

ECON 331
ECONOMETRICS I
Monday 13.00-15.00 - DB20
Wednesday 11.00-12.00 - DB20

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Office Hours: Tuesdays 13.00-14.00
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or by appointment

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Recitations/Lab Sessions: Date and Place will be announced.

Course Materials:

1. Texts: Stock, J. H., and M. W. Watson, *Introduction to Econometrics*. 3rd Edition, Addison Wesley-Pearson Education, Boston, 2010. (S&W)

Wooldridge, J., *Introductory Econometrics: A Modern Approach*. 4th Edition, South-Western College Pub., Cincinnati, 2008. (W)

2. Lecture Slides: They will be available online at Moodle.
Moodle for TED: <http://moodle.tedu.edu.tr/>

Problem Sets, Exam Dates, Quiz Dates, Recitation/Lab Materials and Other course updates will be on Moodle. It's your responsibility to follow up the updates for this course on Moodle and TEDU Emails.

3. Recitation/Lab Materials will be on Moodle.

4. Practice Multiple Choice Problems will be on Moodle.

5. Suggested/Complementary Readings: Pedace, R., *Econometrics For Dummies*, 1st edition, John Wiley & Sons, New Jersey, 2013.

Damodar N. Gujarati and Dawn C. Porter, *Basic Econometrics*, 5th Edition, McGraw-Hill Education, 2009.

R. C. Hill, W. E. Griffiths, G. C. Lim, *Principles of Econometrics*, 4th Edition, Wiley, 2011.

Credits: (3+0+0) 3 TEDU Credits, 7.0 ECTS Credits

Prerequisites: MATH 230. Good command of English and solid knowledge of Statistics will be very helpful with following the course.

Course Catalog Description:

Interactions between economic problems and the assumptions of statistical theory. Formulation, estimation and testing of economic models. Single variable and multiple variable regression techniques. Theory of identification and issues relating to inference. Functional forms and specification error analysis. Multicollinearity.

Course Objectives:

The main objectives of this course to revise and strengthen students' knowledge of univariate and multivariate statistics; to obtain a full understanding of the classical linear regression model; to provide students with a working knowledge of regression analysis under non-classical assumptions on the disturbance; to provide the necessary mathematical and statistical tools needed to conduct theoretical econometric analysis at an advanced level.

Learning Outcomes:

After a successful finishing of the course, the student should be able to

- 1) Demonstrate understanding of verbal, graphical, mathematical and econometric representation of economic ideas and analysis, including the relationship between them.
- 2) Demonstrate more extensive knowledge and skills of quantitative economics and econometrics.
- 3) Apply complex ideas to solve problems; reason logically and work analytically; perform with high levels of accuracy.
- 4) Apply mathematical, statistical and graphical techniques in an appropriate manner and analyze and solve complex problems accurately.
- 5) Relate economic questions to empirical observations and try to deal with those using econometric models based on sound hypotheses.
- 6) Have a working knowledge of statistical software and use it to address empirical questions.
- 7) Demonstrate the ability to apply econometric principles by writing a quality paper and giving oral presentations of the findings of the paper as an individual and as a group member.

Course Requirements & Grading:

Quizzes and In Class Activities	150
Problem Sets.....	75
Lab/Recitation Activities.....	75
Midterm.....	200
Paper & Presentation.....	200
Final.....	300
Total.....	1000

Grading Scale:

A total grade of less than 500 is an F. Grades above 500 will be assigned according to following ranges. Letter grades will be determined via curving in each grade range when necessary.

875-1000 A Range**750-874 B Range****600-749 C Range****500-599 D Range****< 500 F**

TEACHING and LEARNING**Planned Learning Activities and Teaching Methods:**

Telling/Explaining, Discussions/Debates, Questioning, Reading, Demonstrating, Problem Solving, Case Study/Scenario Analysis, Video Presentations, Oral Presentations/Reports, Hands-on Activities, Web Searching.

Student Workload:

Lectures 42 hrs, Quizzes/Exams 36 hrs, Course Readings 42 Hours, Assignments/Case Study/Research Review 36 hrs, Recitation/Lab Applications 18 hrs, Written Performance Project/Presentation 36 hrs -- Total workload is 210 hours.

Computer Usage:

Students will use MS Office applications (Word, Excel, and PowerPoint) to work on their assignments/case study/research review, presentations and a Statistical Software for the lab applications and their written projects.

MAKE-UP:

1. If you have a legitimate and documented excuse and miss the mid-term exam for some dire reason, you will be given a written make-up exam. In case of serious illness, a verifying report from a physician is necessary and it has to be approved by the University Health Centre. It will be a **cumulative** make up exam at the end of the semester.
2. If you miss a quiz, homework, class activity, paper/presentation deadline, there are NO MAKE-UP for those. There may be some extra credit options throughout the course. You may use extra credit chances for your missed work.

STUDENT CONDUCT**Academic Integrity:**

Academic dishonesty in assignments, examinations, or other academic performance is prohibited and considered a violation of the student conduct. It includes “cheating” (the intentional use or attempted use of unauthorized materials, information or study aids); “fabrication” (the intentional falsification or invention of any information); “assisting in dishonesty or tampering” (intentionally or knowingly helping or attempting to help another commit an act of dishonesty or tampering with evaluation instruments and documents); and “plagiarism” (intentionally or knowingly representing the words or ideas of another person as one's own). Penalties for academic dishonesty may result in receiving an 'F' in the course and may further instigate disciplinary action.

