

Jan 5, 2018

**AEB 4931 Econometrics  
Spring 2018**

**Class & Instructor Details**

Instructor: Dr. Xiang Bi (Pronounced as Shee-ang Bee)  
Phone: 352-294-7671  
Class meeting time: MWF 12:50 -1:40pm  
Class location: MCB3124

Office: 1105 McCarty Hall B  
e-mail: [xiangbi@ufl.edu](mailto:xiangbi@ufl.edu)

**Prerequisites**

AEB 3550

**Office hours**

MWF 15:30 – 16:30 am or by appointment.

Email is the best way to reach me. Please use AEB4931 on the subject line.

**Textbook and Software**

1. Introductory Econometrics: Modern Approach, 5<sup>th</sup> edition. Jeffrey M. Wooldridge. Cengage.
2. Stata software.
  - a. Free through [apps.ufl.edu](http://apps.ufl.edu)
  - b. To purchase at a heavily discounted rate, go to <http://www.stata.com/order/new/edu/gradplans/>
    - Stata (Small Stata) \$35 for 6 month license (less than 1200 observations, 99 variables)
    - Stata/IC \$69 for 6 month license (less than 2.4 billion observations, 2067 variables)
3. Laptop computer (if you do not have one, please let me know)

**Objectives**

The main objective is to teach you how to apply econometric analysis and interpret the results in real life. This course will cover the theory and practice of various econometrics concepts, and also enable you to formulate and test econometric hypotheses. Additionally, you will gain hand-on experience using Stata to conduct econometric and statistical analysis.

**Grading Scale**

93 - 100.0 A; 90 - 92.9 A- ; 87 - 89.9 B+ ; 83 - 86.9 B ; 80 - 82.9 B- ; 77 - 79.9 C+ ; 73 - 76.9 C ; 70 - 72.9 C- ; 67 - 69.9 D+; 63 - 66.9 D ; 60 - 62.9 D- ; Less than 60 E

Components	Weights
Homework assignments (8*5%)	40%
Class discussion & participation (including attendance)	10%
Research paper (two presentations 10%, paper 10%)	20%
Mid term and final exams (2*15%)	30%
Total	100%

**Class Website**

Jan 5, 2018

Power point presentations will be posted on Canvas. I will also use the blackboard and it is your responsibility to keep notes and find notes from your peers if you miss a class. Additionally, I will create a folder in Canvas containing datasets used for computer exercises, homework assignments and lectures.

### Tentative Schedule

Note: We will focus on Chapters 1 to 8. Advanced topics in chapters 9, 11, 13, 15, and 17 will be briefly discussed if time permits.

Weeks	Chapters	Dates	In-class discussions	Homework
Week 1	Chapter 1: The nature of econometrics and economic data; Stata and appendix C: Algebra	8-Jan	P1 P2 Stata exercise C1 C2	C3 C4 C5
Week 2	Chapter 2: The simple regression model; Stata and appendix C: Algebra	16-Jan		
Week 3	Chapter 2	22-Jan	P3 P4 P5	C1 C4 C6
Week 4	Chapter 2	29-Jan		
Week 5	Chapter 3: Multiple regression analysis and estimation	5-Feb		
Week 6	Chapter 3	12-Feb	P2 P3 P4	C1 C3 C8
Week 7	Chapter 3	19-Feb		
Week 8	Chapter 4: Multiple regression analysis and inference <b>First presentation</b>	26-Feb	P2 P4 P9	C2 C9 C11
Week 9	Spring break	5-March		
Week 10	Chapter 4	7-Mar		
Week 11	Chapter 5: Regression analysis, OLS asymptotics <b>Mid term Exam</b>	12-Mar Mid term <b>Wed Mar 14</b>	P2 P3	C4 C5
Week 12	Chapter 6: Multiple regression analysis further issues	19-Mar		
Week 13	Chapter 6	26-Mar	P3 P7	C4 C9
Week 14	Chapter 7: Multiple regression analysis with qualitative information	2-Apr	P2 P4	C2 C10
Week 15	Chapter 8: Heteroscedasticity and review	9-Apr	P1 P5	C4 C13
Week 16	Review <b>Final presentation</b>	16-Apr		
Week 17	<b>Final Exam</b>	April 25 <sup>th</sup>		

The instructor reserves the right to change the terms and dates stated in this syllabus at any time. Should there be any changes, notifications will be given in class and posted on eLearning in advance. It is solely the student's responsibility to stay informed of any changes.

