College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

Question	Mean	Count	1	2	3	4	5
1. How valuable were the assigned readings? 1=taught me little; 5=extremely educational	2.60	25	5	7	8	3	2
2. How valuable were the homework and/or computer assignments? 1=taught me little; 5=extremely educational	3.00	52	8	8	16	16	4
3. How valuable were the laboratories? 1=taught me little; 5=extremely educational	4.00	52	1	2	10	22	17
4. Rate the examinations in this course as a test of your knowledge. 1=too easy, not adequate; 3=adequate; 5=too difficult, not a fair test	3.78	50	3	4	9	19	15
5. Did the lecturer stimulate your interest in the subject? 1=not at all; 5=stimulated great interest, inspired independent effort	2.75	52	8	15	14	12	3
6. Was the lecture presentation organized and clear? 1=disorganized and unclear; 5=very organized and lucid	2.42	52	9	18	20	4	1
7. Was the lecturer willing and able to help you overcome difficulties? 1=was of no help; 5=was very helpful	3.17	52	4	11	16	14	7
8. Rate the overall teaching effectiveness of your lecturer compared to others at Cornell. 1=worse than average; 5=much better than average	2.46	52	14	13	15	7	3
9. Was the recitation organized and clear? 1=not at all; 5=very organized, lucid	3.63	30	0	4	9	11	6
10. Was the recitation instructor willing and available to help you overcome difficulties? 1=was of no help; 5=was very helpful	4.10	31	1	1	7	7	15
11. How would you rate the recitation instructor's command of the course material? 1=poor command of material; 5=excellent command of material	4.41	32	0	0	5	9	18
12. What was the overall quality of the recitations and your recitation instructor? 1=worse than average; 5=much better than average	3.97	31	0	2	8	10	11
13. Overall, how does course compare with other technical courses you've taken at Cornell? 1=poorly, not educational; 5=excellently, extremely educational	2.71	45	9	9	16	8	3
14. How many hours each week did you spend on this course outside of class/lab/recitation? 1=less than 2; 2=(2-4); 3=(5-8); 4=(9-15); 5=16 or more	3.42	52	2	3	22	21	4
15. How prepared were you for this course? 1=overprepared, it repeated material; 5=underprepared, course assumed unfamiliar knowledge	4.00	52	1	1	14	17	19
16. Was the code of academic integrity maintained in this course? 1=no, often violated; 5=yes, well maintained	4.61	51	0	1	4	9	37
17. Most important reason for taking this course? 1=field or major requires it; 2=prerequisite for further courses of interest; 3=interest in subject matter; 4=reputation of the course; 5=reputation of the instructor	--	52	9	1	42	0	0

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   **Course Owner   MAE**
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

---

1. Please comment on the strengths of any aspect of this course (e.g., the lecture, recitation, laboratory, computing, text, homeworks, examinations or course content).

41784: This course helped introduce many aspects of mechanical engineering. Its homeworks were very thought-provoking.

42426: the lecture was always intriguing..and andy is fun to listen too/watch

42643: The lectures were taught in a very personal, engaging way, and the labs were engaging and interesting. The material, especially the computing, were challenging, but mostly in a good way so that I will be better prepared for similar material in the future.

43320: The laboratory was helpful. I liked this hands-on aspect.

43350: TA's were helpful.

43364: Lab is fun and hands-on.

43368: I liked that lecture was recorded and posted online. Being able to go back and repeat certain parts helped with absorbing course content. Also, most of the labs were interesting and fun without being terribly difficult.

44555: Most of the labs were interesting and useful, reaffirmed that I wanted to do Mechanical Engineering

45182: The lab experiments for this course were very interesting and thought provoking. Posting the lecture videos online was very helpful. My TA was a very helpful in explaining confusing concepts from lecture.

45192: Labs were interesting and insightful.

45293: The guest lecturers were very good and made me interested in various aspects of engineering. I really enjoyed their lessons.

