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**Class Name & Number:** Section # 16268

**IOM 529 - Advanced Regression Analysis**
Spring 2013: 12:30-1:50 PM - MW

**Course Description:**
Students completing this course will have a detailed understanding of Multiple Regression, Analysis of Variance, and other Data Aggregation methods. Advanced Multiple Regression Analysis, Survey Analysis, ANOVA testing for Marketing-type applications, and some Times Series Analysis methods will be covered. Practical problems in estimating and testing all of the above will be discussed using various computer software packages. Focus will be placed on applications to Finance and Marketing, although other fields also benefit from the procedures we will cover.

**Course Goals:** Students completing this course will have a detailed understanding of Multiple Regression, Analysis of Variance, and other Data Aggregation methods. Advanced Multiple Regression Analysis, Survey Analysis, ANOVA testing for Marketing-type applications, and some Times Series Analysis methods will be covered. Practical problems in estimating and testing all of the above will be discussed using various computer software packages. Focus will be placed on applications to Finance and Marketing, although other fields also benefit from the procedures we will cover.

**Prerequisites:** Intermediate level course in statistical methods (GSBA 524 or 506 or equivalent) covering the basics of statistical inference, confidence intervals, and univariate tests and techniques. In order to keep the class moving at a decent pace, I will have a couple days of review solidifying the Simple Regression concepts you should have covered in your prior course. I will then hand out a “practice test” covering the relevant basics that you should have mastered before beginning this course. It will be turned in, but not counted for a grade; the results will be used by me only to measure where the class is as a whole. If you feel that you do not have a sufficient grasp of these concepts, please come see me and we will figure something out!

**Major Deliverables:**

- Weekly Homework Exercises: 10%
- In-Class Midterm Exam: 15%
- Mid-Semester Project: 20%
- Final Project: 20%
- Take-Home Final Exam: 30%
- Attendance & Participation: 5%

**This course would benefit those pursuing careers in these INDUSTRIES:**
Marketing
Finance
Real Estate
Economics