CS 4102-002 Algorithms - Spring 2014

ENGR (21175)

INSTRUCTORS: Floryan, Mark (mrf8t)

Respondents: 38 / Enrollment: 81

Summary: CS 4102-002 Algorithms - Spring 2014 (21175)

Overall Course Rating

CS-4102-002 Mean 4.20 CS-4102-002 Std Dev 0.91 CS-4102-002 Response Count 190

SEAS, 4000-level courses Mean 4.19 SEAS, 4000-level courses Std Dev 0.89 SEAS, 4000-level courses Response Count 9293

Overall Instructor Rating

INSTRUCTOR: Floryan, Mark Mean 4.53 Std Dev 0.56 Response Count 264

SEAS, 4000-level courses Mean 4.38 SEAS, 4000-level courses Std Dev 0.80 SEAS, 4000-level courses Response Count 13773

~ 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-4102-002										
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
38	4.62	0.59	25 (65.79%)	10 (26.32%)	2 (5.26%)	0 (0.00%)	0 (0.00%)	1 (2.63%)		

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)	
1860	4.40	0.72	934 (50.22%)	769 (41.34%)	89 (4.78%)	33 (1.77%)	12 (0.65%)	23 (1.24%)	

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 CS-4102-002, Floryan, Mark									
То	otal	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3	37	4.42	0.55	16 (43.24%)	19 (51.35%)	1 (2.70%)	0 (0.00%)	0 (0.00%)	1 (2.70%)

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)		
1974	4.29	0.86	924 (46.81%)	731 (37.03%)	161 (8.16%)	63 (3.19%)	26 (1.32%)	69 (3.50%)		

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-4102-002									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
38	4.43	0.65	19 (50.00%)	15 (39.47%)	3 (7.89%)	0 (0.00%)	0 (0.00%)	1 (2.63%)	

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)		
1860	4.30	0.84	875 (47.04%)	779 (41.88%)	111 (5.97%)	63 (3.39%)	26 (1.40%)	6 (0.32%)		

Not

Applicable

(NA)

(2.63%)

Not

Applicable

(NA)

179

(9.62%)

Not

Applicable

(NA)

(10.53%)

Not Applicable

(NA)

720

(38.83%)

Not

Applicable

(NA)

(2.63%)

Not

Applicable

(NA)

(3.16%)

Not

Applicable

(NA)

(2.63%)

Applicable (NA)

26

(1.32%)

Not Applicable

(NA)

(2.63%)

Not

Applicable

(NA)

62

(3.15%)

~ QUESTIONS AND DETAILS ~ ~ ANSWER MATRICES ~ 4. The homework assignments helped Results for CS-4102-002 me learn the subject matter. Std Dev Agree (4) Total Mean Strongly Neutral Disagree Strongly Agree (5) (2)Disagree (3)Question Type: Likert (1) 38 4.54 0.56 21 15 0 0 contributed by Dean of the School of Engineering (39.47%) (0.00%)(55.26%) (2.63%)(0.00%)and Applied Science Results for SEAS, 4000-level courses Disagree (2) Mean Std Dev Strongly Agree (4) Total Neutral Strongly Disagree (1) Agree (5) (3) 724 (38.92%) 30 1860 4.20 0.89 680 191 56 (3.01%)(1.61%)(36.56%)(10.27%)5. The textbook increased my Results for CS-4102-002 understanding of the material. Agree (4) Total Mean Std Dev Strongly Neutral Disagree Strongly Agree (5) Disagree (1) (3) (2)Question Type: Likert 38 3.29 1.06 4 15 contributed by Dean of the School of Engineering (18.42%)(10.53%)(39.47%)(21.05%)(0.00%)and Applied Science Results for SEAS, 4000-level courses Strongly Agree (5) Agree (4) Disagree (2) Mean Std Dev Strongly Disagree Total Neutral (3)(1) 1854 3.80 1.07 258 346 387 109 34 (18.66%) (20.87%)(13.92%)(1.83%)(5.88%)6. The course material was well Results for CS-4102-002, Floryan, Mark organized and developed. Total Mean Std Dev Strongly Agree (4) Neutral Disagree (2) Strongly Disagree (1) Agree (5) (3) Question Type: Likert 0 (0.00%) 38 4.57 0.55 22 14 0 contributed by Dean of the School of Engineering (36.84%) (57.89%) (2.63%)(0.00%)and Applied Science Results for SEAS, 4000-level courses Agree (4) Std Dev Total Mean Strongly Neutral Disagree Strongly Agree (5) (3) (2)Disagree (1) 1959 4.22 0.88 823 803 165 31 (42.01%)(40.99%)(8.42%)(3.83%)(1.58%)7. The instructor was knowledgeable Results for CS-4102-002, Floryan, Mark about the subject matter. Std Dev Strongly Disagree (2) Strongly Mean Neutral Total Agree (4) Disagree (1) Agree (5) (3) Question Type: Likert 23 (60.53%) 38 4.62 0.49 14 n n contributed by Dean of the School of Engineering (36.84%) (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 Agree (5) Disagree (1) (3) 1966 4.65 0.58 1344 536 44 (0.51%)(2.24%)(0.31%)(68.36%)(27.26%)8. The instructor was well prepared for Results for CS-4102-002, Floryan, Mark class. Agree (4) Total Mean Std Dev Strongly Neutral Disagree Strongly Agree (3) (2)Disagree Question Type: Likert (5) (1)38 4.57 0.55 22 14 1 0 0 contributed by Dean of the School of Engineering

