2012

500-91 Business Statistics

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STAT 500
Xavier University MBA: Managerial Statistics
Summer 2012

Instructor: Dr. Greg Smith  Email: smithg2@xavier.edu
Office: 209 Smith Hall  Phone: 745-3245
Fax: 745-3455

Office Hours: Monday 3:00 pm – 6:00 pm
Thursday 3:00 pm – 6:00 pm
Other times by appointment

Course Site: blackboard.xavier.edu

Classroom: 15 Hailstones Hall

Class time: TR 6:00 pm -9:15 pm

In case of emergency class cancellation an email will be sent to advise of the situation and provide further information. In addition, a posting will be made on Blackboard.

Williams College of Business Mission:
“We educate students of business, enabling them to improve organizations and society, consistent with the Jesuit tradition.”

Class Text & Software:

Data Files:
Data files for end-of-chapter assignments are found on the CD accompanying the class text.

Course Description:
Descriptive statistics, statistical inference, linear regression, auto correlation analysis and forecasting models.
My Vision:
A course in statistics is offered in a wide variety of disciplines - from the social sciences to business to the natural sciences. The same statistical methods are applied across disciplines. Therefore, it should not be surprising that the tools you will learn to use in this course will benefit you in your future courses and careers. In this course you will learn basic descriptive statistical methods, sampling methodology, how to draw inferences from samples to larger populations and how to make predictions based upon historical relationships between variables. I've found that statistics is best taught through a series of clear and carefully worked examples. Therefore, theoretical background in descriptive and inferential statistical methods will be provided, however a great deal of time will be spent teaching you how to apply the theory to the real world. As we cover topics, if you do not have a clear understanding of one topic it is wise to seek help immediately as the next topic will build upon the previous one. Enjoy!

Course Goals: Upon completion of this course, you should be able to:

- Use statistical methods to create, analyze, and transform data into information used in business decision making.
- Describe data using measures of central tendency and dispersion
- Describe and deploy probability concepts appropriate for the field of inferential statistics
- Describe and deploy sampling methods including the use of the central limit theorem for selection of sample means from a population
- Describe levels of confidence and construct confidence intervals
- Define hypothesis testing and conduct one and two sample hypothesis tests
- Employ EXCEL to complete statistical data analyses including ANOVA, correlation, regression, and forecasting.

Course Policies:
- I will take attendance at every class period. This is simply for my information and will only come into play if attendance is poor.
- Assignments are to be submitted on the due date. Late assignments will not be accepted, unless prior arrangements have been made with the instructor. A score of 0 will be recorded for any assignment received beyond the due date.
- Grade tracking and averaging is the responsibility of the student. Blackboard will be kept up-to-date for your convenience.
Computer Work:
A major component of the course is the use of EXCEL to analyze data. As such, a portion of each class will be devoted to initiating the creation of EXCEL models. Similar work will be assigned for individually generated homework. Therefore, any submitted electronic homework file containing a name other than the intended author will result in a zero for both parties (see Academic Honesty statement).

Academic Honesty:
"All work submitted for academic evaluation must be the student's own. Certainly, the activities of other scholars will influence all students. However, the direct and unattributed use of another's efforts is prohibited as is the use of any work untruthfully submitted as one's own. The penalty for violation of this policy will be a zero for that assignment if it is a first offense. Subsequent violation will result in an F for the course."

Assignments:
Homework will be assigned for topics covered, including cases. Homework will be assigned throughout the course. You will be notified of assignments in-class, through Blackboard, and through updates to the online syllabus.

Exams:
There will be two short quizzes and two (2) exams covering material from the textbook and assignments. The first quiz covers Chapters 1,2,3 while the second quiz covers Chapters 5,6,7. The first exam will cover material from Chapters 8,9,10,11. The final exam will cover material from Chapters 13-16.

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**Class Schedule**

(This is simply a guide and may be changed periodically. Check Blackboard for changes)

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<tr>
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| 5/15/12  | Course Introduction  
|          | Chapters 1, 2, and 3 |
| 5/22/12  | Chapters 5, 6, and 7  
|          | HW1 Due (5/22/12)  
|          | Quiz 1 Due (5/24/12) - 1, 2, 3 |
| 5/29/12  | Chapters 8 and 9  
|          | HW2 Due (5/29/12)  
|          | Quiz 2 Due (5/31/12) - 5, 6, 7 |
| 6/5/12   | Chapters 10 and 11  
|          | HW3 Due (6/5/12) |
| 6/12/12  | Chapters 13 and 14  
|          | Exam 1 (6/14/12) - 8, 9, 10, 11  
|          | HW4 Due (6/12/12) |
| 6/19/12  | Chapters 15, 16+  
|          | Final Exam (TBD) - 13, 14, 15, 16  
|          | HW5 Due (6/19/12) |