Syllabus

CS 1112 // Introduction to Programming // Spring 2026

Professor Nada Basit

What's In The Syllabus?

Summary of Important Information

Syllabus

CS 1112 // Introduction to Programming // Spring 2026

– Instructor

Instructor (Email)	Office Hours	Office Hour Location
Nada Basit (basit@virginia.edu)	➢ Mondays: 10:30am - 12:00pm ➢ Wednesdays: 10:00am - 11:00am * ➢ Other times: *by appointment only (email me!)*	In-person, in my office – Rice 405 *(No need to use the office hour queue tool to join my office hours!)*

** This time may change, stay tuned. An announcement will be made once the day/time has been finalized.*

Office Hours begin on Tuesday, January 20. *(Jan. 19 is a holiday. Email if you wish to meet sooner!)*

Important notes:

- ***When sending email, always include "CS 1112" somewhere in your email subject header**. I receive a lot of emails and teach other classes. This will allow me to get to your email faster!*
- ***All times in this Syllabus are given in Eastern Time (ET)***

– Course Information

Meeting dates: August 27 to December 8, 2025

Lecture:

Section	Days & Time	Location	Professor
001	M/W/F, 12:30-1:45pm	Olsson Hall 018	Nada Basit
002	M/W/F, 2:00-3:15pm	Olsson Hall 018	

In-Class Activities a.k.a. "Lab" activities:

*There are **no** separate labs for CS 1112. Instead, they are incorporated into the lectures on M/W/F. Labs may show up in the middle and/or at the end of the lecture.*

We will be using **PyCharm** as the IDE for the course. You will have the opportunity to download and install this software prior to labs officially starting (instructions will be provided for you). It is your responsibility to ensure you have PyCharm properly installed. Feel free to ask your TAs for help!

Do your best to attend class **regularly.** *If you miss a lab, you are missing out on the **interaction** with a partner and with the TAs, both a part of the intended learning experience in this course.*

Course TAs, Contact Information, and TA Office Hours:

We are fortunate to have many great teaching assistants (TAs) for this course. TAs will provide office hours (tutoring), assist with in-class "lab" activities, help with grading, and do other course tasks. TA names, emails, and their office hours will be posted on the course **Google Calendar** (linked to via Canvas); all **in-person TA Office Hours begin** on Tues., January 20. Note, you must use the class **"Office Hour Queue" tool** to join TA office hours!

Head TAs:

Head TAs are each assigned a **role** and serve as the **point-of-contact for this role for all students** (across all sections). If you have a question about any of these areas, **first** contact the appropriate Head TA(s) by email (there can be **co-Head TAs** per area). See table for information.

Head TA Name(s)	*Email(s) **	*Head TA Role / Point-of-Contact*
Bonny Koo & Ethan Chien	uck8up@virginia.edu vbs3kt@virginia.edu	**Course Admin.**
Niveen Abdul-Mohsen	bvn9ad@virginia.edu	**Quiz and Quiz Grading**
Sanjana Hossain	cjh8az@virginia.edu	**Quiz and Quiz Grading**
Julie Fitzhugh	yzc5ht@virginia.edu	**Homework and Homework Grading**
TBD	xxxx@virginia.edu	**In-Class "Lab" Activities**
Kayla Kim	rkf9wd@virginia.edu	**Office Hours**
TBD	xxxx@virginia.edu	**Piazza Admin.**
Matthew Kim	vbp9qa@virginia.edu	**Course Website Management** *(not Canvas)*

**** Important note: When sending email to Head TAs, always include "CS 1112" somewhere in your email subject header**. This will allow the TAs to filter your emails and respond quicker.*

– Important Dates *(Please note these dates carefully. See Course Schedule for more.)*

- ☐ First day of CS 1112: January 12, 2026 (*Monday*)
- ☐ MLK Holiday: January 19, 2026 *(no classes or office hours)*
- ☐ Add deadline: January 26, 2026 [***Engineering School date***]
- ☐ Drop deadline (without "W"): February 23, 2026 [***Engineering School date***]
- ☐ Spring Break: February 28 - March 8, 2026 *(no classes or office hours)*
- ☐ Courses end / Last day of CS 1112: April 28, 2026 (*Tuesday*)

– Course Description (CS 1112)

A first course in programming, software development, and computer science. Introduces **computing fundamentals and an appreciation of computational thinking**. No previous programming experience required. (Note: CS 1110, 1111, and 1112 provide different approaches to teaching the same core material). The course provides an introduction to the Python programming language including topics such as variables, types (Python types emphasized are: ints, floats, booleans, strings, lists, tuples, dictionaries, and files), functions, conditionals, repetition (loops), console and file input/output, reading from the web, and regular expressions.

Differences between CS 1110/1111/1112: CS 1110 is considered the "vanilla" version of the course, whereas CS 1111 is for students with significant prior programming experience (but not enough to place out of the course). CS 1112 is intended for those with no previous programming experience. CS 1112 combines lecture and lab together, but in CS 1110/1111 they are separate.

– Prerequisites

The Computer Science department at the University of Virginia strives to ensure all students have a positive, inclusive, and productive experience in their classes. Special emphasis is placed on the first/introductory courses: CS 1110/1111/1112. The following are the prerequisites for this course. **A student taking this course pledges they:**

- Have no prior programming experience
- Are committed to be daily, *active* participants

– Course Objectives (ABET Course Objectives)

By the end of the semester, students should be able to:

- Understand the nature of the syntax and semantics of a programming language.
- Analyze a problem and create a solution.
- Produce a small working program that solves the problem given a set of requirements.
- Understand and implement basic test strategies to test a program, given a set of requirements.

– Additional (General) Course Goals

- Exercise and improve problem solving skills and develop an appreciation for computational thinking.
- Impart understanding of the basic principles and concepts of object-oriented design and programming.
- Successfully trace code of existing programs to determine the output.
- Be able to effectively communicate with peers and instructors about your programming.

– Textbooks / Reading Material

There are **no *required* textbooks** this semester. All content that you need will be in the scripts and course materials that can be found on the course website.