Disruptive Behavior:

Behaviors that are disruptive to teaching and learning will not be tolerated. Behaviors that create a hostile, offensive or intimidating environment based on gender, race, ethnicity, color, religion, age, disability, marital status or sexual orientation may be subject to scrutiny by the Student Council and University Administration.

Academic integrity and professionalism are fundamental values of TED University. Please see: <http://student.tedu.edu.tr/tr/student/akademik-durustluk-ilkeleri>

TENTATIVE Outline of Course Topics

#	Topics Lecture numbers and book chapter numbers may not coincide!	Readings
1	Introduction to Class Economic Questions and Data	Syllabus S&W Ch1, W Ch1
2	Review of Statistics: Descriptive Statistics, Confidence Intervals, Hypothesis Testing	S&W Ch 3
3	Simple Regression and Correlation	S&W Ch 4, 5 W Ch 2
4	Multiple Regression and Further Issues	S&W Ch 6, 7 W Ch3
5	Midterm (Date To Be Announced)	
6	Heteroscedasticity	S&W Ch 5 W Ch 8
7	Multicollinearity	S&W Ch 6 W Ch 3
8	Dummy Variables	S&W Ch 5 W Ch 7
9	Model Specification/Selection and Functional Forms	S&W Ch 7 W Ch 6
10	Student Presentations	
11	CUMULATIVE FINAL (Date To Be Announced)	

FAQs and Answers:

1. I cannot make it to your office hour, what should I do if I want to ask questions outside the classroom?

You can always talk to me or the Teaching Assistant after the classes. It is also fine for me to meet with an appointment. Please email me for the intended date and time to meet. You can also email me with your questions, and I will get back to you as soon as possible. For any kind of difficulty you face with in the course process, it is your responsibility to contact me and it is my responsibility to help you.

2. What will be the format of the quizzes and tests?

Multiple choices, true/false questions, and problems may appear in quizzes and exams. I reserve the right to make the quizzes and exams open/closed book. In exams and most of the quizzes, you will be allowed to use a SINGLE PAGE (2-SIDED) FORMULA SHEET.

3. Will there be make-up quizzes or tests?

There will be NO make-up for the quizzes and home works. You can consider potential extra credit opportunities as a chance for make-up. For the exams, you will be given an opportunity to make-up for the midterm. The make-up exam will be comprehensive and held at the end of semester.

4. Are the exams comprehensive?

The Final and the make-up exam will be cumulative. Since economics is an integrated discipline, to do well in the exams you should not forget the basic materials you have learned before.

As we move on in the course, you will notice that chapters build up on the knowledge of earlier chapters. This means you need to seek help early if you need it. You are welcome to come to my office for theoretical material help.

5. Can you tell me a bit about the format of your teaching?

I will teach in accordance with the outline of above schedule, but may not follow it strictly. I will use lecture slides and I may also teach in the more traditional way – using chalks and board when necessary. You are encouraged to stop me anytime if you have questions or anything is not making sense to you. I may use videos and in class activities to enhance your understanding of the course material and motivate discussion/participation.

6. What is your attendance policy?

I do not intend to set any attendance policy. It is in your benefit to attend all the lectures in order to do well in the course. If you miss class, you are responsible for all lecture material, handouts and announcements made.

I would strongly recommend you attend the lectures. However, if you can manage the class work (homework, exams, etc.) without attending, there is no problem. Note that, in my previous classes, the students with high attendance rates got significantly higher grades than those who did not attend regularly.

Please DO NOT send emails about your absence from a specific class. If you miss a lecture, make sure you go over the lecture slides, get the lecture notes from your class mates and understand the material you missed.

7. Is there any cell-phone policy?

Yes. When your phone rings or when you talk over the phone in class, you impose some externality (you are going to learn what this thing is later in the course) on your classmates and me, and this creates inefficiency. So, there should be no talking over the phone while you are in the classroom. Set your phone to silent mode and if it rings (silently!), leave the room and come back when you are finished.

Moreover, I do like everyone to feel comfortable in class while maintaining a learning environment. A set of rules will be compiled in class as follows:

- Text messaging is NOT RECOMMENDED in class.
- Using laptops are also NOT RECOMMENDED.
- If you wish to ask a question during class, raise your hand and I will call on you.
- Insightful comments, questions and class participation are appreciated, and rewarded.

8. What should I do in order to get a good grade from this course?

You are strongly encouraged to read the textbook carefully and work on problem sets. It is the student's responsibility to check the course's website for homework solutions, practice questions, recitation problems and announcements. Here is a list of things TO DO:

- Attend classes and recitations regularly. Excessive absences tend to result in a low grade.
- Expect to spend at some hours in preparing for this course.
- Read the corresponding chapters before class.
- Write down questions that come up while reading the chapters and discuss them with me during my office hours. By reviewing the material with others much learning may be gained. Consider forming study groups with other class members.
- Work through the problem sets and exercises in the book in preparation for the exams. You may use some online resources to solve more problems such as website of your textbook.
- Show up for office hours to clarify your understanding and ask your questions.
- Note that no instructor can teach you material, but only assist your learning efforts. You cannot learn the material of this class passively. You have to actively study for and participate in class.

9. Is there any EXTRA CREDIT in this course?

Yes, there will be extra credit chances in home works and quizzes. In addition, regular exams may include some extra credit.