Std Dev

0.72

(57.89%)

Strongly

Agree (5)

1111

(56.48%)

(36.84%)

Agree (4)

654

(33.25%)

(2.63%)

Neutral

(3)

105

(5.34%)

(0.00%)

Disagree

(2)

(1.12%)

(0.00%)

Strongly

Disagree

(1)

13

(0.66%)

Results for SEAS, 4000-level courses

Mean

4.48

Total

1967

and Applied Science

~ 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-4102-002									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
38	4.03	0.96	12 (31.58%)	18 (47.37%)	4 (10.53%)	2 (5.26%)	1 (2.63%)	1 (2.63%)	

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)
1859	4.12	0.89	681 (36.63%)	803 (43.20%)	222 (11.94%)	85 (4.57%)	26 (1.40%)	42 (2.26%)

10. The grading policy was fair.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-4102-002, Floryan, Mark									
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	37	4.42	0.65	18 (48.65%)	15 (40.54%)	3 (8.11%)	0 (0.00%)	0 (0.00%)	1 (2.70%)

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)
1969	4.24	0.87	879 (44.64%)	744 (37.79%)	208 (10.56%)	72 (3.66%)	22 (1.12%)	44 (2.23%)

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-4102-002, Floryan, Mark										
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
38	4.65	0.48	24 (63.16%)	13 (34.21%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (2.63%)		

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)	
1973	4.48	0.70	1092 (55.35%)	715 (36.24%)	86 (4.36%)	20 (1.01%)	14 (0.71%)	46 (2.33%)	

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-4102-002, Floryan, Mark									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
38	4.49	0.61	20 (52.63%)	15 (39.47%)	2 (5.26%)	0 (0.00%)	0 (0.00%)	1 (2.63%)	

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)
1965	4.28	0.82	851 (43.31%)	779 (39.64%)	169 (8.60%)	54 (2.75%)	18 (0.92%)	94 (4.78%)

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-4102-002								
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)			
38	1 (2.63%)	4 (10.53%)	19 (50.00%)	9 (23.68%)	5 (13.16%)			

Results for SEAS, 4000-level courses						
Total	Less than 1	1 - 3	4 - 6	7 - 9	10 or more	
	(NA)	(NA)	(NA)	(NA)	(NA)	
1862	61	569	776	281	175	
	(3.28%)	(30.56%)	(41.68%)	(15.09%)	(9.40%)	

~ QUESTIONS AND DETAILS ~				~ ANSWER	MATRICES ~			
14. I learned a great deal in this course.	Results for	CS-4102-002						
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	38	4.53	0.60	22 (57.89%)	14 (36.84%)	2 (5.26%)	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)
	1849	4.29	0.85	888 (48.03%)	727 (39.32%)	146 (7.90%)	66 (3.57%)	22 (1.19%)
15. Overall, this was a worthwhile	Results for	CS-4102-002	2					
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	37	4.49	0.56	19 (51.35%)	17 (45.95%)	1 (2.70%)	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)
	1855	4.30	0.90	935 (50.40%)	684 (36.87%)	139 (7.49%)	58 (3.13%)	39 (2.10%)
6. The course's goals and requirements	Results for	CS-4102-002	2, Floryan, Ma	rk				
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	38	4.53	0.56	21 (55.26%)	16 (42.11%)	1 (2.63%)	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)
	1963	4.36	0.77	959 (48.85%)	828 (42.18%)	114 (5.81%)	44 (2.24%)	18 (0.92%)
17. The instructor was approachable	Results for	CS-4102-002	2, Floryan, Ma	rk				
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	38	4.79	0.47	31 (81.58%)	6 (15.79%)	1 (2.63%)	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)
	1964	4.45	0.78	1137 (57.89%)	643 (32.74%)	131 (6.67%)	33 (1.68%)	20 (1.02%)
18. Overall, the instructor was an	Results for	CS-41 <u>02-0</u> 02	2, Floryan, Ma	rk				
effective teacher. 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	38	4.68	0.62	28 (73.68%)	9 (23.68%)	0 (0.00%)	1 (2.63%)	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)
	1969	4.41	0.79	1081 (54.90%)	700 (35.55%)	130 (6.60%)	36 (1.83%)	22 (1.12%)

Please make	any	overall	comments

~ ANSWER MATRICES ~

19. F or observations about this course:

~ QUESTIONS AND DETAILS ~

Question Type: Short Answer contributed by Office of the Provost

Results for CS-4102-002						
Total	Individual Answers					
23	See below for Individual Results					

The lecture could be made better by using microphone and writing on the screen instead of the white board, so that students sitting in the back of the auditorium can hear and see more clearly.

