



ECO5936 SPECIAL TOPICS:

PYTHON FOR APPLIED

ECONOMICS

SYLLABUS

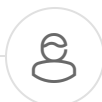


COURSE INFORMATION

- **Course Hours:** Tue 11:35 AM - 12:20 PM
- **Course Meeting Location:** Bellamy Bldg, Room 259
- **Credit Hours:** 1 hour

COURSE DESCRIPTION

This course will familiarize students with Python for economic data analysis. The students will learn how to read and clean data, create variables, combine datasets, obtain descriptive statistics and run regressions using Python. The last part of the course will be dedicated to learning how to produce dashboards in Power BI.



COURSE INSTRUCTOR



- **Dr. Simona Andrei**
- Teaching Professor I
- sandrei@fsu.edu (<mailto:sandrei@fsu.edu>)
- BEL 260
- Office Hours: Tu Th 1 - 2 PM, or by appointment

↩ Emails will be responded to within 24 to 48 hours.



LEARNING OBJECTIVES

At the completion of this course, students will be able to write programs in Python to:

1. Read in, check, and clean datasets.
2. Create and modify variables.
3. Subset, modify, and combine datasets.
4. Produce descriptive statistics.
5. Conduct basic regression analyses.

Students will also be able to create dashboards in Power BI.



TENTATIVE COURSE OUTLINE

Module 1: Python Basics

Module 2: Variables and types

Module 3: Lists, arrays, dictionaries, and other data structures

Module 4: Functions: inbuilt and user-defined

Module 5: Numpy and Pandas basics

Module 6: Data in/out and Data exploration

Module 7: Conditional Statements and Loops

Module 8: Subsetting and combining datasets

Module 9: Intro to regressions

Module 10: Web scraping

Module 11: Power BI Dashboards

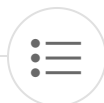


COURSE MATERIALS

Recommended

- McKinney, Wes. *Python for Data Analysis: Data Wrangling with Pandas, NumPy, and Jupiter*. 3rd edition, O'Reilly, 2022;

- Heiss, Florian and Brunner, Daniel. *Using Python for Introductory Econometrics*. 2020.



STUDENT RESPONSIBILITIES

- Students should log on to Canvas at least every other day to check for course updates.
- Students are expected to keep up with the class, engage with the course material, and submit assignments by the due dates.
- To be successful in this course, students need to complete all required assignments and tests.



GRADING POLICY

Evaluation will be based on programming assignments. Expect to have a programming assignment almost every week. The lowest score on the assignments will not count toward the calculation of the final grade. You MAY discuss assignments with other students, although all final work submitted should be your own. Typically you will have one week to complete an assignment. Homework assignments must be submitted by the due date and time. Late homework assignments will receive a penalty of 20% for each day (or part of a day) late.

Grading Scheme

The following grading standards will be used in this class:

Grading Scheme Breakdown

Grade	Range
A	100% to 93%
A-	< 93% to 90%
B+	< 90% to 87%
B	< 87% to 83%
B-	< 83% to 80%
C+	< 80% to 77%
C	< 77% to 73%



C-	< 73% to 70%
D+	< 70% to 67%
D	< 67% to 63%
D-	< 63% to 60%
F	< 60% to 0%



TECHNOLOGY REQUIREMENTS

Course content is accessible through Canvas.

Anaconda is free and you will install it in your accounts on the first day of class.



COURSE POLICIES

COMMUNICATIONS/IN-PERSON AND ONLINE ETIQUETTE

For Email Communication:

- For email, please respond to your instructor's and peers' messages promptly.
- Include the **course number in the subject line**.
- Use a brief description in the subject line that outlines the topic of discussion.
- Avoid using slang or profane words.
- Use your instructor's correct title he or she prefers for communication.
- Avoid using emoticons, such as smiley faces, and maintain a professional demeanor.
- Sign your email messages using your full name.
- **AVOID USING ALL CAPS**. This makes the message visually difficult to read and is perceived by the reader as "shouting."
- Use correct spelling, grammar, and punctuation, just as you would for any communication.
- Ask yourself whether you would be comfortable if someone other than the intended receiver were to read your message. Remember, email is not a completely secure form of communication.
- Refrain from "flaming," which is expressing a strongly held opinion without tact or regard for others. Don't assume that recipients will know the intent of the message (e.g., "just kidding"). It reads differently when it's in print (electronic or not).

