

# CMSC 14100 5 - Introduction to Computer Science I - Instructor(s): Aaron Elmore, Jesus Almaraz-Argueta

Project Title: College Course Feedback - Autumn 2023

Number Enrolled: **62** Number of Responses: **39** 

#### **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

The styles and ways of writing Python code

python basics, code style

Python, OOP, Trees and Recursions

Learned the basics of programming in python. Also learned about the tree data structure and about recursion

programming basics (variables, functions), data structures (trees), recursion

Basic Programming in Python, including Lists, Libraries, Classes, Recursion, etc.

Python

python

I learned the fundamentals of Python including variables, loops, classes, and recursion. I gained technical programming skills as well as some basic dexterity with Linux.

I learned a lot of the basics of computer science, including elementary data structures such as strings and lists, as well introductory concepts of object—oriented programming, all of which we applied in Python.

Functions, recursion, trees, classes; essentially, foundations of computer science in Python

The basics of programming in python.

Basics of Python, data types/structures, basic programming skills

How to speak Spanish on my feet.

Basic Python - loops logic etc

Basic data, list/dictionary, data structure, object-oriented programming, recursion, files...

Basic skills in coding in python

I learned the basics of python.

conditionals, iteration, lists, dictionaries, OOP, recursion, file handling

Python data types and syntax, class and objects, and recursion were the most important things.

Tuple, Dictionary, Class, Recursion & Tree, Exception, File.

Introduction to programming in Python. Coming in with some coding background, their pointers on code style were helpful.

Classes, trees, recursion

Basics of programming through Python

The fundamentals of Python: variables, conditionals, functions, dictionaries, classes, recursion, etc.

The introduction to Python as well as basic data structures. Recursion is hard to understand but I kinda got a sense of it.

Python; tree, files, programming logic.

Basics of python programming

Introduction to python

I learned how to work with lists, dictionaries, classes, and trees. I also gained experience working with recursion.

Dictionary, Class, and Tree

I gained a basic understanding of how to work in Python and use the Linux command line. The former included an understanding of how to work with simple types like ints and strings, more complex data structures like dictionaries and lists, and a brief delve into file i/o too.

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

#### Comments

The discussion sections helped me to familiarize with the course

lectures were alright. Discussions were useless. Assignments were either too easy or too hard. All contributed to my learning experience other than discussions.

The discussion sections were useful because we got to talk to others and understand why certain code didn't work. Also, writing code by hand simulated the exam environment.

#### Comments

The in-class examples were pretty useful and homeworks helped me practice the ideas presented in class

lectures were ok

I didn't go to any of the lectures and was still able to do well. The discussions were useless, but the assignments did a good job of helping us learn.

Hands-on discussion sections

not really contributed

The lectures and discussion sections contributed to my learning by teaching me the concepts. The assignments allowed me to apply my learning and get experience actually writing code. Discussion also helped with writing code and making sure I truly understood the concepts.

The lectures provides short but succinct overviews of the primary concepts we went over, and while the discussion sections were pretty long, they usually went by quickly and helped me solidify my understanding of the concepts.

The lectures were helpful in working through examples and trying out outputs, as well as asking questions directly to the professor. The discussions were super helpful in working through problems on paper and therefore preparing for exams — I highly recommend attending all of them if you can as it really is quite similar to the exam environment but you work collaboratively with other students and the TA. Assignments were challenging but very helpful in preparing for exams and just learning how to do problems effectively.

I found the homework to be most helpful for learning, but I was often frustrated by poorly worded questions that required me to spend about as much time deciphering the language as doing the actual problem.

The lectures were helpful, but the most helpful part of the course for me were the homework assignments—they forced me to learn the material really well.

BlinkLearning exercises helped solidify lectures.

Discussions are helpful. Assignment covers more and makes exams look easier.

The lectures were great as they made the textbook a lot more clear. The discussion was also very useful as it allowed us to test our skills. The assignments we are also very interesting as they allowed us to test our skills and think

Most of the learning was done independently of the course by working on the weekly assignments.

discussions are basically recitations and help get you used to the formats of tests

Lectures, weekly assignments, and discussion were all very helpful.

The lectures helped me understand the concepts, the discussions enhanced my understanding, and the assignments enabled me to test my knowledge.

Lectures provided us with the concepts, while discussions tried to provide some group collaborative practice. The discussions were not very helpful, and very long (80 minutes). Assignments were helpful in cementing the concepts through practice.

