SOI Report: Fall 2016

Charles O'Neill (AEM 313-001 Aerodynamics)

Question	Num Resp	Resp Rate	Mean	Std Dev	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
The procedure for grading was fair.	47	58%	4.30	0.69	4	2%		44%	12%
The course was a valuable learning experience.	47	58%	4.57	0.80		70%		21%	% 6% <mark>2%</mark>
The instructor was									
an effective communicator.	47	58%	4.21	0.93		51%	2	23%	21% <mark>4%</mark>
accessible to students outside of class.	46	57%	4.78	0.51	82%			13% 4%	
well-prepared for class.	47	58%	4.81	0.45	82%			14% 2%	
Question	Num Resp	Resp Rate	Mean	Std Dev	Α	В	C D	F	Other
What grade do you expect to receive in this course?	47	58%	4.27	0.66	36% 46%			10% 6%	
Question	Num Resp	Resp Rate	Mean	Std Dev	Excellent	Above average	Average	Below average	Failure
How would you rate this course?	47	58%	4.13	0.88	40)%	36%	6	19% <mark>4%</mark>
How would you rate the instructor of this course?	47	58%	4.36	0.79		51%		38%	6% <mark>4%</mark>
Question	Num Resp	Resp Rate	Mean	Std Dev	Always	Usually	Often	Sometimes	Rarely
How frequently did you attend class?	47	58%	4.87	0.45			91%		4% 4%

Any additional comments about the instructor.

I would recommend that he work through more examples in class, in order to allow students a demonstration of how to apply some of the concepts in problems that we will see in homeworks and tests. I definitely don't believe that he should teach only the problems on the test as real world application of these concepts are more important, but I would have liked to see a better balance of test problem-like application and real world application, as opposed to leaning very heavily toward real world application. I would also say that he should use a microphone. I sat in the front so I could hear him without any issues, but for those in the back, it would be hard to hear him.

Dr. O'Neill is one of the best professors I have had in my college career hands down no questions asked. He's always prepared for class, brings in great real world examples, and can teach very very well. I wish he could teach all of my aerospace classes to be completely honest.

His tests were very hard and really challenged you to know your stuff and work at it. He graded the tests fairly and always strove to give us a grade that reflected what we actually knew. His style of teaching was great, since his hand written notes could show pictures and drawings that you just can't get in a textbook or in canned slide shows.

Overall, Dr. O'Neill is the best professor I have had this semester, and probably in college. I have learned so much from his class, and I know I will remember long into my professional career.

Dr. O'Neill is an extremely brilliant man. He communicates well during lectures and generally makes things interesting. This is his first semester teaching this class so there have been a few bumps in the road. He began by teaching too much material far too quickly. Thankfully he adapted and has been excellent since.

Dr. O'Neill genuinely cares about his students and wants to see them succeed.

Dr. O'Neill Is an amazing teacher and extremely knowledgable. He was very helpful outside of class and was willing to take as much time as you needed to answer questions. His office was always open. Excited to take another class with Dr. O'neill.

Dr. O'Neil is a high quality teacher. He cares for his students, and is genuinely interested in his field of work. There were many times where it was hard to understand his teaching, but other than that, I thoroughly enjoyed his class.

Difficult to hear near the back of the classroom. Was often difficult to keep up in class as the notes he used to teach were pre-written. the notes were seemingly scrolled through and more productive worked out examples should be used in class. Although the we were told the second test would be easier than the first and was much more difficult, Dr. O'Neill was well mannered, intelligent, and fair. New note system highly encouraged.

Couldn't hear anything if you sat behind the first 4 rows of the class because he spoke so softly. Also, no examples in class were ever gone through so when it came to homework and test problems it was very difficult. The amount of material talked about in class was way too much to digest with the way he teaches the class. Very disappointing

Always accessible outside of class, which was great.

I genuinely enjoyed Dr. O'Neill's lectures, however I do have some constructive criticism as I will be taking AEM368 with him next semester. The lecture notes in class were difficult to follow as they were pre constructed and often times skimmed through during the lectures. This made it difficult to pay attention and figure out what was proof material and what was vital information to take in. He did post the notes online, which is very helpful, but if the information was not clear in class, it was harder to discern alone. I wish we had done more in-class problems to help solidify the material and its relevant uses.

Other than this, Dr. ONeill did a great job with the course and was very fair with material assigned (while it was still challenging). Going into next semester with him it would be nice to see more in class assignments and a revision to the note system to help students retain more of the material.

He is very helpful and works with the students. Its hard to hear if you are in the back, but that's my only complaint.

He is a wonderful teacher, knows his material, and is very knowledgeable. If students aren't understanding the information he will explain it in a different way until we do. He is an amazing professor and I would love to have a class taught by him again.

He does not need to put so much weight on multiple choice sections of his exams if they are going to be extremely complicated and have multiple answers. He could either speak louder or have a microphone too, since its hard to hear him in the back.

Any additional comments about the instructor.

He did a great job of walking us through difficult topics and was always eager to answer questions. He was extremely helpful when I would go into his office and answer questions.