- Report any inappropriate communication considered to be of a serious nature to your instructor as it may be a violation of University policy.
- Treat others with respect by making messages clear and succinct.

PARTICIPATION & LATENESS POLICY

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

POLICY FOR MISSED ASSIGNMENTS

Students with excused absences as defined by the participation and lateness policy should contact the instructor IN ADVANCE to arrange for an extension on a given assignment. Medical absences MUST be accompanied by appropriate documentation. Students who miss an assignment without advance permission and/or without appropriate documentation will receive a score of zero on that assignment.

POLICY ON RESPONDING TO STUDENTS

- Email responses typically within 24 to 48 hours.
- Graded assignments typically returned within 1 week after due date.



UNIVERSITY POLICIES

UNIVERSITY ATTENDANCE POLICY

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

ACADEMIC HONOR POLICY



The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of student's academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "... be honest and truthful and ...[to] strive for personal and institutional integrity at Florida State University." (For more details, see the [FSU Academic Honor Policy and procedures for addressing alleged violations \(http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy\)](http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy).)

ACADEMIC SUCCESS

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the [Department of Student Support and Transitions \(https://dsst.fsu.edu\)](https://dsst.fsu.edu) to learn more.

PROCESS FOR RESOLVING ACADEMIC PROBLEMS OR GRIEVANCES

Please use the *Resolving Academic Problems: A Step-by-Step Guide for Students* in the Academic Honor Policy and Grievances section of the [Office of Faculty Development & Advancement \(https://fda.fsu.edu/academic-resources\)](https://fda.fsu.edu/academic-resources) website to begin the process of communicating with your instructor to resolve any confusion or difficulty you may be having in the course. Detailed information on FSU's grievance procedure, including special instructions for students enrolled in an FSU branch campus, is maintained on the FSU Undergraduate Bulletin's [Academic Integrity & Grievances \(https://registrar.fsu.edu/bulletin/undergraduate-information/academic-integrity-grievances\)](https://registrar.fsu.edu/bulletin/undergraduate-information/academic-integrity-grievances) webpage. Out-of-state distance learning students should review the Office of Distance Learning [Complaint Resolution \(https://distance.fsu.edu/about-us/complaint-resolution\)](https://distance.fsu.edu/about-us/complaint-resolution) webpage for additional procedures.

AMERICANS WITH DISABILITIES ACT

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations

for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course.



Students with disabilities needing academic accommodation should:

1. register with and provide documentation to the Office of Accessibility Services; and
2. request a letter from the Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; and,
3. meet (in person, via phone, email, teams, zoom, etc...) with each instructor to whom a letter of accommodation was sent to review approved accommodations.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided.

This syllabus and other class materials are available in an alternative format upon request.

For the latest version of this statement and more information about services available to FSU students with disabilities, contact the:

[Office of Accessibility Services \(Tallahassee Campus\)](https://dsst.fsu.edu/oas) (<https://dsst.fsu.edu/oas>)

874 Traditions Way

108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

(850) 644-9566 (voice)

(850) 644-8504 (TDD)

oas@fsu.edu (<mailto:oas@fsu.edu>)

<https://dsst.fsu.edu/oas>

[Student Accessibility Services \(Panama City Campus\)](https://pc.fsu.edu/students/sas) (<https://pc.fsu.edu/students/sas>)

2nd Floor Barron Building (Room 215)

Florida State University Panama City

Panama City, FL 32405

(850) 770-2172 (office)


(866) 693-7872 (toll free)

Email: sds@pc.fsu.edu (<mailto:sds@pc.fsu.edu>)

<https://pc.fsu.edu/students/sas>

FREE TUTORING FROM FSU

On-campus tutoring and writing assistance are available for many courses at Florida State University. High-quality tutoring is available by appointment and on a walk-in basis. These services

are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity. 

Tallahassee Campus

For a comprehensive list of on-campus tutoring options, visit the [Academic Center for Excellence \(https://ace.fsu.edu/tutoring\)](https://ace.fsu.edu/tutoring) (ACE) webpage (<http://ace.fsu.edu/tutoring>) or contact tutor@fsu.edu (<mailto:tutor@fsu.edu>).

