0806C220
Introduction to Programming

Instructor: TBA

Time: October 20, 2025 - November 21, 2025

Office Hours: 2 hours (according to the teaching schedule)

Contact Hours: 60 (50 minutes each)

Credits: 4

Email: TBA

Course Description

This course is an introduction to programming in Python for students with no previous computer programming experience. Covers the basic concepts in computing such as CPU, memory, functions, algorithms, data structures, programming environments, problem solving etc.

Required Textbook(s)

Starting out with Python, 4th edition, Tony Gaddis, Pearson.

Prerequisites

No prerequisites required. No previous knowledge of Python or coding experience in any programming language are required.

Course Goals

Upon completion of this course, students should be able to:

1. Define key terminology used in programming.

2. Break down a problem into smaller components and write a function for each of the components.

3. Develop an algorithm and express an algorithm in a language.

4. Declare and use variables in programs.

5. Use arithmetic operators, comparison, and logical operators.

6. Create and use functions in programs.

Course Schedule

Please note that the schedule is meant to give an overview of the major concepts of this course. Changes may occur in this calendar as needed to aid in the student`s development.

Week1

- Introduction to the course; Hello World
- Computer hardware and software, data storage
- Algorithm design; input, processing and output
- Variables, string
- Performing calculations
- Lab: Program 1

Week 2

- Boolean logic
- Branching
- More on branching
- Lab: Program 2

Week 3

- Looping; while loop

- For loop; nested loop

- Functions

- Midterm (*Thursday*)

- Lab: Program 3

Week 4

- More on functions

- Lists

- 2D lists

- Tuples

- Lab: Program 4

Week 5

- Dictionaries

- File IO and Exceptions

- Review

- Final Exam (*Thursday*)

Course Requirements

Hardware/Software: You will need to download a Python integrated development environment (Python IDLE) and provided test case files for the class assignments. Links will be provided by the instructor. You will need to use your own computers to work on the course assignments, including homework, laboratory assignments, and exam problems.

Course Assignments: The course assignments will consist of homework, lab programming assignments, and one midterm exam and a final exam. Active participation in the class (timely responses to the instructor's and TA's inquiries, on-time assignment submissions, active participation in the lab sessions) is required and will be awarded points toward the final grade. Attendance in the online synchronous lab sessions is mandatory and students need to actively participate in the sessions.

Assignment Due Dates: Weekly homework assignments will be due on Saturdays (11:59 am Beijing time) of the week they were posted, with an exception of Week 5, where the homework assignments will be due on that Friday (11:59 am Beijing time). Weekly laboratory programming assignments will be posted prior to the Friday lab session and will be due on the coming Tuesday (11:59 am Beijing time).

Late Assignments/ Make-up Exams: It is important to complete the lab projects, homework assignments, and exams in a timely manner. Exams are due on (11:59 am Beijing time) on the date indicated. You will not be able to make up a missed homework, exam, or lab project for any reason except documented military duty or jury duty.

Grading Policy

Type	Percentage
Homework/Lab Programming Assignments	40%
Midterm Exam	25%
Final Exam	25%
Participation/Attendance	10%

Grading Scale

The instructor will use the grading system as applied by JNU:

Definition	Letter Grade	Score
Excellent	A	90~100
Good	B	80~89
Satisfactory	C	70~79
Poor	D	60~69
Failed	E	Below 60

Academic Integrity

As members of the Jinan University academic community, students are expected to be honest in all of their academic coursework and activities. Academic dishonesty, includes (but is not limited to) cheating on assignments or examinations; plagiarizing, i.e., misrepresenting as one's own work any work done by somebody else or a work generated by AI; submitting the same paper, or a substantially similar paper, to meet the requirements of more than one course without the approval and consent of the instructors concerned; or sabotaging other students` work within these general definitions. Instructors, however, determine what constitutes academic misconduct in the courses they teach. Students found guilty of academic misconduct in any portion of the academic work face penalties that range from the lowering of their course grade to awarding a grade of E for the entire course.