

Measurement and Analysis

ECO-3410 | Fall 2024

Dr. Alfonso Rodriguez

Course Overview

This course will provide an introduction to the foundations of probability and statistical methods. We will be applying the methods introduced in the course to real world economic data in order to analyze the relationships between various economic variables.

Textbook

Larsen, R., and M. Marx (2018). *Introduction to Mathematical Statistics and Its Applications*, 6/E, Pearson Publishing.

Software

Anaconda - Python (lates Version).

- You can download Anaconda for Windows, macOS, or Linux from www.anaconda.org
- See instructions on installing Anaconda for your operating system >>> [here](#) <<<.

I will be working through all course examples using Python. So, I recommend downloading and installing Anaconda/Python on your system as soon as possible.

Contact Information

I can be reached via e-mail at alrodrig@fiu.edu. Please include in the e-mail subject line the course number, in this case ECO3410. Otherwise, your e-mail will, most likely, end up in my spam folder.

Do not message me through Canvas as I do not check the Canvas Inbox, I only check me email.

I will hold office hours on Mondays and Wednesdays from 7:00AM – 7:50AM, in my office, DM313A. I will also be available, if the need arises, by appointment.

So, If you are having issues with the course material and/or need to meet with me one-on-one please stop by during office hours or contact me so we can schedule a meeting.

Grades

Your grade in this course will be based on various homework assignments (20%), two in-class exams (20% each), and an applied project (40%).

Please note, it is of the utmost importance that you do not miss an exam. Those who do not complete an exam will receive a failing grade for that exam, no exceptions.

Project Grade

The project grade will be calculated based on the following three factors:

- (1) grade on project, 33.3%
- (2) the in-class presentation of project, 33.3%; and,
- (3) peer grade, 33.3%.

The first grade is based on the overall quality and content of the project; the second grade is based on your presentation; and, the final grade will be based on how your team members (peers) grade your performance and contributions to the project and its presentation.

Grade Distribution

The grade distribution for the course is as follows:

Grade	Range
A	95 - 100
A-	90 - 94
B+	87 - 89
B	83 - 86
B-	80 - 82
C+	77 - 79
C	70 - 76
D	60 - 69
F	0 - 59

Topic List

Topic	Chapter
Summarizing Data	
Set and Probability Theory	2.1 - 2.8
Random Variables	3.1 - 3.4
Expectations	3.5, 3.6, 3.12
Random Variables, their Distributions, and Sampling	4.1 - 4.6
Parameter Estimation	5.1 - 5.4
Hypothesis Testing	6.1 - 6.4

In order to accommodate the class discussions, changes to the topic list outlined above may occur. In the event that such a change should occur, you will be informed of the details during class.

Academic Misconduct

Please read over and be aware of [FIU's Code of Academic Integrity](#). Any violation thereof constitutes academic misconduct and may result in disciplinary action including, but not limited to, a failing grade, disciplinary probation, or expulsion from the university.

Accommodating Disabilities

If you have a disability and need assistance, please contact the [Disability Resource Center](#). Upon contact, the Disability Resource Center will review your request and contact me in order to make arrangements for assistance.