Panama City Campus

Peer tutoring is available for all undergraduate FSU Panama City students both in-person on campus and remotely through Zoom. If you need tutoring support, please email the peer tutor listed on the [Peer Tutoring \(https://pc.fsu.edu/peer-tutoring\)](https://pc.fsu.edu/peer-tutoring) webpage (<https://pc.fsu.edu/peer-tutoring>). Tutoring will be in-person in the [John and Gail Robbins Center for Academic Excellence and Innovation \(https://pc.fsu.edu/students/student-services/john-gail-robbon-center\)](https://pc.fsu.edu/students/student-services/john-gail-robbon-center) unless you specify with the tutor that you would like to meet via Zoom instead. If you have trouble reaching a peer tutor outside their scheduled availability listed on the [Peer Tutoring \(https://pc.fsu.edu/peer-tutoring\)](https://pc.fsu.edu/peer-tutoring) webpage, you may email [advising@pc.fsu.edu \(mailto:advising@pc.fsu.edu\)](mailto:advising@pc.fsu.edu) or call (850) 770-2263 to be connected with available resources.

CONFIDENTIAL CAMPUS RESOURCES

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

[Victim Advocate Program \(https://dsst.fsu.edu/vap\)](https://dsst.fsu.edu/vap)

University Center A

Room 4109

Phone: (850) 644-7161 (24/7)

Text: (850) 756-4320 (24/7)

Email: [Victims-Advocate@fsu.edu \(mailto:Victims-Advocate@fsu.edu\)](mailto:Victims-Advocate@fsu.edu)

Office Hours: Monday-Friday 8am-5pm

<https://dsst.fsu.edu/vap>

[Counseling & Psychological Services \(Tallahassee Campus\) \(https://counseling.fsu.edu/\)](https://counseling.fsu.edu/)

Askew Student Life Center, 2nd Floor

942 Learning Way

Phone: (850) 644-8255 / (850) 644-TALK

<https://counseling.fsu.edu>

[FSU PC Counseling Center \(Panama City Campus\) \(https://pc.fsu.edu/students/student-affairs/counseling-center\)](https://pc.fsu.edu/students/student-affairs/counseling-center)



Michael McLaughlin, LCSW

Coordinator/Therapist

Barron Building, Office 214

Phone: (850) 770-2174

Email: mrm18bg@fsu.edu (<mailto:mrm18bg@fsu.edu>)

Office Hours: Monday-Thursday 9am-4pm; Friday 9am-3pm

<https://pc.fsu.edu/students/student-affairs/counseling-center>

University Health Services (<https://uhs.fsu.edu/>)

Health and Wellness Center

960 Learning Way

Phone: (850) 644-6230

Office Hours: Monday-Friday 8am-4pm

<https://uhs.fsu.edu>

FSU FOOD PANTRIES

FSU has established food pantries where students in need can pick up nonperishable food items freely and anonymously. Donations for the collection of nonperishable food items are encouraged.

For information about the Tallahassee food pantry, visit the **Food for Thought Pantry**

(<https://dsst.fsu.edu/resources/food-for-thought-pantry>)_webpage

(<https://dsst.fsu.edu/resources/food-for-thought-pantry>). The pantry is located at University Center A, Suite 4148. If you have questions or concerns, contact the Department of Student Support and Transitions at foodpantry@fsu.edu (<mailto:foodpantry@fsu.edu>) or (850) 644-2428.

For information about the Panama City Food Pantry, visit the **Seminole Exchange**

(<https://pc.fsu.edu/students/counseling-center/food>)_webpage

(<https://pc.fsu.edu/students/counseling-center/food>) The pantry is located at Barron Building, 2nd floor. If you have questions or concerns, contact Michael McLaughlin, LCSW, at mmclaughlin3@fsu.edu (<mailto:mmclaughlin3@fsu.edu>) or (850) 770-2174.

SYLLABUS CHANGE POLICY

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.



CANVAS SUPPORT

Need help with Canvas? Contact FSU Canvas Support:



✉ **Email:** canvas@fsu.edu (<mailto:canvas@fsu.edu>)

📞 **Phone:** (850) 644-8004

🌐 **Website:** support.canvas.fsu.edu (<http://support.canvas.fsu.edu>)

🕒 **Hours:** 8am to 5pm, Monday - Friday