




THE STUDENT ASSESSMENT OF INSTRUCTION SYSTEM THE UNIVERSITY OF TENNESSEE				
Engineering Fundamentals 230	Sec # 44010	William R. Schleter		
Comp Solution/Engr Problems (LEC)	Fall 2012	Form G	# of Students: 17	

Questions	Excellent	Very Good	Good	Fair	Poor	Very Poor	Item Mean
1. Course as a whole	2 (12%)	4 (24%)	4 (24%)	6 (35%)	1 (6%)	0 (0%)	3.00
2. Course content	2 (12%)	5 (29%)	7 (41%)	3 (18%)	0 (0%)	0 (0%)	3.35
3. Instructor overall	2 (12%)	5 (29%)	7 (41%)	2 (12%)	1 (6%)	0 (0%)	3.29
4. Instructor's contribution to students' understanding of concepts	2 (12%)	4 (24%)	7 (41%)	2 (12%)	2 (12%)	0 (0%)	3.12
5. Course organization	4 (24%)	8 (47%)	3 (18%)	1 (6%)	1 (6%)	0 (0%)	3.76
6. Opportunity to ask questions	7 (41%)	4 (24%)	5 (29%)	1 (6%)	0 (0%)	0 (0%)	4.00
7. Explanations by instructor	2 (12%)	6 (35%)	5 (29%)	3 (18%)	1 (6%)	0 (0%)	3.29
8. Contribution to student's ability to solve problems	2 (12%)	5 (29%)	6 (35%)	2 (12%)	2 (12%)	0 (0%)	3.18
9. Use of examples and illustrations	3 (18%)	3 (18%)	8 (47%)	2 (12%)	1 (6%)	0 (0%)	3.29
10. Length/difficulty of homework assignments	2 (12%)	3 (18%)	7 (41%)	4 (24%)	0 (0%)	1 (6%)	3.00
11. Exams' contribution to understanding content	2 (12%)	2 (12%)	5 (29%)	5 (29%)	2 (12%)	1 (6%)	2.65
12. Instructor's enthusiasm	5 (29%)	4 (24%)	6 (35%)	1 (6%)	1 (6%)	0 (0%)	3.65
13. Textbook overall was	2 (12%)	2 (12%)	6 (38%)	1 (6%)	0 (0%)	5 (31%)	2.38
14. Answers to students' questions	2 (12%)	4 (24%)	11 (65%)	0 (0%)	0 (0%)	0 (0%)	3.47
15. Relationship between lectures and text	2 (12%)	3 (18%)	8 (47%)	3 (18%)	0 (0%)	1 (6%)	3.06
16. Availability of extra help when needed	6 (35%)	5 (29%)	5 (29%)	0 (0%)	0 (0%)	1 (6%)	3.82
17. Interest in whether students learned	4 (24%)	4 (24%)	7 (41%)	1 (6%)	1 (6%)	0 (0%)	3.53
18. Amount you learned in the course	2 (12%)	4 (24%)	6 (35%)	4 (24%)	1 (6%)	0 (0%)	3.12
19. Relevance and usefulness of course content	2 (12%)	4 (24%)	5 (29%)	3 (18%)	3 (18%)	0 (0%)	2.94
20. Relevance and usefulness of assignments	2 (12%)	4 (24%)	6 (35%)	3 (18%)	2 (12%)	0 (0%)	3.06
21. Reasonableness of assigned work	2 (12%)	2 (12%)	6 (35%)	3 (18%)	2 (12%)	2 (12%)	2.59
22. Relationship of exams to material emphasized	3 (18%)	2 (12%)	5 (29%)	5 (29%)	2 (12%)	0 (0%)	2.94

Relative to other college courses you have taken	Much Higher		Average			Much Lower		
23. Do you expect your grade in this course to be:	2 (10%)	2 (10%)	7 (40%)	3 (20%)	3 (20%)	0 (0%)	0 (0%)	0 (0%)
24. The intellectual challenge presented was:	2 (10%)	5 (30%)	6 (40%)	3 (20%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)
25. The amount of effort you put into this course was:	2 (10%)	6 (40%)	6 (40%)	2 (10%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)
26. The amount of effort to succeed in the course was:	5 (30%)	6 (40%)	4 (20%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)
27. Your involvement in this course (asgn, atnd, etc) was:	2 (10%)	6 (40%)	3 (20%)	5 (30%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)

28. On average, how many hours per week have you spent on this course, including attending classes, readings, reviewing notes, writing papers, and any other course related work?

Under 2	1 (6%)
3-4	1 (6%)
5-6	5 (29%)
7-8	6 (35%)
9-10	1 (6%)
11-12	2 (12%)
13-14	1 (6%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

29. From the total average hours above, how many do you consider were valuable in advancing your education?

Under 2	3 (18%)
3-4	4 (24%)
5-6	5 (29%)
7-8	2 (12%)
9-10	1 (6%)
11-12	1 (6%)
13-14	1 (6%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

30. Expected Grade

A	6 (38%)
B+	5 (31%)
B	3 (19%)
C+	1 (6%)
C	1 (6%)
D	0 (0%)
F	0 (0%)
S	0 (0%)
NC	0 (0%)
Other	0 (0%)

32. Class Composition

Fresh	0 (0%)
Soph	10 (59%)
Junior	4 (24%)
Senior	2 (12%)
Grad	0 (0%)
Other	1 (6%)

33. Wanted to take course

Yes	8 (47%)
No	6 (35%)
Neutral	3 (18%)

31. Course Was

In major	12 (71%)
In minor	0 (0%)
Dist. Req.	5 (29%)
Elective	0 (0%)
Other	0 (0%)

Student Responses to Open Ended Questions

Question #1: Was this class intellectually stimulating? Did it stretch your thinking?

- Yes-I am horrible with Matlab, but the TAs kept the material as interesting as they could. While I don't love Matlab (because I don't generally love things that I'm not good at), the class has given me an appreciation for the value of basic programming knowledge.
- Yes-Coding in this class is like learning a different language. It took time and effort to fully understand and communicate in MATLAB language.
- -Yes. I didn't know how to do any programming beforehand.
- Yes-I love programming. Definitely makes me view things we learn in math a whole lot differently because it's the same language but spoken in a different dialect (I guess that's the best way to describe it).
- Yes-It's a necessary evil.
- Yes-I had no Matlab experience before this class, so everything I learned was new.
- Yes-The course offered a new way to approach math and engineering problems.
- Yes-The concepts presented in this class were sometimes hard to understand. However, in order to do well in this class, I had to really study the material and comprehend every small step used to solve problems using MATLAB.
- Yes-Yes, it was very good for students wanting to learn some basic computer programming for engineering problems.
- Yes-It required me to think about how to write and analyze code
- No-The material presented in class was straight forward, and was more memorization than conceptualization.

