Response Rate

10/11 (90.91%)

Mean

6.00

STD

0.00

Median

6.00

Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE 5704 83842 202309: Robotics and Automation-ECE 5704 83842 202309

Instructor: Dylan Patrick Losey *
Response Rate: 11/11 (100.00 %)

1 - Please indicate the extent to which you agree or disagree with each of the following statements: 1A - The instructor was well prepared. **Dylan Patrick Losey Response Option** Weight Frequency Percent **Percent Responses** Means Strongly disagree 0 0.00% (1) 5.23 5.16 0.00% Disagree (2) 0 Somewhat disagree 0 0.00% (3) Somewhat agree 0 0.00% (4) (5) 0 0.00% Agree Strongly agree (6) 10 100.00% 25 50 100 Question College Department

Mean

5.23

STD

1.09

Median

6.00

Department

2989

College

25753

1 - Please indicate the extent to which you agree or disagree with each of the following statements: 1B - The instructor presented the subject matter clearly. **Dylan Patrick Losey** Means **Response Option** Weight Frequency Percent **Percent Responses** 0.00% Strongly disagree 0 6.00 (1) 5.06 4.93 Disagree (2) 0 0.00% Somewhat disagree (3) 0 0.00% Somewhat agree (4) 0 0.00% 0 (5) 0.00% Agree 10 Strongly agree (6) 100.00% 100 Question College Department College Response Rate Mean STD Median STD Median Mean STD Median Mean Department 6.00 0.00 1.30 10/11 (90.91%) 6.00 25573 5.06 1.23 5.00 2974 4.93 5.00

1 - Please indicate the exter	nt to which	you agree	or disagr	ee with	each of the	foll	lowing sta	teme	ents:						
1C - The instructor provided	d feedback	intended t	o improve	my co	urse perforn	nan	ice.								
Dylan Patrick Losey															
Response Option		Weig	ght Freq	uency	Percent	F	Percent Re	spoi	nses			Me	ans		
Strongly disagree		(1))	0	0.00%					5.20	_	5.03	4.88		
Disagree		(2))	0	0.00%								4.00	1	
Somewhat disagree		(3))	1	10.00%		1								
Somewhat agree		(4))	1	10.00%										
Agree		(5))	3	30.00%										
Strongly agree		(6))	5	50.00%										
					•	0	25	50	100	Question	1	College	Departme	nt	
Response Rate	Mean	STD	Median		College		Mean	S	STD	Median		Department	Mean	STD	Median
10/11 (90.91%)	5.20	1.03	5.50		25560		5.03	1	.25	5.00		2970	4.88	1.29	5.00

Median

5.00

STD

1.13

Mean

5.16

Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE 5704 83842 202309: Robotics and Automation-ECE 5704 83842 202309

Instructor: Dylan Patrick Losey *
Response Rate: 11/11 (100.00 %)

1 - Please indicate the extent to which you agree or disagree with each of the following statements:

1D - The instructor fostered an atmosphere of mutual respect.

Dylan Patrick Losey

Response Option		Weig	ht Frequ	ency	Percent	Pe	ercent R	esp	onses			Ме	ans			
Strongly disagree		(1)	0)	0.00%					5.60		5.35	5.27			
Disagree		(2)	0)	0.00%	1										
Somewhat disagree		(3)	0)	0.00%	1										
Somewhat agree		(4)	1		10.00%											
Agree		(5)	2	2	20.00%											
Strongly agree		(6)	7	,	70.00%											
						0	25	50	100	Questio	n	College	Departme	ent		
Response Rate	Mean	STD	Median		College		Mean		STD	Median		Department	Mean	STE		Median
10/11 (90.91%)	5.60	0.70	6.00		25533		5.35		1.03	6.00		2972	5.27	1.06	;	6.00

1 - Please indicate the extent to which you agree or disagree with each of the following statements:

1E - Overall, the instructor's teaching was effective.

