Mission Statement

California Institute of Arts & Technology prepares students for professional and individual success through innovative high-quality vocational and career advancement programs, which provide the competencies and credentials for a rewarding career.

Course Information

Course Credits:

Semester Units: 4

Lecture Hours: 45

Lab Hours: 30

Required Resources

Gaddis, Tony. Starting out with Python Fifth edition. Pearson, New York, NY, 2020.
Identifiers: LCCN 2019047254, ISBN 9780135929032

Required Hardware:

Laptop/Desktop with the following minimum specs:

- CPU: Intel i3 RAM: 8gb
- HDD/SSD: 128gb
- Windows OS preferred (Please email instructor if you are in doubt about your laptop.)

Required Software:

Microsoft Windows operating system.

Important Deadlines & Dates

Attendance Policy

All programs require minimum weekly academic progress. Weekly discussion questions count towards attendance.

There are three attendance periods each week:

- Monday/Tuesday
- Wednesday/Thursday
- Friday/Saturday

Weeks 1-4:

Attendance Period 1: Monday/Tuesday

You must complete the discussion question assignment by Tuesday before 11:59pm in order to be marked present for Monday and Tuesday.

Attendance Period 2: Wednesday/Thursday

You must reply to another student's discussion question post or the instructor's replies by Thursday before 11:59pm in order to be marked present for Wednesday and Thursday**.**

Attendance Period 3: Friday/Saturday

You must reply to another student's discussion question or post or the instructor replies by Saturday before 11:59pm in order to be marked present for Friday and Saturday.

Week 5:

Attendance Period 1: Monday/Tuesday

You must complete the discussion question assignment by Tuesday before 11:59pm in order to be marked present for Monday and Tuesday.

Attendance Period 2: Wednesday/Thursday

You must reply to another student's discussion question post or the instructor's replies by Wednesday before 11:59pm in order to be marked present for Wednesday and Thursday.

Attendance Period 3: Friday/Saturday

You must reply to another student's discussion question or post, or the instructor replies by Thursday before 11:59pm in order to be marked present for Friday and Saturday.

The deadline to submit coursework in week 5 is Thursday by 11:59pm.

Course Description

This course introduces students to basic concepts in programming and common baseline computer science topics. The focus of the course will be primarily in Python using the IDLE development environment. Students establish a foundational knowledge base and aptitude required for pursuing more advanced computer science studies. Python language concepts like data types, variables, program control, and functions will be presented. Additional topics introduced include text editors, IDEs, compilers, program development workflows and nested loops. Upon completion of the course students will be able to understand how to create, modify, and maintain basic Python programs to provide software-based solutions.

Course Objectives

Upon successful completion of this course, the student will be able to:

- CO1: Introduction to programming
- CO2: Overview of Hardware and Software
- CO3: How Computers Store Data
- CO4: How a Program Works
- CO5: Install and run a Python compiler
- CO6: Create and execute a program in Python
- CO7: Input, Processing, and Output
- CO8: Displaying Output with print Function
- CO9: Comments
- CO10: Define Variables
- CO11: Reading Input from the Keyboard
- CO12: Performing Calculations
- CO13: String Concatenation
- CO14: Displaying Formatted Output
- CO15: Named Constants
- CO16: Introduction to Turtle Graphics
- CO17: The if Statement
- CO18: The if-else Statement
- CO19: Comparing Strings
- CO20: Nested Decision Structures and the if-elif-else Statement
- CO21: Logical Operators
- CO22: Boolean Variables
- CO23: Turtle Graphics: Determining the State of the Turtle
- CO24: Introduction to Repetition Structures
- CO25: The while Loop: a Condition-Controlled Loop
- CO26: The for Loop: a Count-Controlled Loop
- CO27: Calculating a Running Total
- CO28: Sentinels
- CO29: Input Validation Loops
- CO30: Nested Loops
- CO31: Turtle Graphics: Using Loops to Draw Designs
- CO32: Introduction to Functions
- CO33: Defining and Calling a Void Function
- CO34: Designing a Program to Use Functions
- CO35: Local Variables
- CO36: Passing Arguments to Functions
- CO37: Global Variables and Global Constants
- CO38: Introduction to Value-Returning Functions: Generating Random Numbers
- CO39: Writing Your Own Value-Returning Functions

Prerequisites

Students must have experience using a keyboard and mouse in a GUI-based OS such as Microsoft Windows or Macintosh and understand how to download and install programs found on the Internet.

