CS 4501-002 Spec Top: Computer Science - Spring 2016

ENGR (18460)

INSTRUCTORS: Weimer, Westley (wrw6y)

Respondents: 25 / Enrollment: 61

Summary: CS 4501-002 Spec Top: Computer Science - Spring 2016 (18460)

Overall Course Rating

CS-4501-002 Mean 4.23 CS-4501-002 Std Dev 1.05 CS-4501-002 Response Count 124

Difference from Category Mean, Expressed in Category Standard Deviations

0.07

Overall Instructor Rating

INSTRUCTOR: Weimer, Westley Mean 4.86 Std Dev 0.43

Response Count 175

Difference from Category Mean, Expressed in Category Standard Deviations

0.62

SEAS, 4000-level courses Mean 4.16 SEAS, 4000-level courses Std Dev 0.92

SEAS, 4000-level courses Response Count 9801

SEAS, 4000-level courses Mean 4.34 SEAS, 4000-level courses Std Dev 0.83

SEAS, 4000-level courses Response Count 14353

~ QUESTIONS AND DETAILS ~

1. The course addressed technically rigorous subject matter consistent with the course objectives.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

~ ANSWER MATRICES ~

Results for CS-4501-002									
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	25	4.88	0.33	22 (88.00%)	3 (12.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Results for SEAS, 4000-level courses										
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
1961	4.39	0.73	968 (49.36%)	811 (41.36%)	124 (6.32%)	26 (1.33%)	14 (0.71%)	18 (0.92%)		

2. The instructor used methods other than/in addition to traditional lectures (for example, active learning, in-class problems, collaborative learning, inclass discussion) effectively in this course.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for	Results for CS-4501-002, Weimer, Westley									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
25	4.79	0.41	19 (76.00%)	5 (20.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (4.00%)		

Results for SEAS, 4000-level courses								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
2056	4.25	0.91	922 (44.84%)	734 (35.70%)	179 (8.71%)	85 (4.13%)	31 (1.51%)	105 (5.11%)

3. There was a reasonable level of effort expected for the credit hours received.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-4501-002									
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	25	3.96	1.21	12 (48.00%)	5 (20.00%)	3 (12.00%)	5 (20.00%)	0 (0.00%)	0 (0.00%)

Results for								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
1962	4.23	0.88	854 (43.53%)	862 (43.93%)	124 (6.32%)	83 (4.23%)	36 (1.83%)	3 (0.15%)

~ QUESTIONS AND DETAILS ~ ~ ANSWER MATRICES ~ 4. The homework assignments helped Results for CS-4501-002 me learn the subject matter. Disagree (2) Agree (4) Total Mean Std Dev Strongly Neutral Strongly Not Agree (5) Disagree (3)Applicable Question Type: Likert (1) (NA) 24 4.70 0.88 19 3 0 0 contributed by Dean of the School of Engineering (12.50%)(0.00%)(0.00%)(4.17%) (79.17%)(4.17%)and Applied Science Results for SEAS, 4000-level courses Disagree (2) Mean Std Dev Strongly Agree (4) Total Neutral Strongly Not Disagree (1) Agree (5) Applicable (3) (NA) 1958 4 18 0.92 744 678 195 74 31 236 (3.78%)(1.58%)(38.00%)(34.63%)(9.96%)(12.05%)5. The textbook increased my Results for CS-4501-002 understanding of the material. Agree (4) Total Mean Std Dev Strongly Neutral Disagree Strongly Not Agree (5) Disagree (1) (3) Applicable Question Type: Likert (NA) 25 3.24 1.00 contributed by Dean of the School of Engineering (8.00%) (28.00%)(24.00%)(24.00%)(0.00%)(16.00%)and Applied Science Results for SEAS, 4000-level courses Strongly Agree (5) Agree (4) Disagree (2) Mean Std Dev Strongly Disagree Total Neutral Not Applicable (3)(1) (NA) 1960 3.87 1.02 325 30 386 232 72 915 (16.58%) (19.69%)(11.84%)(3.67%)(1.53%)(46.68%)6. The course material was well Results for CS-4501-002, Weimer, Westley organized and developed. Total Mean Std Dev Strongly Agree (4) Neutral Disagree (2) Strongly Not Disagree (1) Agree (5) (3) Applicable Question Type: Likert (NA) 3 (12.00%) 0 (0.00%) 25 4.88 0.33 22 0 0 contributed by Dean of the School of Engineering (88.00%) (0.00%)(0.00%)(0.00%)and Applied Science Results for SEAS, 4000-level courses Agree (4) Std Dev Total Mean Strongly Neutral Disagree Strongly Not Agree (5) Applicable (3) (2)Disagree (1) (NA) 2047 0.92 776 831 217 37 92 (37.91%)(40.60%)(10.60%)(4.59%)(1.81%)(4.49%)7. The instructor was knowledgeable Results for CS-4501-002, Weimer, Westley about the subject matter. Strongly Std Dev Disagree (2) Strongly Mean Neutral Total Agree (4) Not Disagree (1) Agree (5) Applicable (3) Question Type: Likert (NA) 25 5.00 0.00 25 n n n contributed by Dean of the School of Engineering (100.00%) (0.00%)(0.00%)(0.00%) (0.00%)(0.00%)and Applied Science Results for SEAS, 4000-level courses Disagree (2) Agree (4) Total Mean Std Dev Strongly Neutral Strongly Not Agree (5) Disagree (1) (3) Applicable (NA) 2053 4.61 0.64 1364 576 (0.54%)(0.58%)(1.22%)(66.44%)(28.06%)(3.17%)8. The instructor was well prepared for Results for CS-4501-002, Weimer, Westley class. Agree (4) Std Dev Total Mean Strongly Neutral Disagree Strongly Not Applicable Agree (3) (2)Disagree Question Type: Likert (5) (1)(NA) 25 5.00 0.00 25 0 0 0 0 0 contributed by Dean of the School of Engineering (100.00%) (0.00%)(0.00%)(0.00%)(0.00%)(0.00%)and Applied Science Results for SEAS, 4000-level courses Std Dev Strongly Disagree Total Mean Agree (4) Neutral Strongly Not Agree (5) Disagree Applicable (3) (2) (1) (NA) 2048 0.78 1071 19 4.41 735 117 64 (35.89%)(5.71%) (2.05%)(0.93%)(3.12%)