Our definition of **computational thinking** comes from Jan Cuny, William Snyder, and Jeannette Wing (see paper).
"*Computational Thinking is the thought processes involved in formulating problems and their solutions so that the solutions are represented in a form that can be effectively carried out by an information-processing agent.*"

For people who can handle **an ebook** consider The Coder's Apprentice by Pieter Spronck. This resource considers many of the topics we will explore in this course, though it may not be in the order we will explore them. The course schedule has references to suggested readings from this book, however it is no substitute to being an active note-taking, question-asking class participant!

For people who require **a physical book**, consider *Starting Out with Python 3rd Edition* by Tony Gaddis (ISBN: 9780133582734). The book is *not* required, and no homework will be assigned from it. What the book provides is a good reference to the planned course topics. The book is no substitute to being an active note-taking, question-asking class participant!

There are also many freely available Python resources that you can reference:

- Python Chrestomathics by UVa's own Jim Cohoon. (It is a work in progress.)
- Hands-on Python Tutorial by Andrew N. Harrington.
- Automate the Boring Stuff with Python by Al Sweigart.

We also suggest places to practice your coding skills. Practice makes perfect! CodingBat (https://codingbat.com/python) is a free online website to help you build coding skills in Python (Java, too!) Going through many practice problems is a great way to practice and solidify your understanding.

In this course, our primary focus is on *nurturing the learning process.* As one of our key objectives is to nurture your problem-solving abilities and cultivate an intrinsic understanding of computational thinking, our aim is to guide you in your journey towards becoming a skilled and self-assured programmer. Therefore, we encourage you to resist the temptation to directly copy and paste code from various sources, including textbooks, answer-providing sites, or your fellow peers. Not only does this go against the principles of academic integrity (see the honor section below), but copying and pasting code hinders the growth of your problem-solving abilities and disrupts your capacity to discern and construct good, effective code.

– This Semester CS 1112 Will Be a Fully In-person Class. This Course Will Use the Following Technologies:

[Links to each of these technologies will also be available in the left menu of our Canvas site.]

- Canvas:
  - **Main course site containing all the information and resources** pertaining to the course. Most other technologies will have links to them from this site. On Canvas you can find the Syllabus (this document), announcements, the Syllabus Quiz, assignments (with links out to *Gradescope*), resources (all files, slides, supplemental documents, and code relevant to lectures and the course in general), grades, Panopto Video and more!
- Gradescope: [https://www.gradescope.com/courses/1209167]
  - **An external site where you submit your homework assignments** once you have completed them. Assignments will be graded on this site (and you can view your scores here, too) but final scores will be transferred over to "Grades" on *Canvas*.
  - A link to Gradescope is provided in *Assignments* on *Canvas*.
- Piazza: [https://piazza.com/virginia/spring2026/cs1112/home]
  - **The official question-and-answer discussion forum** for the course, linked through *Canvas*. The system is highly catered to getting you help fast and efficiently from classmates, TAs, and instructors. Rather than emailing questions to the teaching staff, we encourage you to post your questions on Piazza. (**Let us know** if you're not added in 1-2 weeks.)
  - While you're waiting for an answer, see if there is an answer you can provide to someone else's question. Computer Science is a *team sport* -- we're all in this *together*! :)
  - However, do **NOT** post code or solutions (no pictures/screenshots either!) on a **public** thread in Piazza (only on private threads - that are only seen by the teaching staff)!
- Sherlock: [https://sherlock.cs.virginia.edu/]
  - **We will use this external testing site for Quizzes**. All instructions will be provided to you prior to the first quiz. This site has some advantages for hosting, creating, taking, and grading quizzes. (If we cannot use Sherlock this semester, then we will most likely use the "Quizzes" feature on *Canvas*.) You'll be added prior to the first Quiz (**Quiz 1**).
- Office Hour Queue: [https://kytos02.cs.virginia.edu/asci]
  - This **Office Hours (OH) Queue** is used to connect students with TAs during **TA office hours** which are held in Thornton Hall "Stacks" (Thornton Hall, A-wing, 2nd floor, Room 233).
  - Before joining the queue, you are asked to enter an **issue subject**, and then **describe your issue** (reason you joined the OH queue). You'll also enter the **location** you are at so the TA can come find you.
  - If you choose to be *grouped* with other students during office hours (*can help shorten your wait time*), a TA may select you to be part of a group session (instead of a one-on-one session.) Before you leave, kindly fill out a *short satisfaction survey*.

– Instructor Availability & Who To Contact For Different Types of Issues:

It is important to me to be available to my students, and to address their concerns. I am available during my office hours and typically available to talk after each class. I am also available to meet (in-person or on Zoom) outside of these times *by appointment.* Send me an email and we can set something up at a time that is mutually agreeable. Nonetheless, it is a large class and there is only one of me. Therefore the wonderful teaching assistants (TAs) for the course can help address your questions, too. If you have *general* questions that relate to course activities, please **first ask in class** then, consult **Piazza** and/or contact the appropriate **Head TA point-of-contact** related to that topic (see "**Head TAs**" section above.) Otherwise, please attend our office hours. **Here is some additional information about who to contact for different types of issues, and a suggested order** *(this will allow you to get a response quicker):*

To Discuss:	***You should contact us via*** *(in this order)**:***
Questions about course content / topics	In-class questions *(during lecture)*, Piazza, Appropriate Head TA(s), TA Office Hours
Questions about homework (general, *not code*)	Piazza, Homework Head TA(s), TA Office Hours
Questions about code conundrums	TA Office Hours, Professor Office Hours
Questions about grading (general)	Regrade requests through Gradescope (for PAs), Quiz Head TA(s), Homework Head TA(s), Piazza
Questions about in-class "lab" activities (general)	In-class Activities Head TA(s), Professor or TA Office Hours
Questions about TA Office Hours and attending	Office Hours Head TA
Questions about using Piazza or Piazza issues	Piazza Admin Head TA(s)
Conversations about mentoring, research, grad school, internships, résumés, student life, etc.	Professor Office Hours, schedule a one-on-one visit with your professor, TA Office Hours
Personal issues impacting coursework and/or progress (homework, exams, attendance, etc…)	Your Dean*, and/or private email to your professor *(* see **Student Support Team** section)*

In particular, for homework help, **first** consult **Piazza** (by *reading* existing posts then *writing* one if your question wasn't addressed), then attend TA office hours, finally Professor office hours. Always **email your instructor** (do not use Piazza) for **personal issues or emergencies**. ***Contacting me in general:*** I tend to receive *a lot* of email as the semester progresses, so seeing me in person (right after lecture, during my office hours, etc.) is often a good way to get a more immediate response.

