

There were: 10 possible respondents.

	Question Text	N	Top Two	Avg	MAE Avg	MAE SD	Sch Avg	Sch SD	Gen ed Req	Maj/Prog Req	Interest	Instr	Sched	Advisor Rec	Friend Rec	Other					
1	Primary reasons for taking course	6							0%	83%	67%	0%	17%	0%	0%	0%					
									Not At All	2	3	4	Completely	N/A							
3	Covered objectives	6	100%	4.2	4.5	0.9	4.5	0.9	0%	0%	0%	83%	17%	0%							
									Lects	Discusses	Clickers	Activity	Homework	Labs	Project/Folio	Teamwork	Present	Guest Lect	Field/Tri	Writing	Other
4	Contributed to learning	6							83%	17%	0%	17%	83%	0%	67%	0%	0%	0%	0%	0%	0%
									Yes	No											
6	Academically prepared	5	60%	0.6	0.8	0.4	0.8	0.4	60%	40%											
									1 Hr Or Less	1-2 Hrs	3-4 Hrs	5-6 Hrs	7-8 Hrs	9-10 Hrs	11-13 Hrs	13-15 Hrs	15+ Hrs				
7	Time on coursework outside of class	6							0%	0%	0%	17%	17%	17%	17%	17%	17%				
									Memorizing	Apply Basic	Synthes	Judge	Apply New	Solve Probl	Thinking	Teamwork	Reading	Present	Lab	Writing	Other
8	Significant aspects	6							17%	67%	17%	50%	83%	83%	67%	0%	0%	0%	0%	0%	0%
									Not At All	2	3	4	Very	N/A							
10	Intellectual challenge	6	100%	4.8	3.8	1.0	3.9	1.0	0%	0%	0%	17%	83%	0%							
									Little	2	3	4	Lot	N/A							

11	How much learned	6	100 %	4.7	3.9	1.1	4.0	1.1	0%	0%	0%	33%	67%	0%						
									Str Disagr	2	3	4	Str Agree							
12	Did best work possible	6	83%	4.3	4.1	0.9	4.2	0.9	0%	17%	0%	17%	67%							
15	2D Orbital analysis	6	100 %	4.7	4.6	0.7	4.6	0.7	0%	0%	0%	33%	67%	0%						
16	3D orbital analysis	6	83%	4.3	4.5	0.8	4.5	0.8	0%	0%	17%	33%	50%	0%						
17	Newtonian physics	6	100 %	4.7	4.5	0.6	4.5	0.6	0%	0%	0%	33%	67%	0%						
18	Patched conics	6	83%	4.2	4.3	0.9	4.3	0.9	0%	0%	17%	50%	33%	0%						
19	Impulsive orbital maneuvers	6	67%	3.8	4.5	0.8	4.5	0.8	0%	0%	33%	50%	17%	0%						
20	Orbital position	6	83%	4	4.4	0.7	4.4	0.7	0%	0%	17%	67%	17%	0%						
21	Three-body problem	6	33%	2.7	4.1	1.1	4.1	1.1	17%	33%	17%	33%	0%	0%						
22	Matlab STK	6	25%	2	3.7	1.4	3.7	1.4	33%	17%	0%	17%	0%	33%						
									Not At All	2	3	4	Very	N/A						
23	Knowledgeable (Kulumani)	6	100 %	5	4.6	0.8	4.6	0.8	0%	0%	0%	0%	100%	0%						
									Low	2	3	4	High	N/A						
24	Enthusiasm (Kulumani)	6	100 %	5	4.3	1.1	4.4	1.0	0%	0%	0%	0%	100%	0%						
									Str Disagr	2	3	4	Str Agree	N/A						
25	Treats students with respect (Kulumani)	6	83%	4.7	4.4	1.0	4.5	0.9	0%	0%	17%	0%	83%	0%						
									Not Fair	2	3	4	Very Fair	N/A						

26	Fair grading (Kulumani)	6	83%	4.5	4.2	1.1	4.3	1.0	0%	17%	0%	0%	83%	0%						
									Not At All	2	3	4	Excellent	N/A						
27	Feedback (Kulumani)	6	100%	4.8	4.2	1.1	4.2	1.1	0%	0%	0%	17%	83%	0%						
									Poor	2	3	4	Excellent							
28	Overall rating of instructor (Kulumani)	6	67%	4	4.1	1.1	4.1	1.1	0%	0%	33%	33%	33%							

Text Responses

Question: Use this space for comments on strengths of the course.

I learned a great deal in this course and thoroughly enjoyed the material. The professor is very dedicated in this field, and I appreciate his passion for the class as well as the work he puts in to teaching it.

I really thought the coding projects were really beneficial to understanding the material.

Interesting subject Lectures were extremely informative

Very interesting content, practical projects

Question: Use this space to provide suggestions on how to improve this course.

I do not think that 6:10 - 8:40 once a week is a good time to efficiently learn this material. It is a challenging course, and while I always attended lecture, it was hard to focus at that time of night. In addition, the course would be better if not taught by an adjunct professor. Professor Kulumani was always available by email however it would have been extremely helpful to have a professor who was on campus and could at least hold office hours. Lastly, I understand that this is a challenging course and there should be a significant work load, however this class in particular took up most of my time this semester. Taking the recommended 18 credits (by the university) for the semester, there seemed to simply almost not be enough hours in a day to complete the work load expected from this class, compared to my other classes. I dont mind being challenged, in fact I enjoy it, but this class had extremely high expectations for an undergraduate course.

I wish rather than going over derivations of equations, we went over more example problems such as those found on the exam or hw. Also, hw always took days on end to complete which would reasonable if students were not taking 5 other classes for which work must be completed for as well.

Spend more time in class covering subjects. Make homework assignments shorter. Most homework assignments took extensive amounts of time and the same learning objectives could be achieved with less outside of class work. Students were expected to spend extremely large amounts of time working on homework and projects.

Homeworks were often very time consuming, perhaps on some of the longer ones, less programming may help many students complete it on time

The workload is extremely high, the homework is very difficult to complete with while studying another 4 subjects in parallel.

Question: You indicated that you were academically prepared to take this course, what prepared you for this class (which prior courses, which topics)?

Physics Calculus (also Kerbal Space Program)

Calculus

Engineering Dynamics, prior knowledge of Python

Question: You indicated that you were not academically prepared to take this course, please comment on issues with prerequisite courses, or what could have been done differently so that a future student like yourself would be better prepared to take this course?

While the listed prerequisite course I had already taken (APSC 2058- dynamics), I still felt a bit under prepared for the class. We spent a lot of time coding in python, and while I also took MAE 2117 , I dont think that course was enough for me to comfortably understand and implement python in MAE 3145.

This course requires understanding differential equations and the differentials course was not adequate to help through this course.