**Fayetteville Technical Community College**

**SYLLABUS**

**Fall 2020**

**Course:**

Course Title: **Advanced Python Programming**

Prefix and Section Number: **CSC 221-0001**

Day(s) and Time(s): **Mon/Wed 1:00pm – 2:50pm ATC 156**

Delivery Method: Face-to-Face with Online Components

Class Begins: 8/16/2020 Class Ends: 12/11/2020

# Class Hours: 2 Lab Hours: 2 Clinic Hours: 0 Credit Hours: 3

# To Contact the Instructor

Instructor: Andrew Norris

Office Location: ATC 113C

Office Hours: See Blackboard

Phone: (910) 486-3967

Email: norrisa@faytechcc.edu

# Course Description:

This course introduces advanced computer programming using the Python programming language. Emphasis is placed on advanced programming concepts including advanced algorithms and programming principles using standard and third party libraries.

Upon completion, students should be able to design, code, test, and debug advanced Python programs.

# Course Prerequisites: CSC 121

# Course Co-requisites: None

# Course Objectives:

At the completion of this course, the student will have demonstrated understanding of topics below through tests, labs, and discussions.

* Apply logic to develop problem-solving programs
* Design programs using object-oriented programming principles
* Use external libraries
* Use common data structures to store and represent real-world data
* Create programs that visualize and analyze data
* Create Web-based Python applications
* Implement basic machine learning / deep learning principles

**Outline of Instruction:**

1. Object-Oriented Programming
2. Linear Data Structures
3. Non-Linear Data Structures
4. Web Application Programming
5. Machine Learning / Deep Learning

# Required Textbook and Companion Homework Site:

Information about the [FTCC Bookstore (opens in new window)](https://bookstore.faytechcc.edu/) [URL: https://bookstore.faytechcc.edu/] is available on the FTCC college website. To make textbook purchases online, select “Textbook Lookup” on the FTCC Bookstore web page.

## Textbook:

Intro to Python for Computer Science and Data Science: Learning to Program with AI, Big Data and The Cloud 1st Edition by Paul J. Deitel (Author), Harvey Deitel (Author)

ISBN-13: 978-0135404676

# Other Required Materials/Software:

The recommended browsers are Mozilla Firefox, Google Chrome, and Safari in the most updated version.

Microsoft Office 365 (Office 2016) is available to currently enrolled students at FTCC. The Microsoft Office 2016 app is available for download on up to five (5) computers and/or mobile devices. Direct link to download Office 365: [https://login.microsoftonline.com (opens in new window)](https://login.microsoftonline.com/).

Username: FTCCWebadvisorLogin@ad.faytechcc.edu (example: Smithj1234@ad.faytechcc.edu). Password: Active Directory (WebAdvisor) password (if you have not created an Active Directory password, you will need to do this first).

Blackboard Technical Support is available at any time, seven days a week by calling 1-888-829-9660. Assistance on specific trouble-shooting topics are found at [Blackboard Help Online (opens in new window)](https://help.blackboard.com/Learn/Student) [URL: https://help.blackboard.com/Learn/Student].

# Grading Scale:

FTCC grades are based on a 4.0 grading system. Each grade is assigned a “grade-point equivalent” in quality points for each term credit hour scheduled. The grade point average (GPA) is determined by dividing the total of quality points earned by the number of term hours scheduled.

| Numerical Grade | Letter Grade Equivalent | Grade Point Equivalent |
| --- | --- | --- |
| 90-100 | A-Excellent | 4 grade points per credit hour |
| 80-89 | B-Good | 3 grade points per credit hour |
| 70-79 | C-Average | 2 grade points per credit hour |
| 60-69 | D-Below Average | 1 grade point per credit hour |
| 0-59 | F-Failure | 0 grade point |

The complete grading scale description may be found in the current FTCC Student Handbook under “Academic Information.”

# Course Requirements/Methods of Evaluation:

Letter grades will be determined on the following weighted categories:

| **Categories** | **Weight** |
| --- | --- |
| Tutorials / Labs | 20% |
| Labs / Quizzes | 30% |
| Homework | 30% |
| Software Portfolio | 10% |
| Final project | 10% |

# Departmental Policies:

## Student Responsibilities:

1. Required enrollment assignment. I will complete the enrollment activity by the posted ten percent date of the course. The date is clearly posted in the Blackboard Site. Failure to complete this activity could result in being dropped from the course.
2. I will ask questions directly and immediately if I do not understand the instructions or due dates for an assignment.
3. I will organize my time in a way that allows me to thoughtfully and thoroughly complete assignments.
4. I will be responsible for keeping up with when assignments are due and submitting them on time or before they are due.
5. I understand that technical problems related to computer connections or equipment cannot be used as an excuse for failure to complete assignments or to participate online.
6. I understand that technical problems with email require that I contact the FTCC Help Desk at 910-678-8502 for technical support.
7. I understand that technical problems with Blackboard require that I contact Blackboard Technical Support, which is available at any time, seven days a week by calling 1-866-829-9660.
8. I will fully participate in course activities by being prepared and interacting respectfully with my classmates and instructor. I understand that participation in all course components is a requirement of this course and that it counts toward my grade.

**Expected Student Participation Level:**

**BLACKBOARD:** Log on to the Blackboard site at least three times per week. This necessary for students to keep abreast of assignments, utilize provided online resources and take part in discussion boards.

**EMAIL:** Always use your student email to contact your instructor. Please include your section number in all email correspondence. Note: Do not use Yahoo or Hotmail accounts. Check and answer your e-mail at least three times per week.