45794: This course was the only course I've taken that focused more on the learning process than on what we were learning. We were forced to struggle through unfamiliar territory and approach the class unlike any class we had ever taken. Without a textbook or recitation, I was forced to go to office hours, ask questions before/during/after lecture, and ask my classmates for help. As I result, I became comfortable asking for help. I learned to start homework early so that I could go to office hours and fill in the gaps in my homework. I built a lot of relationships with my classmates as we all worked together to complete the work assigned.
The assistance provided by my TA (Justin Fishbone) and the head TA (Anoop Grewal) was very helpful and encouraging throughout the course. They took the time to address any question, but they tended to direct our thoughts so that we could find the answer instead of just giving us the answer. They helped us grow as engineering students as opposed to simply help us survive the course and move on. Their help was integral to my success in this course even as I began to rely on them less as the semester progressed.

46067: Labs were good, helped us understand aspects of Mechanical Engineering

46068: The lecturer did stimulate my interest in the subject; however, I realized that the subject matter and the design process did not feel natural at all to me, and thus I couldn't get as much out of it as I would have liked to.

46127: The teaching style was effective and different.

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

46265: Fun final project, I enjoyed the freedom given in our assignment.

46276: The lab is excellent. Brian is the best TA i had this semester and he helped us a lot with both the first half of semester labs and our car. The car competition was fun and I probably learned more from it than anything in the lecture. A few of the guest lecturers were great (e.g. Prof. Kirby and Prof. Petrina).

46466: The labs

46533: very interesting material and i like the emphasis put on the process of learning rather then simply memorizing and spitting back what the professor says.

46536: The laboratory experiments were really helpful as they cleared and helped understand the lecture.

46607: The labs and final project we did were a great learning experience for me challenging me to be innovative and to solve difficult problems on my own and with the help of classmates. Additionally, it provided a way to apply what we learned in class and other classes to the real world. Additionally some of the homework, though extremely difficult at times, helped me learn about the subject material and my own limitations and as a result has made me a much better student.

46651: Prof Ruina has amazing grasp of the material. The labs were informative and at times, actually pretty fun. The guest lecturers were excellent.

46684: The main strength of this course is that it puts students in the engineering state of mind. It teaches students how to attack a problem using all of the knowledge that they have previously obtained. Also, the labs were very hands on and focused on interesting engineering concepts.

46705: -Lectures were online and could be viewed again: helpful
-Head TA Anoop was very helpful with everything

47012: The homeworks were challenging and were not straight forward. They were interesting to do because they forced to think and think hard.

47035: Peaks ones interest in Mechanical Engineering.

47222: The laboratories seemed most pertinent to my expectations of this course. They allowed me to truly see what Mechanical Engineering resembles, and the experiences will be very useful when it comes time to identify with a particular major.

47233: The greatest part of this course is that the homework is very flexible and the labs are worthwhile. The labs such as dissembling of a tool, robolab, and car competition were all very intriguing and fun.

47255: Labs were straight forward, and our TA was great. He made the concepts easy to understand. This was the best part of the class.

47275: labs stimulated interest in subject and were enjoyable.

47295: Homeworks required much work, but weren't very hard.

47332: The labs were really fun.

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

47608: The main purpose of the course seemed to be an effort in how to teach us how to solve problems. This was achieved, not very well, but through much arduous work and drudging through difficult problems. The TA's were also very helpful.

47609: The TA's in this course were very helpful when it came to preparing for tests and explaining the homework assignments. They were also very easy to get a hold off when needed.

47755: The labs were very interesting and they actually increased my interest in mechanical engineering. The final car project was a great way to end the course. It allowed us to apply what we have learned throughout the year in order to design and assemble a working car.

47787: The labs were interesting, and the Anoop was a very good TA.

47852: My TA, Anoop Grewal, who is also the head TA for the class, is an outstanding instructor. He was ALWAYS willing to help, and he never took an authoritatively cold stance when dealing with us. Actually, he seemed more like "one of us," but we all respected him as an instructor because he deserved it.

48340: I really liked the method of teaching the instructor adopted. The "MacGyver" method as I felt it is correct and that is the way things are done in real life.

48466: The homeworks helped greatly for the tests and examinations. I liked how the lecture videos were placed online for review purposes for exams.

49079: The lectures were interesting and held my attention. The homework was a pain but I do think I took something from it. The first exam was fair.

49340: Labs were very fun, especially the hands on ones where we built machines, also the car project and the guest speakers

49781: The labs we had each week were usually interesting and helped me to understand the material. I enjoyed the final project (building an electric car) but wish we would have been given more lab time to work on it.

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

___

2. Please comment on the weaknesses of any aspect of this course (e.g., the lecture, recitation, laboratory, computing, text, homeworks, examinations or course content).

