

**Statistical Analysis for Economics and Finance**  
**Econ 4000, CTR**  
**Instructor: Aparna Anand**  
**Office: 275 D, 10<sup>th</sup> floor**  
**Email: [aanand@gradcenter.cuny.edu](mailto:aanand@gradcenter.cuny.edu)**

## **COURSE SYLLABUS**

### **Course meeting times and location**

This course will meet on Tuesdays and Thursdays from 10.45 AM until 12.00 PM at online at Zoom. The course will meet from 08/27/2020- 12/17/2020

### **Office hours**

Office hours will be held on Mondays, Wednesdays and Fridays from 1PM- 2PM at Blackboard. Students can also make an appointment by emailing me at [aanand@gradcenter.cuny.edu](mailto:aanand@gradcenter.cuny.edu)

**Prerequisites for this Course:** STA 2000 or Equivalent.

### **Textbook and MyEconlab:**

The text we will be using in this course: Stock and Watson, Introduction to Econometrics 4<sup>rd</sup> Edition. We have a customized edition for the course, which includes: a paperback copy of the book, access to MyEconlab, e-book and access to e-book through iPad. You are required to buy the textbook, but you can apply for a refund from Pearson if you decide to drop the class within a week. The price details and options are listed below:

1. Introduction to Econometrics Package for Baruch College - City University of New York ( Loose Leaf and Access Card to MyEcon Lab)  
ISBN 9780136502227: \$80
2. MyLab Economics New Design for Introduction to Econometrics for Baruch College - City University of New York -- Standalone Access Card  
ISBN 9780136412144 : \$65

Students can also purchase access directly through your MyLab course using your Course ID. If a student purchases access directly, or purchased the access card only from the bookstore and later decides they want the print text – they can purchase the discounted loose leaf from within their MyLab course under “Purchase Options” and it will ship to their home address.

Once you register in MyEconlab for the course using the instructions at the end of the syllabus, there will be an option to purchase a print upgrade of the book if you prefer to have a print copy as well. You will also be able to purchase the custom package (Loose Leaf + MyLab Access Card) or the standalone custom Access Card from the bookstore.

To register in MyEconLab you will need to enter the access code that comes with the book and the course code, which is anand46934

**Blackboard:** There is a blackboard web page associated with this course. Students who are on the class roster can access the web page by logging into blackboard site. Check the class web page often for announcements and grades. Students are encouraged to post any questions about the material on the web page's discussion board for active interaction. I will address those questions for all to see and benefit from.

## **COURSE GOALS AND LEARNING OBJECTIVES**

The course Economics 4000 provide an introduction to estimation and hypothesis testing in simple economic models. This course will introduce you to the basic statistical skills used in empirical economic research and provide you with the theoretical tools and practical experience necessary to do applied econometric research. Students who satisfactorily complete this course, are expected to be able to run and evaluate multiple regression models, perform hypothesis testing, and interpret the results.

The department's learning goals for the economics major can be found at:

<http://zicklin.baruch.cuny.edu/programs/undergrad/degrees/econ.html>

**Course requirements:** Course requirements include class participation, online tests, a mid-term and a final examination. You are expected to be present online for the classes on time- with the exception of specific reasons and technical difficulties, adhere to due dates, and be prepared for classes.

**Class Participation:** The class participation grade 10% will be determined as follows. We will discuss the assigned articles, material/ concepts covered in the previous class. The participation is through the chat window in Blackboard and you can use the microphone if you prefer to talk. This is not a test, but facilitates the students to be in par of the lectures.

**Online Tests:** The online tests will be assigned in MyEconLab after the completion of topics for the respective test. The online tests constitute 15% of course grade. An announcement will be sent out in blackboard regarding the assignment and deadline for the test posted in MyEconlab.

**Empirical Exercises:** There will be two or three empirical assignments that will be assigned from the end of chapters during the course. Empirical Assignments refer to data analysis, regression analysis and interpretation of results performed using software. We would use data sets that accompany the prescribed textbook for the course. We would use Microsoft Excel to perform data analysis. The empirical assignment include a typed word document for the answers of the questions of the assignment supported by the print outs of excel analysis wherever applicable. The grading of the assignments will be done on the basis of check plus (100%), check (85%) and check minus (75). The grades from empirical assignments will be part of the online test grade. That is, if there are seven online tests in MyEconlab, empirical assignment 1 and 2 will be considered as test 8 and 9 respectively.

**Exams:** There will be a Midterm Exam and a Final Exam. All exams will be conducted on Blackboard/Online. The exam format will be few multiple choice and few problem solving questions. No formula sheets are allowed. The dates of the exams are given under grading section.

### **CLASS MANAGEMENT POLICIES**

**1. Attendance:** The attendance for the online classes are highly encouraged. The exceptions are for any personal (medical) circumstances and/or technical difficulties.

**2.** I will use epoccam and white board to write notes. I encourage you to take written notes as much you can during online meeting time for the following reasons:

i) Students who take hand written notes three times more likely to retain information vs. those who take notes directly into their computers/laptops. Refer

<https://www.npr.org/2016/04/17/474525392/attention-students-put-your-laptops-away>

ii) Given the structure of class, it will create a binding environment to stay focused to the lectures.

**3.** There will be NO make-up exams under any circumstances, except in cases of emergency where sufficient documentation is provided. In such cases, the instructor must be contacted within 24 hours of the exam period.

**4. Online Proctoring:** *By the time of this class's midterm or final exams, CUNY faculty might be given access to an online proctoring system. If we are, I plan to make use of the system for our final (and/or midterm) examination. All members of the class will be asked to turn on their web cameras in order to take the exam(s).*

**5.** At the end of each class, reading material will be assigned. Time to time I will also post written lecture documents to complement the online lectures. It is very essential that the students should come to each class prepared and to have read all relevant material..