**PERSONAL INFORMATION:** Make sure your phone number is correct with the Registrar's office. If your instructor attempts to contact you by phone and the phone number listed with the Registrar is incorrect or has been disconnected, and e-mail is not working, it is assumed you are no longer able to complete the course. You may correct your personal information through WebAdvisor, if needed.

**ONLINE:** You may also contact the instructor and/or classmates through the Help Topic on the discussion board.

## Instructor Responsibilities:

1. Instructors will respond to emails and phone calls within 24 hours, Monday through Friday; within 48 hours on weekends and holidays.
2. Instructors will lead and participate in all discussion assignments.
3. Instructors will post grades and provide feedback within 5-7 days.
4. Instructors will observe regularly scheduled office hours.

## Attendance–Time Commitment:

Attendance is essential for maintaining the best learning environment in all course formats. Attendance may be taken separately in each portion of a course (i.e., class, lab, clinic, online). Missing 20% of any portion of a course may result in administrative withdrawal. Special attendance policies are in effect for certain programs (refer to the current FTCC Student Handbook).

# Academic Integrity-Plagiarism:

Academic dishonesty includes, but is not limited to, the following:

1. Obtaining test information, research papers, notes, and other academic material without authorization.
2. Receiving or giving help on tests, projects, or assignments submitted for a grade unless specifically authorized by the instructor.
3. Plagiarism, which is taking credit for another’s ideas or works as if they were your own.

Penalties for plagiarism and cheating that may be imposed by the instructor include, but are not limited to, the following:

1. Rewriting the assignment.
2. Receiving a “0” on the assignment.
3. Failing the course in which the assignment was submitted.

Penalties for plagiarism and cheating that may be recommended include, but are not limited to, the following:

1. Academic probation.
2. Academic suspension.
3. Expulsion from the college.

# Institutional Statement:

Each student is responsible for being aware of the information contained in the FTCC Catalog, FTCC Student Handbook, Student Code of Conduct policy, and semester information listed in the class schedule. All information may be viewed on the FTCC website.

# Make-up Policy:

Late academic work submission procedures are as follows:

1. Academic assignments and projects are due by the scheduled/published dates.
2. In general, there is a 10 percent penalty for each business day that an assignment or project is late. For example, if your assignment is due on Tuesday and you submit it on Thursday, the highest possible grade you can earn is a “B.” With each additional day late, there is a 10 percent penalty. Assignments may be submitted no more than one week late without prior approval from your instructor.
3. No late work will be accepted after the 90 percent date of the term without an incomplete grade approval from your instructor.
4. Certain course activities may not be eligible for late submission after the conclusion of the week, module, or unit. These include, but are not limited to, discussion boards, quizzes, and exams.
5. We know that extenuating circumstances can sometime interfere with timely submission of your work. Be sure to tell your instructor right away if you are going to be late with a submission.
6. Extenuating circumstances include, but are not limited to, personal/family member hospitalization, family member death, a severe weather event, a natural disaster, and an active military situation that prevents timely submission of work. Computer-related issues, internet connectivity, and account blocks are generally not considered extenuating circumstances.
7. You may request an extension or alternative arrangement, preferably prior to the due date, but your request does not automatically result in a waiver of the due date or of the penalties for late submissions. Your instructor may also require you to provide documentation of the reason. If your instructor determines that an extension is warranted, they will provide you with the expectations for your submission.

# Course Concerns/Grade Appeals:

Students have the right to inquire about academic issues or other concerns related to the classroom environment. Inquiries should be directed to the following persons in the following order:

## Course Instructor:

Instructor: Andrew Norris

Office Location: ATC 113C

Phone: (910) 486-3967

Email: [norrisa@faytechcc.edu](mailto:norrisa@faytechcc.edu)

## Department Chair:

Name: Anthony Cameron

Office Location: ATC 113F

Phone: 678-8571

Email: camerona@faytechcc.edu

## Dean:

Dean: Tenette Prevatte

Office Location: GCB 215A

Phone: 678-7353

Email: [prevattt@faytechcc.edu](mailto:prevattt@faytechcc.edu)

# Americans with Disabilities Act (ADA):

FTCC facilitates the implementation of reasonable academic accommodations, including resources and services for students with disabilities, chronic medical conditions, a temporary disability, or other health related conditions resulting in difficulties with accessing learning opportunities. All accommodations are coordinated through the Disability Support Services Office located in the Tony Rand Student Center, Room 127, or call 910-678-8349 or 910-678-8559. Please contact the [Disability Support Services Office (opens in new window)](https://www.faytechcc.edu/campus-life/accessibility/) [URL: https://www.faytechcc.edu/campus-life/accessibility/] as early in the semester as possible.

# Title VI, VII, and IX Non-Discrimination Statement:

FTCC does not practice or condone discrimination in any form against students, employees, or applicants on the grounds of race, color, national origin, religion, sex, age, disability, or political affiliation. FTCC commits itself to positive action to secure equal opportunity regardless of those characteristics.

FTCC supports the protection available to members of its community under all applicable federal laws, including Title VI and VII of the Civil Rights Act of 1964 and 1991, Title IX of the Educational Amendments of 1972, Sections 799A and 845 of the Public Health Service Act, the Equal Pay and Age Discrimination Acts, the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and Executive Order 11375. For more information, please visit the [Title IX and Equal Opportunity (opens in new window)](https://www.faytechcc.edu/title-ix-equal-opportunity/) [URL: https://www.faytechcc.edu/title-ix-equal-opportunity/] page on the FTCC website.

# Syllabus/Schedule Changes:

This syllabus may be changed at the instructor’s discretion, with proper notification to students. Any changes will be promptly noted in Announcements and emailed to the student’s FTCC student email account.