41784: The lectures and homeworks seemed unorganized, since the material seemed to be "jumping" from one point to another.

___

42172: Lecture should have been based on a syllabus

___

42426: the course jumped into MATLAB way faster than I was comfortable with

___

42643: Homeworks were overly challenging and often impossible without extra help, because the lectures covered the advanced material too quickly for me to understand it the first or even the second time through.

___

43320: I felt like Professor Ruina assumed we knew things that we didn't. It was hard to follow his logic sometimes.

___

43350: The lectures were not well organized, and the material is not taught well. The homeworks included unnecessary and incredibly difficult problems. Much of the material doesn't feel like it will be useful to me in the future, and the stuff that will was taught poorly and unclearly. The final project is unnecessarily stressful and not well designed, making the course the worst I have taken thus far at Cornell.

___

43364: The material is very confusing and hard to understand and the homework was very difficult.

___

43368: The amount of MATLAB knowledge that we were supposed to have for this course seemed unreasonable. The tutorials at the beginning of the year didn't help with the type of problems we were supposed to solve using MATLAB. While many people were able to pick up on the syntax, students without programming experience were completely lost.

Also, the idea of doing different versions of the same problem for homework every week didn't appeal to me. While starting simple and developing into something more complicated was a good idea, it can become frustrating for the student to work with the same problem for an entire semester.

___

44555: The lecture, homework, examinations, computing, just about everything but the labs seemed an almost waste of time. Most of the work could only be done by guess work and never truly understood what was being done, and most of the time the guess were wrong. Worse, none of the actual material in the class is suppose to mean something, just the "philosophy" of the "Macgyver Style". While this is admirable, the homeworks cause more frustration than anything, as one works on it for hours, knowing what they are doing is completely wrong, but can't help it. Finally, after about 7 hours one than gives up, feeling as though they just wasted a good solid block of time where they could have been doing something more productive.

___

45182: The lecture notes for this course was difficult to understand and unclear.

___

45192: The lecture material was poorly organized, confusing, and too difficult. There was no natural progression of subjects and so the material was random. The homeworks were entirely too difficult and it was hard to complete them in any resonable amount of time even when I worked with classmates. It was assumed that we had prior knowledge of MATLAB, differential equations, and 1112 level physics as freshman.

___

45293: The lessons were completely unclear adn i was totally confused about what was going on in the class throughout the whole semester.
This is supposed to be Introduction to Mechanical Engineering, to see if you are interested in what mechanical engineers do, and i honestly have no idea what mechanical engineering is after taking this course. Not exactly what you're supposed to get out of it.
Prof. Ruina expected us to have an advanced physics background in order to solve the homework problems, though physics is not listed as a pre-requisite for this course. This was challenging and unfair in my opinion.

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

When a professor says "we dont have prelims or a final in this course" and then gives you a final on the last day of class that he tells you about one week before- FINALS WEEK is for finals, just be clear abotu what you're going to give us from the start

45794: As a result of the focus on process over mastery of material, I was often frustrated as I struggled through the work. Coming in with no computer programming experience led to a difficult transition into the large amount of matlab work required for the class. There was no way to track grades as the class progressed, and homework solutions were not accessible until the last week of class as we prepared for the final in-class exam. It would have been much more helpful for the homework solutions to be posted the week following the homework so that gaps in understanding could be filled instead of allowed to expand as assignments became more complex. I do not feel like I have mastered the material covered in this course, but I definitely have a stronger learning process, which I think was Prof. Ruina's goal all along.

46067: Homework was very confusing and not adequately explained.

46068: The final, while definitely a test of knowledge from the semester, did not allow enough time to do all the questions even if you did know how. There were too many, most of which required lots of detailed work.

46127: Some of the material was boring, and some of the labs seemed pointless.

46265: Homeworks and examinations were over the head of almost all of the students in the course. Much too difficult.

46276: The lecture in this class was confusing and often not helpful or very educational. The theory of "Macgyver" that Prof. Ruina uses in class is aggravating. We didn't have a textbook or very helpful lectures. Without giving us very much guidance for homework, we were expected to figure out complex problems by ourselves. Also, MATLAB is used extensively in this class, though almost no one out of the 60 students has computer programming experience. This is another example where we were asked to basically just figure it out ourselves without any helpful guidance. I would like to have known about the structure and topics in this class but there is no syllabus. We just went through the semester jumping from topic to topic. Except for the lab, I do not feel this class was in any way satisfactory.