(52.29%)

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

9. I received adequate preparation from the prior courses in the curriculum to be successful in this course.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-4501-002										
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
25	4.24	0.88	12 (48.00%)	8 (32.00%)	4 (16.00%)	1 (4.00%)	0 (0.00%)	0 (0.00%)		

Results for SEAS, 4000-level courses								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
1960	4.01	0.99	657 (33.52%)	829 (42.30%)	229 (11.68%)	130 (6.63%)	51 (2.60%)	64 (3.27%)

10. The grading policy was fair.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-4501-002, Weimer, Westley									
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	25	4.60	0.82	19 (76.00%)	3 (12.00%)	2 (8.00%)	1 (4.00%)	0 (0.00%)	0 (0.00%)

Results for SEAS, 4000-level courses									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
2051	4.26	0.85	889 (43.34%)	852 (41.54%)	169 (8.24%)	60 (2.93%)	29 (1.41%)	52 (2.54%)	

11. The instructor responded adequately to in-class questions.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-4501-002, Weimer, Westley											
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)			
25	4.92	0.28	23 (92.00%)	2 (8.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)			

Results for SEAS, 4000-level courses									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
2047	4.43	0.76	1094 (53.44%)	731 (35.71%)	107 (5.23%)	37 (1.81%)	19 (0.93%)	59 (2.88%)	

12. The instructor effectively used technology in support of the learning goals for this course.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-4501-002, Weimer, Westley								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
25	4.80	0.41	20 (80.00%)	5 (20.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Results for SEAS, 4000-level courses								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
2051	4.28	0.84	890 (43.39%)	795 (38.76%)	169 (8.24%)	52 (2.54%)	26 (1.27%)	119 (5.80%)

13. The average number of hours per week I spent outside of class preparing for this course was:

Question Type: Multiple Choice

contributed by Office of the Provost

Results for CS-4	501-002				
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
25	0 (0.00%)	2 (8.00%)	11 (44.00%)	7 (28.00%)	5 (20.00%)

Results for SEAS, 4000-level courses							
Total	Less than 1	1 - 3	4 - 6	7 - 9	10 or more		
	(NA)	(NA)	(NA)	(NA)	(NA)		
1964	79	637	822	287	139		
	(4.02%)	(32.43%)	(41.85%)	(14.61%)	(7.08%)		

