

0806C220

Introduction to Programming

Instructor: TBA

E-mail: TBA

Time: May 17, 2027 - June 18, 2027

Office Hours: by appointment

Contact Hours: 60 (50 minutes each)

Credits: 4

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.

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 Outline

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

Module 1

- Topics: Hello World, Introduction to Computer Hardware and Software, Data Storage, Algorithm Design
- Homework 1
- Lab 1

Module 2

- Topics: Variables, Inputs, Outputs, Data Types, Strings, Arithmetic Operators
- Homework 2
- Lab 2

Module 3

- Topics: Boolean Logic, Expressions
- Homework 3
- Lab 3

Module 4

- Topics: Decision Structures (if, if-else, Nested Decisions)
- Homework 4
- Lab 4

Module 5

- Topics: Repetition Structures: while, for Loops,
- Homework 5
- Lab 5

Module 6

- Topics: Functions: Definition, Parameters, Return values
- Homework 6
- Lab 6
- Midterm Exam

Module 7

- Topics: More on Functions, Scope, Modular Programming
- Homework 7
- Lab 7

Module 8

- Topics: Lists, 2D Lists, Tuples
- Homework 8
- Lab 8

Module 9

- Topics: Dictionaries, Sets, More on Strings
- Homework 9
- Lab 9

Module 10

- Topics: File I/O, Exceptions
- Homework 10

- Lab 10
- Final Exam

Course Requirements

Access to a computer with Python (latest stable version) and an Integrated Development Environment (e.g., IDLE, VS Code, etc.). Reliable internet connection to access the Moodle learning platform, course videos, and assignments. Ability to complete and submit assignments and exams on Moodle. Ability to take the final exam with synchronous proctoring via Zoom or other online proctoring service.

Grading Policy

Type	Percentage
Lab Programming Assignments	35%
Homework Assignments	10%
Midterm Exam	25%
Final Exam	30%

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.