

 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>NEW COURSE PROPOSAL</b> <b>Undergraduate Programs</b>		UUPC Approval <u>10/7/24</u> UFS Approval _____ SCNS Submittal _____
	Department Economics  College Business <i>(To obtain a course number, contact erudolph@fau.edu)</i>		Confirmed _____ Banner Posted _____ Catalog _____
Prefix <b>ECO</b>  Number <b>4430</b>	<i>(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)</i>  Lab Code _____	Type of Course <input type="text" value="Lecture"/>	Course Title <b>Analysis of Economic Data</b>
Credits <i>(See Definition of a Credit Hour)</i> <b>3</b>	Grading <i>(Select One Option)</i> Regular <input checked="" type="radio"/> Sat/UnSat <input type="radio"/>	Course Description <i>(Syllabus must be attached; see Template and Guidelines)</i> Data analysis is vital to the efficient functioning of businesses in modern industries. Students with strong data analysis skills are thus better prepared for and more competitive in our fast paced and everchanging labor markets. This course provides students with practical tools for analyzing real-world data. Large data sets that are widely used by economists are used for illustration purposes and the data analysis tools that students learn in this course can be easily applied to data in any other field. The course will utilize software (including, but not limited to, Excel and Stata) for a variety of data-oriented tasks in order to explore the informational content of	
Effective Date <i>(TERM &amp; YEAR)</i> <b>Fall 2025</b>	Prerequisites, with minimum grade* <b>ECO 2013, ECO 2023 &amp; STA 2023</b>	Corequisites _____	Registration Controls <i>(Major, College, Level)</i> _____
<i>*Default minimum passing grade is D-. Prereqs., Coreqs. &amp; Reg. Controls are enforced for all sections of course</i>			
WAC/Gordon Rule Course <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to proposal. See <a href="#">WAC Guidelines</a> .		Intellectual Foundations Program (General Education) Requirement <i>(Select One Option)</i>  None  General Education criteria must be indicated in the syllabus and approval attached to the proposal. See <a href="#">Intellectual Foundations Guidelines</a> .	
<b>Minimum qualifications to teach course</b> M.S. or Ph.D. in Economics			
Faculty Contact/Email/Phone Neela Manage/manage@fau.edu/7-3226		List/Attach comments from departments affected by new course See attachment for approval from ITOM department	
<b>Approved by</b> Department Chair <u>Monica Escaleras</u> College Curriculum Chair <u>Julie A. [Signature]</u> College Dean <u>MAR [Signature]</u> UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Meeroff</u> UFS President _____ Provost _____			<b>Date</b> 9/19/2024 <u>9/23/24</u> <u>9-26-24</u> <u>10/7/24</u> <u>10/7/24</u> _____ _____

Email this form and syllabus to [mjennin@fau.edu](mailto:mjennin@fau.edu) seven business days before the UUPC meeting.



## ECO 4430 Analysis of Economic Data

3 credits

Fall 2025

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### Course Description

Data analysis is vital to the efficient functioning of businesses in modern industries. Students with strong data analysis skills are thus better prepared for and more competitive in our fast paced and everchanging labor markets. This course provides students with practical tools for analyzing real-world data. Large data sets that are widely used by economists are used for illustration purposes and the data analysis tools that students learn in this course can be easily applied to data in any other field. The course will utilize software (including, but not limited to, Excel and Stata) for a variety of data-oriented tasks in order to explore the informational content of the data, create charts and tables, and generate reports for data presentation.

### Course Prerequisites and Credit Hours

3 credit hours

Prerequisites: ECO 2013 & ECO 2023 and STA 2023

### Instructional Method

This class is designated as “Primarily Classroom” and will meet in person most of the time.

### Textbook

Michael N. Mitchell, *Data Management Using Stata: A Practical Handbook*, 2<sup>nd</sup> edition, 2020, Stata Press. ISBN 9781597183185

### Suggested Readings and Materials

-Mary Anne Poatsy, Jason Davidson, and Keith Mulbery, *Exploring Microsoft 365: Excel 2021*, 2023, Pearson. ISBN 9780138272166

-Gary L. Koop, *Analysis of Economic Data*, 4<sup>th</sup> edition, 2013, Wiley. ISBN 9781118472538

-John F. Hoffman, *Principles of Data Management and Presentation*, 2017, University of California Press. ISBN 9780520289949

-Ulrich Kohler and Frauke Kreuter, *Data Analysis Using Stata*, 3<sup>rd</sup> edition, 2012, Stata Press. ISBN 9781597181105

Sample Databases:

Federal Reserve Economic Data (FRED)

<https://fred.stlouisfed.org/>

World Bank: World Development Indicators

<https://databank.worldbank.org/source/world-development-indicators>

### Course Learning Objectives

After successfully completing this course students will be able to:

- Import data from large economic databases into spreadsheets and use formulas within and between spreadsheets to explore and manage data
- Use mathematical and statistical functions to analyze data
- Explore data properties by designing and creating charts, tables, pivot tables, and pivot charts
- Create summary reports to describe the data based on the charts and graphs

### Course Resources

There will be an online course web page at the FAU Canvas site: <http://canvas.fau.edu>

Student resources for FAU Canvas are available at

<http://www.fau.edu/canvas/getting-started.php#Students>

### Course Grading Scale

A	94 and above	C+	77-79.99
A-	90-93.99	C	73-76.99
B+	87-89.99	C-	70-72.99
B	83-86.99	D	60-69.99
B-	80-82.99	F	<60

### Course Evaluation Method

The final grade will be based on data exercises (20%), homework assignments (20%), midterm exam (20%), data project (20%) and final exam (20%).