Week 1 [CO1- CO16]

Topic: Introduction to Python and IDLE

- **Lecture topic:** Introduction to Programming and Python's Datatypes
- **Read:** Chapters 1 and 2 in textbook
- **Discussion:** Participate in the threaded discussion - Introduction
- **Assignment:** Complete Week 1 Check-In Assignment, Assignment - Create Your GitHub Account, Week 1: Takeaway Journal Assignment, Week 1: Chapter 1 Quiz
- **Exercises:** Complete Week 1 - Hands On Exercise

Week 2 [CO17-C23]

Topic: Decision making in the Program

- **Lecture topic:** Variables, Numbers, and String Types
- **Read:** Chapters 2 and 3 in textbook
- **Discussion:** Participate in the threaded discussion - Literals, variables, and constants
- **Assignment:** Complete Week 2: Assignment, Week 2: Takeaway Journal Assignment, Week 2: Chapter 2 Quiz
- **Exercises:** Complete Week 2 - Hands On Exercise

Week 3 [CO24-CO31]

Topic: Decision making in the Program

- **Lecture topic:** Conditionals and Control Flow and Lists
- **Read:** Chapters 3 and 4 in textbook
- **Discussion:** Participate in the threaded discussion - Python
- **Assignment:** Complete Week 3: Assignment, Week 3: Takeaway Journal Assignment, Week 3: Chapter 3 Quiz
- **Exercises:** Complete Week 3 - Hands On Exercise

Week 4 [CO24-CO42]

Topic: More on Loops and Functions

- **Lecture topic:** for Loops, while Loops, and Functions
- **Read:** Chapters 4 and 5 in textbook
- **Discussion:** Participate in the threaded discussion - Differences among languages
- **Assignment:** Complete Week 4 Assignment, Week 4: Takeaway Journal Assignment, Week 4: Chapter 4 Quiz
- **Exercises:** Complete Week 4 - Hands On Exercise

Week 5 [CO01-CO42]

Topic: Review

- **Lecture topic:** Functions and Review
- **Read:** Review Chapters 1-5 in textbook
- **Discussion:** Participate in the threaded discussion - Program Design and Pseudocode
- **Assignment:** Complete Week 5 Assignment, Week 5: Takeaway Journal Assignment, Week 5: Chapter 5 Quiz
- **Exercises:** Complete Week 5 - Hands On Exercise
- **Assessment:** Final

Policies

Grading

Discussions : 15%
Assignments : 30%
Exercises : 35%
Assessment : 20%
TOTAL : 100%

Letter Grade	Percentage	Grade Points
A	94% - 100%	4.0
A-	90% - 93.9%	3.7
B+	88% - 89.9%	3.3
B	84% - 87.9%	3.0
B-	80% - 83.9%	2.7
C+	78% - 79.9%	2.3
C	74% - 77.9%	2.0
C-	70% - 73.9%	1.7
D+	68% - 69.9%	1.3
D	64% - 67.9%	1.0
D-	60% - 63.9%	0.7
F	Below	0

Work Submission Policy

All work must be submitted according to the following:
1. In CANVAS
2. By due date listed in CANVAS (Each Week)
3. Use software and web browser recommended in the course.
(Work not completed by the date & time listed in CANVAS for each assignment will receive no credit)

Attendance and Drop Policy:

Attendance is taken on Tuesdays, Thursdays, and Saturdays. In Week 5 Attendance is taken on Tuesday, Wednesday, and Thursday. Students will be considered absent anytime they miss a discussion post deadline. If a student has more than two absences, they may be dropped from the class.

Academic Integrity

All incidents of plagiarism will be reported to Academic Affairs.
Academic integrity is the foundation of the academic community. Because each student has the primary responsibility for being academically honest, students are advised to read and understand all sections of this policy relating to CIAT standards of conduct listed in the CIAT course catalog located on https://www.ciat.edu/

Plagiarism involves the use of quotations without quotation marks; the use of quotations without indication of the source; the use of another's idea without acknowledging the source; the submission of a paper, laboratory report, project, or class assignment (any portion of such) prepared by another person; or incorrect paraphrasing. A student's work shall be limited to 20% or less of the quoted text. Students shall request instructor's approval for any cases of re-submission or reuse of materials or work previously submitted and graded in other courses.

CALIFORNIA INSTITUTE OF ARTS & TECHNOLOGY CODE OF CONDUCT POLICY FOR CIAT COMMUNICATION PLATFORMS

This Code of Conduct policy extends to all CIAT communication platforms including, but not limited to Canvas discussion boards, email, live chat, phone, Yammer, and CIAT social media sites.

CIAT communication platforms are provided to students to collaborate in meaningful discussions regarding education and career goals, build or strengthen relationships with classmates and CIAT staff, and stay connected to ongoing resources.

We encourage you to use these digital resources to develop working relationships and stay motivated through your academic journey and beyond.

