ECON 343: Macroeconomic Data Analysis

College of Arts & Sciences Syllabus

COURSE INFORMATION — **March 8 to May 4, 2021**
Credit Hours: 3 — Remote via Google Meet, TR 5:40pm

Course Description: The manipulation, presentation, and interpretation of real macroeconomic data. Concepts include GDP, inflation, interest rates, exchange rates, and nominal and real variables. Students will gain experience applying formulas, preparing graphs, and uncovering basic statistical relationships among data series.

Course Prerequisites: ECON 215 at minimum; ECON 217 and MATH 165 recommended.

FACULTY INFORMATION

Instructor: Scott Hegerty

Office Location: BBH 340C; Remote via Google Meet

Office Hours: ONLINE; "Live" office hours will be held T 1:00-2:00pm

Phone Extension: 5695, once on-campus instruction resumes

E-mail: S-Hegerty@neiu.edu

COURSE MATERIALS

List of Required Texts / Materials:

Hegerty, *Macroeconomic Data Analysis: A Practical Guide to Report-Writing* (2020), available on scribd.com or scotthegerty.com

Relevant videos are also posted to YouTube.

COURSE OBJECTIVES / STUDENT LEARNING OUTCOMES

- Understanding how to properly present, manipulate, and interpret data is an important skill, not only in the business world, but also for a deeper understanding of Economics in general. Macroeconomics, in particular, presents a number of opportunities for such analysis, as data on production, interest rates, price levels, monetary aggregates and exchange rates are readily available. While they are critical to understand in the business world, these data also present particular challenges, since they are primarily time series.

- The purpose of this class is two-fold. First, we review general macroeconomic concepts, paying particular attention to their use in practice, the need to interpret them, and the relevant formulas used to derive relationships among them. Second, we learn how to apply these formulas, as well as plot graphs and present data in Excel. We also learn how to interpret the results of more advanced statistical analyses and present them professionally.

STUDENT TASKS / ASSIGNMENTS / REQUIREMENTS

Assignments:

Data projects: There will be **five Homework assignments** this semester and a **final project**. Students will need to apply the concepts learned in class. Assignments will be fairly labor-intensive, involving data manipulation, graphing, and written interpretations of results. The final project will be more intensive and expect students to choose a topic and incorporate all aspects of the class. Writing and professional presentation are just as important to a successful assignment as the data analysis itself.

While this class expects ALL students to be able to work with Excel for projects, those students with prior knowledge of statistical software (such as R or Eviews) are encouraged to use it as much as possible. If there is time and sufficient student interest, this course will briefly introduce the R software, but its mastery is not necessary to successfully complete this course.

Assignments will be given out most Tuesdays during class time, via D2L. Completed assignments are to be uploaded to D2L by 5:30pm on the following Tuesday (except for Spring Break, which is the week of March 18). The due date for the final project will be given in class.

The **final exam** will be short, assessing students' understanding of the tools used in the course, as well as analytical thinking and communication skills. You will need to use the skills you learned in this class to answer a question—finding data and reporting your result. It will take place during NEIU's scheduled exam slot from 6:00pm to 8:00pm on Tuesday, May 4, but may have shorter time limit than the full two-hour time slot.

Missed Exams will not be made up. With an appropriate excuse, the remaining course components will be adjusted to equal 100 percent. Students must be prepared to provide such documentation as a Grandmother's obituary or doctor's excuse.

Grading Policies and Formulae:

Your grade will be assigned based on the following formula:

Attendance and participation	10%
Data projects (5 x 10%)	50%
Final Project	25%
Final Exam (Tuesday, May 4 at 6:00pm)	15%

Each assignment and test will be given a specific number of points. Your final score will be based on the number of points you earn overall, weighted by the scale given above. Grades will then be assigned by the following scale:

100-90.00	A	89.99-75.00	B	74.99-60.00	C	59.99-50.00	D
Below 50	F						

Course Outline:

This is an eight-week course, running from March 8 to May 4, 2021.

The class will meet via **Google Meet** each Tuesday and Thursday from 5:40-6:40pm.

The first two weeks will introduce core concepts: Microsoft Excel, basic data transformations, and how to write a high-quality report. These concepts are also explained on YouTube; links will be provided.

Beginning in Week 3, **Tuesdays** will be devoted to reviewing each of the four macroeconomic themes: *Real variables*, *prices*, *money and interest rates*, and *international* topics. There will be one assignment on each theme. **Thursdays** will cover Homework answers, additional examples (often in R, but with general applications), and student questions.

All students must do the first assignment in Excel. Subsequent assignments may be done in R, but this is not required. Those students with adequate background will benefit from using these skills. The same applies to knowledge of regression or other econometric topics.

	Week	Topics			Assignment
9-Mar	1	Course intro	Macro variables	Data sources	HW1
11-Mar		Data transformations	Summary stats	Excel basics	↓
23-Mar	2	Report writing			
25-Mar		Data Tables	Graphs and Graphing		
30-Mar	3	Real variables (GDP, etc.)			HW2
1-Apr		R example			↓
6-Apr	4	Prices and inflation			HW3
8-Apr		R example			↓
13-Apr	5	Money and interest rates			HW4
15-Apr		R example			↓
20-Apr	6	International macro			HW5
22-Apr		R example			↓
27-Apr	7	Regression basics	Project work		
29-Apr		Time Series basics			
4-May	8	Final Exam			Project due @ 5:30pm

COURSE POLICIES AND STATEMENTS

Absence Policy:

Attendance is strongly recommended. Per NEIU attendance policy, less than 75% attendance will automatically result in failure for the semester, regardless of your grade on assignments and exams.

Ethics:

Unless explicitly allowed by the instructor, all homework must be completed individually. Students must be prepared to provide proof of independent work if asked, and will fail the course if they are unable to do so. Assignments might be made to differ slightly among students, and even identical questions will produce different answers among classmates. It is easy to tell if you copy, and I would rather see your own mistakes than someone else's answer with your name on it. Resist the temptation to ask for too much help from a classmate—or to offer it. Oftentimes an A student has more to lose helping a D student, when both receive F's.

Academic Integrity Policy:

REQUIRED: By enrolling in this course, you are bound by the NEIU Student Code of Conduct: http://www.neiu.edu/university-life/student-rights-and-responsibilities/student-code-conduct. You will be informed by your instructor of any additional policy specific to your course regarding plagiarism, class disruptions, etc.

ADA Statement:

REQUIRED: Northeastern Illinois University (NEIU) complies with the Americans with Disabilities Act (ADA) in making reasonable accommodations for qualified students with disabilities. To request accommodations, students with special needs should make arrangements with the Student Disability Services (SDS) office, located on the main campus in room D104. Contact SDS via (773) 442-4595 or http://www.neiu.edu/university-life/student-disability-services.

Campus Safety:

REQUIRED: Web links to Campus Safety: Emergency Procedures and Safety Information can be found on NEIUport on the MyNEIU tab or as follows: http://homepages.neiu.edu/~neiutemp/Emergency_Procedures/MainCampus/.