– Safety and Respect: Attendance, Illness and Other Absences

Regular **attendance** is highly encouraged. Both practical experience and systematic studies on active learning and engagement consistently demonstrate that students greatly benefit from active participation in class. Actively taking part and consistently attending can enhance not only the retention of the material, but can also boost confidence and foster a sense of belonging.

Your **safety** and comfort is important to us. In this course, we will diligently follow all University regulations. At the time of writing this document, wearing a mask is optional in classrooms. However, everybody's health risks, circumstances, and level of comfort are different. Therefore, anybody choosing to wear a mask during class (short-term or long-term) is welcome to do so. We will interpret wearing a mask as being considerate and caring of others in this classroom. We may also choose to mask and remain distanced.

If you're not feeling well please call Student Health at (434) 924-5362; for all our safety and health, please **stay at home** and watch the recorded lecture. *We will ensure that staying home **does not** impact your grade compared to being in person*, so that you can take the time you need to do everything that you need to get better. Please email the instructor promptly in order to arrange extensions and makeups (where appropriate); otherwise, the due dates remain.

We also wish to support your **career development**: if you know you have to miss class, exams, or quizzes due to interviews, conference attendance, and other events that support your growth as engineering professionals, please email your instructor as soon as you know and preferably at least one week prior to leaving so that appropriate arrangements can be made with you.

– Syllabus Quiz

Every student must complete the **Syllabus Quiz**. This quiz is open to all students for about two weeks and is located on our course's ***Canvas*** site. Every student must take the quiz and earn a **100% score** (or be removed from the course). *Please take the quiz earlier rather than later.*

Most students should aim to complete the Syllabus Quiz by 11:00pm, January 23, 2026. The hard deadline is set to 11:00pm, January 28, 2026. This quiz can be **attempted as many times** as necessary. You should see the score you earned on Canvas Grades.
Once you earn 100% you can stop attempting the quiz. Talk to a TA / Quiz and Quiz Grading Head TA if you have difficulty retaking the quiz or seeing the score.

– Types of Learning Assessments

The **assessment and their descriptions** are as follows:

1. **In-Class "Lab" Activities and Class Participation**: On most days there will be in-class activities during lectures that are designed to be hands-on, collaborative experiences that give you the opportunity to review and reinforce your understanding of the material that we have been learning. *(Therefore, please always remember to come to class with your laptop!)*
    - **These activities are meant to be *collaborative***, and healthy discussion is not only encouraged but *expected!* You will also get the assistance of TAs and your professor as needed. They provide additional practice with recent and current topics covered in class that can help you with the homework assignments.
    - **These activities will be graded (only during class) on a *completion* basis**, not necessarily based on correctness. As long as you try your best and we can see you have made a ***sincere effort*** towards the goal/solution of the activity you will receive ***full credit.***
    - Do your best to complete these activities by the ***end of class*** on the day the activities are introduced. Be sure to check-in with a TA to show them your work before leaving class! Remember, ***full*** participation and engagement is expected during activities.
    - Note: we **will not** give credit for these in-class "lab" activities if completed **after** class.
    - **Overall, in-class "lab" activities and participation account for 15% of your grade.** If you participate in **at least 80% of the activities** throughout the semester you will earn all (15% out of 15%) of this portion of your grade. *That is to say, you can miss 20% of the in-class "lab" activities during the semester (approx. 4-5 activities) without penalty.*
2. **Homework: Programming Assignments (PAs)**: There will be approximately eight (8) programming assignments (PAs) throughout the semester. These assignments are intended to help you apply the material that we've been learning. By completing these assignments, you will be developing your problem-solving abilities.
    - **Use your programming assignments as a means to sharpen your skills** and problem solving abilities in order to do well on quizzes and the exams. These assignments are often where students say they learn the most. **All assignments can be found under "Assignments" on the left menu of Canvas.**
    - **No collaboration is permitted.** All work and submissions must be the result of **individual academic effort.**
    - **Homework assignments are submitted online on Gradescope** and you will receive immediate feedback from the auto-grader on how many test cases you have passed.
    - **You must submit each homework by the specified deadline.** If you encounter last-minute issues close to the homework deadline, you may submit a homework assignment **up to 24 hours late**. We cannot accept assignments submitted after this time. Homework can be **submitted multiple times if necessary** *(without penalty)*, but no later than 24 hours after the original due date. Your *last* submission is the one that is graded.
    - Homework assignments are due **by 11:00pm on Wednesdays** (or by **11:00pm on Thursday** if submitting up to 24 hours late). **No homework assignment is dropped.**