Dylan Patrick Losey

Response Option		Weig	ht Freque	ency Percen	t	Percent R	espon	ses			Me	ans		
Strongly disagree		(1)	0	0.00%	I				5.90		5.04	4.93		
Disagree		(2)	0	0.00%	1							4.93	l	
Somewhat disagree		(3)	0	0.00%	1									
Somewhat agree		(4)	0	0.00%	1									
Agree		(5)	1	10.00%	5 1									
Strongly agree		(6)	9	90.00%	S									
					(25	50	100	Question	n	College	Departme	nt	
Response Rate	Mean	STD	Median	College		Mean	SI	D	Median	ı	Department	Mean	STD	Median
10/11 (90.91%)	5.90	0.32	6.00	25412		5.04	1.2	27	5.00		2955	4.93	1.32	5.00

2 - 2A - What did the instructor do that most helped in your learning?

Dylan Patrick Losey

Response Rate 7/11 (63.64%)

- Provided pre-made videos which were well-structuted and helped a lot if one misses a class or a topic. The instructor covered the basics and helped us master the fundamentals which helped understand the complex topics.
- Practice problems after every lecture were very helpful.
- Dr. Losey is knowledgable about the subject and took great care to have good and interactive slides and homework questions. The practice problems were mostly helpful, aside from a few here and there. Being willing to grant some homework extensions was super helpful.
- The instructor provided recorded videos on modules which helped me revise the concepts taught in class. The instructor also helped the class understand basic concepts before dwelling into bigger picture.
- (1) He did not overcomplicate topics. Ensured that we had all prerequisite knowledge for a topic from previous lectures since mostly everything built on itself nicely throughout the course. (2) When teaching new concepts, he would ease us into more complicated concepts or formulas with step-by-step instructions or examples, which is more effective than tons of math at once. I almost never felt lost during the course, and I've been in other classes where I get lost instantly because they jump right into difficult concepts without preparation. (3) I believe there was a perfect amount of homeworks, and they covered every concept we learned, so we got to practice every new concept. It's tough to actually retain information unless it is practiced, so this was very important.
- The organization of the topics was effective in providing clarity on the reasons for learning those particular concepts
- Not much

Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE_5704_83842_202309: Robotics and Automation-ECE_5704_83842_202309

Instructor: Dylan Patrick Losey *
Response Rate: 11/11 (100.00 %)

3 - Please indicate the extent to which you agree or disagree with each of the following statements: 3A - I have a deeper understanding of the subject matter as a result of this course. **Response Option** Weight Frequency **Percent Responses** Strongly disagree 0 0.00% (1)5.14 5.14 0 (2) 0.00% Disagree Somewhat disagree (3)0 0.00% 0 0.00% Somewhat agree (4)Agree (5) 1 10.00% Strongly agree (6)9 90.00% 25 100

Mean

5.14

STD

1.09

Median

5.00

Department

2723

Mean

5.14

STD

1.04

Median

5.00

College

21974

3 - Please indicate the extent to which you agree or disagree with each of the following statements: 3B - My interest in the subject matter was stimulated by this course. **Response Option** Weight Frequency Percent **Percent Responses** Means Strongly disagree (1)0 0.00% 4 93 4 92 (2)0 0.00% Disagree Somewhat disagree (3)0 0.00% (4) 0 0.00% Somewhat agree 11.11% Agree (5)8 88.89% Strongly agree (6)25 100 Question College Department Response Rate Mean STD Median College Mean STD Department STD Median 9/11 (81.82%) 5.89 0.33 6.00 21856 4.92 1.31 5.00 2702 4.93 5.00

4 - 4A - What could you have done to be a better learner?

Mean

5.90

0.32

Median

6.00

Response Rate 7/11 (63.64%)

- If projects were a part of the course rather than 2 exams (mid-term and the finals), it would have been perfect. As the instructor provided flawless homeworks, it would have been excellent if there was a project snuck-in somewhere or some kind of a practical application of the concepts taught in the class.
- Asked more questions during class.

