

Intensive Foundations of CS (Fall 2023)

Instructor: **Shafer, Steven**

Subject: **CS**

Catalog & Section: **5001 10**

Course ID: **21477**

Objectives:

Enrollment: **28**

Responses Incl Declines: **15**

Declines: **0**

Instructor Related Questions: Steven Shafer (31 comments)

Q: What were the strengths of this course and/or this instructor?

- 1 Clear and explicit explanation of related knowledge.
- 2 Steve is a truly able teacher because he has rich experience to share about tech. I love him.
- 3 Prof. Shafer is kind, humorous and supportive. I love him!
- 4 he prepares powerpoint which is helpful
- 5 sense of humor
- 6 structured each lecture in a very infomative and condense way. Could see lots of effort put into the preparation.
- 7 none at all
- 8 Prof. Shafer was great in delivering the course; his speech was clear, coherent and informative. He was very kind and supportive to students' questions and concerns. He brought a positive vibe to the class. He seemed well prepared and had a lot to offer outside of regular class syllabus.
- 9 He was enthusiastic about the topic he was teaching.
- 10 Throughout the semester, I could tell my professor tried his best to provide solid foundations for us students who have no tech background. I appreciate his enthusiasm, humor, and experience that he brought into the course. Whenever he talked about his past experiences in lecture, it provided me with a sense of inspiration to keep on coding during those tough times. I also appreciated the professor's and TA's willingness to answer everyone's questions. I have gone to multiple office hour sessions for this class and I generally felt satisfied with the explanations I received during office hours.

I also liked how organized the course was; there was a clear weekly structure that helped in my study plan for the week. Although the course structure was confusing to understand at first, once I got the hang of it I felt like it was an effective way to handle our assignments.

The final thing I liked about the course was that the instructor was really receptive to student feedback. All throughout the semester he kept asking us for our opinions which I appreciated. For example, I wrote a review for the mid-course evaluation saying that the professor's explanations were very shallow and that the course was moving too fast. Since then, I have noticed that the professor before he starts new material he has included a few slides that review the material from the week before. This gives me hope from the eyes of a student that the instructor can and will implement changes based on student feedback. I am grateful that my opinion is valued.
- 11 The instructor was dedicated to teaching the class and designing interesting projects for us to work on. I learned a lot from working through the projects.

Q: What could the instructor do to make this course better?

- 1 1. Design a project that has more real life functionalities for the student to work on through out the semester.
2. Spend more time on hard topics, especially when there are more student who has no related background.
- 2 Maybe more quizzes.
- 3 1.Please use less libs of python like Pyglet, Turtle and Tkinter. We have to spend much time reading their docs and dealing with problems. They are inefficient and useless.
2.Many CSA students have well knowledge of computer science. Some questions in the class and in quizzes do not have only one answer and explanation. I might be better to have open ended answer.
- 4 He could speed up the pace of the course and teach us more!
- 5 provide more prepared quiz
- 6 I don't like the project related to drawing different graph but it's my own opinion
- 7 make the maximum out of the 3-hour long lecture time instead of finishing early on 2-3 occasions
- 8 learn how to teach
- 9 It would be nice if there were more interactions with students in classes; students came from diverse backgrounds and it would be interesting if we could share how the class materials could apply in our previous fields. Prof. used quite some references/examples from the pharmacy project he worked on; students could have talked about the same in their previous experiences e.g. what would be an object in a CRM (client relationship management) of an accounting firm. Slides could use some pictures and videos. Projects were very easy in the beginning but became suddenly difficult when OOP was introduced; courseload was not evenly distributed over the semester. More hacking/coding together please :)
- 10 Slow down. I think Professor Shafer has an unfair expectation of students who are just now picking up coding for the first time. He expects us to master the concepts that he spent 20 minutes explaining. He also could have communicated better about what will be on the final/what to study. Throughout the whole semester, he had a very heavy emphasis on vocabulary and terminologies used in Python. However, on the final, he strictly asked about the outputs of Python code that consisted of classes, and inheritance, and the majority of the students were unprepared because most of us were busy studying vocabulary.

Q: What could the instructor do to make this course better?

- 11

Before I start this section of the evaluation, I want to let the instructor, the administration, and my fellow students know that I am risking my status as a student here by saying the things I am about to say. Several people have told me not to be this vocal in my criticism but I nevertheless am going to unapologetically voice my concerns in hopes that there will be improvement in this 5001 course, a course that is one of the most foundational in this Align program. Without this course, the Align program literally would not be possible. I truly believe every student in my class including me deserves better than what we have received, especially considering the tuition we pay to sit in a chair in front of this professor. It is ultimately your prerogative to listen to what I say and I quite frankly am not expecting any sort of drastic change that will result from this evaluation. But if this is the “teaching” that Northeastern is (1) willing to and (2) content with providing to its students, then it leaves me no choice but to say that this program is a scam with regards to its teaching quality and faculty “excellence”. And if you so claim that my “comments make a difference in the planning and presentation of [my] curriculum” and that you “value [my] opinion”, then I will give it to you (quoted from the TRACE email sent on 11/24/2023).