3. **Quizzes**: Quizzes will be one of the primary ways that we will assess your mastery of the material in this course. It is also a good way to self-assess in preparation for the exams. After every major topic, there will be a Quiz. These quizzes will be administered regularly throughout the semester and cover a few topics.
    - **All quizzes have a time limit of 30 minutes** and **will be timed** using an online timer. The timer will begin as soon as you **open** the quiz, so DO NOT open the quiz until you are ready to begin! Quizzes will *automatically* close after the allotted time (so please be mindful of your time!) You will not be able to see or update answers on your quiz once the quiz closes.
        - **Students with documented SDAC accommodations *will* have their time appropriately adjusted** automatically. For example, if you have 1.5x time accommodations, the online timer that you see while taking the quiz will automatically give you 45 minutes (and then automatically close). It is up to you to **inform me** of your SDAC accommodations **prior** to the first Quiz! If you gain SDAC accommodations in the middle of the semester, then let me know as soon as possible.
    - **All Quizzes are open-book; that is, you are allowed to use your notes** and any resources provided to you by the instructor on Canvas. You may also use PyCharm, but just be mindful of your time! However, you are NOT permitted to gain any assistance in any form by another person. **Absolutely no collaboration** is permitted. All work and submissions must be the result of **individual academic effort**.
    - All Quizzes are **take-home** and therefore must be taken **on your personal laptop** or desktop computer. We unfortunately cannot be responsible for connection problems or glitches on your computer. We will, however, provide you with some quiz-taking guidelines before the first quiz to help mitigate errors/issues as much as possible.
    - Quizzes will be taken and submitted **on our external testing site "Sherlock."** (There will be a link to the quizzes on our Canvas page.)
    - Quizzes are **released on Friday and due by 11:00pm the following Monday.** (You will need to only find a 30-minute window to take the Quiz.)
    - Given that your responsibility is to find any 30-minute time period between Friday and Monday, **there will be no late or make-up options**. However, **we will drop your lowest two (2) Quiz scores** at the end of the semester.
4. **Exams** (*Exam 1 and Exam 2*): Exams will be one of the primary ways to demonstrate what you have learned throughout the course. The format of the exams will be **on paper**, and will be longer than a quiz, more comprehensive, and will consist of a variety of question types (multiple choice, short answer, True/False, code tracing, matching, etc…)
    - There will be **two (2) paper exams** throughout the semester. These exams will take place in-person, during class time. We will ask you to show your **UVa student ID** on the day of each exam, so please remember to bring your UVa student ID with you!
    - All exams are **closed-book**, and **closed IDE** (no PyCharm). **Absolutely no collaboration** is permitted. All work and submissions must be the result of **individual academic effort**.

- We will dedicate one class prior to each exam for **review**. All relevant exam instructions will be provided to you prior to the exams. (No new course material will be taught on these review days. No in-class activities will be given on these review days either.)
- **No exam is dropped.** *However, you'll be able to **gain some points back** by performing **exam corrections** on your exams. Use this opportunity to learn from your mistakes!* You'll be asked to fill out an exam correction form. Details will be announced separately.

5. **Final Project**: The final project is slightly larger than a homework assignment and serves as a final cumulative programming assignment. The project will provide you with hands-on practice with Python dictionaries, regular expressions, and file input/output.
   - This project accounts for 5% of your overall course grade.
   - **You are permitted to work collaboratively** in small groups of 3-4 people. **You cannot work as an individual or as a pair!** This project is meant to be collaborative.
   - Even though emphasis will be on Python dictionaries, regular expressions, and file I/O, you will utilize skills you have learned *throughout* the semester to complete this project (the cumulative nature of later topics relying on the knowledge and understanding of earlier, more fundamental topics.)
   - **You will be asked to give a small presentation** (in a small-scale setting) directly to your professor or to one of the TAs describing your approach to solving the project and walking us through your code. Details of the project and presentations will be provided in the formal project description document which will be made available on Canvas.

– Exams

There will be **two (2) paper exams** in this course, each worth **12%** of your overall course grade. These exams are *not* cumulative. That is, the material covered in Exam 1 will be topics covered from the beginning of the semester up to Exam 1. The material covered in Exam 2 will be topics covered after Exam 1 up to Exam 2. Prior to each exam we will have a review session and topics for each exam will be clearly stated. This course will *not* have a traditional final.

- As with all scientific and technical disciplines, ***later topics rely on a solid understanding of earlier topics.*** In that sense, while we will not explicitly ask questions on Exam 2 that pertain to Exam 1 material, you would be expected to know and understand these basic Exam 1 topics in order to completely answer questions relating to the later topics. If you think about it in another way, in order to learn how to run, you first must master how to walk. Learning how to run is a more advanced skill, but would be very difficult to do if you cannot walk. To use a programming example, in order to iterate through the data stored in a Python dictionary (a kind of data structure) you may wish to utilize a for loop to iterate over the dictionary's keys. Looping and for-loops would constitute material from earlier in the semester (Exam 1 material), while working with Python dictionaries shows up later in the semester (Exam 2 material).
- You may gain some points back on exams by performing *exam corrections* (allowing you to earn back a certain number of points). This is a valuable learning opportunity should you choose to take advantage of it. Instructions on how to do this will be provided to you.

– The Use of Generative AI (Artificial Intelligence) In This Course

We are living in a technology-rich world, where generative artificial intelligence (AI) is abundant and readily available at our fingertips. As with all new and interesting tools, there is a great deal of curiosity and concern. These tools are designed to assist in various creative and problem-solving tasks, and they operate by generating content based on patterns and data inputs. It's important to note that while these tools can be valuable resources for enhancing learning experiences, students are expected to use them responsibly and ethically.

While we encourage embracing new technologies, as computer scientists, your instructor and your TAs believe that a firm foundation in computer science is necessary for efficient and accurate use of these emerging tools. Without a solid foundation of computer science knowledge, it becomes increasingly more challenging to use generative AI tools efficiently, accurately, and responsibly.

Restrictions:

In this course, students are encouraged to use Generative AI Tools such as ChatGPT to support their work if they want to, *as long as the following guidelines are followed:*

Transparency: When utilizing content generated by AI tools, you must always ***acknowledge*** the use of such tools and make it clear which parts of your work were assisted by AI. You must clearly cite any AI-generated material according to the documentation rules of the assignment. For example, for a Python-based coding assignment, if you utilized a Generative AI tool you must leave a comment next to the section of code in question and state, "The author acknowledges the use of [***Generative AI Tool Name, e.g. Microsoft Copilot***] in the preparation and completion of this programming assignment for [***Description: e.g. brainstorming, syntax checking for X in Python, how to construct this regular expression, … etc***]."

