# CMSC 14100 4 - Introduction to Computer Science I - Instructor(s): Aaron Elmore, Jesus Almaraz-Argueta

Project Title: **College Course Feedback - Autumn 2023**

Number Enrolled: **67**
Number of Responses: **35**

**Report Comments**

Opinions expressed in these evaluations are those of students enrolled in the specific course and do not represent the University.

Creation Date: **Friday, February 2, 2024**

## What are the most important things that you learned in this course? Please reflect on the knowledge and skills you gained.

| Comments |
| --- |
| Fundamentals of computational thinking, how to use Git, basics of Python, functions, lists, scoping, tuples, dictionaries, classes, files, recursion |
| Classes, recursive functions and code quality guidelines. |
| Basics of python/coding in general, starting with the very basic tools of Python and ending with recursive functions and data structures. Also, the skill of how to think quantitatively and efficiently! |
| Print statements, def, conditionals, loops, trees, files, dictionaries. |
| Computational thinking and python |
| intro python skills |
| python's data structure & built–in methods, recursion |
| Not much, this felt like a duplicate AP CSA/CSP course |
| Python programming |
| Computational thinking and basic programming skills |
| Introduction to python – iterative and recursive functions |
| Basics of Python. Variables, Types, & Expressions. Conditionals and Loops. Lists, Strings and Tuples. Functions. Dictionaries. Classes and Objects. Exceptions. Recursion and Recursive Data Structures. Files. |
| I gained experience implementing tasks in Python and in using the VS Code program. I learned the basic syntax of 'for loops' and was introduced to trees, dictionaries, and recursion code. I learned the material in Chapters 1–4.1.2 of the textbook by profs Anne Rogers and Borja Sotomayor. |
| Basic python |
| intro to python, variables, if else, loops, functions, dictionaries, lists, classes, recursion |
| Python |
| I learned computational thinking, basic data structure, github interaction, object–oriented programming, file system, etc. |
| Control Flow Statements, Introduction to Functions, Data Structures (List, Tuples, Strings, Dictionaries, Sets), Objects and Classes, Recursion, Trees |
| I was already very familiar with the material, but I did learn more about tools used in programming. |
| Cs knowledge very basic python |
| Basic python skills, recursion, trees |
| learned the basics of coding and python: lists, types, dictionaries, conditionals, for and while loops and iteration. the end of the quarter was focused more on structures with stacks, queues, trees and recursion, and a little bit on exceptions and working with files |
| I learned how to use Linux, Terminal, VSCode, and learned basic coding skills for Python, as well as data structures, classes and objects, and recursion. |
| Basics of python: 4 data types & basic manipulations with them (string, booleans, numbers, None), functions, for & while loops, lists, tuples, dictionaries, recursion, trees. |
| Basic Python, data types, if statements, loops, recursion, trees, classes and objects, I/O. |
| Fundamentals of coding via python, basics of Github and linux |
| Recursion, Classes, Files |

## Describe how aspects of this course (lectures, discussions, labs, assignments, etc.) contributed to your learning.

| Comments |
| --- |
| Lectures introduced new topics around once a week and spent some time walking through practical examples of these concepts before we had to use them for HW/exams. The lectures were definitely the most helpful part of the course, and it was especially important to be in lecture during the second half of the course when some more complex concepts were introduced. Homework assignments helped to reinforce my understanding of concepts and provided somewhat of an enjoyable problem–solving challenge. Discussions involved working through more practice problems on paper with groups, which I personally did not find the most helpful, as my understanding of the material was often far ahead of my groupmates'. |