Question #2: What aspects of this class contributed most to your learning?


- The TAs were stupendous. Their enthusiasm for teaching is infectious, and they could really communicate the material in a way that I could understand.
- The lectures and examples for this class were extremely useful.
- Learning from other people in groups
- Projects and homework.
- I can see why engineers need this. We should have done more examples that were directly relevant to engineering. Too much of the code is silly.
- Practice problems and tests for exams. They were good because they gave more variations on the topics.
- The labs.
- The labs and practice exams taught me the most.
- The extra study sessions gave me a chance to ask the TAs questions I had about the material and really helped me learn what I didn't understand from class.
- The relation of Matlab and programming to how data is analyzed in the real world.
- the excellent teaching assistants.

Question #3: What aspects of this class detracted from your learning?

- Having such large classes makes it easy for my focus to drift.
- None
- Classes were generally boring
- The vague parts. I'm taking diffeq, but the whole solving second order equations part of the class made no sense. Basically, I don't know how the ode45 function operates, or why we need to fix a subfunction that solves for the derivatives. There were other vague parts like the fsolve, I just wanted to know why the command required us to fix it a certain way. Anywho.
- It should be an online class with weekly help sessions. Going to class is boring and absolutely useless. Watching other people write code at a pace I can't follow is frustrating and doesn't help me learn at all.
- The TAs going over the labs too quickly because that makes it hard to get an idea of how the code for that day works with notes.
- Sometimes it is difficult to follow the material in lab, I usually had to teach myself in my own time through the matlab help files.
- The homework was good for my grade, but I learned little from it.
- The exams were somewhat long, and I felt rushed while trying to take the exams. I felt like there just wasn't enough time for me to really work on all the problems on the exams.
- The basics are not emphasized, and not truly understood. The advanced portions, which are learned in later classes, are forced on us with too much speed.
- The ability to browse the internet during class time.

Question #4: What suggestions do you have for improving the class?
<ul style="list-style-type: none"> • Smaller sections would make it easier for students to engage with the instructors.
<ul style="list-style-type: none"> • Class is great. No improvement needed.
<ul style="list-style-type: none"> • The workload for the projects is vastly greater than what should be reasonable for a 2 hour class. Some of the ta's could barely do the projects. How are the students supposed to be able to do something the ta's couldn't? I spend far more time on this class than I do on my other 4 classes combined, all of which are greater than 2 hour classes.
<ul style="list-style-type: none"> • Not really. I enjoyed this class, and I love matlab. Can't wait to go onto fortran.
<ul style="list-style-type: none"> • MAKE IT AN ONLINE CLASS
<ul style="list-style-type: none"> • It would be helpful if the TA typing would put more comments in the code to better explain how each line works in the examples. More example problems in some topics such as ODE problems and images would be greatly appreciated.
<ul style="list-style-type: none"> • I think a book could be helpful.
<ul style="list-style-type: none"> • The projects are a bit too complicated. Maybe offer a bit more instruction on how to complete them.
<ul style="list-style-type: none"> • I would include more helpful examples on the class website relating to the different lab sessions. It seemed like the homework and exam problems were very different from those posed in the lab sessions.
<ul style="list-style-type: none"> • Make the projects shorter, and the tests harder.
<ul style="list-style-type: none"> • The projects, while they do not require an unreasonable amount of code, require many functions that were not mentioned in class. This causes them to take way too much time. For the amount of class time, homework, and projects this class should be worth more than 2 credit hours
<ul style="list-style-type: none"> • I don't really know how Matlab works as a program, and what some of the basic functions are. We are not tested on definitions, important ideas are not repeated enough to have experience, and that could be fixed with more class time and a different focus on the class. If this class were emphasized more in the EF 152, instead of physics concepts that we will all see again later, we might be more proficient at Matlab/programming in general and be able to focus more on methods, than working out how to program. I am perfectly fine with discussing these topics more, although the powers at be have their own plans. Thank you for your time, and I hope my suggestions are not looked over too quickly.
<ul style="list-style-type: none"> • Integrating projects and lecture material. Making projects more real-world applicable and useful for future classes.



THE STUDENT ASSESSMENT OF INSTRUCTION SYSTEM THE UNIVERSITY OF TENNESSEE				
Engineering Fundamentals 230	Sec # 44011	William R. Schleter		
Comp Solution/Engr Problems (LEC)	Fall 2012	Form G	# of Students: 13	