Like I stated in my mid-course evaluation, this professor moved too fast for the level of mastery and fluency he expects on exams and quizzes. I understand that this is inevitable due to the fact that the Align program tries to teach everything CS majors learn in 4 years in 1 year. However, I do think for 5001 especially there needs to be a systematic way of teaching and breaking down concepts and not just rushing to cover all the material. For example, the content in the last 2 weeks really should be included in 5004 and 5008 (inheritance, advanced data types, stacks, queues, dequeues, sorting algorithms, etc.), which goes to show how fast the professor moved over the course of the semester. We were already expected to be familiar with loops by the 2nd week. Going this fast might not be a big deal for some, especially for those who have had previous experience or went to a bootcamp. This is actually a theme I keep coming back to: this program is not as beginner-friendly for complete beginners as I thought. In fact, being a complete beginner is a disadvantage because we are expected to compete with people who went to bootcamps and are familiar with other programming languages like Java and Javascript. There are so many times I felt like the “minority of the minority” as a non-CS, non-STEM/non-technical, non-bootcamp, no previous coursework and having close to zero experience with coding. As a result, I felt highly discouraged and demotivational, which affected my study habits during the semester. And the sad reality is having to hear from a graduating MSCS Align student that “this program was never for complete beginners to begin with”, which is what I (incorrectly) thought the entire point of the program was. I see a lot of ex-bootcampers and STEM majors here, which question how “inclusive” this program really is for complete beginners like me trying to enter into tech. As I said in the mid-course review, the Align program and NEU administration cannot control who applies and gets accepted into the program. But I still firmly believe in the two class solution I mentioned before for the 5001 course: one for people who have had previous experiences/coursework/bootcamps in CS and another for complete, absolute beginners. In this way, in the class with previous background, the professor can go at a faster pace than the other with no background. My professor this semester fits with this previous background class, not for students like me. It is a little unreasonable for people with absolutely no experience to compete with people who have already learned this. It is not a level playing field right now and I am feeling major imposter syndrome that could have been avoided had the CS5001 course been separated into the two classes as outlined above.

While I appreciated the professor preparing extensive slides for lecture (a little sad this is the standard we are judging professors off of because some other professors fail to do even this), I wish this professor was a little bit clearer in his explanations of the slides. For example, a lot of the key terms are explained like this: “this is called (key term)”. This was not really helpful; I don’t know what the professor wants to emphasize about a particular key term and my intuition is not trained in CS enough to know what he is exactly trying to key in. It would be more helpful if he gave exact definitions (which he sometimes did) for every bold key term so as to not confuse students about what the important things to know are. I still cannot perform and understand some of the most basic things we learned in this class and have to use Youtube to learn everything. Definitely not worth the \$6,500 I paid for this level of “teaching”.
- 12

I would appreciate a little more practice or smaller exercises outside of the projects and labs especially when learning about how to deal with different data types. I would also appreciate if the professor can slow down a little during the first half of the course as well as when introducing the object oriented concepts.

Q: Please expand on the instructor’s strengths and/or areas for improvement in facilitating inclusive learning.

- 1

Strength: experience in professional field.
Area for improvement: pacing could be further improved.
- 2

Quizzes can be more helpful if they also test ideas of coding instead of just definition
- 3

the instructor has really well-organized pattern for class with clear expression
- 4

I think in general the courseload is a bit light; it would be fun (and useful for interviews) if we could try hacking Leetcode problems using what was learned in classes, either in class or as homework.
- 5

The master videos could be provided at the beginning of the semester. Every instructor may have different ways to explain things, such as a concept or algorithm. Taking in various perspectives of interpreting a thing can help students to understand the content better.
- 6