46466: Lecture, homeworks, and examinations

46533: while the challenge is definitely interesting and fun, the pace of some of the lectures was too fast

46536: Homework is very challenging

46607: I did feel that the lectures initially were a bit random at times. Though knowing how to calculate buoyancy is important I don't think it related well with the rest of the material we covered.

46651: The HW was overkill. This class felt like a weed-out class.

46684: The major weakness of this course was the lack of clarity and speed of the lectures. There were many times throughout the course when I felt as if the instructor was throwing variables up on the board and randomly coming to a conclusion about them. With the speed of the lecture, I could not catch up or even formulate a question as to what I was confused about. Another aspect of the course that I did not like was the lack of a textbook. Although I attend lectures in my other classes, I have discovered that I learn the most when I read through and analyze the textbook. Therefore, I found difficulty in trying to learn topics in this course because I had to rely heavily on lecture notes and videos. I understand that the motivation for no textbook was so that students could understand how to attack problems without having been previously shown how to solve them. However, I would have had less difficulty and would have understood the material more if the course had an accompanying textbook.

46696: It was sad that matlab was included in the course. Those like me with little knowledge of matlab were left

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

helpless and I found that unfair.

46705: -Homework was much too hard most of the time
-Instructor assumed that we had pervious knowledge about computer science and physics when many of us had not, which made us struggle during homeworks
-At the beginning of the course, it was state that there would be "No finals, no prelims. No tests, possible quizzes". However, having the "final quiz" was basically like having a final exam with less time (it was much too time-pressured) and was stressful because there was other work due the same week. If it was told to us earlier during the semester it would've been more fair.
-No actual textbook or readings (aside from the Matlab tutorials) made this course extremely difficult to study for and review
-Lectures were too quickly paced most of the time
-There was more on guest lecturers on the "final quiz" than there was on what we had learned most of the year, which I felt was very unfair.
-Some lab TAs could not help us on homework confusion at all during office hours, only Anoop could really clarify things.
-Some announcements were given much too late (ie. midnight the night before for clarifications, HW was assigned on Sunday night to be due Tuesday which took away all weekend time, ect.)
-This class, an introduction to engineering class, turned out to be the hardest, most time consuming, and most stressful class I took first semester, which is not what I expected
-Final quiz was announced right after Add-Drop period, which was in my opinion unfair (because you said the first week there would be no final)
-No syllabus. Having one for next be a guarenteed help to students next year.
-Lack of concrete grading system was not helpful

47012: We spent too much time covering the same material. We had tons of lecture time devoted to fairly straightforward topics.

47035: Very dfficult homework and examinatons.

47222: The lecture assumed too much prior knowledge of course material. Although some students seemed adequately prepared to undertake the assignments and understand the lecture, there was a large number who took very little from the lectures. Although Prof Ruina took time to let the class ask questions throughout lecture, the fact is many students were confused to the level of not knowing what to ask to better comprehend the topics. The material proved to challenge almost every student in the class to a certain level, but to some it was so extensive that they took little knowledge from the course. The "quizzes" were fair in that all of the questions were reviewed multiple times in lecture, and the grading in general seemed to be fair. It is my suggestion not to lessen the amount or level of material in the course, but to provide supplemental instruction in some basic concepts covered in lecture that students can seek out and take advantage of if and when needed.

47233: The lectures were disorganized. We talked about gears for almost half of the semester, but most of the people still barely understood it. The homework was extremely difficult, and we never know if we got the right answer or not until the last day before the final exam. I wish there was solution after each homework so we could at least get the next one correct. The first exam was very easy, fairly adequate. However, the second exam was far too impossible with the time restraint. You can barely test the knowledge of the course in such rush.

47255: This course was executed horribly. The lecturer made topics unclear and overly complicated. Many students suffered through the matlab portion of the class even though, because they had not taken any sort of computer programming prior.

The lecturer made tried making lessons "intuitive", but only served to confuse even the people who knew the topic beforehand. We confronted with this, he defended his methods. Periodic surveys during the class did not seem to affect the teaching methods at all.

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

Homeworks were extremely long and difficult, largely because of a lack of reference material. Lecture videos were great, however they were too fast and assumed to many things to be of good use. We spent entirely way too much out of class, doing homework.