Response Rate

10/11 (90.91%)

- I should've spent more time on assignments as they were lengthy.
- Go to the supported labs for the course (they were optional for me, as I am in the grad section) to further practice material, but I did not have the time to prioritize that.
- Started working on Homeworks early
- · Discuss more with TA
- Flexible exam

5 - 5A - Please add any additional comments regarding the course and/or instructor here:

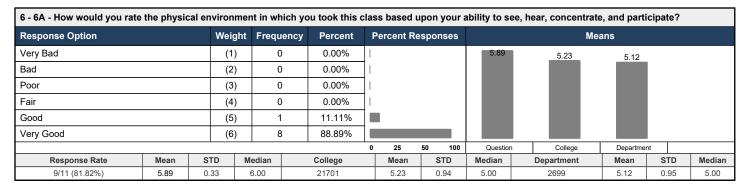
Dylan Patrick Losey

Response Rate 5/11 (45.45%)

- Great professor
- I felt that all of the homework were pretty fair, except the controls homework. A few of the questions did not seem reasonable and I am not sure why the multivariable stability was covered since there was not much that we did aside from some abstract proof. If simulink is expected to be used for a homework, a quick tutorial in class or recorded video would have been tremendously helpful. For this type of class, paper tests aren't a good fit. I understand it is probably to ensure that people weren't cheating but the test questions were a bit awkward given the necessity of coding for robotics. An applied project would be a better fit, having students select a robot or construct one themselves and apply all of the topics would likely have been a better educational experience.
- The grading had too much attention to detail. I've noticed there were marks assigned to presentability (ex. simplifying space Jacobian) and sometimes there should've been scope for partial credit.
- Honestly, this course was probably top 3 from my entire time at Virginia Tech for the reasons explained above. Additionally, it is obvious that the professor is passionate about robotics, which helps me stay engaged during class. The coursework is also definitely well-prepared.
- TAs are very strict in grading

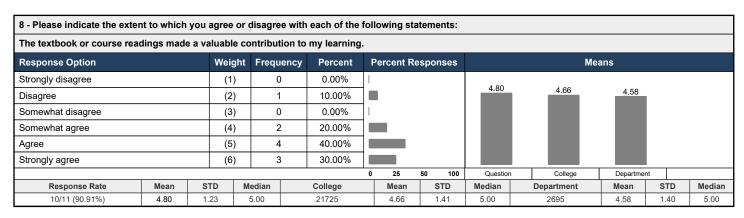
Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE 5704 83842 202309: Robotics and Automation-ECE 5704 83842 202309



7 - 7A - Please add any comments ab	out the physical environment here:
Response Rate	1/11 (9.09%)
No complaints.	

8 - Please indicate the exter	nt to which	you agre	e or o	disagree wi	th each of the	fol	lowing st	ate	ments:							
I improved my ability to pro	blem solve).														
Response Option		We	ight	Frequenc	Percent	F	Percent R	esp	onses			Ме	ans			
Strongly disagree		(1)	0	0.00%	1				5.50		5.08	5.13			
Disagree		(2)	0	0.00%	1										
Somewhat disagree		(3)	0	0.00%	1										
Somewhat agree		(4)	2	20.00%											
Agree		(5)	1	10.00%											
Strongly agree		(6)	7	70.00%											
						0	25	50	100	Question	1	College	Departme	nt		
Response Rate	Mean	STD	M	edian	College		Mean	Γ	STD	Median		Department	Mean	ST	D	Median
10/11 (90.91%)	5.50	0.85		6.00	21863		5.08		1.07	5.00		2706	5.13	0.9	16	5.00