Questions	Excellent	Very Good	Good	Fair	Poor	Very Poor	Item Mean
1. Course as a whole	4 (31%)	4 (31%)	4 (31%)	0 (0%)	1 (8%)	0 (0%)	3.77
2. Course content	3 (25%)	4 (33%)	2 (17%)	2 (17%)	0 (0%)	1 (8%)	3.42
3. Instructor overall	1 (8%)	6 (50%)	4 (33%)	1 (8%)	0 (0%)	0 (0%)	3.58
4. Instructor's contribution to students' understanding of concepts	2 (17%)	5 (42%)	2 (17%)	1 (8%)	2 (17%)	0 (0%)	3.33
5. Course organization	3 (25%)	5 (42%)	3 (25%)	1 (8%)	0 (0%)	0 (0%)	3.83
6. Opportunity to ask questions	4 (33%)	7 (58%)	0 (0%)	1 (8%)	0 (0%)	0 (0%)	4.17
7. Explanations by instructor	4 (33%)	3 (25%)	2 (17%)	2 (17%)	1 (8%)	0 (0%)	3.58
8. Contribution to student's ability to solve problems	5 (42%)	3 (25%)	2 (17%)	0 (0%)	2 (17%)	0 (0%)	3.75
9. Use of examples and illustrations	4 (33%)	5 (42%)	2 (17%)	0 (0%)	1 (8%)	0 (0%)	3.92
10. Length/difficulty of homework assignments	3 (25%)	6 (50%)	2 (17%)	1 (8%)	0 (0%)	0 (0%)	3.92
11. Exams' contribution to understanding content	4 (33%)	5 (42%)	2 (17%)	0 (0%)	1 (8%)	0 (0%)	3.92
12. Instructor's enthusiasm	5 (42%)	3 (25%)	4 (33%)	0 (0%)	0 (0%)	0 (0%)	4.08
13. Textbook overall was	4 (33%)	2 (17%)	3 (25%)	1 (8%)	1 (8%)	1 (8%)	3.33
14. Answers to students' questions	3 (25%)	5 (42%)	3 (25%)	0 (0%)	1 (8%)	0 (0%)	3.75
15. Relationship between lectures and text	4 (33%)	2 (17%)	3 (25%)	2 (17%)	0 (0%)	1 (8%)	3.42
16. Availability of extra help when needed	4 (33%)	5 (42%)	3 (25%)	0 (0%)	0 (0%)	0 (0%)	4.08
17. Interest in whether students learned	3 (25%)	6 (50%)	1 (8%)	1 (8%)	1 (8%)	0 (0%)	3.75
18. Amount you learned in the course	4 (33%)	4 (33%)	0 (0%)	1 (8%)	3 (25%)	0 (0%)	3.42
19. Relevance and usefulness of course content	4 (33%)	4 (33%)	1 (8%)	1 (8%)	2 (17%)	0 (0%)	3.58
20. Relevance and usefulness of assignments	4 (33%)	4 (33%)	3 (25%)	1 (8%)	0 (0%)	0 (0%)	3.92
21. Reasonableness of assigned work	5 (42%)	4 (33%)	0 (0%)	2 (17%)	1 (8%)	0 (0%)	3.83
22. Relationship of exams to material emphasized	5 (42%)	4 (33%)	2 (17%)	1 (8%)	0 (0%)	0 (0%)	4.08

Relative to other college courses you have taken	Much Higher			Average			Much Lower		
23. Do you expect your grade in this course to be:	2 (20%)	4 (30%)	3 (20%)	2 (20%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
24. The intellectual challenge presented was:	5 (40%)	4 (30%)	3 (20%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
25. The amount of effort you put into this course was:	5 (40%)	1 (10%)	6 (50%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
26. The amount of effort to succeed in the course was:	5 (40%)	4 (30%)	2 (20%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
27. Your involvement in this course (asgn, atnd, etc) was:	4 (30%)	4 (30%)	4 (30%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

28. On average, how many hours per week have you spent on this course, including attending classes, readings, reviewing notes, writing papers, and any other course related work?	
Under 2	0 (0%)
3-4	1 (8%)
5-6	3 (25%)
7-8	3 (25%)
9-10	1 (8%)
11-12	2 (17%)
13-14	1 (8%)
15-16	1 (8%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

29. From the total average hours above, how many do you consider were valuable in advancing your education?	
Under 2	3 (25%)
3-4	2 (17%)
5-6	3 (25%)
7-8	0 (0%)
9-10	2 (17%)
11-12	1 (8%)
13-14	1 (8%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

30. Expected Grade	
A	6 (50%)
B+	4 (33%)
B	0 (0%)
C+	1 (8%)
C	1 (8%)
D	0 (0%)
F	0 (0%)
S	0 (0%)
NC	0 (0%)
Other	0 (0%)

32. Class Composition	
Fresh	0 (0%)
Soph	10 (83%)
Junior	2 (17%)
Senior	0 (0%)
Grad	0 (0%)
Other	0 (0%)

31. Course Was	
In major	10 (83%)
In minor	0 (0%)
Dist. Req.	2 (17%)
Elective	0 (0%)
Other	0 (0%)

33. Wanted to take course	
Yes	11 (92%)
No	1 (8%)
Neutral	0 (0%)


Student Responses to Open Ended Questions

Question #1: Was this class intellectually stimulating? Did it stretch your thinking?
<ul style="list-style-type: none">• Yes-MATLAB is a difficult thing to learn.
<ul style="list-style-type: none">• Yes-This class according to me needs a lot of time. One needs to spend a good amount to work and understand this class. I was not able to put more effort and time because of the other classes I'm taking which needs even more time. & most important is that I'm a slow learner. I wish this class was easier than what it is now.
<ul style="list-style-type: none">• Yes-It helped me think about what I was doing in a different way. To get a computer to do something you have to know exactly what you're doing.
<ul style="list-style-type: none">• Yes-It correlated with my other classes in a way that I find MATLAB now to be very useful.
<ul style="list-style-type: none">• Yes-Yes showing how easy computers are to be helpful
<ul style="list-style-type: none">• Yes-It was a very challenging course
<ul style="list-style-type: none">• Yes-I learned a lot of useful things in this class and I not only understand Matlab better but also computers
<ul style="list-style-type: none">• Yes-Yes, the instructors were able to make the class understand by going through the website while in class.
<ul style="list-style-type: none">• Yes-It was one of the hardest classes I have ever taken
<ul style="list-style-type: none">• Yes-This class forced me to think how to solve problems with certain tools
Question #2: What aspects of this class contributed most to your learning?
<ul style="list-style-type: none">• The labs.
<ul style="list-style-type: none">• I understood how we can use all that we learned in class in future in our professional fields.
<ul style="list-style-type: none">• The TA's were enthusiastic and helpful and answered my emails pretty fast when I had questions.
<ul style="list-style-type: none">• The solution solving aspect
<ul style="list-style-type: none">• the helpful environment that is provided
<ul style="list-style-type: none">• My friends who understand it
<ul style="list-style-type: none">• doing stuff with Matlab
<ul style="list-style-type: none">• The online website.
<ul style="list-style-type: none">• The projects definitely made me think.
<ul style="list-style-type: none">• Lecture and projects
Question #3: What aspects of this class detracted from your learning?
<ul style="list-style-type: none">• Everett's complete lack of teaching ability.
<ul style="list-style-type: none">• I just never understood this MATLAB language, so it has been really hard for me to survive in this class.
<ul style="list-style-type: none">• Some of the lab notes on the ef website didn't explain some of the functions
<ul style="list-style-type: none">• The internet
<ul style="list-style-type: none">• none
<ul style="list-style-type: none">• being on a computer in class
<ul style="list-style-type: none">• can't think of anything
<ul style="list-style-type: none">• Imgur.com
<ul style="list-style-type: none">• The projects
<ul style="list-style-type: none">• n/a

Question #4: What suggestions do you have for improving the class?