Originality: While AI tools can provide suggestions and generate content, the final output should reflect ***your*** understanding, creativity, and originality. Copying AI-generated content ***without understanding*** and without significant modification is not permitted.

Learning: Remember to keep the ***spirit of learning*** and acquiring knowledge at the center of everything that you do! The primary purpose of using AI tools is to enhance your learning experience and problem-solving skills. Students are encouraged to engage with the AI-generated content, understand how it was created, and learn from the insights provided.

Academic Integrity: Any content generated by AI should align with the principles of academic integrity. Plagiarism, improper attribution to the tool, and unauthorized collaboration are serious ***violations of academic honesty***, even (*especially?*) when involving AI-generated content.

Guidance: As always, if you have any questions or are in doubt about the use of generative AI tools and their implications, *feel free to seek clarification* from the instructor, TAs, or by posting on Piazza. Additionally, if you are unsure about whether something may be plagiarism or academic dishonesty, please *contact your instructor* to discuss the issue.

SUMMARY of Restrictions: To encourage the use of generative AI tools while preserving the spirit of learning to acquire a firm foundation of knowledge, we summarize the restrictions around the use of AI in CS 1112 this semester as follows:

1. **You may not use generative AI to generate solutions to the homework assignments or the final project.** These assignments (and the final project) are designed to practice and experience the material we are covering in this class to help build a foundation of knowledge for the future.
2. **You may use generative AI to:** summarize course material, provide context around the material we are discussing, help you study the course content, generate practice problems to help study and prepare, check the work of any practice problems you generate, aid in debugging your solutions (as long as the AI does ***NOT*** create a solution for you), and/or explore additional ways to implement certain course topics (e.g., learn more regular expression techniques to apply to your final project.) *****Note:***** *if you use generative AI in connection with any assignment (or the final project) in the course, you* ***must cite that usage*** *as noted above.*

Remember. . . *Academic Integrity is taken very seriously in this course.* If you fail to cite the use of a generative AI tool as a source, this is considered a serious violation of academic integrity. For every assignment, quiz, activity, exam, be familiar with what is authorized, and what is not. When in doubt, please ask! We are very happy to clarify and explain collaboration rules, what is authorized behavior, and what is not. It is also important to be wary of *unintentional* plagiarism or fabrication of data.

Main takeaway. . . Please act with integrity, for the sake of both your personal character and your academic record!

Your professor humbly acknowledges the use of Microsoft Copilot, a generative AI tool, in the preparation of this section of the Syllabus for brainstorming ideas and the suggestion of phrasing pertaining to attribution of the tool in students' work, originality, and learning. 😊

Available Models:

Two different Generative AI models are available for you to use during this course (within the restrictions above).

1. UVA provides access to **Microsoft Copilot** through Office 365. With UVA's license agreement, your interactions *are not used to train the model*, providing some ***privacy guarantees*** over other paid models.
2. Our **Office Hour queuing system (ASCI) has a built-in local LLM model**. It has access to our course material, including slides when available, so it can provide direct answers with references to specific course documents. This LLM model is still in development so it may have a few glitches! Also, please note that it takes a few seconds to respond as it is running on a server in the basement of Rice Hall. [**Note**: this feature *may or may not be turned on this semester*.]

Risks of Generative AI:

Generative AI tools can be powerful learning aids, but they also come with **important limitations and risks**. Remember that generative AI can only generate content from their training data, which is *out of date*, and they may provide *incorrect* or *false* information. Therefore, please keep the following in mind:

- **Outdated or inaccurate content**: AI systems are trained on past data, so their knowledge *may be out of date*. They may also produce responses that sound confident but are *factually incorrect*.
- **Plagiarism and copyright concerns**: AI models are trained on pre-existing material, which *may include copyrighted content*. Using AI output without proper *citation* may lead to plagiarism or copyright violations.
- **Not designed for accuracy**: The goal of these tools is to generate human-like text, *not necessarily reliable or correct information*. Submissions based solely on AI output may therefore be inaccurate or incorrect.

Ultimately, **you are responsible**—not the AI—for ensuring that your work is accurate, original, and consistent with the standards of this course. Please carefully evaluate AI responses against course material and, whenever in doubt, please do not hesitate to visit your professor or a TA during office hours. *We enjoy discussing the material with you!*