| Comments |
| --- |
| Assignaments were the most important part for me as they really required me to apply all the concepts from the class. |
| Lectures were crucial for understanding what was going on in class. I cannot imagine succeeding in this class without attending them, and I found lectures much more helpful at clarifying concepts than the problems we'd work through in discussions. We had 8 weekly homeworks, all of which were challenging (and TIME CONSUMING) to a degree, but were designed so that we would walk away from them with a stronger intuition on how to code and how to think. |
| The discussion sections probably helped the most in terms of learning. |
| discussion sections were mostly unhelpful. lectures repeated information from textbook. |
| The lectures were fine I'm sure but the discussion sections were not very helpful. The worksheets were more tedious than anything, and the weekly agendas for the meetings never seemed conducive to actual discussion. It was more like "do this problem set and write your answer on the board". Really I'm just not sure why a Computer Science course needed a discussion section in the first place. Maybe a lab, but not a discussion section. |
| lectures were very helpful, discussions were relevant and expanded on the concepts, assignments allowed us a space to apply what we learnt |
| Lectures, discussions, and assignments all contribute to my learning. |
| PSets were amazing learning tools, and the textbook was very good as well. Notes from the office hour sessions were very helpful for studying for the test. They also gave out previous exams for us to study and those were very helpful for preparing for the exams. |
| lectures were most of my learning, the textbook a close second, and discussion sections didn't help much at all |
| Lectures were good but most of the learning can be done through the book. Homework assignments were time consuming and challenging but definitely fun. Discussions were a bit boring but still useful. |
| Homeworks and practice tests helped improve my learning. The rigorous grading in this course helped me become a more organized and dilligent learner —- these qualities are extremely important for performing well. |
| HW / Discussions were most useful, lectures were useful in learning new concepts being applied real time. |
| Textbook |
| The lectures together with the textbooks are helpful, assignment are good practices for learning and preparing for exams, but the discussion sessions are not so helpful. We cannot switch sections whatsoever or be absent even with excuses. My discussion session ended up with a pretty weird environment that makes me uncomfortable, so I choose not to go in the end. |
| The homework assignments are very helpful in understanding the concepts |
| The assignments were good practice, but didn't really help me in the way of learning. |
| Assignments and practice exams were good |
| The homework was the most helpful for learning. The textbook also was immensely helpful, but everything else was just supplementary. |
| lectures helped to introduce the topics and discussions were really helpful in the sense that you got to work on practice problems and reading code. the group dynamic in discussions also contributed a lot to my learning because they would often me when i don't really understand what's happening in certain questions |
| Discussions were very helpful in learning about the content, as well as getting to meet some other students in my class. The course can be tough if it is your first time coding and if you are going through it alone. |
| The lectures were very helpful. Prof Elmore could slow down a bit though since I sometimes feel rushed in lectures. I usually have to go to the textbook to review concepts covered in his class. Prof Rogers was a better lecturer, because she explains concepts very clearly and people in her class ask loads of questions. Prof Rogers was also really responsive on ed, during weekdays she usually answers your questions within half an hour. On weekends it's usually one hour. She was even available during Thanksgiving break. Honestly the best professor I had. Ofc if you are a fast learner and has some background in CS I think you would be fine in Prof Elmore's class. |
| The textbook was VERY helpful and informative. Lectures were helpful but very fast. Discussions and homework assignments were extremely beneficial. |
| Lectures introduced concepts, discussion sections went through examples of how to apply concepts |
| Became much more proficient in python |

## Please respond to the following:

| | Mean | Median | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|---|
| This course challenged me intellectually. | 4.40 | 5.00 | 2.86% | 2.86% | 8.57% | 22.86% | 62.86% |
| I understood the purpose of this course and what I was expected to gain from it. | 4.71 | 5.00 | 0.00% | 0.00% | 2.86% | 22.86% | 74.29% |
| I understood the standards for success on assignments. | 4.56 | 5.00 | 0.00% | 5.88% | 2.94% | 20.59% | 70.59% |
| Class time enhanced my ability to succeed in graded assignments. | 3.63 | 4.00 | 11.43% | 8.57% | 17.14% | 31.43% | 31.43% |
| I received feedback on my performance that helped me improve my subsequent work. | 3.94 | 4.00 | 8.82% | 2.94% | 14.71% | 32.35% | 41.18% |
| My work was evaluated fairly. | 4.29 | 5.00 | 2.86% | 2.86% | 11.43% | 28.57% | 54.29% |
| I felt respected in this class. | 4.43 | 5.00 | 0.00% | 5.71% | 8.57% | 22.86% | 62.86% |
| Overall, this was an excellent course. | 4.20 | 4.00 | 0.00% | 5.71% | 14.29% | 34.29% | 45.71% |

