



COMP 150: Introduction

Week 01, Lecture 01



Welcome to Introduction to Computing

COMP 125: Visual Information Processing, by the book:

The world overflows with electronic data. This course introduces programming in a simple, powerful language like Python, with selection, repetition, functions, graphical effects, and dynamic interaction with the Internet, plus connections to lower level computer organization and computer implications in the wider world.

Welcome to Introduction to Computing

COMP 125: Visual Information Processing, by the book:

The world overflows with electronic data. This course **introduces programming** in a simple, powerful language like Python, with selection, repetition, functions, graphical effects, and dynamic interaction with the Internet, plus connections to lower level computer organization and computer implications in the wider world.

Welcome to Introduction to Computing

COMP 125: Visual Information Processing, by the book:

The world overflows with electronic data. This course **introduces programming** in a simple, powerful language like **Python**, with selection, repetition, functions, graphical effects, and dynamic interaction with the Internet, plus connections to lower level computer organization and computer implications in the wider world.

Welcome to Introduction to Computing

COMP 125: Visual Information Processing, by the book:

The world overflows with electronic data. This course **introduces programming** in a simple, powerful language like **Python**, with selection, repetition, functions, graphical effects, and dynamic interaction with the Internet, plus connections to lower level **computer organization** and computer implications in the wider world.

Welcome to Introduction to Computing

In short:

Who: Background-agnostic

What: Foundational language

Where: In-class (Inst for Env Sust - Room 124)

When: M/W/F 2:45 - 3:35

How: Hands-on, in-class labs and one project

Why: *That's an excellent question!*

Expectations: You and Me Both

1. General
2. Lectures
3. Labs
4. Late Work
5. Exams
6. Project(s)
7. Academic honesty
8. Grades
9. Schedule

Expectations: Me to You

- I will do my best to be on-time, and I'll end on-time
- I'll make sure you have references for everything we work on
- I'll have office hours and a class discussion board to help with anything you need
- Labs will have at least *some* in-class time
- Exams will work with a range of learning-strengths
- Breaks will belong to you

Expectations: You to Me

- You should attend class
- You should reach out if you need help
- You should work on the homeworks and project in-class to best-use your time
- You must demonstrate academic honesty

Expectations: Lectures

You will not have much homework in this class other than a project

- *but* -

You **have** to attend lecture and lab.

Reason being ...

Expectations: Lab

These are done *in class* on Fridays!

- Released on Wednesdays, sometimes Mondays, during lecture
- Due 11:59PM AoE Fridays
- Take 15-30 minutes.

If you complete them in (or before) lab on Fridays, I'll grade them right there, and you can make corrections (and improve the score).

Otherwise, they're due AoE midnight on Fridays, and grades will be given within a week.

Attend lecture and lab.

Expectations: Late Work

To prioritize personal independence and responsibility, each student is allocated four late-credits.

- No-questions-asked (nor-explanation-needed) 24-hour extension
- Email the instructor and indicate use in the submission
- Otherwise, assignments receive 50% reduced credit per day.
- For extenuating circumstances, reach out!

Expectations: Exams

- Midterm and final
- 20% and 25% of your grade each
- Take a *total* of 60 minutes
- Contents:
 - $\frac{1}{3}$ Essay
 - $\frac{1}{3}$ Practical
 - $\frac{1}{3}$ Oral
- This gives each student the best chance to shine in their preferred mode of learning!

Expectations: Projects

I really want to make this useful *for you*.

- Due by the end of the semester
- At least two weeks of in-lab time to work
- Topics are TBD

We will figure out the details of the project the week after spring break.

Expectations: Speaking of break...

Breaks are *breaks*.

You will not get homework or study work from me during any break
(Spring and Easter).

Expectations: Academic Honesty

I will respect you and your time.

Please respect both *yourself* and me, in return.

Expectations: Academic Honesty

Individual work is *required*.

Examples of non-individual work:

- Plagiarizing online materials
- Use of LLMs (ChatGPT, etc etc etc) for anything other than starting references
- Plagiarizing other students

When in doubt, *miss the points*. It's better to miss a deadline than cheat.

Expectations: Academic Honesty

What happens should you cheat?

- You don't learn
- You cheapen the work for everyone, including yourself
- I have to waste time demonstrating that you cheated
- I have to report the instance to your department
 - They might require yet more of your time - and mine
- You will get no points on the assignment
- You may fail the course entirely depending on severity or repetition

Please - just *don't*.

When in doubt, *miss the points*. It's better to miss a deadline than cheat.

Expectations: Grade Triage

Or: the Dr. Strangelove Principal: How to Not Sweat the Small Stuff

- How many points is this *actually* worth?
- How much does this *really* matter in the scheme of my degree?
- How much does this facet of my degree *really* matter in the scheme of my career?

Balance this with:

- Your own stamina, schedule, and mental wellbeing
- Self-respect, respect for your peers, respect for your instructors
- Getting caught is *distressingly* easy

Grade Scheme

- 10% - In-class quizzes
- 25% - Labs
- 20% - Project
- 20% - Midterm Exam
- 25% - Final Exam

Curves will be applied.

Letter	%	GP
A	95 – 100%	4.0
A-	90 – 95%	3.7
B+	87 – 90%	3.3
B	84 – 87%	3.0
B-	80 – 84%	2.7
C+	77 – 80%	2.3
C	74 – 77%	2.0
C-	70 – 74%	1.7
D+	67 – 70%	1.3
D	64 – 67%	1.0
D-	60 – 64%	0.7
F	< 60%	0.0

Schedule

- Basics of Electronics and Digital Information (1 week)
- Programming and data: essential skills (3 weeks)
- Computer organization (2 weeks)
- Midterm Week: Feb 23-27
- Spring Break: Mar 2-6
- Programming: structure and design (2 weeks)
- Data Analytics and Visualization (2 weeks)
- Machine learning and AI (1 week)
- Flex Topic (1 week)
- Project Implementation (1 week)
- Finals Week: Apr 27 - May 1

Discussion: Motivation

Why learn to program?

- Repeatable tasks
- Reusable workflows
- Tidy
- Different from human strengths
- Looks great on a resume

Discussion: Methods

Why would we use Python?

- Why *wouldn't* we
- Gold-standard language
- Familiar across every industry
- Useful at nearly every level of computing technology
- Loads of resources

Discussion: Mechanism

What would make this course most-useful to you?

- Reasonable homework
- Demonstrate broad usability of programming
- Flexible project subject
- Breaks are *breaks*

Quiz

Discussion:

Programming and Your Career