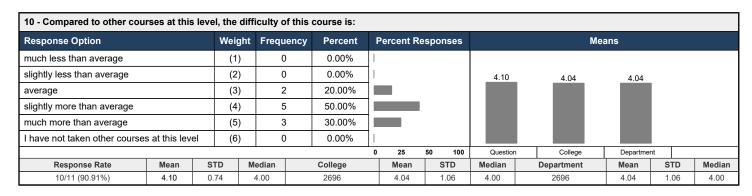
Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE_5704_83842_202309: Robotics and Automation-ECE_5704_83842_202309

8 - Please indicate the exter	nt to which	vou agree	or disagre	e with	each of the	foll	owing st	aten	nents:						
The objectives of the cours							g								
Response Option		Weig	ht Frequ	uency	Percent	Р	ercent R	esp	onses			Me	ans		
Strongly disagree		(1)	(0	0.00%	1				5.90		5.13	5.06		
Disagree		(2)	(0	0.00%										
Somewhat disagree		(3)	(0	0.00%										
Somewhat agree		(4)	(0	0.00%										
Agree		(5)		1	10.00%		I								
Strongly agree		(6)	(9	90.00%										
			·			0	25	50	100	Question	n	College	Departme	ent	
Response Rate	Mean	STD	Median		College		Mean		STD	Median		Department	Mean	STD	Median
10/11 (90.91%)	5.90	0.32	6.00		21804		5.13		1.11	5.00		2696	5.06	1.10	5.00

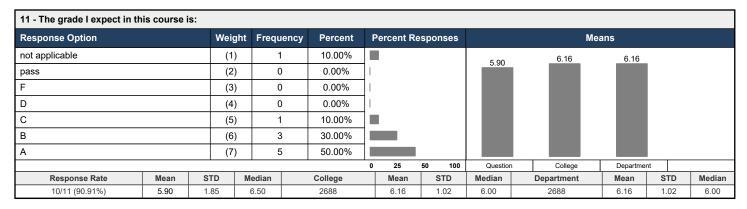
Response Option Strongly disagree Disagree Somewhat disagree	(1) (2)	Frequency 0 0	Percent 0.00%	Percent Re	esponses	5.70	Ме	ans	
Disagree	- ' '	-	0.00%			5.70			
Disagree Somewhat disagree	(2)	0				5.70	5.05	5.09	
Somewhat disagree		1	0.00%	1					
Somewhat disagree	(3)	0	0.00%	1					
Somewhat agree	(4)	0	0.00%	1					
Agree	(5)	3	30.00%						
Strongly agree	(6)	7	70.00%						
	•	•		0 25	50 100	Question	College	Department	

9 - The instructor related	heories and	concepts t	to practic	al issue	s.											
Dylan Patrick Losey																
Response Option		Weig	ght Fred	luency	Percent	P	ercent R	esp	onses			Ме	ans			
Strongly disagree		(1))	0	0.00%	1				5.60		5.24	5.18			
Disagree		(2))	0	0.00%											
Somewhat disagree		(3))	0	0.00%											
Somewhat agree		(4))	1	10.00%		l									
Agree		(5))	2	20.00%											
Strongly agree		(6))	7	70.00%											
						0	25	50	100	Question	1	College	Departme	nt		
Response Rate	Mean	STD	Median		College		Mean		STD	Median		Department	Mean	STE)	Median
10/11 (90.91%)	5.60	0.70	6.00		25104		5.24		1.04	6.00		2929	5.18	1.0	5	5.00

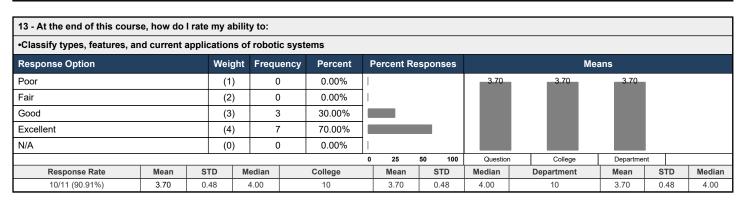


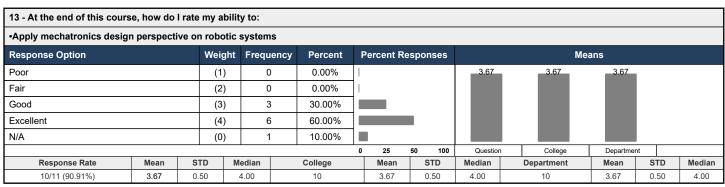
Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE 5704 83842 202309: Robotics and Automation-ECE 5704 83842 202309