## Additional comments about the course:

| Comments |
|---|
| Discussion sections should focus on less problems as there is usually not enough time to solve them all. As well, I notice that people that do not have background on coding or CS really struggle to do the assignments, and I with some knowledge and practice still found it really demanding. |
| did a really great job at structuring the content in terms of covering a lot of ground without it ever feeling overwhelming (as someone with little coding experience) |
| First half of the course was very easy for those with a CS background, but nearly impossible to completely follow and understand for those who have never coded before. |
| The homework grading curve is really weird and unfair. anything the auto grader assigns below a 50% essentially counts as a 0, lower than 90% is a 50, and above 90% is a 100. Kinda unfair that if you can't figure out a single problem and are scoring a raw 89 that you end up with a 50 on the assignment. Also, the attendance policy on discussions is really strict with only two excused absences. Also you're only granted two hw resubmissions, including anything submitted late. After that, no late work is accepted. |
| This should be optional |
| Very well designed and reasonable. |
| The feedback given on homework was minimal. Even if we failed tests on the last exercise but still achieved the maximum letter score, we weren't given any comments on a path forward. Office hours were useless – CS needs a better system for this. All the TAs are so scared of being in trouble for plagiarism that they can't give much help at all. The structure in the first week was ideal, latter weeks meant that the TA MIGHT solve one problem, but you could remain very stuck. |
| I would like to thank Prof. Anne Rogers for reasonable and fair course policies, and for being invested in the success of students. |
| I already had a lot of Python experience coming into the course. |
| It is just not for beginners |
| Recursion was a far more difficult topic than anything else in the class. I wish we spend a bit more time on it. |

## I would recommend this course to:

| | No | Yes |
|---|---|---|
| Highly-motivated and well-prepared students | 6.25% | 93.75% |
| Anyone interested in the topic | 21.88% | 78.13% |

## Thinking about your time in the class, what aspect of the instructor's teaching contributed most to your learning?

| Comments |
| --- |
| Professor Elmore's lectures were absolutely fantastic! The course moves quickly but he was great at explaining concepts and answering questions—truly one of the most helpful educators I've ever had. |
| He pose questions for everyone to be involved in the class and the class to class progress was fine. |
| Elmore always left time for questions, and went through examples in a straightforward and concise manner that I never had trouble following along with |
| Office hours really helped me with a few questions I've had. |
| Nothing |
| very clear in explanations, very friendly and helpful in answering questions |
| I wouldn't know, I didn't go to class |
| He really explain the concepts clearly and with examples |
| The textbook is very helpful. The actual writing of code in real time was also helpful. |
| Lecture |
| Class time |
| Lectures |
| Live code |
| The instructor was very well spoken and clear during lectures. |
| he would often go through a lot of examples, which was very helpful in seeing how the code would work and how it would be slightly different in each scenario depending on what we want to find/return. i think he also explained things very clearly and concisely as i was easily able to reorientate my thinking to think through solving problems recursively rather than just using a loop |
| Ed discussion! The professors and TAs were very responsive and available even during weekends & breaks. |
| Great examples of code in class. Quick to answer questions on Ed. |
| Discussion sections |
| Going through examples in class for each new topic |

## What could the instructor modify to help you learn more?

| Comments |
|---|
| – |
| sometimes it was a bit unclear as to what the important vs unimportant parts of a given example/concept in class were |
| Make more fair grading and late work policies. |
| Rework discussion sections or remove them entirely. |
| n/a |
| Not much. The homeworks were all fine. |
| Nothing |
| Go a little slower in the recursion parts. |
| More examples<br>Don't erase what you've written after 5 seconds of having it on the board |
| Keep lectures more succinct and 'to the point'. |
| Move slower at beginning |
| Get everyone on the same page and less assumption |
| I'd appreciate if the Prof can arrange his coding work in lectures and share them with students as lecture notes. It'll be of so much help if we can just go over those code when we review course content. |
| I'm not really sure. I didn't have much problem with the course. |
| go through the material a little slower and provide more explanation, especially with trees. give more examples on problems with tree related structures |
| Professor Elmore was engaging, however sometimes I felt like he could explain his approaches in a more structured and laid out way. Sometimes he would just write the examples, and it would become difficult to follow if you were just a beginner. |
| Not much, this is a very well–designed course. Maybe adding more office hours on days close to hw ddls? |
| Go a bit slower through the nuances of difficult topics, especially recursion. |
| not much |
| Provide more examples not in the textbook |