- MORE HELP SESSIONS!!!!!!
- Make the homework pertain more to the labs, and fire Everett.
- I would suggest that TA's should be better at explaining the material. and should do more examples related to each and every topic. The projects in the class are very hard and long, so please make them little easy and not every person in class understands this class, so there should be more help sessions available.
- Maybe more help sessions. But there are already two a week. I think its good.
- More examples, more explanation, the TAs sometimes don't realize that they are speaking so fast in MATLAB terms that they lose everyone in the classroom then half of the students are lost.
- none great class
- Lighten the Projects from how much time they take to do. and make the HW more like the tests instead of just half or more multiple choice
- maybe working with other programs a little too
- None. Fine as it is.
- Less projects
- Get project grades back faster



THE STUDENT ASSESSMENT OF INSTRUCTION SYSTEM THE UNIVERSITY OF TENNESSEE				
Engineering Fundamentals 230	Sec # 44012	William R. Schleter		
Comp Solution/Engr Problems (LEC)	Fall 2012	Form G	# of Students: 10	

Questions	Excellent	Very Good	Good	Fair	Poor	Very Poor	Item Mean
1. Course as a whole	2 (20%)	3 (30%)	4 (40%)	1 (10%)	0 (0%)	0 (0%)	3.60
2. Course content	2 (20%)	6 (60%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)	3.90
3. Instructor overall	2 (20%)	4 (40%)	3 (30%)	1 (10%)	0 (0%)	0 (0%)	3.70
4. Instructor's contribution to students' understanding of concepts	2 (20%)	4 (40%)	3 (30%)	1 (10%)	0 (0%)	0 (0%)	3.70
5. Course organization	2 (20%)	5 (50%)	3 (30%)	0 (0%)	0 (0%)	0 (0%)	3.90
6. Opportunity to ask questions	3 (30%)	4 (40%)	3 (30%)	0 (0%)	0 (0%)	0 (0%)	4.00
7. Explanations by instructor	2 (20%)	3 (30%)	4 (40%)	1 (10%)	0 (0%)	0 (0%)	3.60
8. Contribution to student's ability to solve problems	2 (20%)	4 (40%)	3 (30%)	1 (10%)	0 (0%)	0 (0%)	3.70
9. Use of examples and illustrations	2 (20%)	4 (40%)	3 (30%)	1 (10%)	0 (0%)	0 (0%)	3.70
10. Length/difficulty of homework assignments	2 (20%)	1 (10%)	3 (30%)	4 (40%)	0 (0%)	0 (0%)	3.10
11. Exams' contribution to understanding content	2 (20%)	2 (20%)	2 (20%)	4 (40%)	0 (0%)	0 (0%)	3.20
12. Instructor's enthusiasm	2 (20%)	4 (40%)	3 (30%)	1 (10%)	0 (0%)	0 (0%)	3.70
13. Textbook overall was	2 (20%)	2 (20%)	3 (30%)	1 (10%)	1 (10%)	1 (10%)	3.00
14. Answers to students' questions	2 (20%)	5 (50%)	2 (20%)	1 (10%)	0 (0%)	0 (0%)	3.80
15. Relationship between lectures and text	2 (20%)	3 (30%)	3 (30%)	2 (20%)	0 (0%)	0 (0%)	3.50
16. Availability of extra help when needed	3 (30%)	3 (30%)	2 (20%)	2 (20%)	0 (0%)	0 (0%)	3.70
17. Interest in whether students learned	3 (30%)	2 (20%)	4 (40%)	1 (10%)	0 (0%)	0 (0%)	3.70
18. Amount you learned in the course	2 (20%)	3 (30%)	4 (40%)	1 (10%)	0 (0%)	0 (0%)	3.60
19. Relevance and usefulness of course content	2 (20%)	4 (40%)	2 (20%)	1 (10%)	0 (0%)	1 (10%)	3.40
20. Relevance and usefulness of assignments	2 (20%)	3 (30%)	4 (40%)	0 (0%)	0 (0%)	1 (10%)	3.40
21. Reasonableness of assigned work	2 (20%)	2 (20%)	3 (30%)	2 (20%)	1 (10%)	0 (0%)	3.20
22. Relationship of exams to material emphasized	2 (20%)	2 (20%)	3 (30%)	2 (20%)	1 (10%)	0 (0%)	3.20

Relative to other college courses you have taken	Much Higher		Average				Much Lower	
23. Do you expect your grade in this course to be:	1 (10%)	2 (20%)	2 (20%)	2 (20%)	1 (10%)	0 (0%)	1 (10%)	
24. The intellectual challenge presented was:	1 (10%)	3 (30%)	5 (60%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
25. The amount of effort you put into this course was:	0 (0%)	7 (80%)	2 (20%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
26. The amount of effort to succeed in the course was:	3 (30%)	4 (40%)	2 (20%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
27. Your involvement in this course (asgn, atnd, etc) was:	3 (30%)	5 (60%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	

28. On average, how many hours per week have you spent on this course, including attending classes, readings, reviewing notes, writing papers, and any other course related work?	
Under 2	0 (0%)
3-4	0 (0%)
5-6	3 (30%)
7-8	2 (20%)
9-10	2 (20%)
11-12	1 (10%)
13-14	1 (10%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	1 (10%)
22 or >	0 (0%)

29. From the total average hours above, how many do you consider were valuable in advancing your education?	
Under 2	0 (0%)
3-4	0 (0%)
5-6	2 (20%)
7-8	4 (40%)
9-10	1 (10%)
11-12	1 (10%)
13-14	2 (20%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

30. Expected Grade	
A	3 (30%)
B+	3 (30%)
B	2 (20%)
C+	1 (10%)
C	1 (10%)
D	0 (0%)
F	0 (0%)
S	0 (0%)
NC	0 (0%)
Other	0 (0%)

32. Class Composition	
Fresh	0 (0%)
Soph	4 (44%)
Junior	5 (56%)
Senior	0 (0%)
Grad	0 (0%)
Other	0 (0%)

33. Wanted to take course	
Yes	7 (78%)
No	1 (11%)
Neutral	1 (11%)

31. Course Was	
In major	10 (100%)
In minor	0 (0%)
Dist. Req.	0 (0%)
Elective	0 (0%)
Other	0 (0%)

Student Responses to Open Ended Questions

Question #1: Was this class intellectually stimulating? Did it stretch your thinking?

