

# Lab 1 Resource Document: Course Information and Setup

## The Class Website

Each section of the class has its own website. Make sure you use the correct one!

**Dr. O'Bagy's Section (3-4pm):** [obagy.com/cs120](http://obagy.com/cs120)

**Dr. Ahmed's Section (4-5pm):** [cs.arizona.edu/~abureyanahmed](http://cs.arizona.edu/~abureyanahmed)

- **Assignments** are at the top. It will be updated weekly with the current assignment.
  - **Style Guidelines** gives the required programming style for this class. Be sure to read through it, as you will be graded based on it.
  - **Lectures** is where you can find the slide decks from class.
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## Discord

Discord will be the primary mode of communication for this course.

Discord is a messaging app with servers, where each server has multiple channels. Each channel is a separate chat, based on topic. Please keep in mind that this is an academic context, so do not say or do anything in the Discord that you would not do in the classroom.

Here is a QR code to join the Discord server:



(<https://discord.gg/cSmecvuAXK>)

The link can also be found on the class website.

When you first join, you'll only have access to one channel. Select your class section to unlock the rest of the server.

Here are some other channels:

- `announcements` -- **IMPORTANT** to keep an eye on. This is where any class updates are sent.

- `oh-announcements` -- if a TA needs to reschedule/cancel their office hours, they'll announce it here
- `important-links` -- links to the class website and OH schedule
- `general` -- any general comments or anything off-topic you want to chat about
- `questions-general` -- any non-assignment specific questions
- `questions-short-pa` -- short PA questions
- `questions-long-pa` -- long PA questions

### **Update your name in the server to be either your netid or First name last initial.**

1. At the top, select `CSC 120 Fall 2024` to open the dropdown menu
2. Select `Edit Server Profile` (it's the third to last option)
3. Under "Server Nickname", change it to either your netid or your first name and last initial (e.g. Katelyn R)
  - a. Your netid is the first part of your email, not your student ID number!

### **Office Hours**

Office Hours are managed by a Discord bot, QueueBot, to keep things organized. You will join the queue by sending command messages into the `join-queue` channel:

- `!q join` - Join the **online** queue
- `!q join-inperson` - Join the **in-person** queue
- `!q leave` - Leave the queue
- `!q list` - Get a list of people in line

### **You must join the queue whether you are online or in-person**

### **Muting a Channel**

This server can have a lot of traffic. You can choose to mute a channel so you stop receiving notifications from it. However, please **do not mute the announcements channel!**

1. Right click on the channel you'd like to mute (if on mobile, press and hold instead)
  2. Under the `mute channel` option, you have the choice to mute it for a given amount of time, or indefinitely
  3. Alternatively, you can change your notification settings to `@mentions only` in the option below
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## GradeScope

GradeScope is what you will use to turn in your long PAs (programming assignments) and ICAs (in-class activities).

### How to submit an assignment

When you submit to GradeScope, you will be asked to upload your code files. If you have multiple files to submit, make sure to select **all** of them before uploading to GradeScope. You can resubmit as many times as you'd like, but make sure that your final submission has all of your files.

If you're submitting an **ICA**, the best way to submit it is by PDF. Many students use Google Docs to put their code and photos together, then export that to a PDF to submit it. It's helpful to your TA if you put the word of the day on the first page of your document.

If you're submitting a **long PA**, once you submit, the autograder will run automatically. It will run your code and give you feedback on it. The auto grader may take up to a few minutes to run. In order to pass the autograder, you need to have the **exact** output as expected. *Even an extra space could make you fail the autograder!*

### How to read the autograder

You will see several test cases on the right side of the screen. Green means it passed, red means it failed. You can see the difference between your output and the expected output if you click on the test case.

In the example image below, you can see that the student passed all of the test cases for word grid. However, they failed almost all of the word search test cases. In the expected output, we see four words printed, separated by blank lines. In the actual output, we see nothing being printed. This means that your program isn't printing any output for this test case, despite there being an expected output.

The screenshot displays an autograder interface. On the left, two test case panels are visible. The top panel, titled 'test-word\_search-02 (0/3)', shows a 'TESTCASE FAILED' message. It details the expected output as 'friend', 'the', 'there', 'you' on separate lines, and the actual output as '1,4d0'. The bottom panel, titled 'test-word\_search-03 (0/3)', also shows a 'TESTCASE FAILED' message with the same expected output and an actual output of '1,4d0'. On the right, a summary panel for 'PA-01-long' is shown, indicating it is 'Ungraded' and '131 Days, 17 Hours Late'. It lists the student as 'Unknown Student (removed from roster?)', shows a total score of '- / 80 pts', and an autograder score of '21.0 / 48.0'. Under 'Failed Tests', it lists ten 'test-word\_search' items, all with a score of 0/3. Under 'Passed Tests', it lists six 'test-word\_grid' items, all with a score of 3/3.

You can also see that this test case is `word-search-02`. You can find the exact input and expected output in the **test cases zip file** on the **assignments** page of the class website!

In general, once you submit your assignment for the last time, whatever score you got on the autograder is final. However, you may lose your autograder points if you hard code the output, or bypass doing the assignment in some way.

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## CloudCoder

CloudCoder is what you will use to turn in your short PAs.

The link to cloudcoder is: [practice.cs.arizona.edu](https://practice.cs.arizona.edu)

You can find the weekly short problems in the list on the left.

Complete all of the required problems before the due date, at 7:00pm. Every time you click the “Run it!” button, your code and score are saved. No need to turn it in when you're done.

The assignment will remain available even after the deadline, but your score will no longer be updated.

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## D2L

D2L is where you'll go to complete your \*OCA\* assignments. OCAs are video assignments that are typically due weekly. You can find the OCAs under the **\*\*content\*\*** tab.

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## **VS Code**

VS Code is an IDE (Integrated Development Environment), for writing code. It has useful features like autocomplete and a debugger. For this course, we recommend you use VSCode. If you use another editor, TA's may not be able to help with issues you run into using your editor.

You can download VSCode at <https://code.visualstudio.com>.

When you open VS code, you will see a welcome tab with options to change colorschemes and settings.

If you want to keep your projects in a common folder, you must first create that folder on your computer, then open this folder through VS Code. Simply choose `File > Open Folder` from the menu. To add files from other folders to your workspace, you can use `File > Add a Folder to Workspace`. If you create new files with a folder open, they will automatically be placed within the open folder.

You can open your first project by selecting `New File...` on the welcome tab, or `File > New File` from the tool bar across the top of the window. Choose a Python file format, or simply add `.py` to the end of your filename.

VSCode should prompt you to install the Python extension when you open a Python file. Otherwise, you can install the extension through the extensions tab, the grid icon on the left sidebar, by searching for "Python"

Once you have the extension downloaded, you can run your code with the green arrow in the top corner. Your output will show up at the bottom of the screen in the terminal.