## The Instructor . . .

| | Mean | Median | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | N/A |
|---|---|---|---|---|---|---|---|---|
| Organized the course clearly. | 4.53 | 5.00 | 0.00% | 0.00% | 6.67% | 33.33% | 60.00% | 0.00% |
| Presented lectures that enhanced your understanding. | 4.00 | 4.00 | 3.23% | 9.68% | 12.90% | 32.26% | 41.94% | 0.00% |
| Facilitated discussions that were engaging and useful. | 4.14 | 4.00 | 3.23% | 0.00% | 19.35% | 29.03% | 41.94% | 6.45% |
| Stimulated your interest in the core ideas of the course. | 4.26 | 5.00 | 0.00% | 6.45% | 16.13% | 22.58% | 54.84% | 0.00% |
| Challenged you to learn. | 4.52 | 5.00 | 3.45% | 0.00% | 6.90% | 20.69% | 68.97% | 0.00% |
| Helped you gain significant learning from the course content. | 4.19 | 5.00 | 3.23% | 6.45% | 9.68% | 29.03% | 51.61% | 0.00% |
| Was available and helpful outside of class. | 3.90 | 4.00 | 13.33% | 0.00% | 16.67% | 20.00% | 46.67% | 3.33% |
| Motivated you to think independently. | 4.47 | 5.00 | 0.00% | 0.00% | 16.67% | 20.00% | 63.33% | 0.00% |
| Worked to create an inclusive and welcoming learning environment. | 4.32 | 5.00 | 0.00% | 3.23% | 12.90% | 32.26% | 51.61% | 0.00% |
| Overall, this instructor made a significant contribution to your learning. | 4.20 | 5.00 | 3.33% | 6.67% | 13.33% | 20.00% | 56.67% | 0.00% |

## Please include the name of the TA/CA/Intern you are evaluating. What aspects of the TA's teaching contributed most to your learning? What could the TA modify to help you learn more? Please include any additional feedback for the TA/CA/Intern.

| Comments |
|---|
| The TAs were available on Ed to help answer questions, and each discussion section had a TA assigned to it. My discussion's TA was Rohan Deme. He was friendly but my interactions with him were really just facilitating us working through the problems and occasionally elaborating on a point of confusion. Sometimes when I asked fairly simple questions, he didn't seem any more sure of the answer than I was. |
| Rohan Deme. He did not reply to my email. |
| Rohan Deme |
| Minjoo |
| He was chill. |
| Don't know his name. |
| Rohan. Always explain things clearly and make sure everyone understands the concept. |
| Nicholas Lee |
| N/A |
| Nicholas Lee |
| Nicholas |
| Rohan. He was very helpful during discussions and always explained things very clearly when we were confused. He did a great job facilitating discussions. |
| My TA was Nicholas Lee. He was very engaging during discussions and always made the sessions educational as well as interesting. He was always happy to answer questions and help students out with any problems they might have been having with the course. |
| Kaitlyn Li. I went to her office hours and she answered many of my questions during finals week. Not much! She's very responsive and explains concepts clearly. |
| Nicholas was a great TA. He explained everything very clearly and walked us through good, helpful examples step–by–step and was never condescending towards us. |
| Can't remember the name. facilitated discusssion sections, answered questions well |
| Han Liu |

## The TA/CA or Intern. . .

| | Mean | Median | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | N/A |
|---|---|---|---|---|---|---|---|---|
| Facilitated discussions that supported your learning. | 4.32 | 5.00 | 0.00% | 0.00% | 20.00% | 25.00% | 50.00% | 5.00% |
| Gave you useful feedback on your work. | 4.25 | 4.00 | 0.00% | 0.00% | 15.00% | 30.00% | 35.00% | 20.00% |
| Stimulated your interest in the core ideas of the class. | 4.17 | 4.00 | 0.00% | 0.00% | 25.00% | 25.00% | 40.00% | 10.00% |
| Challenged you to learn. | 4.26 | 4.00 | 0.00% | 0.00% | 20.00% | 30.00% | 45.00% | 5.00% |
| Helped you succeed in the class. | 4.21 | 4.00 | 0.00% | 0.00% | 20.00% | 35.00% | 40.00% | 5.00% |
| Was available and helpful outside of class. | 4.25 | 4.00 | 0.00% | 0.00% | 15.00% | 30.00% | 35.00% | 20.00% |
| Overall, this individual made a significant contribution to your learning. | 4.00 | 4.00 | 5.00% | 0.00% | 25.00% | 20.00% | 40.00% | 10.00% |