47275: Homework was difficult. In someways this is good because it challenges the student; however there is fine line between challenging and way too hard. Homework in this class was at times way too hard.

47295: The lectures entailed material I already knew.

47332: The lecture is completely unrelated to the lab. And the lecturer spends far too much time caught up on math problems. I feel like it would be better to expose students to all of the aspects of mechanical engineering instead of just problems about diffeq's and bikes.

47608: It seemed like Professor Ruina's lectures were a little jumbled, almost as if there hadn't been enough thought put into them ahead of time to make them as effective as they could have been. The homework assignments also seemed to take five times longer than they could have to teach the same lesson.

47609: The homework assignments in the course required too much time. Each problem on its own could very easily take up to four hours to solve and at least three problems were assigned each week. Also the instructor in this course tended to jump from topic to topic which made it difficult to understand what we were learning.

47755: I believe that the homework amount and difficulty was the weakness of this course. Some of the homework was very difficult to do and took over 10 hours to complete.

47787: The way this course was taught only made me dislike Mechanical Engineering. Ruina's self named "bang your head against the wall until you figure something out" style of teaching was pointless and annoying. I feel that we were unprepared to do the homework, as we were taught very little in lecture. Ruina prides himself on giving us one hard problem to solve, which is way above our current skill set. If we were taught and given work based on our level of knowledge at this point in our academic careers the course would be much more manageable, but instead we fumble around with the homework for 6 hours getting literally no where before we give up in desperation, only for him to show us how to do it the next day in 5 minutes. Had he taught us the information before hand, the homework could reinforce what we learned, but instead the homework just wasted consistantly 6 hours a week of my life in addition to lab reports, ultimately teaching me nothing. It is not an effective way of teaching and only makes one dislike the course instead of being interested in learning the material.

47852: Honestly, this was one of the most unorganized, unnecessarily confusing, and arbitrarily work-intensive classes I have ever taken. Professor Ruina seems like a genuinely good guy, and he clearly has mastery of the subject material (whatever that material actually is - we jumped around more than a kangaroo on a coal bed). Yet, he could not have made this class any worse than it was.

It started well enough; in fact, I actually understood most of the beginning material: buoyancy, volume of a partially-filled sphere, and Young's Modulus, to name a few. Then came the quiz. I cannot stress enough how that was the turning point in both my understanding of the course material and in my (and most of the class's, whether they'll admit to it or not) opinion of Professor Ruina. For nearly the entire drop period, he boasted how his class had "no tests," and we were ecstatic. Then, right after fall break, we were given a "quiz." A quiz worth 160 points. Lab reports and homeworks are worth 10 points each, according to Blackboard. This was not a quiz - it was basically an in-class test. And it was much harder than anything we should be expected to have known at our level.

It's easy enough for Ruina to claim that we should ideally be able to reproduce his derivations on the board after reviewing our notes, but reality does not work that way. He expected much more out of us than was reasonable - and I am by no means a slacker; the rest of my courses this semester were fairly easy, in my opinion, but this course was, for all intents and purposes, not fair. The course flew downhill from there, because we stopped learning topics that actually made some semblance of sense and started the infamous "bike" half of the course. This material was especially

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

unreasonable because it assumed knowledge of physics properties such as angular velocity and advanced torque principles that many of us, myself included, had not been introduced to. And he did not introduce us, either - he dove right into derivations and applications of those topics. Yes, there were office hours, and yes, I did go, often - but that wasn't good enough, because Ruina took off at a lightning pace and left most of his class in the dust. The homeworks, too became increasingly complex to the point where we would spend an average of 7 to 10 hours on each problem set, and we would still have errors. Yes, I know this is a common plight for engineers, but this is an "Introduction to Mechanical Engineering" course, for goodness sakes! Even my Mechanics of Solids friend gawked when I told her the amount of time I pour into this class, and for what? The majority of the grade, if it's based on any kind of point system, will be determined from the quiz (which is a test, which Ruina EXPLICITLY PROMISED we would not have). And the final was a joke. He wanted us not to stress about it? Has he forgotten what it was like to be a student? We were basically given a final in the last week of classes, which, as far as I know, is not allowed. Yet, it is not a violation of any such rule (if it exists), because it was called a "quiz." Whatever that abomination was, it wasn't fair. What kind of measure of our course knowledge asks more about guest lectures than about the actual course, or has a question about the kinds of things you can order from McMasters, or asks about a specific guest lecturer by name only (are we supposed to memorize names, too?)?