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~ QUESTIONS AND DETAILS ~	_			~ ANSWER I	MATRICES ~			
14. I learned a great deal in this course.		CS-4501-002					l <u>-</u> .	
Question Type: Likert contributed by Office of the Provost	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	25	4.80	0.65	22 (88.00%)	2 (8.00%)	0 (0.00%)	1 (4.00%)	0 (0.00%)
	Results for	SEAS, 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	1957	4.26	0.87	897 (45.84%)	798 (40.78%)	163 (8.33%)	67 (3.42%)	32 (1.64%)
15. Overall, this was a worthwhile	Results for	CS-4501-002						
course. ~ Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
contributed by Office of the Provost	25	4.72	0.84	22 (88.00%)	1 (4.00%)	0 (0.00%)	2 (8.00%)	0 (0.00%)
	Results for	SEAS. 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	1957	4.25	0.96	956 (48.85%)	708 (36.18%)	163 (8.33%)	77 (3.93%)	53 (2.71%)
6. The course's goals and requirements	Results for	CS-4501-002	, Weimer, We	estley				
were defined and adhered to by the instructor.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Question Type: Likert contributed by Office of the Provost	25	4.88	0.33	22 (88.00%)	3 (12.00%)	0 (0.00%)	0 (0.00%)	(0.00%)
	Results for	SEAS, 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	2052	4.36	0.76	992 (48.34%)	877 (42.74%)	121 (5.90%)	44 (2.14%)	18 (0.88%)
17. The instructor was approachable	Results for	CS-4501-002	, Weimer, We	estley				
and made himself/herself available to students outside the classroom.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Question Type: Likert contributed by Office of the Provost	25	4.52	0.82	17 (68.00%)	5 (20.00%)	2 (8.00%)	1 (4.00%)	0 (0.00%)
	Results for	SEAS, 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	2053	4.39	0.80	1112 (54.16%)	716 (34.88%)	161 (7.84%)	45 (2.19%)	19 (0.93%)
18. Overall, the instructor was an	Results for	CS-4501-002	, Weimer, We	estley				
effective teacher. ———————————————————————————————————	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
contributed by Office of the Provost	25	4.88	0.44	23 (92.00%)	1 (4.00%)	1 (4.00%)	0 (0.00%)	0 (0.00%)
	Results for	SEAS, 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	2059	4.36	0.84	1079 (52.40%)	748 (36.33%)	150 (7.29%)	50 (2.43%)	32 (1.55%)

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~ ANSWER MATRICES ~

19. Please make any overall comments or observations about this course:

Question Type: Short Answer

contributed by Office of the Provost

Results for CS-4501-002								
Total	Individual Answers							
20	See below for Individual Results							

Oh! LDI. Where do I start? Let's see... I took this course because I wanted to take the PL+Compilers one-semester combination ever since I heard Bethany, Martin, and a few other people tell me it would be the hardest undergraduate elective I could take here at UVa, and LDI was the closest to PL that I'd see offered before I graduate. I do agree--this certainly is a hard class--but it wasn't hard for the same reasons I expected. A lot of people would consider this course to be unreasonably difficult or too much time for the credit hours given; I disagree. In fact, much of the course material is conceptually straightforward/intuitive--aside from separating the store and environment, if someone had asked me to write an interpreter at the start of the semester, I would have written it nearly exactly the same way as I did in PA2-5. Instead, the only difficulty of the lexing and parsing assignments was simply figuring out poorly documented tools, while the difficulty of the type-checking and interpreting assignments was the "code slog" of writing out multiple thousands of lines of code. (My partner and I have >600 commits in our github repo as of now.) A couple of things I particularly enjoyed about this course that aren't present in most other classes I've taken were the "extra readings" that came from historically important papers or notable authors and the "relaxed" atmosphere in Piazza. In particular, reading the Smashing the Stack, gprof., etc papers was quite fun. The "stretch break" trivia in the slide sets was also quite enjoyable--I just might steal that when I'm a professor.:) Overall, I thought the course was enjoyable, but I didn't really expect the difficulty to be in implementation, but rather conceptual. I also thought the class would be more focused on parsing/lexing strategies instead of type-checking or opsem strategies, but I guess that's just because I'm "behind the times" of the current focus of PL research. :P As a final note, the only reason I marked "disagree" for "was this course worthwhile?"

I really can't say anything negative about this class. I had some circumstances this semester that may result in a lower final grade than I may like, but that does not change that LDI has been an excellent course, and that Professor Weimer is both masterful and engaging as a lecturer, and has a deep grasp of the material to the point that he has no trouble teaching it effectively. One of my hardest, but also one of my favorite classes I've taken at this University.

I learned a great deal in this course. - More than strongly agree!!

This is one of the best classes offered in this department. It is not easy, but even the harder version of this class should be doable by a competent student in their third or fourth year of study.

One of the better courses I've had in recent memory. Wes Weimer clearly spends time and effort on being an effective instructor every year.

[This review is for the Legacy grading option] This class is exactly what I had hoped it would be and more. The material was interesting, and the assignments are challenging in the best way. The course is extremely well organized, and there isn't much I could think of to make it better. I would honestly understand the argument to make this class mandatory for BS CS majors since with the option to take it as LDI, it is at least reasonable to expect, and it really makes you understand how computers work so much better. Also, everyone should get the chance to take a class with Wes Weimer.