## How much did the following elements of the course contribute to your learning gains?

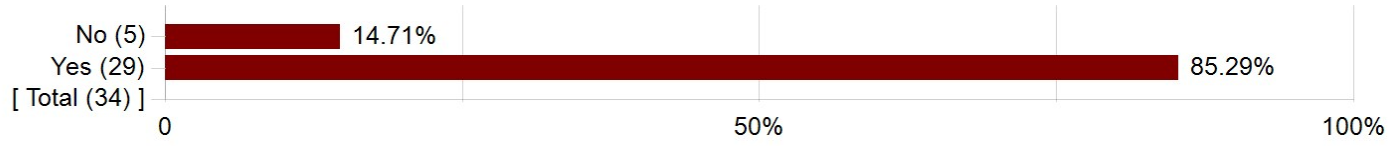
| | Mean | Median | No Gain | A Little Gain | Moderate Gain | Good Gain | Great Gain | N/A |
|---|---|---|---|---|---|---|---|---|
| Laboratory Experience | 3.33 | 4.00 | 14.29% | 0.00% | 0.00% | 14.29% | 14.29% | 57.14% |
| Field Trips | 1.00 | 1.00 | 14.29% | 0.00% | 0.00% | 0.00% | 0.00% | 85.71% |
| Library Sessions | 1.00 | 1.00 | 14.29% | 0.00% | 0.00% | 0.00% | 0.00% | 85.71% |
| Review Sessions | 1.67 | 1.00 | 28.57% | 0.00% | 14.29% | 0.00% | 0.00% | 57.14% |
| Writing Seminars | 1.00 | 1.00 | 14.29% | 0.00% | 0.00% | 0.00% | 0.00% | 85.71% |

## Other course elements not mentioned above:

| Comments |
|---|
| Discussion sections |
| discussion sessions |
| Discussion sections were extremely helpful. |

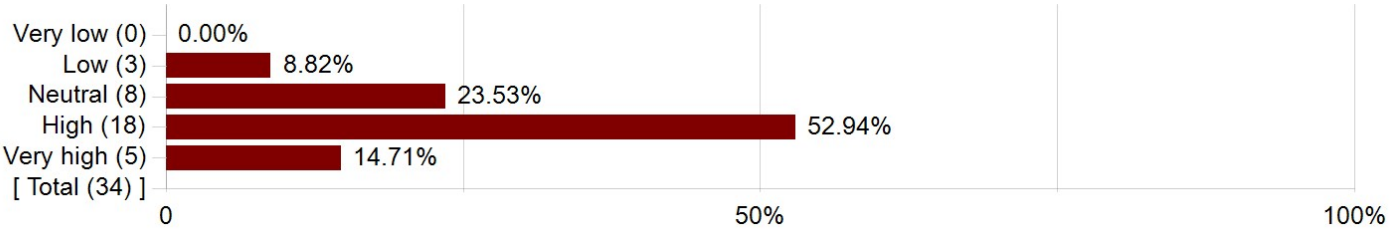
## Is this class a requirement of some sort?

Is this class a requirement of some sort?



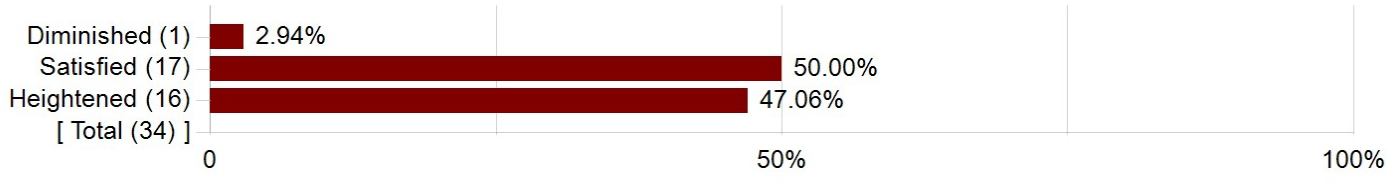

## Prior to starting this class, your interest level was?

Prior to starting this class, your interest level was?