Lectures only toward the end of the quarter, discussions more so (though they were a drag at the time), homework the most

The discussion sections were really helpful for getting you used to writing code, and the homework mad you practice the material well

The smaller discussion sections where we worked on practice code problems with other students were extremely helpful

The lectures are sometimes helpful to attend, though I almost learned all of my content through the homework and discussion sessions.

Lectures go through the relative important concepts. Discussions give concrete examples of lecture content. Assignments help us learn how to apply concepts to real–life scenarios.

Homeworks were very practical and helpful

In lectures examples are shown to let us have better understanding of lecture

Lectures were not specific to the weekly homeworks but gave a solid framework of topics. Discussion section was a great place to practice working through problems and helped me adjust to writing code by hand which is needed for the midterm and final

I think discussions are very useful.

The discussions were very useful for doing problem solving with what we learned in class and in the textbook. The lectures helped build upon what we learned in the readings.

### Please respond to the following:

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This course challenged me intellectually.	3.97	4.00	5.13%	7.69%	15.38%	28.21%	43.59%
I understood the purpose of this course and what I was expected to gain from it.	4.41	5.00	2.56%	0.00%	7.69%	33.33%	56.41%
I understood the standards for success on assignments.	4.31	5.00	2.56%	5.13%	2.56%	38.46%	51.28%
Class time enhanced my ability to succeed in graded assignments.	3.78	4.00	5.41%	10.81%	13.51%	40.54%	29.73%
I received feedback on my performance that helped me improve my subsequent work.	4.08	4.00	5.41%	5.41%	13.51%	27.03%	48.65%
My work was evaluated fairly.	4.29	4.50	2.63%	0.00%	13.16%	34.21%	50.00%
I felt respected in this class.	4.24	4.00	2.63%	0.00%	15.79%	34.21%	47.37%
Overall, this was an excellent course.	3.84	4.00	2.63%	10.53%	18.42%	36.84%	31.58%

#### Additional comments about the course:

#### Comments

Good Professor. Thanks, professor Elmore

If you have no prior experience this class will be definitely be challenging

mostly self study

One piece of advice I have for students taking this course is to just take notes in a Python (.py) file. I used Spyder and was able to save both the file and the console (all the tests run and their results) to a folder on my computer, and so I actually got to run the code simultaneously with Professor Elmore, and it made it easier to think about and independently test if I wanted, as well as look back on all of the code from previous lectures.

I found the office hours queue to be very difficult to manage, and I never understood who I should go to for help. Spending all day checking my email to see if I was admitted to office hours only to have a 10 minute window for me to arrive made office hours more trouble than they were worth.

Just basic stuff, so if you have cs background it should be easy, but otherwise probably not

Despite being an introductory course, 141 is difficult and requires lots of independent effort outside of class for those with little to no experience with programming. It is extremely fast–paced and if you do not already have programming intuition or basic skills you will constantly find yourself playing catch up.

This is not an intro course. I had previous python experience (though not much) and the first half was pretty easy but as soon as we hit classes it became an enormous challenge

I feel like this course is very hard if you have no coding background or knowledge. From my understanding, most people in the class seemed to have some sort of previous coding experience even if it wasn't Python.

It was a great class, but you need some experience with programming to help you catch up

homework can build up, definetly good to get started early and finish early than be stuck and have to deal with the deadline

Please be more systematic and organized in teaching

#### I would recommend this course to:

	No	Yes
Highly-motivated and well-prepared students	5.26%	94.74%
Anyone interested in the topic 23	3.68%	76.32%

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

#### Comments

The instructor lectures clearly and this is enough for me to understand

He fishes for answers from students rather than just saying it which is good

The teacher's willingness to answer questions.

The in-class examples and he explained what he was doing very clearly

Lectures were good

he tried, but not helpful

The coding examples the instructor did in class helped most since I got to see the concepts in action and understand the syntax.

Working through problems as a class was probably the most helpful for my learning, as it provided blueprints for how I should tackle similar problems on my own.

Professor Elmore engaged us both by asking us questions and by always calling on students when they had hands up to answer a question. He also ran multiple tests on much of his code, and we were actually able to see him debug and his methods for that if something went wrong, which was super helpful.

The instructor provided examples of the topics covered in lecture.

Writing out example functions that we could use for future assignments and tests.