## Recording on Zoom

*Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.*

## CONDUCT AND ACADEMIC INTEGRITY

I fully support Baruch College's policy on Academic Honesty, which (in part) states:

*"Academic dishonesty is unacceptable and will not be tolerated. Cheating, forgery, plagiarism and collusion in dishonest acts undermine the college's educational mission and the students' personal and intellectual growth. Baruch students are expected to bear individual responsibility for their work, to learn the rules and definitions that underlie the practice of academic integrity, and to uphold its ideals. Ignorance of the rules is not an acceptable excuse for disobeying them. Any student who attempts to compromise or devalue the academic process will be sanctioned."* If academic dishonesty is suspected in the assignment, tests / exams, a report will be sent to the Office of the Dean of Students. Additional information can be found at:

[http://www.baruch.cuny.edu/academic/academic\\_honesty.html](http://www.baruch.cuny.edu/academic/academic_honesty.html).

## STUDENT DISABILITIES

It is college policy to provide accommodations and academic adjustments for students with disabilities. Any student with a disability who may need accommodations in this class is requested to speak directly to Student Disability Services located in Newman Vertical Campus, Room 2-272 as early in the semester as possible. All discussions will remain confidential.

### **For additional information:**

<http://www.baruch.cuny.edu/facultyhandbook/DisabilitiesInformation.htm>

## GRADING

Your grade will be determined as follows:

- Class Participation 10%
- Online Tests 15%
- Midterm Exam: **Thursday, November 5, 2020** 35%
- Final Exam: **Thursday, December 17, 2020** 40%

**COURSE OUTLINE – TENTATIVE:**

DATE	WEEK	TOPICS	CHAPTERS
8/27	1	Economic Questions and Data, Review of Probability	1
9/1 & 9/3	2	Review of Probability	2
9/8 & 9/10	3	Review of Probability	2
9/15 & 9/17	4	Review of Probability	2
9/22 & 9/24	5	Review of Statistics	3
9/29 & 10/1	6	Review of Statistics	3
10/6 & 10/8	7	Review of Statistics	3
10/13 & 10/15	8	Linear Regression with One Regressor	4
10/20 & 10/22	9	<b>Linear Regression with One Regressor</b>	4
10/27 & 10/29	10	<b>Review</b>	
11/3	11	<b>MIDTERM</b>	
11/5	11	Regression with a Single Regressor : Hypothesis Tests and Confidence Intervals	5
11/10 & 11/12	12	Regression with a Single Regressor : Hypothesis Tests and Confidence Intervals; Linear Regression with Multiple Regressors	5 & 6
11/17 & 11/19	13	Linear Regression with Multiple Regressors	6
11/24	14	Hypothesis Tests and Confidence Intervals in Multiple Regressions,	7
12/2 & 12/4	15	Hypothesis Tests and Confidence Intervals in Multiple Regressions; Nonlinear Regression Functions	7 & 8
12/8	16	Nonlinear Regression Functions	8
12/10		Review	
12/17	17	<b>FINAL EXAM</b>	

<b>Assurance of Learning Chart</b>				
<b>BBA Common Learning Goals</b>	<b>Significant Part of Course</b>	<b>Moderate Part of Course</b>	<b>Minimal Part of Course</b>	<b>Not Part of Course</b>
Analytical Skills	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data Analysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technological Skills	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data and Economic Decisions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quantitative Thinking Skills	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Assignment Mapping</b>		
<b>Assignments</b>	<b>Course Learning Goals</b>	<b>BBA Common Learning Goals</b>
Lectures	Probability, Statistical tools for regression, Regression Analysis and Interpretation of results	Analytical Skills, Data and Economic Decisions, Quantitative Thinking Skills
Online Tests and Homework	Probability, Statistical tools for regression, Regression Analysis and Interpretation of results	Analytical Skills, Data and Economic Decisions, Quantitative Thinking Skills
Empirical Exercises	Practical Experience in Data Analysis, Regressions and Interpretation	Data Analysis, Technological Skills
Exams	Probability, Statistical tools for regression, Regression Analysis and Interpretation of results	Analytical Skills, Data and Economic Decisions, Quantitative Thinking Skills
Class Participation	Probability, Statistical tools for regression, Regression Analysis and Interpretation of results	Data and Economic Decisions, Quantitative Thinking Skills

## **Student Registration Instructions:**

To register for Econ 4000 Fall 2020:

1. Go to <https://www.pearson.com/mylab>.
2. Under Register, select Student.
3. Confirm you have the information needed, then select OK! Register now.
4. Enter your instructor's course ID: anand46934, and Continue.
5. Enter your existing Pearson account username and password to Sign In.

You have an account if you have ever used a MyLab or Mastering product. If you don't have an account, select Create and complete the required fields.

6. Select an access option.

» Enter the access code that came with your textbook or that you purchased separately from the bookstore.

» If available for your course,

- Buy access using a credit card or PayPal.

- Get temporary access.

If you're taking another semester of a course, you skip this step.

7. From the You're Done! page, select Go To My Courses.

8. On the My Courses page, select the course name Econ 4000 Fall 2020 to start your work.

To sign in later:

1. Go to <https://www.pearson.com/mylab>.
2. Select Sign In.
3. Enter your Pearson account username and password, and Sign In.
4. Select the course name Econ 4000 Fall 2020 to start your work.

To upgrade temporary access to full access:

1. Go to <https://www.pearson.com/mylab>.
2. Select Sign In.
3. Enter your Pearson account username and password, and Sign In.
4. Select Upgrade access for Econ 4000 Fall 2020.
5. Enter an access code or buy access with a credit card or PayPal.