# Course Syllabus



## INTELLECTUAL PROPERTY

The materials in this course are the intellectual property of Dr. Larissa Munishkina and UCSC. As a student, you have access to many of the materials in the course for the purpose of learning, engaging with your peers in the course, completing assignments, and so on. You have a moral and legal obligation to respect the rights of others by **only using course materials for purposes associated with the course**.

For instance, **you are not permitted to share**, upload, stream, sell, republish, share the login information for, or otherwise disseminate **any of the course materials**, such as: lecture video and audio files, assignments, exams, quizzes, slides, notes, syllabus, simulations, datasets, and discussion threads.

## **OVERVIEW**

This is CSE30 Programming Abstractions in Python, a class where you continue learning Python.

**Course Work**. You will have two programming assignments and eight lab assignments. The final grade will be calculated according to the following schema:

Programming Assignments 20

Lab Assignments 80

Extra Credit: Sections 1

Extra Credit: Surveys 1

**NOTE:** Please note that all assignments (due, late, extended, etc.) should be submitted BEFORE the final week. Assignments are not accepted during or after the final week.

**NOTE:** To contact the instructor, please use the Google email <a href="mailto:mlarissa@ucsc.edu">mlarissa@ucsc.edu</a> (mailto:mlarissa@ucsc.edu) instead of the Canvas email.

Instructor: Larissa (Lara) Munishkina (mlarissa@ucsc.edu)

Office Hours: on Zoom, on Friday 4:30 pm -5:30 pm

<u>https://ucsc.zoom.us/j/3928413932</u> <u>→ (https://ucsc.zoom.us/j/3928413932)</u>

passcode python

**Lectures:** MW at 1:00 pm - 4:30 pm

online on Zoom:

https://ucsc.zoom.us/j/99627864931 → (https://ucsc.zoom.us/j/99627864931)

passcode python

TAs: Bhatia Nayan <a href="mailto:nbhatia3@ucsc.edu">nbhatia3@ucsc.edu</a> (mailto:nbhatia3@ucsc.edu)

Section:

Tu: 12:30 pm to 2:30 pm

Wed: 10:00 am to 12:00 pm

OH:

Tu: 2:30 pm to 4:30 pm

Zoom link:

https://ucsc.zoom.us/j/91450077889?

<u>pwd=OGJGOWhNRk9zR1UwVUhsNjg3OU1KQT09</u> ⇒

(https://ucsc.zoom.us/j/91450077889?

pwd=OGJGOWhNRk9zR1UwVUhsNjg3OU1KQT09)

Tutors: Leo Li (bli312@ucsc.edu (mailto:bli312@ucsc.edu) )

Tuesday 5:30PM - 7:30PM | Thursday 8:00 PM - 10:00 PM

Location: **Zoom** ⇒ (https://ucsc.zoom.us/j/7297552517?

pwd=ZHdiK3lycHNPV1pURzljZEs0a044dz09) | Password: python

**MSI Tutors:** 

Birrueta-Hernandez Vanessa vbirruet@ucsc.edu

LSS Small Group

Birrueta-Hernandez Vanessa <u>vbirruet@ucsc.edu</u>

Tutor: (mailto:vbirruet@ucsc.edu)

Monday 7:00PM - 8:00PM

Wednesday 11:00AM - 12:00PM

Sunday 2:00PM - 3:00PM

Main Textbook: Problem Solving with Algorithms and Data Structures using Python —

**Problem Solving with Algorithms and Data Structures** 

<u>(runestone.academy)</u> ⇒

(https://runestone.academy/runestone/books/published/pythonds/index.html)

**CSE30 Colab Notebook □** 

 $\underline{(https://colab.research.google.com/drive/1pGbavl2ULR59IJQx5jHAyLgynhjtxaxn?}$ 

usp=sharing)

**CSE20 Beginning Python Colab Notebook ⇒** 

Optional Textbooks: (https://colab.research.google.com/drive/1vKb4G5lblibSh-IEtRMGbj34TJiE\_dSg?