What to expect with the CIAT Interactive Discussion Boards on Canvas:

- Interact with your instructor and classmates on topics related to your course objectives.
- Participation will be monitored and tracked toward your course attendance requirements.
- Responses must correspond to the topic of the question posted in the discussion prompt.
- Learn from others with diverse education and technical backgrounds.

What to expect with the CIAT Online Community on Yammer:

- Find study partners for certification exams or coding labs
- Share insights on study strategies or technology tips to support your fellow classmates
- Stay up to date with ongoing CIAT-hosted and industry events
- Get ongoing career and job networking tips
- Feel connected to classmates from different backgrounds and geographic locations
- Show off your wins!
- And more…

Ways To Connect with CIAT Team Members:

Yammer and Canvas discussion boards are great platforms student to student or student-to-staff collaboration. However, email and phone communication channels are more appropriate for more private communications or course feedback.

CIAT Student Services support staff are available through phone (**877-599-3621**), live chat (www.ciat.edu), and email (studentservicesteam@ciat.edu).

- **Urgent support:** If you need personal support with a course assignment, program, technical assistance, registration, or anything that requires immediate attention.

- For personal support with a course assignment, please contact your instructor first
- For Canvas support or class access issues, please canvas@ciat.edu
- For technical help resetting passwords or access to your CIAT Student Portal, please submit a helpdesk ticket by emailing help@ciat.edu
- For academic advising, disability support accommodations, registration, or programrelated questions, email StudentServicesTeam@ciat.edu

- **Personal crisis:** If you are undergoing a personal, financial, or emotional crisis that impacts your ability to be successful at CIAT, please email StudentServicesTeam@ciat.edu.

- **Voicing anger or frustration:** If you have a concern or frustration, you'd like to address with the CIAT management team, please email feedback@ciat.edu and a member of the CIAT management team will respond with an opportunity for a one-on-one discussion and added support.

Usage and Monitoring

CIAT reserves the right to monitor and moderate all discussions on the CIAT communication platforms. CIAT will remove and permanently delete text or images that do not comply with this usage policy, including, but not limited to:

- Profanity
- Racial injustice

- Cyberbullying
- Sexual harassment
- Threats, harassment, or references to violence of any kind
- Unkind words or negativity
- Cheating or academic dishonesty
- Inappropriate or irrelevant content
- Feedback regarding personal experience with instructors, CIAT staff, or classmates

An atmosphere that is free of negativity will foster stronger relations and create an environment that encourages constructive feedback – benefiting all of us. Obscene, discriminatory, harassing, or defamatory postings will not be permitted. If such posts are made, one or more of the following actions may be taken:

- Content removal
- Ban from further participation in Canvas discussion board posts or student replies
- Removal from class or CIAT program
- Academic probation or suspension
- Legal and/or police involvement

We ask that you remain respectful and follow some simple guidelines:

- **Be respectful:** Online comments can be easily misconstrued. Don't post messages, images, or content that are likely to cause harm or offense to others.

- **Be aware.** Don't share personal information about you or others that is not intended to be shared with the entire CIAT community or your classmates. Do not share users' posts or comments publicly, outside of CIAT platforms, without prior permission.

- **Be secure.** Don't share your passwords or other access to your classes, computer, study materials, or other personal accounts.

- **Be truthful.** When providing support or feedback to your fellow classmates, be honest and truthful about your own experiences or technical facts. Do not intentionally mislead or misguide classmates that are seeking your advice.

- **Be relevant.** Don't spam groups or post messages that are unrelated to the purpose of that community group or Canvas discussion post. Post questions to appropriate subcommunities. Keep topics related to your technical education and career journey. Ensure posts and replies to Canvas discussion boards are related to the discussion prompt. All communication topics are subject to moderation. Acknowledge that classmates may have different views related to politics, religion, culture, gender, or other personal beliefs.

- **Be helpful.** Every student is at a different stage of their journey. When helping others, you learn new ways to grow your own skills. Think of ways to give back and support others.

CIAT Yammer Guidelines

Participating in the CIAT Yammer platform acknowledges and confirms that you understand and agree to the following requirements:

- Information, opinions, statements, pictures, or files posted on Yammer cannot be considered private.
- Yammer does not replace California Institute of Arts & Technology's established student communication channels including phone, email, text, and Canvas. Any information posted on Yammer is provided as an added resource to students.
- Participation is entirely voluntary and a matter of individual choice.
- Never rely on information or opinions posted on the CIAT Yammer network by other users to replace CIAT policy or standards or information that you receive from CIAT staff.
- While the CIAT Yammer network contains plenty of useful information and our administrators strive to address incorrect statements, we cannot guarantee the accuracy, privacy, or validity of the information provided in the groups by other users.
- Any statements or comments posted on Yammer may be to be used in CIAT promotional materials