Professor is a little lazy. End up class early very often.

The semester that I took this course, the grader has been... off, especially when it comes to grading proof questions. I also think that we should do more thorough walk-through of the algorithm in class. We should have plenty of time in class to do this especially since we are often let out early even though we had 3 snow days.

Floryan is great--really helpful and approachable. A few times throughout the course he would allude to CS2150, which he taught the previous semester, and assume the class knew things taught in his version of the class. For students who took 2150 several semesters ago with a different professor, it was a slight disadvantage for students who didn't have that material fresh in memory, or didn't learn the same material in the same way as he taught his class. Other than that, Floryan is an excellent lecturer and clearly knowledgeable and enthusiastic about teaching.

This course was extremely challenging, but I cannot see any other way to teach or shape the course. The material is difficult to grasp, and implementing the concepts learned in class to programs was hard to accomplish as well. However, Professor Floryan truly does want to see his students succeed, and communicates and cooperates with them well to see what more he can provide in order for his students to make progress.

Homework takes too much time regarding the number of credit hours of the course.

Professor Floryan is an incredible teacher. I can't imagine a better organized algorithms class. He was very approachable and made the material, which is fairly complex, simple and fun to learn. He tried to relate to use regularly, which really helped class morale. I would consider him one of my favorite professors at UVa.

I was dreading this course since first year, but Professor Floryan actually made the class enjoyable and manageable. Thanks for being super cool, Floryan!

This class is fun and interesting, though I wish we went into more technical detail about proofs. Prof. Floryan is an effective, enthusiastic, approachable, and friendly teacher. What I may complain about is quality of the graders: I always get points off from my assignments for no good reasons. Sometimes when my answers were obviously right, the graders just marked them as wrong and offered no explanation. I always had to argue with Prof. Floryan and eventually got my points back.

I think the biggest improvement that could be made to this course would be to present each algorithm in a very similar way. Just like we are required to list inputs/outputs, runtime, assumptions, description... I think if you were to do that would make learning the algorithms easier to do. Also, the proofs back in the Greedy section were hard to follow along with - it seemed like an odd combination of informal/formal which confused me. Besides these two improvements though, this class was great!

Floyran is a great teacher, though sometimes he cuts lecture short, although we can probably fit more material in. Would take a class with him again. Covers material well and is well prepared for class.

The homeworks were difficult and time consuming

This class was HARD. The transition for discrete to the types of proofs needed in this class was rough. The graders seemed a bit evil. When using the text book it was often necessary to reread a previous section in order to follow the current section, because you would forget what all the variables are, or what was lemma 33.14 was (not real made that up). This class was hard. Floryan did a good job with it though.

Prof. Floryan was great at answering questions and responding to feedback. He made very difficult algorithms easy to comprehend and was always responsive and available when needed.

Great, difficult, and rewarding class. You are an awesome and entertaining teacher. Subject material was presented clearly and questions were always answered. Never was bored in class, and the subject matter was always presented in an interesting way. One complaint is that the grading policy is a little harsh for written homeworks. Since the homework is 45% of our overall grade, getting a point off out of 10 can cause significant dents in overall grade. Maybe make homeworks out of 100? But awesome class. One of the few classes I am happy by the fact that I learned a lot even though I didn't

The slides were easy to follow and understand. I never read the book, only the slides. The Dutch Knockout meant there was added pressure to get a good grade on the final.

Tough class, but Prof. Floryan is very understanding and does his best to help you get through it. Definitely saw a lot of improvement as the semester progressed. Thanks Prof. Floryan!

Fantastic class, learned a lot,

This class had some very difficult topics. Professor Floryan was understanding of that and did his best to help students get a grasp on the material. I spent a lot of time in office hours for the homework assignments and I found it helpful to discuss the problems with other students with guidance from professor Floryan. Having more time for this kind of guided discussion would have been beneficial, especially on the more difficult written assignments. At the start of the semester, we did a lot of written proofs on the board. It was helpful to go through the proofs step by step instead of having it presented on a slide. Floryan is the best instructor I have had in the Cs department The course covers a lot of important material, and I think Professor Floryan did a pretty good job of makign it udnerstandable. Although the Cormen textbook is the Bible of Algorithms, I think it is a little dense, and was therefore not the most helpful as the textbook to a course where I was seeing these algorithms for the first time. That said, once Professor Floryan introduced the material in class, I was able to get through the textbook in my review for the exam, albeit extremely slowly. I think Professor Floryan made the class a fun and enjoyable experience. Professor Floryan is a cool guy. I'm not surprised he won ACM Professor of the Year. He was very approachable and reasonable about giving points back.