Lecture is great

He was very engaged with the class and asked questions which contributed most to my learning

Write sample codes of the concept in class.

I especially appreciated Professor Elmore's last two lectures which were not technically part of the course material but were more practical (executables, arguments, file, iterators).

Worked examples

The sample code problems on the board.

Professor Elmore has a deep understanding of the subject

Live coding.

Homeworks really contributed to my learning

lectures were helpful for base understanding

Drawing graphs about the concepts

Professor Elmore did live work in VS Code on the projector which helped me follow along with his thought process. He was also straightforward in answering questions.

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

#### Comments

Be a little more proactive and give more examples.

make signposts and explain what he is doing instead of just writing codes...i dont know what he is writing since like midterm

The instructor could provide more practice problems to help me gain more understanding.

When we were just going over code examples, it might be better to have them typed out before, but this would also make it a bit harder to follow how the code actually works so it's not necessarily a better approach.

When the code is very complex or there is a lot of code on the page, it could be hard to take down or fully understand if we were scrolling from top to bottom frequently, so the only thing I'll say is perhaps spending a bit more time on smaller blocks of code for better understanding. I specifically have our work on classes in mind right now as those could be quite long and sometimes confusing.

I would like to see more examples beyond what is already included in the textbook as those were the most helpful for my learning.

The course overall was really really fast, which meant that the pace of the lectures were also really quick. The professor also doesn't have concrete notes to send out other than the textbook, and I would've loved to catch a few of the functions he wrote out before he deletes them on the file.

Prof. Elmore is great.

I think the format he used was perfect, nothing to change

More applications of what we were learning to his research/real coding stuff

Use PowerPoint slides and the sample codes together to explain the concept.

That may be personal, but the professor constantly turned a question to the class (as in "What do I do in my code now?", which in itself is a good practice as it makes you think a bit and get back on it if you were zoning out; however, I believe he also made use of it too much, and sometimes I could not even hear the insights some of the students had. Therefore, reducing the number of times the class is being asked about things could be a thing.

I think more practice coding problems outside of just the homework. Each homework focused on one main concept that we learned in lectures that week and then would usually build upon the previous week. But for the topics covered after the midterm, there was less applied practice.

I think explaining the concepts mentioned in the textbook more thoroughly would help. I feel that most of the lecture are just replicating what is explained in the textbook

The first half of the quarter could have been paced faster to clear up room for diving deeper into post–midterm topics.

Not moving too fast

maybe given out some sort of handout for each lecture, taking notes by hand or computer was tricky for various reasons

Be more systematic and organized in teaching(I want PPT), especially when explaining a concept. Allocate more time to the later, difficult concepts in the class

It would be nice if we could see the slides and code from class on Canvas, but other than that, Professor Elmore's instruction was excellent.

#### The Instructor . . .

	Maan	Median	Strongly	Disagras	Moutral	Agroo	Strongly	NI/A
	Mean		Disagree	Disagree	Neutral	Agree	Agree	N/A
Organized the course clearly.	4.35	4.00	0.00%	0.00%	8.11%	48.65%	43.24%	0.00%
Presented lectures that enhanced your understanding.	4.20	4.00	0.00%	5.41%	8.11%	43.24%	37.84%	5.41%
Facilitated discussions that were engaging and useful.	4.15	4.00	0.00%	2.70%	13.51%	40.54%	32.43%	10.81%
Stimulated your interest in the core ideas of the course.	4.23	4.00	0.00%	2.70%	10.81%	43.24%	37.84%	5.41%
Challenged you to learn.	4.40	4.00	0.00%	0.00%	5.41%	45.95%	43.24%	5.41%
Helped you gain significant learning from the course content.	4.20	4.00	2.70%	0.00%	10.81%	43.24%	37.84%	5.41%
Was available and helpful outside of class.	4.07	4.00	2.70%	0.00%	16.22%	32.43%	29.73%	18.92%
Motivated you to think independently.	4.36	4.00	0.00%	2.70%	2.70%	43.24%	40.54%	10.81%
Worked to create an inclusive and welcoming learning environment.	4.12	4.00	0.00%	8.11%	8.11%	37.84%	35.14%	10.81%
Overall, this instructor made a significant contribution to your learning.	4.17	4.00	0.00%	2.70%	13.51%	43.24%	35.14%	5.41%

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

Discussion sessions fascinated by our TA at least were the most useless and unproductive sessions this quarter.

