

ECON 2090 ANALYSIS OF ECONOMIC DATA(3 credit hours)

Elmira College

SPRING 2025

Required Text:

1. Gary Koop. *Analysis of Economic Data*. John Wiley & Sons.
2. Daniels, L. & Minot, N (2019). *An Introduction to Statistics and Data Analysis Using Stata* (1st ed.). Sage.
3. Stock, J. H., & Watson, M. W. (2019). *Introduction to Econometrics* (4th ed.). Pearson.

Pre-requisites: ECON 1060 Introduction to Microeconomics; ECON 1080 Introduction to Macroeconomics.

Course Description

This course introduces students to the principles and techniques of analyzing economic and social data. Emphasis is placed on developing skills in data collection, exploration, visualization, and statistical analysis. Topics include descriptive statistics, hypothesis testing, regression analysis, and interpretation of results. The course will utilize statistical software for practical application.

Course Objectives and Goals

- Recognize suitable economic models and concepts to address major contemporary economic and social issues.
- Collect, summarize and present data useful for decision making.
- Utilize regression analysis to test hypotheses about economic behavior, with examples draw from economics and other social sciences.
- Understand and explain the intuition behind the most common statistical methods used to isolate causal effects.
- Analyze, visualize, and communicate economic and social data individually and in group settings.

Evaluation of Performance

Your grade will be based upon your performance on exams, assignments, and participation.

4 Assignments	20%
2 Quizzes	20%
Midterm Exam	25%
Final Exam	35%
Total	100%

Grades will be assigned as follows:

A 93% and above B- 80 - 82% D+ 67 - 69%

A- 90 - 92%	C+ 77 - 79%	D 63 - 66%
B+ 87 - 89%	C 73 - 76%	D- 60 - 62%
B 83 - 86%	C- 70 - 72%	F 59% or below

Withdrawal Policy: Please see Elmira College Bulletin for information on this policy.

Academic Honesty: Please read the section on Academic Honesty in the [Code of Conduct](#). Briefly, academic dishonesty includes: cheating, fabrication, facilitating academic dishonesty, and plagiarism. Ask if you have any questions on whether something constitutes as academic dishonesty. All work must be original and new. Past assignments from current or other courses will not be accepted. Academic dishonesty will not be tolerated. It will result in zero on the assignment, and a report will be filed with the school. Continued practice will result in failure of the class. Institutional penalties may also apply with repeated acts of academic honesty.

Student Responsibility:

- It is your responsibility to keep track of assignments and due dates.
- You should ask questions concerning assignments and lectures, if you need any clarifications.
- If you are struggling in class, have concerns, and/or unsure about expectations, please stop by during office hours or make an appointment for another time.

Tentative Schedule of Topics

<u>Topic</u>	<u>Materials</u>	<u>Tasks & Evaluations</u>
Overview of Data Types and Structures in Economics	Chapter 1	
Sources of Economic Data	Chapter 2	
Descriptive Statistics	Chapter 3	Assignment 1
Random Variables and Probability Distributions	Chapter 4	
Sampling Methods and Data Collection in Economics	Chapter 5	Quiz 1
Estimation and Confidence Intervals	Chapter 6	
Hypothesis Testing	Chapter 7	Assignment 2
T-tests and Analysis of Means for Economic Data	Chapter 8	Midterm Exam
Correlation and Causation in Economic Variables	Chapter 9	
Simple Linear Regression	Chapter 10	Assignment 3
Multiple Regression	Chapter 11	
Dummy Variables and Interaction Terms in Regression	Chapter 12	Quiz 2
Regression with Time Lags	Chapter 13	
Univariate Time Series Analysis	Chapter 14	Assignment 4
Data Transformation	Chapter 15	
Model Misspecification	Chapter 16	Final Exam