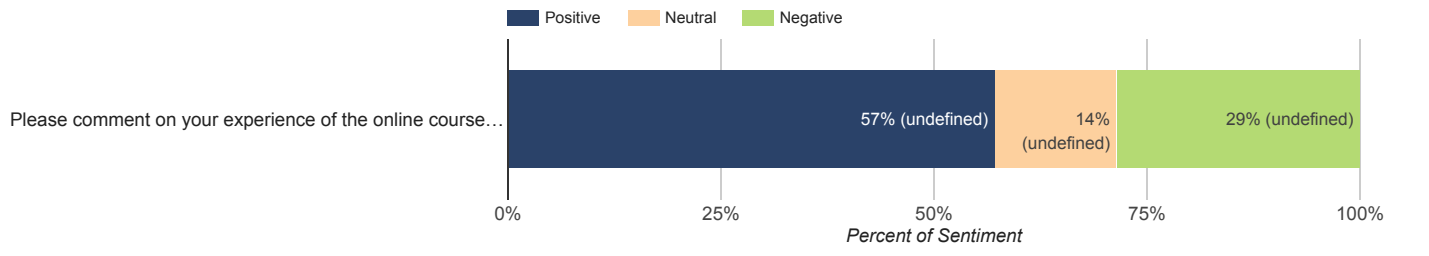
I think Professor Shafer is a great professor, but he needs to slow down in explaining concepts and treat us like complete beginners. It feels like because the concepts come easy to him, they'll also be easy for us to understand. There are times when I have no idea what he is talking about/explaining.
- 7

Like I said before, please try to not use complicated terminology; I could not understand a lot of the things he said and started doubting my English comprehension skills whenever I read his slides. I also did not appreciate his comments saying that “this is easy” or “this is the level of difficulty of the final exam, isn't it so easy” because to hear this was discouraging, especially for me as a complete beginner who is still trying to learn basic programming concepts and feel extremely pressured to be in a class with people who basically already learned this. I see this professor’s kind intentions and appreciate them, but I wish he could have made me more confident in my programming skills. This might have been a problem that is outside of his scope and more of an administrative problem that allows for so many people who actually have experience in coding to be in this 5001 beginner level class. But now because of his class, and the weak foundations I got from his class, I have developed a mindset that “I can’t code” because of my lack of performance with others in this class. I will now be spending all of my winter break trying to restore what was lost and trying to actually achieve what this class was supposed to achieve and give me solid foundations. Please know, intensity should not come at the price of quality. There is a way to have both; they are not mutually exclusive. I am disappointed that the Align program still has not figured out this balance given its relative history and this reflects on how little it cares for teaching quality. I feel unsupported and if this does not improve, I will be taking my talents elsewhere.
- 8

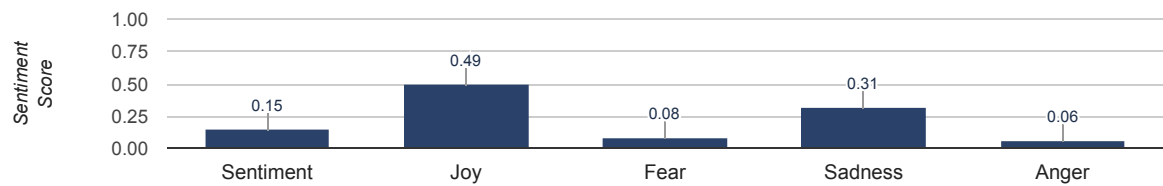
It might be more helpful to do some in-class programing together.

Questions to Assess Students’ Online Experience (7 comments)

Q: Please comment on your experience of the online course environment in the open-ended text box



Q: Please comment on your experience of the online course environment in the open-ended text box.



- 1 It would be better to have access to more engaging learning materials apart from the slides and book. ★★★★★
- 2 I have attended every class in person so I don't know much about the online experience. ★★☆☆☆
- 3 Piazza is helpful★★★★★
- 4 Worst of the worst. No explanation or solutions for each project at all. Absolute no teaching skills despite his years of practical experience in tech career. Not suitable for teaching zero background CS students like us. ★☆☆☆☆
- 5 All the materials were well organized and layed out on Canvas. Professor was responsive on Piazza. Textbooks are easily accessible on the internet. ★★★★★
- 6 I'm very upset that Professor Shafer did not share the online ALGN MSCS videos until the very end of the semester. ★☆☆☆☆
- 7 It would be nice if the professor can provide the college videos as supplements. For some concept, I might not be able to understand it during the class and need a little more support information. ★★★☆☆

Student Self-Assessment of their Effort to Achieve Course Outcomes (7 comments)

Q: What I could have done to make this course better for myself.

- 1 To learn more about the programing principle and gain a better understanding about how to better organize the code for the program.
- 2 I should have read through more materials to help me better understand Python.
- 3 watch other videos
- 4 Self-study
- 5 Should do projects more timely and interact with prof more often.
- 6 Gone to office hours to ask for help instead of trying to figure out things on my own.
- 7 I first could have more intensively studied Python before this course started because this course did not end up being as beginner friendly as I expected. Additionally, I should have done a bootcamp or watched a lot more Youtube videos to learn everything. I also just should have switched into a different professor's course.