Victor was helpful in answering questions and faciliated discussion on alternative solutions.

Andi Liu

Víctor Almaraz Argueta

Kaitlyn Li. She was very helpful in discussions, always took time to help us reach the answers and made sure all students were ready before moving on.

David Xue

Victor Almaraz Argueta. Did a very good job structuring the discussion sections.

Kaitlyn was very good at explaining the code we were looking at.

My TA's name is Victor. He clearly explained the solutions to the discussion problems and organized the discussion session well.

Kaitlyn Li. She mostly let us solve things independently in discussion and then we reviewed the answers together.

Nat

David Xue. He was a really cool guy who clearly knew what he was doing. Also gave some beautiful tips on writing code. I would just love to see more writing of code by himself in the discussion section, but that would require an entire reformulation of the discussion section, I guess.

There were a lot of TA's that I saw during office hours, but Lena and Zhe were the best. They helped explain to me coding concepts I was getting confused about, visualize what my code was doing, and break down the code into steps.

Andy is an excellent TA. He is patient, he understands our struggles, and he really wants to help us understand the topics. I hope that someone like him teaches in the lectures.

Andy

We have a discussion section leader, but not a TA.

### The TA/CA or Intern...

	Strongly						Strongly		
	Mean	Median	Disagree	Disagree	Neutral	Agree	Agree	N/A	
Facilitated discussions that supported your learning.	4.29	5.00	4.55%	9.09%	0.00%	22.73%	59.09%	4.55%	
Gave you useful feedback on your work.	4.42	5.00	0.00%	4.76%	0.00%	38.10%	47.62%	9.52%	
Stimulated your interest in the core ideas of the class.	3.95	4.00	9.09%	4.55%	9.09%	31.82%	40.91%	4.55%	
Challenged you to learn.	4.05	4.00	4.55%	9.09%	4.55%	36.36%	40.91%	4.55%	
Helped you succeed in the class.	4.48	5.00	4.55%	4.55%	0.00%	18.18%	68.18%	4.55%	
Was available and helpful outside of class.	4.13	5.00	4.55%	9.09%	4.55%	4.55%	45.45%	31.82%	
Overall, this individual made a significant contribution to your learning.	4.24	5.00	4.55%	9.09%	0.00%	27.27%	54.55%	4.55%	

### 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	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Field Trips	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Library Sessions	5.00	5.00	0.00%	0.00%	0.00%	0.00%	16.67%	83.33%
Review Sessions	4.50	4.50	0.00%	0.00%	0.00%	33.33%	33.33%	33.33%
Writing Seminars	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

### Other course elements not mentioned above:

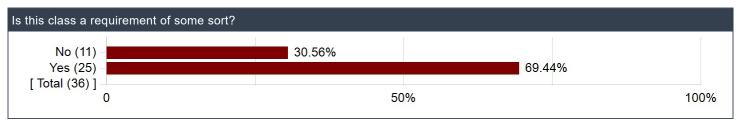
#### Comments

I do not think discussion sections should have the format they currently do; that is, spokesperson, manager, and recorder. It already feels intimidating having to go on a random group of three to solve a problem on a topic I am seeing for the first time ever, and being assigned a responsibility on that just makes things worse.

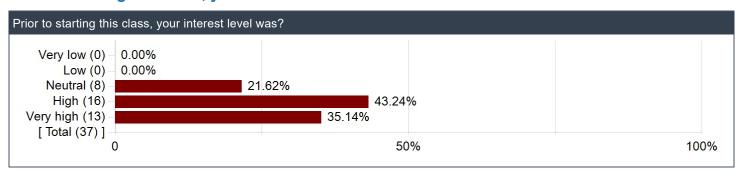
Discussion Sessions --- Great Gain

We had discussion sessions

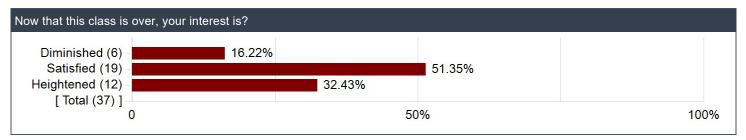
## Is this class a requirement of some sort?



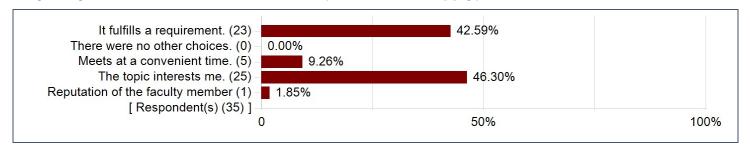
## Prior to starting this class, your interest level was?