– Final Grades

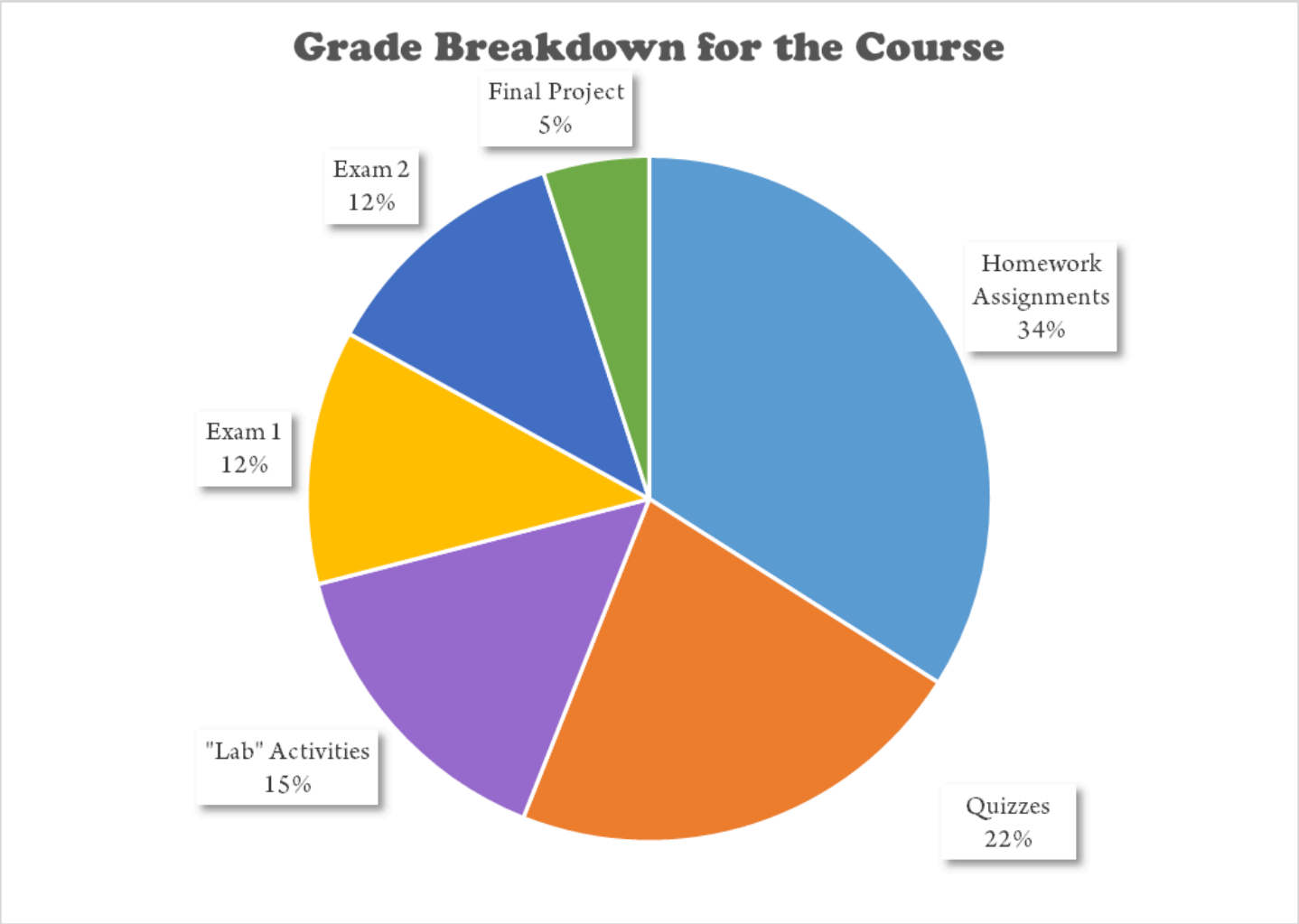
Final grades will be calculated using the following percentage breakdown:

Homework Assignments*:	34%
Quizzes**	22%
In-class "lab" Activities / Participation:	15%
Exam 1	12%
Exam 2	12%
Final Project	5%

* Also referred to as "***Programming Assignments***" (PAs)

** The **Syllabus Quiz** is required, however as such it does not count towards your overall course grade

*For students taking this course as a **Pass/Fail** grade, a course grade of at least 65.0% is required to earn a grade of P. There will be no rounding of your grade; however, there may be other opportunities to gain a small amount of additional points / "extra credit".*



Letter grades will be assigned according to the following letter grade mapping:

Grade	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Lower Bound	98.0	93.0	90.0	87.0	83.0	80.0	77.0	73.0	70.0	67.0	63.0	60.0	0

– Professionalism

In this course, being kind, respectful, supportive, compassionate and mindful of others is essential. Unprofessional behavior, such as misbehavior towards instructors/classmates/TAs, disrupting class, talking while others are talking, not following University health and safety regulations, unauthorized homework assistance, failure to cite sources, consistently missing assignment deadlines, misuse of class platforms (e.g. Piazza), contacting TAs when they are not on the clock, causing distractions for other students, etc., can and will be held against a student when final grades are calculated (up to **20% course grade penalty**).

– Computing Resources

There are some specific computer resources needed for this course:

- You need to have a **working laptop** that can run the **PyCharm IDE**. Any modern laptop or desktop will have no problem running this software. A laptop is suggested since you will bring one to lecture every day to follow-along with the lecture material, and also to work on the hands-on labs which often involve writing some Python code.
- We will have a class dedicated to helping you install and set up **Python** and **PyCharm**. We have created a short tutorial for both Windows and Mac operating systems that walks you through downloading, installing, and using the **PyCharm** environment. Follow the provided instructions to ensure you have the proper setup on your laptop. The TAs and professor will be available to help you during the class.

– Recording of Lectures

You may NOT record our lectures. University policy states that this is not allowed without our consent. However, most lectures may be recorded **by the instructor** and made available to the class. These recordings, when available, will be available on Canvas (see ***Panopto Video***). Please allow us *up to 48 hours* to post lecture recordings. If class attendance **drops below 50%**, lecture recordings may not be made that day. Note, we will **not** live stream any portion of the course throughout the semester.

– Reading Carefully

 *Pssst! Hey you, yes you!* Thanks for reading the Syllabus carefully - you found the Syllabus "*easter egg*"! If you can find a fun image or meme of a frog and email it to me (basit@virginia.edu; use Email subject: "CS 1112 Frog!") before February 14, 2026, I'll give you 0.5% extra credit!

– Honesty and the Honor Policy

This class is built around all of us actively and honorably participating throughout the course. The course is dependent upon our community of trust and relies upon all class members to be faithful to it. We trust every student in this course to fully comply with all of the provisions of the University's Honor Code. By enrolling in this course, you have agreed to abide by and uphold the Honor System of the University of Virginia, as well as the following policies specific to this course:

- **All graded assignments, quizzes, and exams will be considered pledged.**
  - *As a general rule, unless otherwise stated, assignments, quizzes, and exams must be the result of **individual academic effort***
- **No plagiarism (or anything like it)**
  - *You **must** cite any and every source you consult, other than those explicitly provided by the course itself. If you work with, obtain or receive help from another source (Internet website, TA, tutor, online video, AI tool, etc.), nothing should be copied or retyped into the submitted solution. References must be documented in a comment in code on the assignment (or as a note in the report). Any copied work is an Honor Code violation.*