<u>usp=sharing)</u>

Python Cookbook, 3rd Edition [Book] (oreilly.com) ⇒

(https://www.oreilly.com/library/view/python-cookbook-3rd/9781449357337/)

(https://www.oreilly.com/library/view/introducing-python-2nd/9781492051374/)

Fluent Python, 2nd Edition [Book] (oreilly.com) □

(https://www.oreilly.com/library/view/fluent-python-2nd/9781492056348/)

<u>Learning the Unix Operating System, 5th Edition [Book] (oreilly.com)</u> ⇒

(https://www.oreilly.com/library/view/learning-the-unix/0596002610/)

**Main Online** 

Resources

Canvas webpage: Programming Abstractions: Python (ucsc.edu)

(https://canvas.ucsc.edu/courses/53162/)

SOE webpage: Programming Abstractions: Python | Course Web Pages (ucsc.edu)

(https://courses.soe.ucsc.edu/courses/cse30/Spring22/02)

**Additional Online** 

Resources:

The Python Standard Library — Python 3.8.9 documentation □

(https://docs.python.org/3.8/library/index.html#library-index)

⇒ (https://docs.python.org/3.8/library/index.html#library-index) Download

Python | Python.org ⇒ (https://www.python.org/downloads/)

(https://www.python.org/downloads/) NumPy (https://numpy.org/learn/)

⇒ (https://numpy.org/learn/)

(https://www.w3schools.com/python/numpy/default.asp)

<u>SciPy.org</u> — <u>SciPy.org</u> ⇒ (https://www.scipy.org/) ⇒

(https://lucadealfaro.github.io/abstractions-in-python/)

<u>TkDocs Tutorial</u> <u>□→ (https://tkdocs.com/tutorial/)</u>

**Gallery** — Matplotlib 3.4.1 documentation ⇒

(https://matplotlib.org/stable/gallery/index.html)

turtle — Turtle graphics — Python 3.8.9 documentation □

(https://docs.python.org/3.8/library/turtle.html)

(https://www.pygame.org/docs/)

(http://www.ee.surrey.ac.uk/Teaching/Unix/)

<u>UC Santa Cruz - Information Technology Services (ucsc.edu)</u>

UCSC ITS and UNIX

Timeshare:

(https://its.ucsc.edu/)

Software for the Campus (ucsc.edu)

(https://its.ucsc.edu/software/index.html)

UNIX/AFS Handouts (ucsc.edu) (https://its.ucsc.edu/unix-

timeshare/tutorials/index.html)

#### GRADING POLICY

Programming Assignments 20

Lab Assignments 80

Extra Credit: Sections 1

Extra Credit: Surveys 1

Please notice that you will receive points for attending lectures and discussion section. If you cannot attend a lecture, you can watch a corresponding lecture video in the Assignment folder under the name <a href="Video Lectures">Video Lectures</a> (<a href="https://canvas.ucsc.edu/courses/74346/assignments">https://canvas.ucsc.edu/courses/74346/assignments</a>). You have to submit the assignment to get extra credit: If you attended the lecture, you still need to submit the assignment, but you do not have to watch the video.

#### **GRADE CALCULATION**

You can calculate your own grade: All assignments have points, and you can add them together to calculate your grade. You can obtain 1000 points or more in total with extra credit.

**NOTE:** Canvas grades are not accurate because Canvas uses a different process for grade calculation. Please do not rely on or use the Canvas grade but rather calculate your grade by adding points you accumulated.

Letter grades are assigned according to the following schema:

A+	975 points or more
A	925
A-	900
B+	875
В	825
B-	800
C+	775
С	725
C-	700
D+	675
D	625
D-	600
F	0

**Class Participation.** Class participation includes lecture assignments, discussion section attendance, and participation in discussion forums on Canvas.

**Late Policy**. Please note that all assignments have a due date. Assignments can be submitted late (up to one week) with penalty. The late penalty is 5 percent per day for all late assignments. Missing assignments will receive zero points.

**Late Enrollment.** Please note that there are no accommodations for late enrollment: It is up to you to join the class late and catch up with the assignments.

**Labs**. You will have five notebook assignments. The main purposes of taking lab assignments are to learn Python libraries and packages. Labs may include the following topics: classes, stacks, queues,

trees, expression trees, graphs, dependency graphs, sudoku puzzle, motion detection. Lab assignments should be completed and submitted on the notebook grader website.

Extra credit labs may include the following topics: using standard library modules including random, math, datetime, re (regular expressions), sys, os, html, and internal and external libraries such as Turtle, Tkinter, Matplotlib, NumPy, SciPy, PyGame, and others. Extra labs can be submitted on Canvas.