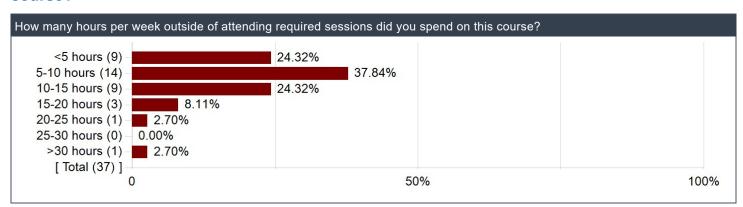
## Now that this class is over, your interest is?



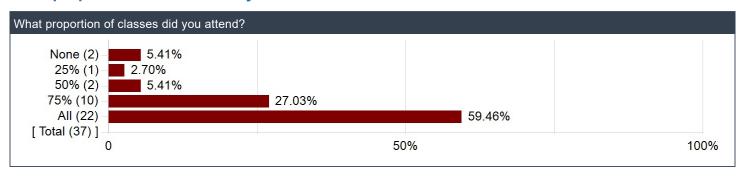
## Why did you choose to take this course? (Select all that apply)



## 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

It was pretty difficult, and I had to go to multiple office hours. I had no prior experience.

Medium difficulty for someone who self-studied cs for about 3 months.

I did quite a bit of Python programming over the summer, so the first 75% of the class was pretty easy, but then once recursion and trees hit it became very hard/

knew a bit of python but cs 141 would be a very steep learning curve since the content post-midterm moves very fast

Easy if you've done any programming before

Good

Completely self study, so pretty hard

The course was slightly more difficult than I expected as someone who only took intro CS in high school.

Having a fairly strong CS background, I didn't find it too difficult to pick up on many of the concepts that were new to me, however I think it would be a fairly challenging class if I didn't have any previous knowledge of computer science.

I had worked with some other languages, mostly style rather than computation, and some very basic Python and MatLab. Overall, I don't think this course is too bad: just make sure to allocate your time well and begin assignments early so that if you get stuck you have more time to think/go to office hours.

I had very minimal programming background. I found the material to be very manageable and interesting.

I had a good amount of programming experience going into this class (not with Python, but other OOP languages), and I found this class to be pretty challenging at times. My friend who had zero experience however, couldn't keep up. If you plan on taking this class, please do yourself a favor and code beforehand, even if it's just a little bit. The course is not built for beginners, even though it should be. And to make matters worse, TA office hours are limited/they can only tell you so much, and they don't allow you to work with anyone on the homework. They claim this isn't a weed—out class, but I watched as nearly all of the people who didn't have any experience either drop, withdraw, or pass/fail the class. It discourages people from pursuing CS further, and scares them into quitting when it gets hard. I know the CS department is trying their best to modify the intro sequence so that it accommodates more people, but there is still a lot of work to be done, and in the meantime, please try and learn some of the material beforehand. The class goes way too fast for someone who's never seen code before to keep up.

#### Hard

I had cs experience so it was extremely easy and I presume it will be for other people with siginificany cs background since it's just basic python but it could definitely be more difficult for someone without that experience.

It can get hard at the beginning. Go to office hours and things will get easier once you learn more

This course is not very difficult, but requires some work on the side

The homeworks are quite challenging.

With some coding experience, this course was not difficult. But for those without experience it can be very challenging.

Far too hard for an intro course

Considerably difficult, as I had zero previous coding experience. However, it's more about the amount of stuff we cover in such a short amount of time

pretty hard as I had minimal previous coding experience

I have minimal experience in computer science, and I think that as an intro class, this class is especially challenging.

Not hard with some coding background.

Hard

Suitable for people with no backgrounds in computer science

If you have a coding background, this should be a nice intro/refresher to python. If not, it will require more effort and time, but still very doable

I coded in highschool for multiple years, definitely a bit fast for an intro class but if you attend all the lectures and discussion classes and commit to learning it will go well

Everything is manageable and simple except class and tree(recursion). Also, I just don't like to write code by hand and check my code without any tool by my eyes and brain during the exam

I took APSCA in high school and this course was perfectly doable for me. It felt like I was transferring much of what I learned in Java to Python.