- **Write your own code (within the collaboration policy)**
    - *When the collaboration policy states that work must represent individual effort, you must write your own code. Not just type it (though you need to do that too): **compose it yourself**, as your own original work (also view the section about "**The Use of Generative AI (Artificial Intelligence) In This Course**"). Remember that:*
        - *Plagiarism, improper attribution to the tool, and unauthorized collaboration are violations of academic honesty*
    - *Our TAs have been trained to provide help that does not undermine the primary purpose of helping you learn. Other people (tutors, fellow students, etc) have not. As such, you should **not** give help to your peers nor accept help from others besides course staff.*
- **Understand what you submit**
    - *Your **understanding** is one of the primary deliverables of our assignments, moreso than the code itself. As such, we may ask you to **explain** aspects of a solution you turn in, and may dock points if it appears you simply copied someone else's ideas (or just guessed a lot of things until one worked) without understanding them.*
    - *Also view the section about "**The Use of Generative AI (Artificial Intelligence) In This Course**". Remember that:*
        - *While AI tools can provide suggestions and generate content, the final output should reflect your understanding, creativity, and originality. Copying AI-generated content without understanding and without significant modification is a violation of academic honesty and is strictly prohibited.*

<u>Academic integrity policies for each assignment type</u>:

- **Homework Assignments:** Review the collaboration policy that is posted with each assignment. Unless otherwise stated, assume the collaboration policy is that no collaboration is allowed and assignments must be the result of **individual academic effort**. Gradescope will provide similarity checks on the homework assignments. Ensure that you add a comment providing a citation for any outside help you receive.
- **Quizzes:** Are open-book, but all work must still be the result of individual academic effort. **Absolutely no collaboration is permitted at any time.**
- **In-class ("lab") activities:** These activities are **collaborative** by nature, so group discussions and engagements are *highly encouraged*.
- **Final Project:** Collaboration in small groups is permitted within the stated collaboration policy. (You may *not* work as an individual on the final project.)
- **Exams (Exam 1 and Exam 2):** Are closed-book. **Absolutely no collaboration is permitted at any time. All work must be the result of individual academic effort.**

Penalties: up to 100% course grade penalty. If course staff detect cheating, plagiarism, sharing, copying another solution to an assignment (including portions thereof), or other dishonest behavior and honor code infractions, they may impose any penalty up to and

including a failing grade (F) in the course. *This is independent of, and in addition to, the operations of the Honor Code.*

- **1st Offense:** You will receive **zero (0)** points on that assessment
- **2nd Offense: Automatic F** in the course

Please let us know if you have any questions regarding the course Honor policy. If you think you may have committed an offense in this course, you may withdraw an assignment before it has come under suspicion. You may do this by sending an email to your instructor. More information can be found at http://honor.virginia.edu. Your Honor representatives can be found at: http://honor.virginia.edu/representatives.

– Research

Your class work and related data might be used for research purposes. For example, we may use anonymized student assignments to design algorithms or build tools to help programmers; use data collected from course support tools to better understand and seek to improve student engagement and learning; etc. Any student who wishes to opt out can contact their professor to do so *after* final grades have been issued. This has ***no*** impact on your grade in any manner.

– Disclaimer

This syllabus is to be considered a reference document that can and will be adjusted through the course of the semester to address necessary changes. This syllabus can be changed at any time without notification. It is up to the student to monitor this page for any changes. Final authority on any decision in this course rests with the professor, not with this document. The instructor will make every effort to announce significant changes to the class (via an announcement).

Additional Important Information

– Special Circumstances / SDAC (Students with Disabilities or Learning needs)

The University of Virginia strives to provide accessibility to all students. It is my goal in this course to create a learning experience that is as accessible as possible. If you anticipate any issues related to the format, materials, or requirements of this course, please meet with me outside of class so we can explore potential options. Students with disabilities may also wish to work with the **Student Disability Access Center (SDAC)** to discuss a range of options to removing barriers in this course, including official accommodations. We are fortunate to have an **SDAC advisor, Courtney MacMasters**, physically located in Engineering. You may email her at `cmacmasters@virginia.edu` to schedule an appointment. For general questions please visit the SDAC website: https://sdac.studenthealth.virginia.edu/ or call 434-243-5180. If you have already been approved for accommodations through SDAC, please send me your accommodation letter and meet with me so we can develop an implementation plan together. Generally, any accommodations will not extend beyond the last day of finals for the semester.

For this course, students with special circumstances (personal, athletics, SDAC considerations, etc.) need to let me know **no later than ten (10) business days after the first day of the semester.**

– Religious Accommodations

It is the University's long-standing policy and practice to reasonably accommodate students so that they do not experience an adverse academic consequence when sincerely held religious beliefs or observances conflict with academic requirements. Students who wish to request academic accommodation for a religious observance should submit their request to me by email as far in advance as possible. Students who have questions or concerns about academic accommodations for religious observance or religious beliefs may contact the **University's Office for Equal Opportunity and Civil Rights (EOCR -** https://eocr.virginia.edu/**)** at UVAEOCR@virginia.edu or 434-924-3200. Accommodations do not relieve you of the responsibility for completion of any part of the coursework missed as the result of a religious observance. Generally, any accommodations will not extend beyond the last day of finals for the semester.

– Lauren's Promise [thanks to: LaurenMcCluskey Foundation]

Everyone has the power to listen to, believe, and respond to a person asking for help. ***Lauren's Promise*** is a vow that I *(Professor Basit)* took. I want others to know that I represent a safe haven for sharing incidents of sexual assault, domestic violence, or stalking. I will listen to you and *believe* you if someone is threatening you! Anyone who makes Lauren's Promise will listen to and believe those individuals who are being threatened or experiencing sexual assault, dating violence or stalking and will help connect victims to support resources.

– Basic Needs Security

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in the course is urged to contact the Dean of Students for support. You can find more information about food insecurity here (https://caresupport.studenthealth.virginia.edu/care-and-support-services/basic-needs-resources/food-resources). Furthermore, please notify me, your professor, if you are comfortable in doing so. This will enable me to provide any resources that I may have.