Jan 5, 2018

### Homework (40%)

Homework **assignments will be due on Mondays on which the next chapter begins.** For each assignment, you will need to use Stata to complete the data. Please submit your Stata codes, outputs, and a brief summary of your answers in paper. The homework assignments represent a *significant portion* of your grade, so remember it is your responsibility to submit assignments by the due dates. If you have an excused absence for a class period when an assignment is due, it is your responsibility to turn in the assignment **before** the class period. Late submissions will be discounted. To help you with the homework, we will go through parts of the homework with Stata during class on Wednesdays or Fridays.

- Same day late submission 80%
- Second day late submission 60%
- Third day late submission 40%
- **Any submissions beyond the fourth day 0%**

### Research Paper (10%)

Your training will be complete when you can use statistics and econometrics to tell a clear and convincing story using empirical data. For this reason, you are required to submit a research paper. This paper can be your own original research or can be a replication of a published journal article. Keep in mind that you may not always find workable dataset to examine the questions of your interests. In particular, we will not include time-series or panel data analysis in this class. Thus research paper using time-series or panel data will require additional work, and I am more than happy to help you with it. **You are encouraged to discuss your research topics with me during the first month of the class.**

The research paper is **due on the last day of the class (April 250). No late submissions!** If you have an excused absence on that day, you need to turn in the paper before the due date. This research paper should include: introduction, literature review, methodology, data, and conclusions. If you are replicating the analysis of a published paper, you need to include: introduction of the research questions, summary of the methods and data, critiques of the methods, and advancement of the literature after the paper is published.

### Presentations on the Research Paper (10%)

Each class member will make two presentations on the research paper. The first presentation should focus on motivation, objectives (research questions) **and proposed methodology and data.** The second and final presentation should focus on methodology, results (conclusions), and future work. Your presentations will be evaluated by the instructor and your peers. If you have an excused absence on the dates of the presentations, you will need to make an arrangement with me to present on another date.

### In-class Discussions, Participation and Attendance (10%)

In addition to written assignments, each member of class **should come to class prepared to discuss** the textbook chapters. I have included the discussion questions in the syllabus. To ensure every student get a chance to speak, students can form discussion groups. Each group **has 2 students.** The group can

Jan 5, 2018

choose **one of the discussion questions I included** in the schedule. On average, each group will be responsible for leading the discussions from two chapters.

In the discussion, the leading group is responsible to explain to the rest of the class their approaches to the questions. Getting the correct solutions is not the sole objective of the discussions. Other approaches may be available. The leading group should make sure the rest of the class understand the question and the approach proposed and should encourage the rest of the class to propose alternative approaches.

Please note that I will grade the contributions from the leading group and the rest of the class. When grading on discussions/ participations, these are the factors I look for:

- Does the student speak in a comprehensible fashion?
- Are the student's comments conceptually substantive and perceptive? (Is the student speaking from what they 'feel' is correct, or can they explain the basis of their comments using material from lectures - including earlier classes?)
- Does the student build on previous comments, creating a constructive discussion, rather than repeating established points or suddenly shifting the topic, derailing an ongoing discussion? Can the student disagree with prior comments in a respectful, constructive manner?

You need to notify me of absences. The general rule is if you miss a class, turn anything in **prior to the class** (e-mail is wonderful for this). Students who attend class, but choose to disrupt the class by talking, texting, arriving late or leaving early, browsing unrelated websites on computers or working on other class assignments will not receive credit for this portion of their grade.

### **Mid-term and Final Exams (30%)**

In case you have a scheduling conflict with the exam time, you must consult with me at least two weeks in advance. I can schedule you to take the exam before the scheduled time. In case of serious illness, family emergency or other major problem or conflict, you must present documentation (usually in the form of a note from the Dean of Student Office or from your academic advisor) to support your request to have a make-up exam after the scheduled time.

### ***University Policies***

#### **Grades and Grade Points**

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

#### **Absences and Make-Up Work**

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

#### **Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to

Jan 5, 2018

hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:  
<http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php>.

#### **Software Use:**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

#### **Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- **University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)**

Counseling Services; Groups and Workshops; Outreach and Consultation; Self-Help Library; Training Programs; Community Provider Database

- **Career Resource Center, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)**

#### **Services for Students with Disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)