

**ELEMENTARY ECONOMETRICS  
(ECON 4400) - Summer 2019**

**Instructor:** Saeed Shaker  
**Email:** [shaker.34@osu.edu](mailto:shaker.34@osu.edu)

**Mon/Wed 1:30-3:05 PM,  
Ramseyer Hall 100**

**Office Location:** 371 Arps Hall  
**Office Hours:** Mon/Wed 3:15 – 4:15pm  
**Course Page:** <https://carmen.osu.edu/>

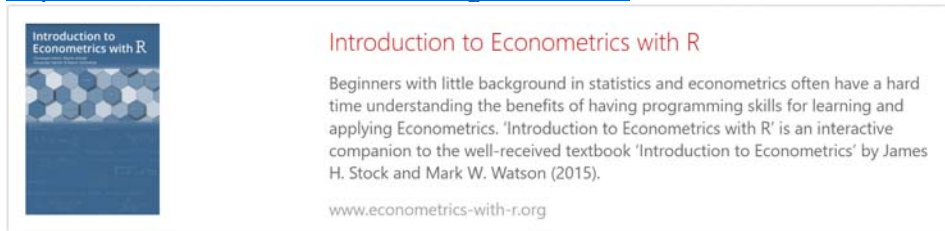
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**Course Description:** This course is an introduction to methods and tools of statistical and regression analysis. Students will learn a set of statistical tools and research designs that are useful in conducting empirical research in economics. This course is oriented towards understanding the intuition behind the methods and applying them to real world data using software. Upon successful completion of this course, you will be able to perform statistical and regression analysis using R, and interpret the results. You will also be able to conduct your own analysis using the technical skills you will learn.

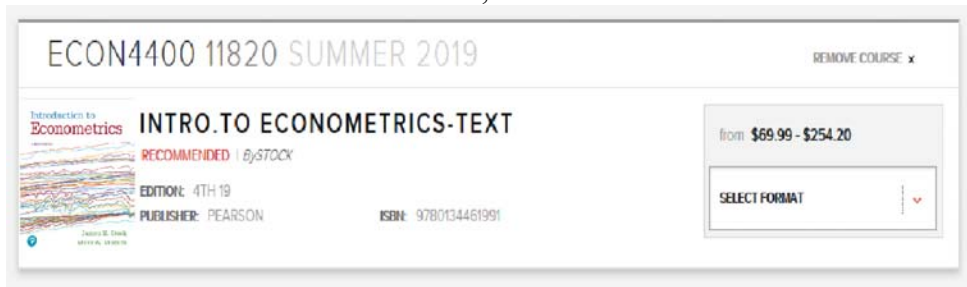
**Prerequisites** 3400, IntStds 3400, Stat 1430 (133), 1450 (145), 2450 (245), or AEDEcon 2005 (205), or equiv. Not open to students with credit for 5410 (641), 5420 (642), or 444.

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**eBook** Introduction to Econometrics with R  
<https://www.econometrics-with-r.org/index.html>



**Textbook** Introduction to Econometrics 4E text, Stock/Watson



**Software**

A laptop computer with a copy of R-Studio installed is required. R is a very powerful data and statistical programming tool, plus it is open source and free. As you know, technical skills of this sort are extremely important to the employers these days. You will finish this course with a reasonable level of statistical programming skills, but you need to keep learning and practicing by yourself if you want to advance.

Homework, Final Project, and some quizzes will be completed using R.

Download R Studio:

<https://www.rstudio.com/products/rstudio/download/>

You may also use a web version of R by creating an account in R cloud:

<https://rstudio.cloud/>

**Grading:**

Item	% of Total grade
Midterm 1	20%
Midterm 2	20%
Final Exam	25%
Project	15%
Homework	10%
Quiz	10%
Extra Credit	Up to 5%

**Grading Scale**

$93 \leq A < 100$	$86 \leq B+ < 90$	$76 \leq C+ < 80$	$67 \leq D+ < 70$
$90 \leq A- < 93$	$83 \leq B < 86$	$73 \leq C < 76$	$60 \leq D < 67$
	$80 \leq B- < 83$	$70 \leq C- < 73$	$E < 60$

**Homework:**

There will be 4 homework assignments. Students can work together on assignments, but must turn in your own assignment (as well as the computer code), in your own words. All assignments must be fully typed or you will receive 15 points deduction out of total 100 points for each homework.

**Homework must be handed in at class for full credit.**

**Quizzes:**

There will be 11 in class quizzes, each accounting for 1% of the course grade. The lowest score will be dropped, and there is no make up for them if you miss any.

**Project**

The purpose of the project is to practice the application of the analytical and quantitative skills which will be acquired in this course. The project should be a professional looking manuscript with easily interpreted graphs and tables. The project details and rubric will be posted on Carmen and discussed in class. The project must be handed in on Carmen, where it will be checked for plagiarism by the turnitin app.

**The project is due Friday, July 26 by 5:00 pm.**

**Exams:** All Exams will happen at the usual lecture hall. Exams are closed book and closed notes. Final exam will be cumulative. (Simple calculators allowed)

**Midterm 1:** Monday, June 10 (1:30-3:05PM)

**Midterm 2:** Wednesday, July 3 (1:30-3:05PM)

**Final:** Tuesday, July 30 (2:00-3:45PM)

**Makeup**

**Exams:**

There will be no makeup exams.

- If you miss the first midterm exam for a valid documented reason, the second midterm exam and the final exam grades will be re-weighted proportionally.
- If you miss the second midterm exam for a valid documented reason, your final exam grade will be re-weighted.
- There is no valid reason for missing both midterm exams: the score on each midterm will be zero if you miss both exams.
- If you miss the final exam for a valid documented reason, you will receive the average of your midterm 1 and midterm 2 grades **minus** 20%.
- If you miss any exam for an invalid or undocumented reason, your score on that exam will be zero.

**Extra Credit**

The extra credit is to incentivize participation. If you are actively participating in the class discussions, and asking and answering questions you will receive up to 4% extra points.

There's also 1% extra credit which will be given to everyone if the SEI participation rate is greater than 80%.

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**Tutoring:**

Free tutoring is available at the Econ Learning Center, 311 Arps Hall. It is open Monday through Friday from 9:00 am until 5:00 pm. No appointment is necessary – you can just walk in.

## **Academic Misconduct Statement**

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct: ([http://studentaffairs.osu.edu/resource\\_csc.asp](http://studentaffairs.osu.edu/resource_csc.asp))

**Disability Services:**

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 098 Baker Hall, 113 W 12th Ave; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

**Course Outline:**

Date	Important to note	Chapter(s)
W 5/8	Admin Stuff. + Intro	1
M 5/13		2
W 5/15		2, 3
M 5/20		3
W 5/22	Introduction to R	
M 5/27	NO CLASS	
W 5/29		4
M 6/3		4, 5
W 6/5		5
M 6/10	Midterm 1	
W 6/12		6
M 6/17		6
W 6/19		7
M 6/24		7, 8
W 6/26		8
M 7/1	NO CLASS	
W 7/3	Midterm 2	
M 7/8		9
W 7/10		9
M 7/15		11
W 7/17		11, 12
M 7/22		12
W 7/24	Review	
M 7/30	Final Exam	