Response Option		Weig	ht Freque	ency P	Percent	Perc	cent Re	espo	nses			Me	ans			
0-2		(1)	0		0.00%]										
3-5		(2)	1	1	10.00%					3.20	_	3.03	3.03			
6-9		(3)	6	ε	60.00%											
10-14		(4)	3	3	30.00%											
15 or more		(5)	0		0.00%	1										
						0	25	50	100	Question	n	College	Departme	nt		
Response Rate	Mean	STD	Median	Co	llege	N	Mean		STD	Median		Department	Mean	ST	ΓD	Median
10/11 (90.91%)	3.20	0.63	3.00	2	706	;	3.03		1.01	3.00		2706	3.03	1.0	01	3.00





Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE_5704_83842_202309: Robotics and Automation-ECE_5704_83842_202309

13 - At the end of this cour	se, how do	I rate my al	oility to:												
•Utilize spatial descriptions	and homo	geneous tr	ansformat	ions to	analyze for	ward	and inv	verse	kinem	natics					
Response Option		Weig	ht Frequ	iency	Percent	Per	cent R	espor	nses			Me	ans		
Poor		(1)	C)	0.00%	1				3.90	ī	3.90	3.90		
Fair		(2)	C)	0.00%	1									
Good		(3)	1	ı	10.00%										
Excellent		(4)	g)	90.00%										
N/A		(0)	С)	0.00%	1					ı				
						0	25	50	100	Question	ı	College	Departme	nt	
Response Rate	Mean	STD	Median		College		Mean	S	TD	Median		Department	Mean	STD	Median
10/11 (90.91%)	3.90	0.32	4.00		10		3.90	0	1.32	4.00		10	3.90	0.32	4.00

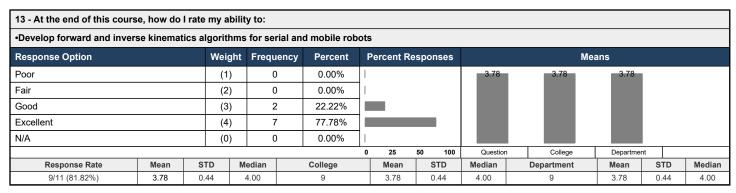
13 - At the end of this cour	se, how do	I rate my a	bility to:												
•Analyze velocity kinematic	s and forc	e rendering	l												
Response Option		Weig	ght Fred	quency	Percent	Pe	ercent R	espons	es			Me	ans		
Poor		(1))	0	0.00%					3.40		3.40	3.40		
Fair		(2))	1	10.00%										
Good		(3))	4	40.00%										
Excellent		(4))	5	50.00%										
N/A		(0))	0	0.00%	1									
						0	25	50	100	Question	1	College	Departmer	nt	
Response Rate	Mean	STD	Median		College		Mean	STI	D	Median	Dep	partment	Mean	STD	Median
10/11 (90.91%)	3.40	0.70	3.50		10		3.40	0.7	0	3.50		10	3.40	0.70	3.50

•Model the dynamics and	controls of s	tationary a	and mobil	e robot	s										
Response Option		Weig	ght Freq	uency	Percent	Рє	ercent R	esp	onses			Me	ans		
Poor		(1))	0	0.00%	1				3.70		3.70	3.70		
Fair		(2))	0	0.00%	1									
Good		(3))	3	30.00%										
Excellent		(4))	7	70.00%				1						
N/A		(0))	0	0.00%										
		·	·			0	25	50	100	Question	ı	College	Departmer	nt	
Response Rate	Mean	STD	Median		College		Mean		STD	Median	D	epartment	Mean	STD	Median
10/11 (90.91%)	3.70	0.48	4.00		10		3.70		0.48	4.00		10	3.70	0.48	4.00