- Yes-It presented a new understanding of computers
- Yes-Yes
- Yes-But not in a good way. I don't feel that I've learned how I'm actually going to apply matlab in the biomedical world. I haven't met one biomedical engineer that uses/knows what matlab is!! Silly I have to take it in order to get my ECE credit.
- Yes-Computer programming doesn't come to me as easy so it stretched my thinking.
- Yes-Programming extreme intellectual thinking.
- Yes-It definitely stretched my thinking because we worked with more difficult material than I have worked with at least with programming code
- Yes-In this class I learned so much more about Matlab and actually began to like using it. Before then I never liked it.
- Yes-I have never programmed before, so it was a new way of thinking and problem solving.

Question #2: What aspects of this class contributed most to your learning?

- projects
- The in-class interactions with TA's.
- No
- Labs
- Projects.
- The examples, and practicing and doing the projects
- My two TA's Taylor and Everett. They are both extremely good and helped me so much in the class. It was always interesting and educational.
- Once I began to grasp the topics, the projects helped solidify what I was learning.

Question #3: What aspects of this class detracted from your learning?

- N/A
- No
- Projects. Too much crammed into one project. It was about the equivalent of 5 projects in one.
- none
- Some of the material of tests and projects are somewhat difficult due to not fully understanding the concepts especially with the images.
- When I went to one help session and a TA spent over 50 minutes with one person while others like me had questions. About 6 of us were waiting.

Question #4: What suggestions do you have for improving the class?

- Reduce the amount of time required to do the projects.
- Yes
- Better projects
- Exams need to be shorter or more time should be allowed.
- To maybe do more examples and post more examples online that we can look at.
- More than one TA per help session.
- Suggest a text, such as Matlab Demystified for those who learn better from a text. Teach students how to navigate the mathworks website, especially if they don't know what function they're looking for.



THE STUDENT ASSESSMENT OF INSTRUCTION SYSTEM THE UNIVERSITY OF TENNESSEE				
Engineering Fundamentals 230	Sec # 44013	William R. Schleter		
Comp Solution/Engr Problems (LEC)	Fall 2012	Form G	# of Students: 10	

Questions	Excellent	Very Good	Good	Fair	Poor	Very Poor	Item Mean
1. Course as a whole	2 (20%)	3 (30%)	2 (20%)	1 (10%)	1 (10%)	1 (10%)	3.10
2. Course content	2 (20%)	3 (30%)	2 (20%)	1 (10%)	1 (10%)	1 (10%)	3.10
3. Instructor overall	2 (22%)	3 (33%)	1 (11%)	1 (11%)	0 (0%)	2 (22%)	3.00
4. Instructor's contribution to students' understanding of concepts	2 (20%)	2 (20%)	2 (20%)	1 (10%)	1 (10%)	2 (20%)	2.70
5. Course organization	4 (40%)	1 (10%)	2 (20%)	2 (20%)	0 (0%)	1 (10%)	3.40
6. Opportunity to ask questions	3 (30%)	1 (10%)	3 (30%)	2 (20%)	0 (0%)	1 (10%)	3.20
7. Explanations by instructor	2 (20%)	2 (20%)	3 (30%)	1 (10%)	1 (10%)	1 (10%)	3.00
8. Contribution to student's ability to solve problems	3 (30%)	1 (10%)	2 (20%)	1 (10%)	1 (10%)	2 (20%)	2.80
9. Use of examples and illustrations	3 (30%)	2 (20%)	2 (20%)	1 (10%)	1 (10%)	1 (10%)	3.20
10. Length/difficulty of homework assignments	2 (20%)	2 (20%)	2 (20%)	2 (20%)	1 (10%)	1 (10%)	2.90
11. Exams' contribution to understanding content	2 (22%)	2 (22%)	2 (22%)	1 (11%)	1 (11%)	1 (11%)	3.00
12. Instructor's enthusiasm	4 (40%)	1 (10%)	2 (20%)	1 (10%)	1 (10%)	1 (10%)	3.30
13. Textbook overall was	2 (29%)	1 (14%)	1 (14%)	1 (14%)	1 (14%)	1 (14%)	2.86
14. Answers to students' questions	1 (10%)	4 (40%)	2 (20%)	2 (20%)	0 (0%)	1 (10%)	3.10
15. Relationship between lectures and text	2 (25%)	2 (25%)	1 (12%)	1 (12%)	0 (0%)	2 (25%)	2.88
16. Availability of extra help when needed	4 (40%)	2 (20%)	2 (20%)	1 (10%)	0 (0%)	1 (10%)	3.60
17. Interest in whether students learned	3 (30%)	1 (10%)	3 (30%)	1 (10%)	1 (10%)	1 (10%)	3.10
18. Amount you learned in the course	3 (30%)	2 (20%)	2 (20%)	1 (10%)	0 (0%)	2 (20%)	3.10
19. Relevance and usefulness of course content	2 (20%)	2 (20%)	3 (30%)	1 (10%)	0 (0%)	2 (20%)	2.90
20. Relevance and usefulness of assignments	2 (20%)	3 (30%)	2 (20%)	1 (10%)	1 (10%)	1 (10%)	3.10
21. Reasonableness of assigned work	2 (20%)	2 (20%)	3 (30%)	1 (10%)	0 (0%)	2 (20%)	2.90
22. Relationship of exams to material emphasized	1 (10%)	3 (30%)	3 (30%)	1 (10%)	1 (10%)	1 (10%)	2.90

Relative to other college courses you have taken	Much Higher			Average			Much Lower		
23. Do you expect your grade in this course to be:	0 (0%)	3 (30%)	1 (10%)	4 (40%)	1 (10%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)
24. The intellectual challenge presented was:	1 (10%)	3 (30%)	4 (40%)	2 (20%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
25. The amount of effort you put into this course was:	2 (20%)	2 (20%)	3 (30%)	2 (20%)	0 (0%)	0 (0%)	0 (0%)	1 (10%)	1 (10%)
26. The amount of effort to succeed in the course was:	3 (30%)	3 (30%)	3 (30%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
27. Your involvement in this course (asgn, atnd, etc) was:	4 (40%)	1 (10%)	3 (30%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	1 (10%)	1 (10%)

28. On average, how many hours per week have you spent on this course, including attending classes, readings, reviewing notes, writing papers, and any other course related work?

