



# MOREHOUSE

COLLEGE

## Syllabus – Online Course

<b>Course</b>	Topics in Econometrics (HECO-421)
<b>Semester</b>	S2021
<b>Location</b>	Fall 13 -week Online
<b>Time</b>	9:25a-10:40a MW

<b>Instructor Name</b>	Dr. David A. Poyer
<b>Email</b>	<a href="mailto:david.poyer@morehouse.edu">david.poyer@morehouse.edu</a>
<b>Phone</b>	470-639-0623
<b>Hours of Availability</b>	12:00p-3:00p TuTh

**Textbook:** Stock, James H., and Mark W. Watson, 2019, *Introduction to Econometrics*, 4<sup>th</sup> Edition, Pearson Education Inc., Hoboken, NJ 07030.

**Supplemental Text:** Greene, William H., 2018, *Econometric Analysis*, 8<sup>th</sup> Edition, Pearson Education Inc., Hoboken, NJ 07030.

### Course Description:

This course builds on the concepts taught in ECO 321. It is primarily intended for students majoring in economics and for business students with a concentration in finance. Students are required to have taken and had a grade of “C” or better in Principles of Econometrics (ECO 321).

This course has two major objectives: first, relax the assumptions associated with the classical regression model and cover the statistical consequences and second, introduce the student to special topics in econometric analysis.

In this course, the student will be introduced to several topics in econometric analysis: hypothesis testing and confidence interval estimation within the context of a multiple regression model; non-linear econometric analyses; regression with panel data; and regression with a binary dependent variable.

Students will be required to develop a familiarity with the Stata statistical software package and demonstrate an ability to apply these concepts with real-world data. Time will be allocated for computer-based exercises, where the student will be introduced to and will develop skills in using the Stata statistical program. Students will be required to complete computer lab assignments for which one-credit will be awarded given their successful completion.

Students will be required to complete online homework and quiz assignments using the Pearson MyLab system. MyLab registration is compulsory and is completed through Blackboard.

### **Course Outcomes:**

The overall objective of this course is to provide students with a basic understanding of econometrics and why it is important. At the end of the stats/econometric sequence students:

1. Can apply econometric tools to modeling, estimation, inference, and forecasting in the context of real-world problems.
2. Can evaluate critically the results and conclusions from others who use basic econometric tools.
3. Have a foundation and understanding for further study of econometrics.
4. Have an appreciation of the range of more advanced techniques that exist and that may be covered in more advanced econometric courses.

This course has the following learning outcomes:

1. How to estimate regression models with multiple regressors
2. Understand the consequences of omitted variable and its effect on estimating causal effects
3. Understanding various methods on how omitted variable bias can be addressed and how multiple regression techniques can be used
4. How to conduct hypothesis testing and confidence interval estimation in multiple regression
5. How to detect and model nonlinear population regression functions.
6. How with the use of panel data, one can control some types of omitted variables without observation?
7. How to estimate regression models when the dependent variable is discrete?

### **Course Requirements and Policies:**

**Exams: 30%**

**Homework: 20%**

**Quizzes: 20%**

**Computer Lab: 20%**

**Discussion Board: 10%**

**Attendance Requirements:**

Students are expected to attend each class meeting. Students with more than 3 unexcused absences will be referred to the Office of Student Success and may be administratively withdrawn from the course. Failure to meet minimum attendance requirements may result in the loss of the student's financial aid in accordance with federal financial aid requirements.

**EEO & Disability Statement:**

Morehouse College is an equal opportunity employer and educational institution. Students with disabilities or those who suspect they have a disability must register with the Office of Disability Services ("ODS") to receive accommodations. Students currently registered with the ODS are required to present their Disability Services Accommodation Letter to faculty immediately upon receiving the accommodation. If you have any questions, contact the Office of Disability Services, 104 Sale Hall Annex, Morehouse College, 830 Westview Dr. S.W., Atlanta, GA 30314, (404) 215-2636.

**Academic Dishonesty:**

Morehouse College students are always expected to conduct themselves with the highest level of ethics and academic honesty and abide by the terms set forth in the Student Handbook and Code of Conduct. Instances of academic dishonesty, including, but not limited to plagiarism and cheating on examinations and assignments, are taken seriously and may result in a failing grade for the assignment or course and may be reported to the Honor and Conduct Review Board for disciplinary action.

**Syllabus is not a Contract:**

A syllabus is not a contract between instructor and student, but rather a guide to course procedures. The instructor reserves the right to amend the syllabus when conflicts, emergencies or circumstances dictate. Students will be duly notified.

**Inclement Weather Policy:**

In the event of inclement weather, the College will announce any closures via the emergency notification system and/or through local news outlets. Absent an official closure, students are not excused from attending class due to weather and any absences will be considered unexcused.

**Importantly, if you feel you require special accommodations to attend this class please let me know as soon as possible.**

**Grading Scale:**

A+: >95  
 A: 90-95  
 A-: 85-89  
 B+: 80-84  
 B: 75-79  
 B-: 70-74  
 C+: 65-69  
 C: 60-64  
 C-: 55-59  
 D+: 50-54  
 D: 45-49  
 D-: 40-44  
 F: <44

### Class Schedule

Week	Assigned Reading / Topics	Assignments Due
<b>Week 1</b> 2/1 to 2/7	Stock/Watson: Chapters 7	
<b>Week 2</b> 2/8 to 2/14	Stock/Watson: Chapters 7	
<b>Week 3</b> 2/15 to 2/21	Stock/Watson: Chapters 7	HW and Quiz Chapter 7: 2/18 Exam 1: 2/19
<b>Week 4</b> 2/22 to 2/28	Stock/Watson: Chapters 8	
<b>Week 5</b> 3/1 to 3/7	Stock/Watson: Chapters 8	
<b>Week 6</b> 3/8 to 3/14	Stock/Watson: Chapters 8	HW and Quiz Chapter 8: 3/11 Exam 2: 3/12
<b>Week 7</b> 3/15 to 3/21	Stock/Watson: Chapters 10	
<b>Week 8</b> 3/22 to 3/28	Stock/Watson: Chapters 10	
<b>Week 9</b> 3/29 to 4/4	Stock/Watson: Chapters 10	HW and Quiz Chapter 10: 4/1 Exam 3: 4/2
<b>Week 10</b> 4/5 to 4/11	Stock/Watson: Chapters 11	
<b>Week 11</b> 4/12 to 4/18	Stock/Watson: Chapters 11	

<b>Week 12</b>	Stock/Watson: Chapters 11	HW and Quiz Chapter 11: 4/22 Exam 3: 4/23
4/19 to 4/25		
<b>Week 13</b>		Final Exam
4/26 to 4/30		