***Econometrics - ECON 5020***

Fall 2017

Tuesday & Thursday 11:30-12:45

Business Administration 2003

Professor: Amanda Cook

Office: Business Administration 312

Office Hours: 1:30-2:30 T/Th or by appointment

E-mail: Accook@bgsu.edu [Note the double ‘c’!]

**Course Overview:**

Econ 4020/ 5020 is a first semester undergrad/ master’s level course in econometrics. We will extend ideas learned in stats and learn new techniques to address topics such endogeneity, OLS, maximum likelihood estimators, binary dependent variables, and interaction variables. This course will also focus on teaching students how to program in Stata and demonstrating good data practices so other practitioners can see the decisions they made and replicate their work.

**Textbook:** Michael Bailey’s Real Econometrics: The right tools to answer important questions. Oxford University Press

**Course Schedule:**

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| Date(Week of) | Topic | Assignments |
| August 22 & 24 | Class intro & Chapter 1: Th Quest for Causality | Problem Set 1 Assigned  (Due 5pm on Canvas) |
| August 28 & 30 | Math Appendix & Chapter 2. Stats in the Wild: Good Data Practices | Problem Set 2 assigned |
| September 4 & 6 | Chapter 2. Stats in the Wild: Good Data Practices |  |
| September 11 & 13 | Chapter 3. Bivariate OLS: The Foundation of Econometric Analysis | Problem Set 3 Assigned |
| September 18 & 20 | Chapter 3. Bivariate OLS: The Foundation of Econometric Analysis |  |
| September 25 & 27 | Chapter 4. Hypothesis Testing and Interval Estimation: Answering Research Questions | Problem Set 4 Assigned |
| October 2 & 4 | Chapter 4. Hypothesis Testing and Interval Estimation: Answering Research Questions | Content exam 1: October 4th |
| October 9 & 11  No class Oct 9  (Fall Break) | Chapter 5. Multivariate OLS: Where the Action Is |  |
| October 16 & 18 | Chapter 5. Multivariate OLS: Where the Action Is | Computational Exam 1: October 18th |
| October 23 & 25 | Chapter 6. Dummy Variables: Smarter Than You Think | Problem Set 5 Assigned |
| October 30 & Nov 1 | Chapter 6. Dummy Variables: Smarter Than You Think |  |
| November 6 & 8 | Chapter 7. Transforming Variables, Comparing Variables | Problem Set 6 Assigned |
| November 13 & 15 | Chapter 7. Transforming Variables, Comparing Variables |  |
| November 20  No class Nov 22nd (Thanksgiving) | Chapter 12. Dummy Dependent Variables |  |
| November 27 & 29 | Chapter 12. Dummy Dependent Variables |  |
| December 4 & 6 | Chapter 12. Dummy Dependent Variables | Content Exam Dec 6th |
| December 11-15th | Exam Week | Computational Exam |

***Course Expectations:***

The class will be conducted in a seminar style. Most class sessions will involve group discussion, programing, and problem solving. You will be expected to contribute in these areas. This means that you will share your insights, including what you know and what you have questions about. For some people, talking in a group can be difficult. For almost everyone, sharing what you are unsure of or don’t know is risky and

uncomfortable. However, the best learning occurs because of the questions that you ask. You will find that asking questions is the key to your education and to your future success as a professional. It is expected that students will be prepared for each class meeting. There will be lectures, but they will be based on questions you ask. Therefore, you must read assigned material ahead of time.

***There is an expectation that you will read the textbook before we cover it in class.*** At the start of a new chapter, I will ask students to summarize key ideas, concepts, equations and questions they had/ things they didn't fully understand. To this end, when we start a new chapter, you should bring a one- two (ish) page summary of the key ideas and questions for each section. After students describe the key ideas and concepts, we will list all our questions and I will pay special attention to them as we cover the chapter in class. This is an opportunity for you to take ownership of the course, please use it. I reserve the right to collect your summaries at any time:) We will also periodically have reading checks.

**Evaluation (4020):**

In this course, you will be evaluated on preparation and participation, problem sets, exams, and a discussion of a paper.

