Hunter College, City University of New York
Department of Economics

Economics Statistics	Richard J Nugent III
Economics 221	rnugent@gradcenter.cuny.edu
Spring 2018	Office: 1538 Hunter West
Tue/Thur 7-8:15pm	Thursday 5:50-6:50pm
HW 415	Dept. Telephone: (212) 772-5400

Course Objectives

This course aims to help students develop an understanding of basic statistical tools. At the end of this course students are expected to apply basic statistical techniques such as extracting/collecting data from data sources, analyzing it, stating a hypothesis and performing statistical tests, and finally discussing the findings.

CUNY Common Core

Eco 221 meets the "Mathematical and Quantitative Reasoning" requirement in the Common Core by leading you to the following learning outcomes:
- Interpret and draw appropriate inferences from quantitative representations, such as formulas, graphs, or tables.
- Use algebraic, numerical, graphical, or statistical methods to draw accurate conclusions and solve mathematical problems.
- Represent quantitative problems expressed in natural language in a suitable mathematical format.
- Effectively communicate quantitative analysis or solutions to mathematical problems in written or oral form.
- Evaluate solutions to problems for reasonableness using a variety of means, including informed estimation.
- Apply mathematical methods to problems in other fields of study.

Departmental Learning Objectives

Eco 221 meets the following departmental quantitative skills learning objectives:
- QT1: Understand the role of empirical evidence in evaluating economic problems
- QT2: Interpret results
- QT3: Conduct statistical analysis
- QT4: Gather or obtain research data

the following department problem solving skills learning objectives:
- PS1: Problem solving with clear solution
- PS2: Analyze ambiguous situations

and the following department lifelong learning skills learning objectives:
- LL1: Information databases
- LL2: Primary data Sources
- LL3: Understand economic news

Course Materials

Doane, David P, and Lori W. Seward. Applied Statistics in Business and Economics, 5/e. New York, NY: McGraw-Hill/Irwin, 2016.
ISBN: 978-1307102444

The text is required, there is an e-book only option. This text includes a code for the Connect Homework site. You can find this text at www.hunter.textbookx.com or Shakespeare. Older editions may suffice, however you will be responsible for any

deviations from the fifth edition.

Reading Expectation

It will be expected that you have read the sections in the textbook being covered in class. This will be instrumental in your ability to capture the intuition of the lecture, follow along with the examples, and participate in the class discussion. There will be 5 pop quizzes that will be held at the beginning of the class covering the reading assigned that day.

Communication & Blackboard

Announcements regarding homework, quizzes, exams, and other important course information will be made in class. In addition, I will use Blackboard to post and email you this information, and email friendly reminders. As such, it is imperative that your Hunter College email you have registered with Blackboard is correct, and that you check it regularly. In addition, I will post all course documents on Blackboard. Please make sure you have access to the course on Blackboard.

You are welcome to email me at rnugent@gradcenter.cuny.edu with specific questions regarding course work or for administrative inquiries.

Connect Homework Assignments

There will be a total of 11 homework assignments, 10 that correspond to each chapter, and a data dollection and analysis homework assignment (due April 24). The homework is 20% of your overall course grade. You should not expect to do homework 11 days out of the semester in this course. Rather, the number of days we spend covering the chapter in class should better indicate how many days you should expect to complete the homework. The only way to learn this kind of material is to apply it.

The assigned book provides an access code for the Connect Homework Website for this section. If you do not want to buy the printed book, you can simply register for Connect Website online at http://connect.mheducation.com/class/nugent and use the e-book. (This is a cheaper option).

Each assignment has a sharp deadline, be sure to submit the assignment on time. The assignment will be available following the first class of lecture in that particular chapter. Once assigned, it will be due before the start time of the next class. For example, Connect HW 6 is available March 15 at 8:15pm. It is assigned March 20. It is due March 22, at 7:00pm. All assignments must be submitted online so if you miss the deadline, the assignment will no longer be available.

Quizzes

There will be 2 *scheduled* in-class quizzes specified in the course outline. The quizzes are scheduled for February 15 and March 29. There will be no make-up quizzes under any circumstances. In the event of an excused absence with the appropriate documentation during a quiz, the quiz grade will be re-weighted according to the alternative quiz performance. In addition, there will be 5 pop quizzes that will be held at the beginning of the class covering the reading assigned that day. The scheduled quizzes are worth 5% each, and the pop quizzes sum to 5%.

Examinations

There will be two midterm exams during the semester. The midterm exams are March 8 and April 19. Make-up midterm exams are only accommodated in the event of an excused absence with the appropriate documentation. The last day of class is May 15. The final exam will be held May 24, 6:20-8:20pm in the regularly scheduled classroom. If the final exam score is higher than the lowest midterm score, then the final exam score will take the place of the lowest midterm score.

There will be a make-up final exam for students who have a valid medical report for the exam day. In that case, the medical report should be submitted to the department and the department will schedule the make-up exam.