This class was one of the most worthwhile classes I've taken at the University.

N/a

Professor Weimer is a very smart guy and I'm glad to have had him as a professor in my college career. Thank you for all the time you put in and your complete dedication to the learning of your students. I am still amazed by the effort you go through to provide lengthy answers on Piazza. I am glad I finally learned a functional programming language; I always wanted to learn one every since I heard Lisp was taught in MIT intro courses. The review problem sets provided a good place to start studying for tests. We did them in a group setting (cramming, pseudo-lastminute ahhh bad student!), which made it much more bearable than doing them alone/pairs for credit. I am critical of your video guides to the homework assignments. I know what you're thinking, "blasphemy! How could a student complain about more guidance?!?" Well, the answer is that some content in the video guide was not a good solution to the homework, and it was only at the last minute that we realized what a good solution for a particular problem was. As the professor, students look to you to guide them and learn. You are the expert, so we view anything you give us as correct. This is where the confusion came in: we thought the answer you gave us was good so we ran with it, but (and this happened many times) it turned out that our judgement was better and more clear than your limited guidance. If you think "oh well that was one of the learning goals I had hoped to achieve" then I don't think you should have had that goal. I consider myself to be doing better than most of the class and because of that, I don't think it is reasonable to expect everyone to figure that out (or have enough experience to have good judgement). I won't touch the issue of teaching to the slowest person in the class vs. the average vs. [insert other group]. That is probably a departmental issue on which you all have thoughts. Your late policy provides interesting incentives. By taking off 1% per hour, you essentially do not punish finishing it up exactly at the deadline, maybe a

Hard work (should be worth more than 3 credits) but so worthwhile

~ OUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

It is fair to say that LDI has been the best class I've taken at UVa. This class requires compromises everywhere else in your life, but the result is learning that you can be really proud of. A huge congratulations and thanks to professor Weimer and the team of TAs for making so user-friendly and fair, this is a difficult class that is made "do-able" by an incredibly dedicated and talented team. It doesn't need to be repeated, but the submission server, LDI help videos, useful and active piazza forum, and project submission page are all invaluable resources. LDI sets a very high standard that other classes in the CS department would be improved just by striving for.

Exceedingly difficult but strongly rewardable

Please offer grad PL.

Professor Weimer is a really fantastic teacher. He is always well prepared for lectures, has exemplary course organization, and is a great source of knowledge for students. He always goes above and beyond when responding to students' questions and provides additional resources for us. He wants to help us succeed. He is the paragon of professors.

The fact that you had office hours at the same time as Compilers Practicum meant that I couldn't really ever go see you for help

Sometimes the material was presented in a complicated manner even when the concepts were straightforward. which made it hard to study the slides. The LDI/Legacy divide was sometimes felt when the prof would expect a level of dedication to the course from all of the students in class. The purpose of LDI was to give students a chance to learn the material of PL without as much pressure as the original "legacy" class.. but part of the decision to take LDI over legacy is to account for having the course at a lower priority in our lives than a legacy student would. However, sometimes it felt like it was expected of LDI students to prioritize this class over everything else (other classes, etc). Many times, I would feel out of place during lecture since it was both LDI and legacy students combined. Otherwise, it was a challenging and worthwhile course in terms of material/assignments.

I liked the online submission thing where you see how many test cases you've passed. I wish there were more Weimer office hours especially because compilers was at the same time as office hours.

The thing with the windows-y line endings in PA3 was kind of BS and dropped my grade a whole letter grade but the textbook is the best technical textbook I've ever read and the class taught me a lot. The tests were very fair and made you think more than just memorize algorithms

(* Note: this review is deals with the legacy version of the class *) I cannot rate this class highly enough. Prof. Weimer did a fantastic job making the subject matter interesting and was very engaging during lectures. He also combined the theoretical and practical sides of CS perfectly, which made both topics much easier to understand. For me, this class was one of the few times that I really had the chance to combine everything I learned as a CS major into a series of projects. In terms of class difficulty, PL was an appropriate amount of work. While the class was challenging, Prof. Weimer gave us all the tools to do well. The assignments required a lot of effort, but that just provided a sense of accomplishment when the code was able to pass the test cases. Additionally, the scale of the projects allowed (or perhaps even required) the use of good software design since they were large enough that haphazardly piecing together segments of code would not work. Furthermore, the legacy version stressed testing and thinking about edge cases, both of which are some of the most important and most overlooked aspects of CS. All in all, PL was a great class, perhaps the best I've taken at the university. It would be interesting to see some of the class principles (specifically the project submission and testing systems) applied to other courses in the CS department.

Best CS class!