Under 2	1 (10%)
3-4	0 (0%)
5-6	1 (10%)
7-8	5 (50%)
9-10	1 (10%)
11-12	2 (20%)
13-14	0 (0%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

29. From the total average hours above, how many do you consider were valuable in advancing your education?

Under 2	2 (20%)
3-4	0 (0%)
5-6	3 (30%)
7-8	3 (30%)
9-10	2 (20%)
11-12	0 (0%)
13-14	0 (0%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

30. Expected Grade

A	3 (30%)
B+	3 (30%)
B	2 (20%)
C+	0 (0%)
C	1 (10%)
D	0 (0%)
F	1 (10%)
S	0 (0%)
NC	0 (0%)
Other	0 (0%)

32. Class Composition

Fresh	0 (0%)
Soph	7 (70%)
Junior	3 (30%)
Senior	0 (0%)
Grad	0 (0%)
Other	0 (0%)

31. Course Was

In major	9 (90%)
In minor	0 (0%)
Dist. Req.	0 (0%)
Elective	0 (0%)
Other	1 (10%)

33. Wanted to take course

Yes	5 (50%)
No	2 (20%)
Neutral	3 (30%)

Student Responses to Open Ended Questions

Question #1: Was this class intellectually stimulating? Did it stretch your thinking?

- Yes-We had to learn some stuff on our own
- Yes-I had to think about solving problems from a computer programming way instead of just doing them with a pen and paper.
- Yes-yes it required me to use critical thinking with code
- Yes-Yes.
- No-MATLAB is the most awful, boring thing ever created

Question #2: What aspects of this class contributed most to your learning?

- The practice problems
- The examples gone over in class and the homework contributed most to my learning.
- the projects
- learning about matlab
- The website
- none
- The TAs this semester were excellent! They were always willing to help, and never made you feel silly when asking a question. Having help sessions was very beneficial to me because I had the opportunity to ask questions about concepts covered in class.

Question #3: What aspects of this class detracted from your learning?

- It was very boring
- The internet is very tempting and I sometimes got distracted by email etc. in class.
- none
- nothing
- all
- N/A

Question #4: What suggestions do you have for improving the class?

- NA
- Have more class interaction would help students keep focus.
- have more smaller projects
- better examples for homeworks and tests
- try to understand concept of function and loops and other stuff
- remove it from graduating requirements
- I think that the material tested on the exams should be more consistent with the material covered in class and in the practice exam problems. It seemed that even with a lot of studying you could end up with a lower grade than deserved due to this kind of inconsistency.



THE STUDENT ASSESSMENT OF INSTRUCTION SYSTEM THE UNIVERSITY OF TENNESSEE				
Engineering Fundamentals 230	Sec # 47227	William R. Schleter		
Comp Solution/Engr Problems (LEC)	Fall 2012	Form G	# of Students: 14	

Questions	Excellent	Very Good	Good	Fair	Poor	Very Poor	Item Mean
1. Course as a whole	4 (29%)	5 (36%)	4 (29%)	1 (7%)	0 (0%)	0 (0%)	3.86
2. Course content	5 (36%)	5 (36%)	4 (29%)	0 (0%)	0 (0%)	0 (0%)	4.07
3. Instructor overall	7 (50%)	4 (29%)	3 (21%)	0 (0%)	0 (0%)	0 (0%)	4.29
4. Instructor's contribution to students' understanding of concepts	5 (36%)	4 (29%)	3 (21%)	2 (14%)	0 (0%)	0 (0%)	3.86
5. Course organization	9 (64%)	2 (14%)	3 (21%)	0 (0%)	0 (0%)	0 (0%)	4.43
6. Opportunity to ask questions	10 (71%)	3 (21%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)	4.64
7. Explanations by instructor	8 (57%)	2 (14%)	4 (29%)	0 (0%)	0 (0%)	0 (0%)	4.29
8. Contribution to student's ability to solve problems	6 (43%)	4 (29%)	4 (29%)	0 (0%)	0 (0%)	0 (0%)	4.14
9. Use of examples and illustrations	8 (57%)	3 (21%)	3 (21%)	0 (0%)	0 (0%)	0 (0%)	4.36
10. Length/difficulty of homework assignments	3 (21%)	6 (43%)	3 (21%)	2 (14%)	0 (0%)	0 (0%)	3.71
11. Exams' contribution to understanding content	5 (36%)	6 (43%)	1 (7%)	2 (14%)	0 (0%)	0 (0%)	4.00
12. Instructor's enthusiasm	5 (36%)	2 (14%)	5 (36%)	2 (14%)	0 (0%)	0 (0%)	3.71
13. Textbook overall was	4 (29%)	4 (29%)	4 (29%)	2 (14%)	0 (0%)	0 (0%)	3.71
14. Answers to students' questions	6 (43%)	2 (14%)	6 (43%)	0 (0%)	0 (0%)	0 (0%)	4.00
15. Relationship between lectures and text	5 (36%)	5 (36%)	4 (29%)	0 (0%)	0 (0%)	0 (0%)	4.07
16. Availability of extra help when needed	8 (57%)	4 (29%)	2 (14%)	0 (0%)	0 (0%)	0 (0%)	4.43
17. Interest in whether students learned	6 (43%)	1 (7%)	5 (36%)	2 (14%)	0 (0%)	0 (0%)	3.79
18. Amount you learned in the course	5 (36%)	3 (21%)	5 (36%)	1 (7%)	0 (0%)	0 (0%)	3.86
19. Relevance and usefulness of course content	3 (21%)	4 (29%)	6 (43%)	0 (0%)	1 (7%)	0 (0%)	3.57
20. Relevance and usefulness of assignments	4 (29%)	5 (36%)	4 (29%)	0 (0%)	1 (7%)	0 (0%)	3.79
21. Reasonableness of assigned work	5 (36%)	4 (29%)	2 (14%)	1 (7%)	1 (7%)	1 (7%)	3.57
22. Relationship of exams to material emphasized	5 (36%)	4 (29%)	4 (29%)	0 (0%)	1 (7%)	0 (0%)	3.86

Relative to other college courses you have taken	Much Higher			Average			Much Lower		
23. Do you expect your grade in this course to be:	2 (10%)	6 (40%)	1 (10%)	2 (10%)	3 (20%)	0 (0%)	0 (0%)	0 (0%)	
24. The intellectual challenge presented was:	3 (20%)	6 (40%)	2 (10%)	2 (10%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	
25. The amount of effort you put into this course was:	3 (20%)	6 (40%)	3 (20%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	
26. The amount of effort to succeed in the course was:	4 (30%)	6 (40%)	2 (10%)	2 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
27. Your involvement in this course (asgn, atnd, etc) was:	4 (30%)	5 (40%)	3 (20%)	2 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	

28. On average, how many hours per week have you spent on this course, including attending classes, readings, reviewing notes, writing papers, and any other course related work?

