The major focus of this course is the connection between economic theory and its applications, with a special emphasis in the use of econometric techniques. The class will use real life examples where the use of computer software, and in some cases the internet allows us to better understand a problem, analyze a question, or find an answer. We will make intensive use of computers to learn about financial and business decisions, economic models, and econometric methodology. Models of inter-temporal choice, investment, investment under uncertainty, migration, retirement, housing decisions, economics of regulation, education, financial options, and many others will be explored with real examples, and many times real data, and econometric tools. The focus of this course will be necessarily quantitative, and given the requirements for the course a good knowledge of microeconomics, some math, and some econometrics, will be expected from the students. Students will be expected to consult many sources and think analytically in problem sets, exams, and in the class. Participation from students will be a key to the success of this class.

**Prerequisites and Co-requisites:** C or higher in ECO 303 (req.), and C or higher in ECO 320 (req.). A C or higher in AMS 310 (req.) would be accepted in lieu of the Eco 320 requirement; ECO 321 (advisory co-req.).

**Office and office hours:** My office is located in SBS S-649. Phone: 2-7551. e-mail: hugo.benitez-silva@stonybrook.edu. Office Hours will be Mondays and Tuesdays 10am to 11am, and by appointment.

Recommended Textbooks: The material covered in this class draws from several subfields in economics. We will use chapters from a number of books, which should be available, or will be made available to you.

Recitations: Fridays from 10:00am to 10:53am or from 11am to 11:53am depending on your group. Recitations will be held in a computer lab on the 7th floor of the SBS Building. The Teaching Assistant is Zhenning Wang, he will set up his office hours.

Grading:

- There will be $n$ problem set assignments, worth 20% of the final grade, only the best $n - 1$ grades will be counted, most of them will involve using a computer.

- Active class participation will count for 10% of the grade. This is not a freebie, attendance is only a small part of it. I expect in this part of the grade even more variability than in the others.

- Two midterm exams, which will count 15% of the grade each, will be in class before the Thanksgiving break.

- Students can choose to write a paper for the class that will count for 15% of their grade, with the final exam counting for the remaining 25% of the grade. If the paper option is not taken the final exam will count for 40% of the grade. Those that choose the paper option will have to submit a paper proposal by mid-October. The paper will be due the last day of scheduled classes. Details on dates and the paper are below.

- Working in groups is encouraged, but assignments should be turned in as an individual.

Tech. in the Class: Please turn off your cellular phones, pagers, palm readers, Ipods, Ipad and other electronic devices that can disturb the normal development of the lectures, some of them can be used to take notes and enrich the class experience. The exams will not require calculation beyond what you can accomplish on a basic scientific calculator unless they are during recitation, in which case you will have access to a PC. Therefore, graphing calculator will not be allowed. If you have any questions about your calculator contact me before the exams.

Special Needs: If you have special needs you should contact the staff at the Disability Support Services (DSS), 128 Educational Communications Center, 632-6748. If your needs regard an exam notify me in writing. If you do not notify me at least a week prior to the exam no accommodations are to be expected.
Important Dates:

- Tuesday August 27: First day of classes.
- Tuesday September 3: No class. Long Labor Day weekend.
- Friday September 6: First Recitations meet.
- Tuesday October 8: First Midterm Exam.
- Thursday October 17: Paper proposals are due by 5 p.m. See details below.
- Tuesday November 19: Second Midterm Exam.
- Thursday November 28: No class (or recitations this week) during Thanksgiving Break.
- Thursday December 5: Papers are due by 5 p.m. Last day of classes.
- Monday December 16: Final Exam, 5:30pm to 8pm.

Paper proposals are due October 17, 2013. They have to be no longer than 3 double-spaced letter sized typed pages. They can be in any topics in economics but they have to propose the use of real data. Electronic submissions will be accepted in Word, pdf and postscript formats, but the deadline for these will be 12 p.m. to allow some time to fix possible format problems. Those that do not submit a proposal cannot write papers for this class and the final exam will count for 40% of their grade automatically. I will distribute my comments on each proposal on Thursday November 3, students are free to decide not to write a paper if given my reaction to the proposal they think they are not likely to write a good enough paper. A student that submitted a proposal can decide not to write the paper up to the last minute before 5 p.m. on December 5, 2013.

Papers are due on December 5, 2013. The maximum permitted length of the paper is 15 pages, including graphs, tables, bibliography and notes. The paper has to use a minimum of 11pt fonts (except in graphs and tables) and 1.5 line spacing. Again electronic submissions are permitted with the caveat explained above. The paper can be used to pass the Upper Division Writing Requirement, and potentially can be used as Senior Essays or even Honor Thesis.

Cheating, copying, plagiarism, and other deceiving techniques and/or attitudes will not be tolerated under any circumstance, meaning that the given individual(s) will see his or her case presented to the appropriate administration official and the harshest possible punishment inflicted if found guilty, including dismissal from the University. However, working with your classmates in problem sets is encouraged, and in some cases required, but in individual assignments make your problem set your own.

This class should be fun, enjoy it, study hard, think hard, read the class notes, read the material distributed...and the newspapers, magazines, etc.

Comments: If you have any comments about the class and/or the instructor and/or the teaching assistant please send them to me.
Topics to be Covered

1. Applied Economic Theory: Beyond Eco 303
   - Intertemporal Choice (Week 1 and Week 2): Intermediate Microeconomics by Varian, Chapter 10.
   - Net Present Value and Related Concepts (Week 2): Fundamentals of Corporate Finance by Brealey, Myers, and Marcus, Chapter 7.
   - Extensions to the NPV paradigm, option to wait, financial options (Week 2 and Week 3)
   - Economics of Uncertainty (Week 4 and Week 5): Intermediate Microeconomics by Varian, Chapter 12
   - First Midterm: Preparation and Exam (Week 6)

2. Applied Econometrics: Theory
   - Some Statistics with Applications: Measures of Central Tendency, Dispersion, Symmetry, etc. (Week 7 and 8)
   - The Simple Regression Model: Ordinary Least Squares (Week 8 and 9)
   - The Multiple Regression Model (Week 10 and 11)
   - Second Midterm: Preparation and Exam (Week 12)

3. Applied Econometrics: Applications
   - Retirement: Theory and Policy (Week 14)