be used to accomplish the goals stated above.

Text

Office Hours
Tuesday: 2:00 - 4:00 PM…other hours by appointment.

Grading
Your scores on periodic in-class evaluations (including a final comprehensive evaluation), and several case presentations will be averaged to determine a final grade.
in the course. If you miss an evaluation or case presentation because of an excused absence, your grade on the final evaluation will replace the missing score. No makeup evaluations will be given. Weights assigned to each of these components when determining final grades are as follows:

Periodic In-class Evaluations: 90%
Case/Class Participation: 10%

A (95-100), A- (90-94.99), B+ (88-89.99), B (85-87.99), B- (80-84.99), C+ (75-79.99), etc…

Attendance Policy
To be discussed further at the first class meeting (see also “Grading” section above and “Departmental Policies” below).

Decision Science Departmental Policies

1. Students should read the Syllabus:
   a. Before they register for the course, if possible.
   b. After they register and before the first class, going to the e-Room for the syllabus.
   c. Continually read and refer to the syllabus during the semester.

2. Attendance
   a. Students should show up on time and stay for the entire class. If you must leave class early for some reason, please notify the professor about this before class or at the break. The same applies if you know you will be late for class – email the professor and/or classmate(s), as appropriate.
   b. Students should promptly return from breaks.
   c. If a student must miss a class, he/she needs to give as much advance notice as possible to the professor and have a proactive plan about making up the class material. Also he/she needs to notify group members and keep them informed. If the professor teaches another section, inquire about sitting in on another night.
   d. At the beginning of the semester, students should notify their work supervisor about scheduled exams. If work travel plans still conflict with an exam, it is the student’s responsibility to be proactive in making arrangements to schedule a make-ahead or make-up exam. If the professor teaches multiple sections of the course, it might be possible to take the exam on another night, or take it on another day at the center.

3. Student Class behavior
   a. Turn off cell phones or to vibrate only; students should quietly leave the room if they have to take a phone call. Even in the hallway, cell phone conversations should be in a low tone and not obtrusive.
   b. Students should extend the kind of courtesy they wish to receive when they are presenting/discussing. Side conversations should be brief and not disruptive.
   c. Food rules differ by professor, so check what is allowed. At a minimum, food should be consumed quietly and you should not leave a mess.
d. The use of laptops is usually encouraged during class, but should be for class work only and not for surfing the Internet, emailing class members, listening to music or watching videos during class.

4. Student Channels of Communication
   a. Questions about the center (room, copying facilities, etc.) should be directed to the front desk at your center, and if still a problem, to the Center Director.
   b. Questions about your program, future offerings, and so forth should be directed to your Program Director at your center.
   c. Concerns about the class and feedback, should first be directed to the professor. Students have a right to request of a professor clarification of grading. If classroom or grading concerns are still not resolved, please contact Dr. Mark Chun, Academic Chair Decision Sciences, mchun@Pepperdine.edu with your concerns in writing. The process then moves up to the Associate Dean and finally the Dean of GSBM. Any attempt to bypass this chain of command will result in delays as the message will be sent back down to the appropriate level.

University Policies

Conduct

“The University expects from all of its students and employees the highest standard of moral and ethical behavior in harmony with its Christian philosophy and purposes. Engaging in or promoting conduct or lifestyles inconsistent with traditional Christian values is not acceptable.

The following regulations apply to any person, graduate or undergraduate, who is enrolled as a Pepperdine University student. These rules are not to be interpreted as all-inclusive as to situations in which discipline will be invoked. They are illustrative, and the University reserves the right to take disciplinary action in appropriate circumstances not set out in this catalog. It is understood that each student who enrolls at Pepperdine University will assume the responsibilities involved by adhering to the regulations of the University. Students are expected to respect order, morality, personal honor, and the rights and property of others at all times. Examples of improper conduct for which students are subject to discipline are as follows:

- Dishonesty in any form, including plagiarism, illegal copying of software, and knowingly furnishing false information to the University.
- Forgery, alteration, or misuse of University documents, records, or identification.
- Failure to comply with written or verbal directives of duly authorized University officials who are acting in the performance of assigned duties.
- Interference with the academic or administrative process of the University or any of the approved activities.
- Otherwise unprotected behavior that disrupts the classroom environment.
- Theft or damage to property.
- Violation of civil or criminal codes of local, state, or federal governments.
- Unauthorized use of or entry into University facilities.
- Violation of any stated policies or regulations governing student relationships to the University.

Disciplinary action may involve, but is not limited to, one or a combination of the alternatives listed below:
**Dismissal** – separation of the student from the University on a permanent basis.

**Suspension** – separation of the student from the University for a specified length of time.

**Probation** – status of the student indicating that the relationship with the University is tenuous and that the student’s records will be reviewed periodically to determine suitability to remain enrolled. Specific limitations to and restrictions of the student’s privileges may accompany probation.” GSBM Catalog, pgs. 207-208.

**Policy on Disabilities**

*Assistance for Students with Disabilities*

“Students with disabilities, whether mental or physical, are encouraged to contact the Equal Opportunity Office before the academic year begins or soon after classes are in session. This office will assist each student by providing general information about campus facilities and available resources. The office will assist in providing reasonable accommodation to students with disabilities pursuant to applicable laws. Inquiries should be directed to equal opportunity officer, Dr. Calvin H. Bowers, (310) 456-4208. (Students who wish to file a formal grievance should refer to the “Nondiscrimination Policy,” which is listed in the “Legal Notices” section of this catalog.)” GSBM Catalog, pg. 31.

**Schedule of Classes**

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<thead>
<tr>
<th>Date</th>
<th>Topics</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to Probability, Exploratory Data Analysis, Statistical Inference, and Hypothesis Testing (Chapter 1 AND supplementary Websites).</td>
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<td>Week 2</td>
<td>Introduction to Correlation and Regression (Chapter 9). Case Analysis.</td>
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<tr>
<td>Week 3</td>
<td>Continued discussion of Correlation and Regression (Chapter 9 and Supplemental Websites).</td>
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<td>Week 4</td>
<td>Multiple Regression Models (Chapter 9 and Websites).</td>
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<tr>
<td>Week 5</td>
<td>Multiple Regression Models and Forecasting (Chapters 9 and Chapter 11).</td>
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<tr>
<td>Week 6</td>
<td>Forecasting Models and ANOVA (Chapter 11 and Websites).</td>
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<tr>
<td>Week 7</td>
<td>Art and Decision Models (Case Presentations and Final Evaluation).</td>
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