Point totals:

Preparation, participation & class activities: 110

Problem Sets: 6\*40 = 240

Exam 1 (content and computational): 250

Exam 2 (content and computational): 250

Total: 850

*There will be no make up exams.*

**Evaluation (5020):**

In this course, you will be evaluated on preparation and participation, problem sets, exams, and a discussion of a paper.

Point totals:

Preparation, participation & class activities: 110

Problem Sets: 6\*50 = 300

Exam 1 (content and computational): 300

Exam 2 (content and computational): 300

Research paper 200

Total: 1210

**Research Paper**(5020 only):

You will ask and answer a research question guided by data. (As a hint, find your data first!). Your goal is to write a paper where you explain what your research question is, what data you used, what others have done in the area (a lit review) in addition to highlighting your contribution to the literature and a detailed presentation of your results and what they mean in context.

Additional note for 5020 students: You may notice that your exams are worth `more’ points, as are your problem sets. This is because you will be assigned additional problems (compared to the 4020 students).

*There will be no make up exams.*

**Academic Honesty:** The instructor and students will adhere to the general Code of Academic Conduct as outlined of the BGSU Student Handbook. Specifically, students will not cheat, fabricate, plagiarize or facilitate academic dishonesty. Students who passively engage in cheating (i.e. allowing others to cheat off of them) may receive the same consequences as the person copying. In group work, if your partner or teammates do all the work on an assignment, you should not be listed as a contributor and should receive no credit for that work. If you allow an assignment to be submitted listing you as a contributor, but you did not contribute, this is equivalent to plagiarism.

**Basic needs security:**

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable her to provide any resources that she may possess.

**Classroom Expectations/Inclusion**:

For this class to be effective, you must be an active participant. You are expected to contribute to each class session. This includes asking questions, answering others questions, and adding relevant information. The more spontaneous you can be with your contributions, the better. I will periodically call on people to find out what they are thinking and to bring them into the conversation.

Another part of being an active participant is how you react to others. There are things that we can all learn from each other, so we must treat each other with respect and dignity. This means allowing everyone to share their ideas and carefully considering their input. No one should ever be put down for his/her contributions.

**Disability Services:**

If you have a documented disability which might require modifications in a particular assignment, please contact me in the first two weeks of the term. The Disability Services for Students Office is to help provide equal access and reasonable accommodations to students with disabilities attending BGSU. Students wishing to discuss their eligibility for such accommodations are encouraged to contact the office at

419/372-8495.

**Learning Commons:**

The Learning Commons provides “one-stop-shop” academic support within the Jerome Library in the areas of Academic Coaching, Supplemental Instruction, Writing Consultations, Math/Stats Tutoring, subject groups and individual assistance. The Learning Commons is a collaborative environment designed to foster independent learning to meet the needs of any student in any course at any time in the learning process. For more information, or to make an appointment: tlc@bgsu.edu ; 419-372-2823; www.bgsu.edu/learning-commons.html .

**Religious Holidays:**

It is the policy of the University to make every reasonable effort to allow students to observe their religious holidays without academic penalty. In such cases, it is the obligation of the student to provide the instructor with reasonable notice of the dates of religious holidays on which he or she will be absent. Absence from classes or examinations for religious reasons does not relieve the student of responsibility for completing required work missed. Following the necessary notification, the student should consult with the instructor to determine what appropriate alternative opportunity will be provided, allowing the student to fully complete his or her academic responsibilities. (As stated in The Academic Charter, B-II.G-4.b at: <http://www.bgsu.edu/downloads/file919.pdf>.)

**Expectations for Technology:**

You are welcome to use laptops, cell phones, and other forms of technology within the classroom. However, they should only be used for completing classroom activities. You are not allowed to send or receive texts or calls that do not pertain to the class. If you are expecting a call that you must take, notify me before the session starts, set your phone to vibrate, and leave the room to take the call. I reserve the right to confiscate technological devices that are not being used for classroom activities. You will receive them back at the end of the session.