13 - At the end of this cou	3 - At the end of this course, how do I rate my ability to:												
•Apply appropriate actuat	ors, transmi	ssions, sens	ors, and end	effectors to ro	obot o	design							
Response Option	Weigh	nt Frequency Percent Percer				esponses		Means					
Poor		(1)	0	0.00%	1			3.56	3.56	3.56	1		
Fair		(2)	0	0.00%	1								
Good		(3)	4	40.00%					_				
Excellent		(4)	5	50.00%					_				
N/A		(0)	1	10.00%									
			•		0	25	50 10	Questio	n College	Departmen	nt		
Response Rate	Mean	STD	Median	College		Mean	STD	Median	Department	Mean	STD	Median	
10/11 (90.91%)	3.56	0.53	4.00	10		3.56	0.53	4.00	10	3.56	0.53	4.00	

Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE_5704_83842_202309: Robotics and Automation-ECE_5704_83842_202309



3 - At the end of this course, how do I rate my ability to:															
•Compile trajectory plann	ing and velo	city kinema	atics algo	orithms	for a serial ro	obot									
Response Option	Weig	ght Fre	quency	Percent	Percent Responses				Means						
Poor		(1)	0	0.00%	1				3.50		3.50	3.50		
Fair		(2)	1	10.00%										
Good		(3)	3	30.00%										
Excellent		(4)	6	60.00%										
N/A		(0)	0	0.00%	1									
						0	25	50 10	0	Question	ı	College	Departme	nt	
Response Rate	Mean	STD	Median		College		Mean	STD		Median	1	Department	Mean	STD	Median
10/11 (90.91%)	3.50	0.71	4.00		10		3.50	0.71		4.00		10	3.50	0.71	4.00

13 - At the end of this cou	3 - At the end of this course, how do I rate my ability to:													
•Develop force rendering	algorithms f	or a serial ro	bot											
Response Option	Weigh	t Frequen	cy Percent	Percent R	esponses	Means								
Poor		(1)	0	0.00%	ļ		3.20	3.20	3.20					
Fair		(2)	1	10.00%			0.20	0.20	0.20					
Good		(3)	6	60.00%										
Excellent		(4)	3	30.00%										
N/A		(0)	0	0.00%										
		•	•	•	0 25	50 100	Question	n College	Departmen	t				
Response Rate	Mean	STD	Median	College	Mean	STD	Median	Department	Mean	STD	Median			
10/11 (90.91%)	3.20	0.63	3.00	10	3.20	0.63	3.00	10	3.20	0.63	3.00			

13 - At the end of this cou	3 - At the end of this course, how do I rate my ability to:															
•Verify the effect various	control para	meters ha	ve on	the perforn	nance of a se	rial	robot									
Response Option	Wei	ight	Frequency Percent Percent Responses					Me	Means							
Poor		(1	1)	0	0.00%	I				3.70		3.70	3.70	1		
Fair		(2	2)	0	0.00%											
Good		(3	3)	3	30.00%											
Excellent		(4	4)	7	70.00%											
N/A		((0)	0	0.00%											
					•	0	25	50	100	Question	ı	College	Departme	nt		
Response Rate	Mean	STD	Me	edian	College		Mean		STD	Median		Department	Mean	S	ΓD	Median
10/11 (90.91%)	3.70	0.48	4	.00	10		3.70		0.48	4.00		10	3.70	0.	48	4.00

Fall 2023 VT Student Perceptions of Teaching (SPOT)

Course: ECE_5704_83842_202309: Robotics and Automation-ECE_5704_83842_202309

