

# **Graduate Course Syllabus**

**ECO 620: Applied Econometrics I** 

Center: Online

#### **Course Prerequisites**

ECO-520

#### **Course Description**

This course looks at common econometric models, with a focus on regression models. Through empirical work and analysis, the students will extend their understanding of econometric theory. The course will provide an understanding of the relationship between economic variables that can be used for statistical estimation. The students will learn how to use observational data and how to construct econometric models and methods.

## **Course Outcomes**

- Develop testable hypotheses from research questions that address business issues, supported by empirical strategies and available data
- Transform theoretical models to econometric models that enable empirical approaches to answer research questions
- Use statistical software to execute appropriate diagnostic and adjustment processes that avoid common problems in econometric techniques
- Interpret limitations of econometric models for their effects on the validity of research results
- Provide actionable insights based on statistical and economic significance of results
- Communicate empirical processes and results to technical and nontechnical audiences, in order to inform future actions

#### **Required Materials**

Using your learning resources is critical to your success in this course. Please purchase directly through the <u>SNHU</u> <u>Online Bookstore</u> rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the IT Service Desk, your advisor, and the instructor can provide you with support if you have problems.

Introductory Econometrics: A Modern Approach
Wooldridge, Jeffrey M.
Cengage
Seventh Edition

2020

ISBN: 978-1-337-55886-0

#### Diversity, Equity, and Inclusion

As indicated in our core values, SNHU is committed to "embrace diversity where we encourage and respect diverse identities, ideas, and perspectives by honoring difference, amplifying belonging, engaging civilly, and breaking down barriers to bring our mission to life."

This may or will be reflected in SNHU's curriculum as we embrace and practice diversity, equity, and inclusion (DEI) to provide the most transformative experience for our students, faculty, and staff. Because topics pertaining to DEI can be sensitive, please remember that embodying and practicing diversity, equity, and inclusion is one of our core values that you will encounter throughout the academic experience. In higher education, we are expected to think and engage critically. Use a growth mindset to embrace the diverse readings, course assignments, and experiences of your peers and faculty.

For more information about DEI at SNHU, please visit our website at the Office of Diversity and Inclusion.

## **Instructor Availability and Response Time**

Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours. Instructors will post grades and feedback (as applicable) within seven days of an assignment's due date, or within seven days of a late submission.

# **Grade Distribution**

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	8	30	240
Homework	6	45	270
Final Project			
Milestones	2	95	190
Final Project Submission	1	300	300
	1	-	Total Course Points: 1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

#### **University Grading System: Graduate**

Grade	Numerical Equivalent	Points
А	93–100	4.00
A-	90–92	3.67
B+	87–89	3.33

Grade	Numerical Equivalent	Points
В	83–86	3.00
B-	80–82	2.67
C+	77–79	2.33
С	73–76	2.00
F	0–72	0.00
I	Incomplete	
IF	Incomplete/Failure *	
W	Withdrawn	

<sup>\*</sup> Please refer to the <u>policy page</u> for information on the incomplete grade process.

## **Grading Guides**

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

## **Weekly Assignment Schedule**

All reading and assignment information can be found within each module of the course. Assignments and discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module.

Module	Topics and Assignments
1	Introduction to Econometrics
	Introductory Econometrics: A Modern Approach, Chapter 1
	1-1 Discussion: Hypotheses and Research Questions, Part 1
	1-2 Homework
	1-3 Final Project Overview
	1-4 Discussion: Getting Started
2	Review of Probability and Statistics
	Introductory Econometrics: A Modern Approach, Math Refresher B: Fundamentals of Probability and
	Math Refresher C: Fundamentals of Mathematical Statistics
	2-1 Discussion: Hypotheses and Research Questions, Part 2
	2-2 Final Project Milestone One: Research Question, Literature Review, and Data
3	Linear Regression
	Introductory Econometrics: A Modern Approach, Chapter 2
	3-1 Discussion: Economic Methods and Techniques
	3-2 Homework
4	Multiple Linear Regression Analysis and Multicollinearity
	Introductory Econometrics: A Modern Approach, Chapter 3
	4-1 Homework

Module	Topics and Assignments
5	Hypothesis Testing
	Introductory Econometrics: A Modern Approach, Chapter 4
	5-1 Discussion: Hypothesis and Data Collection
	5-2 Homework
6	Heteroskedasticity
	Introductory Econometrics: A Modern Approach, Chapter 8
	6-1 Final Project Milestone Two: Data Limitations, Approach, and Results
7	Limited Dependent Variables and Dummy Variables
	Introductory Econometrics: A Modern Approach, Chapter 7 and Chapter 17, Section 17-1 (pages 559-571)
	7-1 Discussion: Study Limitations
	7-2 Homework
8	Communication of Empirical Findings
	Introductory Econometrics: A Modern Approach, Chapter 19
	8-1 Discussion: Recommendations
	8-2 Homework
9	Structure of the Economy and Limits on the Forces
	Introductory Econometrics: A Modern Approach, Review Chapters 2, 3, 4, 7, and Math Refresher C
	9-1 Discussion: Final Project Reflection
	9-2 Final Project Submission: Econometric Analysis
10	Course Reflection
	10-1 Discussion: Course Reflection

#### **Attendance Policy**

Online students are required to submit a graded assignment/discussion during the first week of class. If a student does not submit a graded assignment/discussion during the first week of class, the student is automatically dropped from the course for non-participation. Review the <u>full attendance policy</u>.

#### **Late Assignments Policy**

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the <u>full late assignment policy</u>.

## **SNHU Student Handbook**

Review the student handbook.

### **ADA/504 Compliance Statement**

Southern New Hampshire University (SNHU) is dedicated to providing equal access to individuals with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and with Title III of the Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008.

SNHU prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. The university has adopted this

policy to provide for prompt and equitable resolution of complaints regarding any action prohibited by Section 504, the ADA, or the ADAAA.

For questions about **support services**, **documentation guidelines**, **general disability issues**, **or pregnancy accommodations**, please visit the <u>Online Accessibility Center</u> (OAC).

As a student, you must complete an interactive intake process, with supporting documentation, in order to be granted accommodations. Once reasonable accommodations are approved by the OAC, you will receive an accommodations letter. You are then responsible for sharing the letter with your instructor. Accommodations are not retroactive.

If you feel you've been subject to discrimination on the basis of disability, by any party, you may file a complaint or grievance. For more information on the ADA/504 Grievance Policy, go to the <u>Disability and Accessibility Services</u> website.

## **Academic Integrity Policy**

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the <u>full academic integrity policy</u>.

### **Copyright Policy**

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the <u>full copyright policy</u>.

## **SNHU Withdrawal Policy**

Review the full withdrawal policy.

#### **Southern New Hampshire University Policies**

More information about SNHU policies can be found on the policy page.