

**Survey of Applied Econometrics--Econ 535 — Spring 2013**

**Dr. Ken Reynolds**

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**Goal:** The objectives of the course are threefold:

- Exposure to the theory of econometric estimation and inference at a level sufficient to support empirical research appropriate to the Masters level
- Provide “hands-on” exposure to the techniques through replication of classic econometric studies using a general econometrics computer software package
- Provide experience in designing and implementing your own econometric study using real world case studies.

Thus, the course will feature both theoretical and applied econometrics, and in both aspects an attempt will be made to reinforce textbook knowledge with concrete implementation, through exercises on real data sets. To this end, the instructor will use the econometric modeling packages Eviews and NLOGIT 5 (LIMDEP), which will handle all of the problems considered in this course. Students must also have access to regression software *approved for use by the instructor* to use for classroom activities and the two case studies.

*At the core of this process is developing the ability to think through an applied economic problem using a structured approach combined with quantitative rigor.*

**Text:**

1. *Basic Econometrics*, Fifth Edition, Damodar Gujarati (West Point Military Academy) and Dawn Porter (University of Southern California)
2. *Econometric Analysis*, Seventh Edition, William Greene, New York University
3. Access to regression software – NOT Excel – will discuss during first class

**SUBJECT:**

**TEXT CHAPTERS**

	<b>Gujarati</b>	<b>Greene</b>
Multiple Regression	7, 8; Appendix C	2, 3, 4, 5, 6
Multicollinearity	10	4.7.1 – 4.7.3
Heteroscedasticity	11	9
Autocorrelation	12	20
Econometric modeling	13	5

**Multiple Regression Case Study 1 due**

### Topics in Econometrics (as time and class capability permits)

Regression on Dummy Variables	9	6
Nonlinear Regression Models	14	7
Qualitative Response Regression Models	15	17, 18, 19
Panel Data Regression Models	16	11
Systems of Equations	18, 19, 20	10
Time Series Econometrics	21, 22	21

### Topics in Econometrics Case Study 2 due

Case studies are due at the beginning of the period on the assigned due date. If you are going to miss class, the case study is due either before you miss or electronically at the due date time. There is no credit for late case studies. I will detail the class schedule as we progress through the semester. You will have sufficient notice to prepare for class and the case studies.

**Assigned weights: Case Studies—50% each**

**Disability Statement:** If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Resources at 703.993.2474. You must arrange all academic accommodations through that office.

#### Honor Code statement:

- George Mason University has an Honor Code, which requires all members of this community to maintain the highest standards of academic honesty and integrity. Cheating, plagiarism, lying, and stealing are all prohibited.
- All violations of the Honor Code will be reported to the Honor Committee.
- See [honorcode.gmu.edu](http://honorcode.gmu.edu) for more detailed information.
- *For this class, you may discuss the case studies only with each other and the instructor.*

#### Enrollment statement:

- Students are responsible for verifying their enrollment in this class.
- Schedule adjustments should be made by the deadlines published in the Schedule of Classes. (Deadlines each semester are published in the Schedule of Classes available from the Registrar's Website [registrar.gmu.edu](http://registrar.gmu.edu).)
- Last Day to Add (check GMU website Spring 2013 schedule)
- Last Day to Drop (check GMU website Spring 2013 schedule)
- After the last day to drop a class, withdrawing from this class requires the approval of the dean and is only allowed for nonacademic reasons.
- Undergraduate students may choose to exercise a selective withdrawal. See the Schedule of Classes for selective withdrawal procedures.