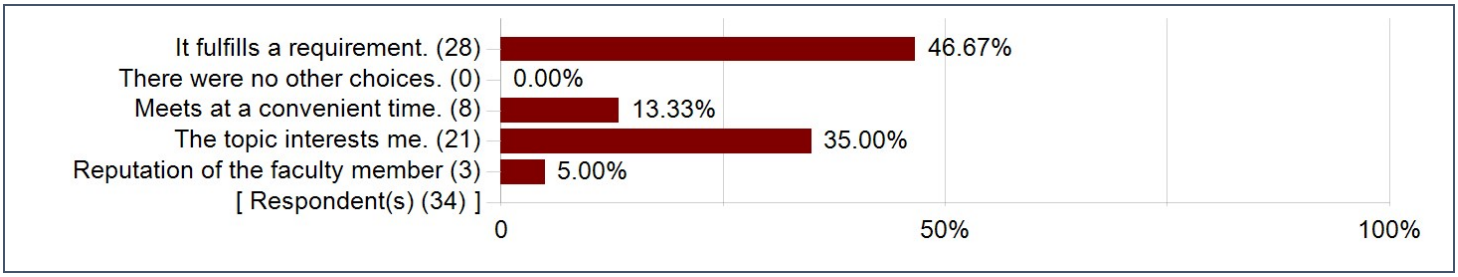



## Now that this class is over, your interest is?

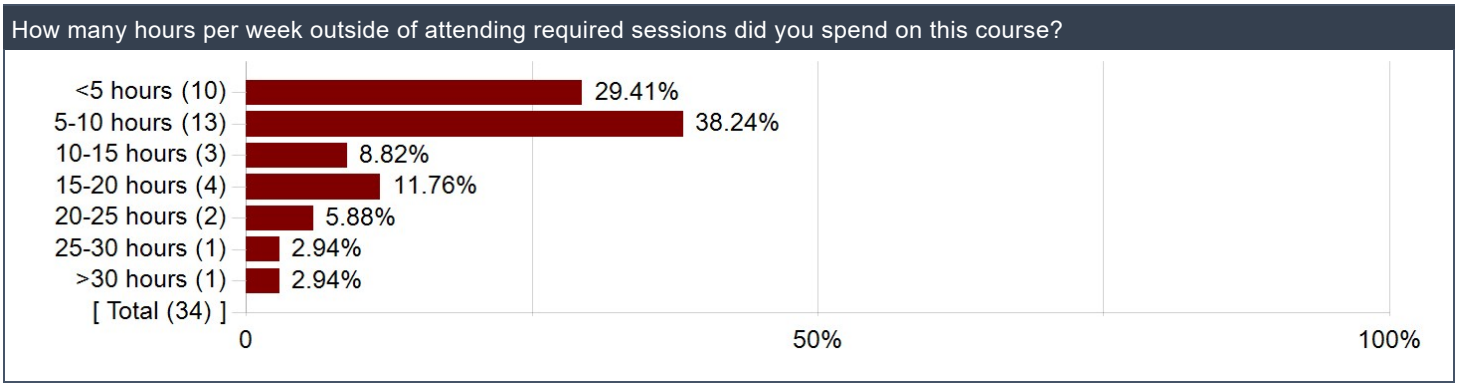
Now that this class is over, your interest is?