**Note:** The syllabus is subject to change at the discretion of the instructor. All revisions will be announced during lecture and will be posted on Canvas. Students are responsible for being familiar with any revisions to the syllabus.

## Course Topical Outline

<u>WEEK</u>	<u>TOPIC</u>
Week 1	Introduction to economic data (importance of data, classifications/types of data)
Week 2	Sources of data Survey of widely used databases (including, but not limited to, <i>FRED</i> , <i>World Bank WDI</i> )
Week 3	Basic elements of spreadsheets and introduction to Excel Introduction to Stata and data management in Stata
Week 4	View large datasets & import data into spreadsheets (FRED data) Generate summary information and descriptive statistics (application of spreadsheet formulas and math, statistics and date functions)
Week 5	Data presentation: Create charts, adding a trendline to a chart, format chart elements, and create sparklines (macroeconomic time-series, FRED database)
Week 6	Data presentation: Design and create tables, table manipulation (macroeconomic time-series, FRED database) HW 1 Due
Week 7	FRED Add-in
Week 8	Exam 1
Week 9	Processing observations across subgroups (Subtotal data, group data, create/modify Pivot tables, create Pivot charts (cross-country data, OECD or WDI data)
Week 10	Range names in formulas, create one- and two-variable data tables (cross-country data, OECD or WDI data)
Week 11	Labeling variables/datasets, creating date and time variables, combining datasets (panel data, WDI data, Stata) HW 2 Due
Week 12	Describing and comparing distributions (histogram, box plots, quantile plots) (FRED data – Stata)
Week 13	Descriptive statistical functions, frequencies, ANOVA, trend, seasonal adjustment (FRED data – Stata)
Week 14	Data reports and presentation
Week 15	HW 3 Due, Final Project due
Week 16	Exam 2

## **Policy on Make-up Tests, Late Work, and Incompletes**

### **Exams**

Students are required to take all exams in-person in the classroom and at the time listed in the Course Outline. If a student misses an exam due to illness, job requirements, or other significant reasons, students may request a makeup exam. Documentation will be required on the missed exam. (Insufficient documentation will result in an “F” on the missed exam). Based upon the reason for the absence and the validity of the supporting documentation, the instructor will decide if the student qualifies for a make-up exam. Students must take the make-up exam as soon as possible and no later than one week after the exam date.

### **Assignments**

All homework assignments (and their due dates) will be posted on Canvas. Late submissions will result in a 10% penalty for each day the assignment is late (if the key has not been posted or answers gone over in class). There will be no make-ups or extra credit for missed assignments.

In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student’s responsibility to notify the course instructor at least one week prior to missing any course assignment.

### **Incomplete Grade Policy Statement**

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete (“I”). The assignment of the “I” grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete (“I”) grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing (“F”) grade.

### **Attendance Policy Statement**

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military

obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

### **Time Commitment Per Credit Hour**

For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of out of class student work for each credit hour. Equivalent time and effort are required for Summer Semesters, which usually have a shortened timeframe. Fully Online courses, hybrid, shortened, intensive format courses, and other non-traditional modes of delivery will demonstrate equivalent time and effort.

### **Code of Academic Integrity**

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

### **Faculty Rights and Responsibilities**

Florida Atlantic University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. To ensure these rights, faculty members have the prerogative to:

- Establish and implement academic standards.
- Establish and enforce reasonable behavior standards in each class.
- Recommend disciplinary action for students whose behavior may be judged as disruptive under the

[Student Code of Conduct University Regulation 4.007](#).

### **Disability Policy**

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability

services are available for students on all campuses. For more information, please visit the SAS website at [www.fau.edu/sas/](http://www.fau.edu/sas/).

### **Religious Accommodation Policy Statement**

In accordance with the rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs regarding admissions, registration, class attendance, and the scheduling of examinations and work assignments. University Regulation 2.007, Religious Observances, sets forth this policy for FAU and may be accessed on the FAU website at [www.fau.edu/regulations](http://www.fau.edu/regulations). Any student who feels aggrieved regarding religious accommodations may present a grievance to the director of Equal Opportunity Programs. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

### **Grade Appeal Process**

A student may request a review of the final course grade when s/he believes that one of the following conditions apply:

- There was a computational or recording error in the grading.
- Non-academic criteria were applied in the grading process.
- There was a gross violation of the instructor's own grading system. The procedures for a grade appeal may be found in [FAU Regulation 4.002](#).

### **Policy on the Recording of Lectures**

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty

### **Counseling and Psychological Services (CAPS) Center**

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

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### **Withdrawals**

Any student who decides to drop is responsible for completing the proper paper work required to withdraw from the course.

### **Disruptive Behavior Policy Statement**

Disruptive behavior is defined in the FAU Student Code of Conduct as "*... activities which interfere with the educational mission within classroom.*" Students who behave in the classroom such that the educational experiences of other students and/or the instructor's course objectives are disrupted are subject to disciplinary action. Such behavior impedes students' ability to learn or an instructor's ability to teach. Disruptive behavior may include, but is not limited to: non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor's expectations for classroom conduct.