Writing Assignments

Writing Assignment I will be 10% of your course grade and us due by the start of class March 22. You will read a contemporary article which discusses the application of statistics in a unique way and reflect or respond in a formal written essay with emphasis on effective writing in STEM disciplines. The essay will be graded for content, grammar, and the your ability to form concise, factual statements.
The goals the reading are to gain appreciation for the unlimited applicability of statistics, consider the career opportunities for statisticians, and engage in real-world applications for the material we will learn throughout the course. The goals of the writing assignment are to organize your thoughts in a formal essay, challenge yourself to reflect in the context of your economics training, practice writing about statistical ideas in a way that emphasizes forming concise, factual statements regarding ideas whose material content is fundamentally mathematical or scientific.

Writing Assignment II will also be 10% of your course grade and will be a software-based assignment completed in pairs or individually. There will be a variety of data and questions assigned, and you will be asked to describe data and perform statistical tests on a specific hypothesis. Most importantly, you will asked to interpret the results in the context of the dataset. The dataset will be provided. Details about Writing Assignment II will be shared after the second midterm examination.

Extra Credit

There will be three opportunities for extra credit in the form of practice exam corrections before each the first and second midterm and the final exam. Each practice exam will be released ahead of the scheduled midterm/final exam and reviewed for completion one class previous to the coinciding exam. After that class, the answer key will be released so each student may individually correct his or her practice exam.

The corrections are due at the start of the exam period for extra credit. All criteria must be fully satisfied to earn credit;
· You must provide a minimum 3-sentence correction/explanation for each incorrect answer, including at least one definition/pdf/cdf. You may not repeat definitions/formulae.
· Each correction must include a diagram. If the problem does not immediately refer to a diagram, provide a related example as support for your explanation.
· All math work must be demonstrated in addition to the three sentences and diagram.
· The corrections should be typed or may be very neatly written on paper without frayed edges, bound with a staple or paper clip. This should look like a professional document, as with any and all other documents you produce.

The three practice exam corrections will amount to a total of 5% points extra credit of the final grade. All three need not be completed to earn the appropriate quantity of extra credit.

Economics Department Tutoring Center

The Economics Department Tutoring Center will be a key component for success in this course. Whether preparing for a quiz or exam or completing homework, the tutors are prepared to assist you understand and solve the task at hand in a productive, however relaxed social learning environment which provides free trade of the assertive critical thinking skills necessary to solve the modern day economic problems. The tutors are Economics Pd.D., MA or MA/MA students from Hunter College or the CUNY Graduate Center. All tutors are qualified to tutor the core courses, including this one, in addition to multiple other courses as well. The tutoring center is generally located in HW1537. If this room is otherwise occupied, tutoring will take place around the corner in HW1533. Tutoring is generally offered Monday—Saturday. Point your browser to http://econ.hunter.cuny.edu/tutoring/tutoring-schedule/ for the most up-to-date schedule.

Academic Integrity

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

Academic Accommodations

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of AccessABILITY, located in Room E1214B, to secure necessary academic accommodations. For further information and assistance, please call (212) 772-4857 or (212) 650-3230.

Evaluation Summary

Component	Weight
Homework	20%
Quizzes	10%
Writing Assignments	20%
Midterm	25%
Final Exam	25%

Hunter College Grading System

Letter Grade	GPA Value	Grade Scale	CR/NC	Grade Scale
A+	4.0	97.5-100%	CR	70.0-100%
A	4.0	92.5-97.4%		
A-	3.7	90.0-92.4%		

B+	3.3	87.5-89.9%		
B	3.0	82.5-87.4%		
B-	2.7	80.0-82.4%		
C+	2.3	77.5-79.9%		
C	2.0	70.0-77.4%		
D	1.0	60.0-69.9%		
F	0	0.0-59.9%	NC	0.0-69.9%

Course Outline

Reading	Lecture	Assignment	Date
Chapter 1	1	Connect HW 1	1/30
Chapter 3	2	Connect HW 2	2/1
4.1, 4.2, 4.3	3		2/6
4.4, 4.5, 4.6	4		2/8
4.7, 4.8	5	Connect HW 3	2/13
Chapter 2	**6 + Quiz**		**2/15**
Chapter 2, 5.1, 5.2	7	Connect HW 4	2/22
5.3, 5.4, 5.6	8		2/27
5.7, 5.8	9	Connect HW 5	3/1
Ch. 5, Review	10		3/6
Midterm Exam I	**11**		**3/8**
Solve Exam	12		3/13
6.1, 6.2, 6.3	13		3/15
6.4, 6.5	14	Connect HW 6	3/20
7.1, 7.2	15	Writing Assignment I	3/22
7.3, 7.4	16	Connect HW 7	3/27
8.1, 8.2	**17 + Quiz**		**3/29**
8.3, 8.4, 8.5	18		4/10
8.6, 8.8, 8.9	19	Connect HW 8	4/12
Review	20		4/17
Midterm Exam II	**21**		**4/19**
Solve Exam	22	Data Homework	4/24
9.1, 9.2,	23		4/26
9.3, 9.4	24		5/1
9.5	25	Connect HW 9	5/3
10.1, 10.2, 10.3	26		5/8
10.4, 10.5, 10.6	27	Connect HW 10	5/10
Review	28		5/15
Final Exam			**5/24 6:20-8:20p**

Except for changes that substantially affect implementation of the evaluation statement, this syllabus is a guide for the course and is subject to change with advance notice. Should any change occur, announcements will be made in class as well as over Blackboard.