– Safe Environment: Harassment, Discrimination, & Interpersonal Violence

The University of Virginia is dedicated to providing a safe and equitable learning environment for all students. To that end, it is vital that you know two values that we and the University hold as critically important:

- Power-based personal violence will not be tolerated.
- Everyone has a responsibility to do their part to maintain a safe community on Grounds.

If you or someone you know has been affected by power-based personal violence, more information can be found on the UVA Sexual Violence website that describes reporting options and resources available -- www.virginia.edu/sexualviolence.

The same resources and options for individuals who experience sexual misconduct are available for discrimination, harassment, and retaliation. UVA prohibits discrimination and harassment (see https://uvapolicy.virginia.edu/policy/HRM-009) based on age, color, disability, family medical or genetic information, gender identity or expression, marital status, military status, national or ethnic origin, political

affiliation, pregnancy (including childbirth and related conditions), race, religion, sex, sexual orientation, or veteran status. UVA policy (see https://uvapolicy.virginia.edu/policy/HRM-010) also prohibits retaliation for reporting such behavior.

If you witness or are aware of someone who has experienced prohibited conduct, you are encouraged to submit a report to **Just Report It** (https://justreportit.virginia.edu/) or contact EOCR, the office of **Equal Opportunity and Civil Rights**, at `UVAEOCR@virginia.edu`.

If you would prefer to disclose such conduct to a confidential resource where what you share is not reported to the University, you can turn to **Counseling & Psychological Services ("CAPS")** at https://www.studenthealth.virginia.edu/CAPS and **Women's Center Counseling Staff and Confidential Advocates** (for students of all genders) at https://womenscenter.virginia.edu/counseling/our-counseling-services.

As your professor and as a person, know that I care about you and your well-being and stand ready to provide support and resources as I can. As a faculty member, I am a responsible employee, which means that I am required by University policy and by federal law to report certain kinds of conduct that you report to me to the University's Title IX Coordinator. The Title IX Coordinator's job is to ensure that the reporting student receives the resources and support that they need, while also determining whether further action is necessary to ensure survivor safety and the safety of the University community.

— Support for Your Career Development

Engaging in your career development is an important part of your student experience that may take you beyond the confines of UVA. Perhaps you applied for an internship and your interview is taking place in-person across the country. Maybe you submitted an abstract to a national technical conference and you have been asked to present your work. These are not only necessary steps on your path but are also invaluable lessons in and of themselves. I wish to encourage and support you in activities related to your career development. To that end, please **notify me by email as far in advance as possible (at least one-week in advance if possible)** of such an event to arrange for appropriate accommodations. Note, any accommodations will not extend beyond three (3) days past the *last day of class for the semester* (not the last day of finals for the semester).

— Student Support Team

Please ***do not wait until the end of the semester*** to ask for help! 🙂
At the University of Virginia, **you have many resources available to you when you experience academic or personal stress**, and we understand that it is hard to know where to go, especially for CS students as our undergraduates span both the College of Arts and Sciences (BACS) and SEAS (BSCS). In addition to your professor (I am *always* here to help!), the School of Engineering and Applied Science, as well as the Department of Computer Science (CS), has staff members located in Thornton Hall (SEAS) and Rice Hall (Computer Science) who you can contact to help manage academic or personal challenges.

For academic or personal challenges - Computer Science specific resources:
The Computer Science department has staff members located in Rice Hall who you can contact to help talk through your academic or personal challenges and get you connected to the right resources. You may reach out

directly to either **SJ Jimènez-Calhoun** (smj4z@virginia.edu) or **Sheri Grimes** (prk2zq@virginia.edu), or visit during **walk-in advising hours** posted here: https://uvacsadvising.org/

Learning / Academic Support (Contact Us page)

- **Lisa Lampe**, Assistant Dean for Undergraduate Affairs, ll4uu@virginia.edu
- **Georgina Nembhard**, Director of Student Success, gnembhard@virginia.edu
- **Courtney MacMasters**, Accessibility Specialist, cmacmasters@virginia.edu, or xar7nf@virginia.edu
- Free tutoring is available for most CS and Engineering courses, in addition to more academic support programs around Grounds (https://academicsupport.virginia.edu/) for a variety of other courses.

Health and Well-being

- **Kelly Garrett**, Assistant Dean of Students (non-academic issues), Student Safety and Support, mwu5gs@virginia.edu
- **Elizabeth Ramirez-Weaver**, CAPS counselor; **Katie Fowler**, CAPS counselor
- You may schedule time with CAPS counselors at https://sites.studenthealth.virginia.edu/mental-health/getting-started-scheduling
- If you need immediate assistance, call (434) 243-5150 to speak with an on-call clinician.

Accommodations

- Learn about the process of **applying for Student Disability Access Center (SDAC) services** (https://disabilityservices.studenthealth.virginia.edu/application-process), completing an online application, submitting documentation, undergoing a review, and attending an appointment to establish accommodations.

Community and Identity

The Center for Connection (The Connect) is a dedicated student space within UVA Engineering that fosters academic success and personal growth. Through its programs and initiatives, The Connect helps students strengthen their engineering identity while providing resources to help them thrive during their studies and beyond. Its work centers on three key areas: student belonging and development, academic support, and community programming grounded in intentional, data-driven strategies.

The Connect features an open study area, a flexible event space, and on-site staff who provide direct support and advising to students. It is part of the **Office of Community, Opportunity, and Engagement** (https://engineering.virginia.edu/offices-programs/office-community-opportunity-and-engagement).

– Last Bit Of Friendly Advice...

Thank you for taking the time to read this important document – the Syllabus! A last bit of friendly advice: ***please do not wait until the last minute if you need help***. I, your professor, am available to help and support you throughout the semester. There is absolutely no shame in asking for help. There is absolutely no "silly" or "dumb" question. I want to see each and every one of you *happy and successful*. If anything impedes your happiness or progress in this course, be it academic or personal, please know you can *always come to me to talk about it*. I may not have all the answers, but I am a good listener. Drop by my posted office hours, or email me to schedule a one-on-one meeting. I wish you an amazing and successful semester, and I look forward to seeing you in class! 😊