Under 2	0 (0%)
3-4	1 (7%)
5-6	5 (36%)
7-8	2 (14%)
9-10	4 (29%)
11-12	2 (14%)
13-14	0 (0%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

29. From the total average hours above, how many do you consider were valuable in advancing your education?

Under 2	0 (0%)
3-4	2 (14%)
5-6	8 (57%)
7-8	0 (0%)
9-10	2 (14%)
11-12	2 (14%)
13-14	0 (0%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

30. Expected Grade

A	6 (43%)
B+	5 (36%)
B	2 (14%)
C+	0 (0%)
C	1 (7%)
D	0 (0%)
F	0 (0%)
S	0 (0%)
NC	0 (0%)
Other	0 (0%)

32. Class Composition

Fresh	0 (0%)
Soph	9 (64%)
Junior	4 (29%)
Senior	1 (7%)
Grad	0 (0%)
Other	0 (0%)

33. Wanted to take course

Yes	9 (69%)
No	2 (15%)
Neutral	2 (15%)

31. Course Was

In major	12 (86%)
In minor	0 (0%)
Dist. Req.	2 (14%)
Elective	0 (0%)
Other	0 (0%)

Student Responses to Open Ended Questions

Question #1: Was this class intellectually stimulating? Did it stretch your thinking?

- Yes-I was able to learn more about the computer and use that knowledge to simplify a variety of problems.
- Yes-Before this class I was not very good with computers but this class changed the way I thought about the problems.
- Yes-Yes coding is a like learning a new language so definitely challenged how i think
- Yes-This was a great class and it was taught well. After this class, I feel as though I have a much better understanding of MatLab and will be able to use it practically throughout the rest of my education. The projects were stimulating and the work was often challenging, but it helped advance my abilities with MatLab.
- Yes-It forced me to learn something new, a new programming language
- Yes-Let it be known, that I do not enjoy MATLAB. That said, Professor Schleter by far has the most organized and structured class of any in my experience. That makes a huge impact. He frequently assigns coursework that is interesting and stimulating, but the frustrations of programming in MATLAB are a whole other story to those lofty goals. Bottom line, I don't know anyone else to does so well with such generally difficult material. Also, the TA's were knowledgeable, helpful, and generally very enthusiastic about teaching.

Question #2: What aspects of this class contributed most to your learning?

- The in class lectures and the help sessions.
- Projects because you just have to figure out what you are doing. Learn by doing
- problem solving
- The projects contributed most to my learning. As much as I hated them at the time, they challenged me and forced me to really learn how to operate MatLab. Help was always readily available which made things a little easier, too.
- Lecture and homework
- The first half of the class.
- being able to work alongside instructors at computer. thankful for discussion groups during project time. instructors were very attentive to the discussion groups and providing extra study hours.
- Above all the great organization of the class. Objectives, deadline, grading all very easy, understandable, predictable. That is singularly the most important aspect.

Question #3: What aspects of this class detracted from your learning?

- No distractions
- nothing
- Nothing. This class was great.
- Learning about things that are irrelevant to engineering. Who cares about the number of pixels in a picture or how to change half the picture to red and the other to green. So many things taught in this class are not relevant to engineering fundamentals at all.
- would have preferred topics like in the last project to be spread out with other previous projects instead of all the small apps together at the end. seems like we are having to find too many things we didn't go over in class (ideas and concepts, yes - but not to this extent) in order to accomplish. would rather be studying for the final.
- Sometimes the projects became very time-consuming. Homework and test were fairly predictable, however, the projects were very difficult to anticipate the required time to complete each.

Question #4: What suggestions do you have for improving the class?

- No improvement needed
- The homework is a good gradeboost but more practice would be helpful instead if multiple choice
- nothing
- Maybe, explain the instructions a little more for the projects as they tended to be a bit vague.
- more help sessions
- Quit teaching how to do things in MATLAB that aren't helpful to engineering. Also, this is a two hour class supposedly. Last time I checked, a class that meets two and a half hours a week is a 3 hour class, not a two. I have two classes that meet twice a week for the same amount of time and they are both three hour courses. I put less work in to them too. It makes zero sense. Some of the TA's are helpful while others are more interested in insulting your intelligence and making themselves look more intelligent than you. It's annoying to be treated like a moron by somebody that has been in school longer but might have a lower IQ. Nobody should have to put with that.
- overall good.
- No suggestions. Professor Schleter has everything so very systematic.



THE STUDENT ASSESSMENT OF INSTRUCTION SYSTEM THE UNIVERSITY OF TENNESSEE				
Engineering Fundamentals 230	Sec # 50563	William R. Schleter		
Comp Solution/Engr Problems (LEC)	Fall 2012	Form G	# of Students: 7	