I apologize if this sounded like an unreasonable vent of frustration, but that is what I am trying to get across. The primary thing I got out of this class was frustration. It honestly led me to consider computer science and ECE with equal weight as Mechanical, even though I was pretty set on the latter before taking the course.

So, for improvements:
-No more unfair quizzes. Make them less points (or just call them tests so that it isn't as sneaky), revise their ridiculous content, cut them out completely - whatever it takes.
-Try to make the homeworks more palatable. I understand what you were trying to accomplish (ie: that whole "banging your head against the wall" thing), but that is no excuse to give 10-hour problem sets in an intro course, which I feel may be a byproduct of your having come from teaching higher-level courses.
-Have a set goal. Don't be as random with your subjects. The bike material was good only in that it showed clear focus; but that's about the only positive comment I can make about that.

Thank you for taking the time to read this, and I hope you take my comments to heart.

48340: I didn't like the final quiz at all, not because it was tough. But because it defeated the whole "MacGyver" approach that was stressed on during the entire semester. The only way to finish that quiz in time and do it correctly was to memorize some formulae. There was hardly any deduction/application.

48466: The homework was often too difficult and beyond the scope of what was covered in class.

49079: The homework got frustrating a times. The second exam was difficult and definitely a time pressured test, despite reassurance that it would not be.

49340: the curriculum was too random and covered way too many topics, too much emphasis on matlab, when this is a mechanical engineering course

---

49781: I did not have a good experience in this class. Though the professor obviously knew the subject matter extremely well, he taught at a level too high for the course; it seemed like he expected us to have knowledge that I did not have. For example, I felt like I was at a disadvantage because I had no previous programming experience. Although the professor provided us with tutorials to work through so that we would learn MATLAB, the tutorials were ineffective at teaching the skills we needed to complete homework assignments and test questions. It would have helped me if the professor had gone over what was in the tutorials in class. Many times throughout the semester, I knew that a command existed and what it was used for, but I was unable to actually write code with it because I did not know the correct syntax. If we had gone over syntax before doing problems with commands, the problems would have been much easier to understand and follow.

I think this course would have benefited from a textbook and syllabus. Because there was neither, it was difficult to understand the significance of what we were learning and what from class was most important.   I never knew in lecture

College of Engineering, Cornell University
Course Evaluation Response Summary
Semester: Fall 2009   Course Owner   MAE
Course: ENGRI 1170 Lec 1   CID: 5819
Instructor: Ruina
52 Responses, 60 Enrolled, 86.67% Response

if what we were learning was the idea the professor wanted us to remember or if it was just proving something he would get to in a future lecture. While of course everything in a class is important, not knowing what the professor was trying to emphasize made it difficult to do homework and exams well. The lack of a textbook and syllabus also gave me few resources when I was struggling to understand the course material. I went to my TA for help with homework, but because he was not given the solutions, he did not know for sure if what he was saying about the problems was correct. I also went to the professor for help; while he was enthusiastic about helping me to understand the material, he explained it in a similar way to how he had in class so I still had a hard time with certain concepts. A textbook would have allowed me to read about what was being taught—it would be another source to turn to when I was having difficulty with the material.

I thought the homework was too challenging for an introductory course. The professor made it clear that his philosophy was for us to learn by getting frustrated but then figuring out a way to do the problems. While I think this is an ok philosophy to an extent, the homework was so challenging that rather than making me feel determined to find a way to figure out the problems, it seemed impossible and made me dread working on it each week. I attempted all of the homework problems as best I could and went to office hours, but I don't feel like I learned very much from the assignments. It would have helped me if the professor had assigned easier problems and then increased the difficulty of them with time; instead, the initial problems were so challenging and time consuming that more difficult problems seemed hopeless. Starting out with easier problems would not have hurt me as a student or made me care only about grades and not about learning. They would have helped me to understand the material we were learning enough that I could apply my knowledge to more difficult problems. Also about the homework—it would have been helpful to me if homework solutions were posted. Because we never had access to the correct answers to the homework (the only solutions we received this semester were emailed to us the day before our final exam), I was not able to go over past homework and see where I had made mistakes.