**Programming Assignments**. Programming assignments (PAs) must be done *individually* (or in pairs) and have to be submitted on time on Canvas. Assignments will be graded according to the grading rubrics published under each assignment folder. PAs may include the following projects: games (tic tac toe, hangman, fifteen, battleship, etc.), imaging (stenography, photoshop), video games. One of the PAs is an open project where you can choose your own project to work on. You can complete the open project in pairs with another student.

You can consult the instructor, teaching assistants, tutors, or students about general approaches of the program, its syntax, and debugging the code. However, do not copy other's code or share your own code with other students or post the code on the Internet. If the same or very similar programming codes are found between students, the students will receive a zero score for the assignment. Administrative actions will be taken with the university. Please read about the Academic Integrity Policy written below.

Academic Integrity Policy. Academic integrity is the cornerstone of a university education. Academic dishonesty diminishes the university as an institution and all members of the university community. It tarnishes the value of a UCSC degree. All members of the UCSC community have an explicit responsibility to foster an environment of trust, honesty, fairness, respect, and responsibility. All members of the university community are expected to present as their original work only that which is truly their own. All members of the community are expected to report observed instances of cheating, plagiarism, and other forms of academic dishonesty in order to ensure that the integrity of scholarship is valued and preserved at UCSC.

In the event a student is found in violation of the UCSC Academic Integrity policy, he or she may face both academic sanctions imposed by the instructor of record and disciplinary sanctions imposed either by the provost of his or her college or the Academic Tribunal convened to hear the case. Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript.

For the full policy and disciplinary procedures on academic dishonesty, students and instructors should refer to the **Academic Integrity page** (https://www.ue.ucsc.edu/academic\_misconduct) at the Division of Undergraduate Education.

Accommodations and External Help. UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately by email or during my office hours within the first two weeks of the quarter. At this time, I would also like us to discuss ways we

can ensure your full participation in the course. I encourage all students who may benefit from learning more about DRC services to contact DRC by phone at 831-459-2089, or by email at <a href="mailto:drc@ucsc.edu">drc@ucsc.edu</a> (mailto:drc@ucsc.edu).

**Small Group Tutoring**. Small Group Tutoring (SGT) supports students academically to advance educational equity by designing inclusive learning environments outside of the classroom. SGT is open to all students enrolled in the class and they must sign up on online system: TutorTrac. You can sign up using this link: <a href="https://traccloud.go-redrock.com/ucsc/">https://traccloud.go-redrock.com/ucsc/</a>) You can also find the link on the website: <a href="https://lss.ucsc.edu/index.html">https://lss.ucsc.edu/index.html</a>). (<a href="https://lss.ucsc.edu/index.html">https://lss.ucsc.edu/index.html</a>).

**Title IX.** The university cherishes the free and open exchange of ideas and enlargement of knowledge. To maintain this freedom and openness requires objectivity, mutual trust, and confidence; it requires the absence of coercion, intimidation, or exploitation. The principal responsibility for maintaining these conditions must rest upon those members of the university community who exercise most authority and leadership: faculty, managers, and supervisors. The university has therefore instituted a number of measures designed to protect its community from sex discrimination, sexual harassment, sexual violence, and other related prohibited conduct. Information about the Title IX Office (http://titleix.ucsc.edu/), the online reporting link → (https://ucsc-gmeadvocate.symplicity.com/public report/index.php/pid681212?), applicable campus resources, reporting responsibilities, the <u>UC Policy on Sexual Violence and Sexual Harassment</u> (https://policy.ucop.edu/doc/4000385/SVSH), and the UC Santa Cruz Procedures for Reporting and Responding to Reports of Sexual Violence and Sexual Harassment can be found at titleix.ucsc.edu (http://titleix.ucsc.edu/). The Title IX Office is actively responding to reports and requests for consultation. If you are not currently working with someone in the office and want to make a report/request a consult, you can expect the fastest response by using our online reporting link. 

(https://ucsc-gmeadvocate.symplicity.com/public report/index.php/pid304388?) For more information, please visit the Title IX Operations under Covid-19 (https://titleix.ucsc.edu/about/titleix-covid19.html) page.