Questions	Excellent	Very Good	Good	Fair	Poor	Very Poor	Item Mean
1. Course as a whole	0 (0%)	0 (0%)	4 (67%)	2 (33%)	0 (0%)	0 (0%)	2.67
2. Course content	0 (0%)	0 (0%)	4 (67%)	1 (17%)	1 (17%)	0 (0%)	2.50
3. Instructor overall	0 (0%)	0 (0%)	4 (67%)	2 (33%)	0 (0%)	0 (0%)	2.67
4. Instructor's contribution to students' understanding of concepts	0 (0%)	1 (17%)	3 (50%)	1 (17%)	1 (17%)	0 (0%)	2.67
5. Course organization	0 (0%)	2 (33%)	3 (50%)	0 (0%)	0 (0%)	1 (17%)	2.83
6. Opportunity to ask questions	1 (17%)	2 (33%)	2 (33%)	0 (0%)	1 (17%)	0 (0%)	3.33
7. Explanations by instructor	0 (0%)	1 (14%)	3 (43%)	2 (29%)	1 (14%)	0 (0%)	2.57
8. Contribution to student's ability to solve problems	0 (0%)	2 (29%)	4 (57%)	1 (14%)	0 (0%)	0 (0%)	3.14
9. Use of examples and illustrations	0 (0%)	2 (29%)	2 (29%)	2 (29%)	1 (14%)	0 (0%)	2.71
10. Length/difficulty of homework assignments	0 (0%)	0 (0%)	4 (57%)	2 (29%)	0 (0%)	1 (14%)	2.29
11. Exams' contribution to understanding content	0 (0%)	1 (14%)	3 (43%)	2 (29%)	0 (0%)	1 (14%)	2.43
12. Instructor's enthusiasm	1 (14%)	3 (43%)	2 (29%)	1 (14%)	0 (0%)	0 (0%)	3.57
13. Textbook overall was	0 (0%)	0 (0%)	3 (43%)	2 (29%)	0 (0%)	2 (29%)	1.86
14. Answers to students' questions	0 (0%)	2 (29%)	3 (43%)	2 (29%)	0 (0%)	0 (0%)	3.00
15. Relationship between lectures and text	0 (0%)	0 (0%)	5 (71%)	2 (29%)	0 (0%)	0 (0%)	2.71
16. Availability of extra help when needed	2 (29%)	2 (29%)	1 (14%)	1 (14%)	0 (0%)	1 (14%)	3.29
17. Interest in whether students learned	0 (0%)	1 (14%)	4 (57%)	2 (29%)	0 (0%)	0 (0%)	2.86
18. Amount you learned in the course	0 (0%)	1 (14%)	4 (57%)	1 (14%)	1 (14%)	0 (0%)	2.71
19. Relevance and usefulness of course content	0 (0%)	0 (0%)	4 (57%)	1 (14%)	0 (0%)	2 (29%)	2.00
20. Relevance and usefulness of assignments	0 (0%)	1 (14%)	4 (57%)	1 (14%)	0 (0%)	1 (14%)	2.57
21. Reasonableness of assigned work	0 (0%)	2 (29%)	1 (14%)	2 (29%)	0 (0%)	2 (29%)	2.14
22. Relationship of exams to material emphasized	0 (0%)	1 (14%)	4 (57%)	0 (0%)	0 (0%)	2 (29%)	2.29

Relative to other college courses you have taken	Much Higher		Average				Much Lower	
23. Do you expect your grade in this course to be:	1 (10%)	0 (0%)	2 (30%)	1 (10%)	0 (0%)	1 (10%)	2 (30%)	
24. The intellectual challenge presented was:	2 (30%)	2 (30%)	2 (30%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	
25. The amount of effort you put into this course was:	2 (30%)	2 (30%)	3 (40%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
26. The amount of effort to succeed in the course was:	3 (40%)	2 (30%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	
27. Your involvement in this course (asgn, atnd, etc) was:	2 (30%)	1 (10%)	3 (40%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	

28. On average, how many hours per week have you spent on this course, including attending classes, readings, reviewing notes, writing papers, and any other course related work?

Under 2	0 (0%)
3-4	1 (14%)
5-6	2 (29%)
7-8	1 (14%)
9-10	0 (0%)
11-12	2 (29%)
13-14	0 (0%)
15-16	1 (14%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

29. From the total average hours above, how many do you consider were valuable in advancing your education?

Under 2	0 (0%)
3-4	2 (29%)
5-6	2 (29%)
7-8	2 (29%)
9-10	0 (0%)
11-12	1 (14%)
13-14	0 (0%)
15-16	0 (0%)
17-18	0 (0%)
19-20	0 (0%)
21-22	0 (0%)
22 or >	0 (0%)

30. Expected Grade

A	2 (29%)
B+	1 (14%)
B	1 (14%)
C+	0 (0%)
C	1 (14%)
D	0 (0%)
F	2 (29%)
S	0 (0%)
NC	0 (0%)
Other	0 (0%)

32. Class Composition

Fresh	0 (0%)
Soph	5 (71%)
Junior	1 (14%)
Senior	1 (14%)
Grad	0 (0%)
Other	0 (0%)

31. Course Was

In major	6 (100%)
In minor	0 (0%)
Dist. Req.	0 (0%)
Elective	0 (0%)
Other	0 (0%)

33. Wanted to take course

Yes	1 (14%)
No	3 (43%)
Neutral	3 (43%)

Student Responses to Open Ended Questions

Question #1: Was this class intellectually stimulating? Did it stretch your thinking?

- Yes-very challenging class
- No-I hate computer programming
- Yes-It could help as a review for other engineering related studies
- No-I've taken programming classes before, and this class missed the mark. Not only is the online lab information relatively pointless, examples are poor.. In programming, I think people learn best from running good, simple, working programs that convey simple concepts. I found the examples lacking, and not very much on topic. I found the intellectual challenge was lacking, the grades were more about the TA's showing off how much they know about matlab, and how fast you can write a program. When did programming become a matter of how quickly you write a program? Good code takes time, and a timed test of knowledge shows little indication of knowledge of concepts, it shows who has a photographic memory and who doesn't.
- No-An expansion on EF105.
- Yes-the computer programing thing just doesn't come naturally so it takes me a while to get the hang of things.

Question #2: What aspects of this class contributed most to your learning?

- the in class examples
- looking at my patchy files from class because i could not copy everything the instructors were doing to get all the notes within it too that are not available if you dont get it rite then in class
- The labs
- A combination of the discussion boards, and my own research of how to do most everything
- Homework assignments.
- coming to class and following along with the lessons.

Question #3: What aspects of this class detracted from your learning?

- nothing
- forcing myself to learn something i hate doing
- none
- The projects were just too long.. I worked over 40+ hours on one project, and I have CBE classes as well.. I feel like I had to neglect some of my other courses to learn new concepts I wasn't taught in class to get my program to work.. Please stop assigning projects that contains things that were NOT covered in class.
- labs.

Question #4: What suggestions do you have for improving the class?

- none
- None of the homework assignments made me remember anything that was presented. we should have to write a lot more code for homework problems instead of writing basically none.
- MORE HELP!! On the two days there were help sessions, they were at 5:30pm and only one TA is present.. When there's 40 people in the room, one TA isn't going to be able to help everyone. I applaud the TA's that did try to help. This class needs to be reformatted, a paper book of comprehensive knowledge with examples needs to be written, and lets try a paper test with fill in the blanks, or multiple choice to test knowledge of concepts.. Writing 4 progrmas in 75 minutes is just very challenging to those of us that don't have a knack for programming or a photographic memory.
- Turn the labs into more of a help session. Many if not most of students can be seen with screens on websites other than the ef website during labs. If we could work, ask our own questions, and have a bit more freedom, at least some of the students would become more involved.
- go over the project material more