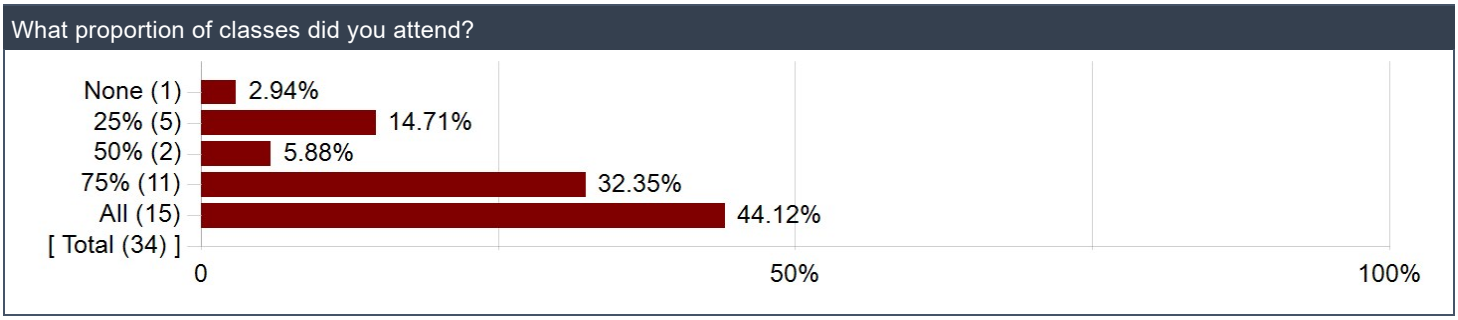
## Why did you choose to take this course? (Select all that apply)




## How many hours per week outside of attending required sessions did you spend on this course?




## What proportion of classes did you attend?



## Please comment on the level of difficulty of the course relative to your background and experience.

| Comments |
| --- |
| I had a decent background with a lot of basic CS concepts (working with functions, variables/datatypes, some classes) but had never worked in Python before, and I found the course very manageable throughout. The first half felt mostly like review but the second half was a lot of new concepts, and it got more challenging but was still not too bad. |
| Homeworks were really long , demanding and difficult |
| very minimal coding experience; I'd say it is a manageable class IF YOU SET ASIDE ENOUGH TIME for it |
| Took Intro to Java. Class was easy at the beginning; more difficult now that it's reached areas I haven't learned before. |
| Took one year of APCS A in high school and a class that used R, pretty easy but I had to stay on top of the work. Classmates with no background greatly struggled |
| I didn't have any previous computer science experience and thought the class was very manageable |
| Pretty difficult without prior coursework. Also they changed the office hours policy so that its really difficult to meet to discuss a specific problem from the hw, etc. |
| Easy |
| had some background experience coming into this course, fairly easy if you pay attention in class |
| Okish |
| Reasonable class for everyone, even if you're new to coding. People who have 'prior' coding experience usually know up to the midterm content, and then it is new for everyone. |
| NOT DOABLE FOR A BEGINNER! I went into this "intro" class with no prior knowledge of coding. I would say that around 75% of people like myself dropped the course or took it pass/fail. The lack of honors sequence means that there are a LOT of people in the class who already know all of the content covered in the first 6 weeks. While beginners struggled through generating a LLM, they could very easily design these aspects. An assignment that would take me 40 hours took them maybe 3. Make a true intro course!!! This has been incredibly discouraging. |
| Quite difficult for someone with no coding experience, but doable if you're willing to put the time in. |
| Steep learning curve. I had an intro Java course in high school, and I struggled in this course. |
| I have no CS experience and it was not an easy course |
| I have a lot of experience in Python so this course was relatively easy for me. |
| High not for beginners |
| Rather time–consuming given no previous coding experience. |
| I already had much experience in programming. It wasn't difficult at all. Perhaps challenging at times, but nothing I couldn't handle I think. |
| Not hard if you have some basic proof based experience or basic coding experience (like, really basic – the course literally starts with hello world) |
| not too difficult if you have previous experience like AP Computer Science A, but it does ramp up in difficulty later in the quarter with the assignments getting pretty complex |
| I coded for a little bit during my first and second year of high school, but it was highly theoretical. This course was very application based and helped push me farther in course content. That being said, it began manageable and difficulty quickly accelerated, so I would recommend students to try and be as consistent as possible in learning the content. |
| I took an intro to R coding class last year and I also have some experience with Stata because of a research assistant position. This course was still challenging for me to be honest. I think it's because the coding experience I had before wasn't very hardcore. Strongly recommend reading the textbook or going on Youtube to find some videos about python before starting this class. |
| As a math major, this class was very compatible with my way of thinking and I found the concepts very logical. I thought the course was on the easier side. |
| very difficult for me because i have had no experience with coding or python before |
| Challenging, had no prior experience, but fair and doable if one commits adequate time to the course |
| Slightly difficult given a basic background in python |