FLORIDA ATLANTIC UNIVERSITY

NEW COURSE PROPOSAL
Undergraduate Programs

Department EECS

College College of Engineering & Computer Science
*(To obtain a course number, contact **erudolph@fau.edu**)*

UUPC Approval 10/10/22
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

Prefix COP **Number** 3035	*(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)* **Lab Code**	**Type of Course** Lecture	**Course Title** Intro to Programming in Python

Credits *(See Definition of a Credit Hour)*: 3

Grading *(Select One Option)*: **Regular** (●) **Sat/UnSat** ( )

Effective Date *(TERM & YEAR)*: Spring 2023

Course Description *(Syllabus must be attached; see Template and Guidelines)*
Introduction to programming with Python for students no prior programming experience. It introduces programming fundamentals, algorithm development, debugging, testing, visualizations, with applications.

Prerequisites, with minimum grade*
No programming experience is required.

Corequisites
No programming experience is required.

Registration Controls *(Major, College, Level)*

Default minimum passing grade is D-.** **Prereqs., Coreqs. & Reg. Controls are enforced for all sections of course

WAC/Gordon Rule Course
☐ **Yes** ☑ **No**

WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to proposal. See WAC Guidelines.

Intellectual Foundations Program (General Education) Requirement *(Select One Option)*
None

General Education criteria must be indicated in the syllabus and approval attached to the proposal. See Intellectual Foundations Guidelines.

Minimum qualifications to teach course
MS in CS, CE, EE

Faculty Contact/Email/Phone
Valentine Aalo/ aalo@fau.edu/561-297-3485

List/Attach comments from departments affected by new course

Approved by	***Date***
Department Chair	9/20/2022
College Curriculum Chair Hongbo Su	
College Dean	10/3/22
UUPC Chair Ethlyn Williams	10/10/22
Undergraduate Studies Dean Dan Moeroff	10/10/22
UFS President	
Provost	

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.

COP 3035
INTRO TO PROGRAMMING IN PYTHON

WF 3:30 – 4:50
3 credits

Spring 2023
Prof. Valentine Aalo
Office: EE 415
Office hours: TR 2-4
Telephone: 561-297-3485
Email: aalo@fau.edu

TA name	N/A
Office	N/A
Office hours	N/A
Telephone	N/A
Email	N/A

Course Description

Introduction to programming with Python for students no prior programming experience. It introduces programming fundamentals, algorithm development, debugging, testing, visualizations, with applications.

Instructional Method

This class is designated as "Video Stream: Attendance Optional." Class sessions will be recorded live, and a limited number of students may attend in person as long as social distancing protocols can be maintained. Other students will view class sessions remotely in Canvas and on Zoom. A Zoom link will be sent out before each class.

Prerequisites/Corequisites

Prerequisites: none

No programming experience is required.

Course Objectives/Student Learning Outcomes

1. Demonstrate and apply programming methods using the Python programming language;
2. Demonstrate the ability to write programs with the Python language and use industry standard development tools;
3. Use effectively Python data structures: lists, dictionaries, sets;
4. Implement error handling with exceptions;
5. Demonstrate the use of input/output mechanisms in Python.

Course Evaluation Method

Homework ..... 55 %
Two Exams ..... 40 %
Discussion Board..... 5 %

Tentative Exam Schedule:

Exam #1: October 08, 2021
Exam #2: December 09, 2021 (Final Exam: 10:30-1:00)

Course Grading Scale

Grading Scale: 92-100: A, 90-91: A-, 85-89: B+, 80-84: B, 77-79: B-, 73-76: C+, 70-72: C, 67-69: C-, 63-66: D+, 60-62: D, 50-59: D-, 49: F

Policy on Makeup Tests, Late Work, and Incompletes (if applicable)

No late work is accepted unless by special permission from the instructor.

Incomplete grades are not in general favored as a policy of the department. Unless there is a solid evidence of medical condition/jury-duty or otherwise serious emergency/family situation incomplete grades will not be given.

Special Course Requirements (if applicable)

All submissions must be made in Canvas. No email submission of any class material will be accepted.

Classroom Etiquette Policy (if applicable)

University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones and laptops, are to be disabled in class sessions.

Attendance Policy

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.

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/

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/.

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.

Required Texts/Readings

"How to Think Like a Computer Scientist: Learning with Python 3", by Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers
Available as an e-book at http://openbookproject.net/thinkcs/python/english3e/

Supplementary/Recommended Readings (if applicable)

1. Learn Python - Free Interactive Python Tutorial: https://www.learnpython.org/
2. Learning Python — The Hitchhiker's Guide to Python: https://docs.python-guide.org/intro/learning/
3. The Python documentation page: https://docs.python.org/3/
4. The Python tutorial: https://docs.python.org/3/tutorial/index.html

Course Topical Outline

1. Introduction
2. Variables, expressions, and statements
3. Python data types
4. Functions
5. The turtle graphics library
6. Control structures

7. Input/output
8. Classes and objects
9. Exception handling
10. Visualizations
11. Applications