Great guy, fun class, one of best professors I've had in my time at UA

Genius guy. A lot of lecture information went over my head, but made sense once I worked out homework problems and looked in the textbook.

Dr. O'Neill makes very difficult tests. Although his tests are curved I don't think they're an accurate representation of our grades because you run out of time to take the tests so you don't have enough time to even give all the multiple choice or written-out problems a solid go. He covers a lot of material and doesn't show very many examples to complete the homework with a good grade. To his credit he makes a point to say he is available to talk to you or help you in his office hours

Dr. O'Neill is very good at making topics exciting that would normally be dull. He is also very knowledgeable and willing to answer any question that could possibly come up. If he did not know the answer, he would let us know the next class. Overall he made learning very fun and I always looked forward to attending class.

I would very much appreciate if you would upload the notes earlier. I like to have them printed the night before class, but sometimes I wasn't able to access the notes in time to print them.

Incredible professor, explained conceptually complex theories well. He is very energetic and passionate about the material and makes it interesting to sit and listen to his lectures. I enjoyed how he used examples from his experiences to give application to the concepts we studied in this class.

It is clear from AEM 313 that Dr. O'Neill is very knowledgeable about the course matter he teaches. However, I wish he had more example problems / worked out solutions in class in order to better understand the complicated material that the course was teaching. I felt like a lot of the material taught in class was either conceptual or just the derivation of equations, and I have a hard time taking the equations and concepts and applying that to real-world problems without having examples of their applications.

It is difficult to hear beyond the second row. The instruction is good and interesting but it doesn't really help if you cannot hear.

Knows the subject so thoroughly that he doesn't know how to make an easier test. I know that he considers all of it absolutely enthralling, but it would be nice if he made it a little clearer which concepts were most important.

Please use microphone because the classroom is very big!!!!

Probably the best instructor I've ever had. He obviously put lots of effort into his teaching and it shows. I really enjoyed his lectures; how he kept the concepts tied to real world situations and applications with examples and models, and the little jokes that were thrown in sporadically to keep people engaged. The class notes are extremely impressive, better than almost any textbook that I've used. He presents the topics in an approachable format while retaining real world context in a way that I have never seen achieved in textbooks or other classes. The only complaint that I can imagine people might have about Dr. O'Neill's teaching is that he can sometimes speak softly, and may be difficult to hear from the back of the room. He also expects more from his students than most professors which challenges everyone to gain a deeper understanding of the material than would otherwise be attained. He manages simultaneously challenge his students without making it difficult to get a good grade in the class. I enjoyed that his tests were very challenging, but general were followed by generous curves. I believe that this technique is better than most classes that try to dumb down that material to a level such that no curve is required. By making the tests more challenging, even the higher-achieving students can find holes in their understanding, prompting them to learn more rather than be complacent because they never got anything wrong. My favorite part was the glider project. I have been waiting for a design project since freshman year; a chance to actually apply and test what I have been learning to real physics. I learned so much more from working on optimizing an actual plane than I would have by only talking about it and plugging and chugging with a few equations. Spectacular teacher.

Professor O'Neill is extremely knowledgeable in the subject matter. He can be soft-spoken at times, which was not a problem in a smaller lecture hall but I could see it maybe being a problem in a larger classroom setting. The only critique I have of his teaching style is that it tends to be very derivation-heavy. I understand the important of derivations but I would have preferred a better balance of derivations and examples. Other than that, I enjoyed his lectures, especially his drawings and use of youtube videos. Visuals are key in this class and he did a great job of utilizing them.

Any additional comments about the instructor.

The course was very difficult. One of my hardest classes on campus so far, however, the professor was very fair. He recognized the difficulty in the material and graded accordingly. More importantly, he made sure we all understood the material. He office was always open to questions or concerns and he would spend extra time in lecture on items he knew people in the class were struggling with.

The one thing that I can complain about is that he requested a a 4 page paper due 17 hours before the turn in date. This was after numerous emails prior to this. All of the students were wondering what content and format to use. He relayed this information very quickly.

The room was awful for this class. Do not use it again.

the test were some of the hardest test I have taken, but you expect that with the class. I am glad he is taking the multiple correct answers on the final because that did mess with my mind a lot.

The tests were too difficult, especially exam 2. I do not feel like my test grades reflect my knowledge of this course. Really enjoyed having an instructor with Dr. O'neill's passion and love for what he does. Exams are to reflect what you have been retaining in a course. I think the level of difficulty of these exams isnt telling the instructor who knows what they are doing and who doesnt. If you fail everyone because the exam is too hard, you cannot get a true reflection of who knows what they are doing and who doesnt. This is how the majority of the class is at a B.

This guy really knows his stuff and looks at everything from the industry side of things, which is very different from our other mostly theory based classes. Dr. O'Neill was always extremely prepared for lectures and I feel like this is the first class I've had in the AEM department that has given me material and resources that will be directly applicable in the work force.

Very organized/well prepared. Lectures are often difficult to follow as they are mainly mathematical theory and do not have many examples. I would prefer taking notes along with Dr. O'Neill's dicussion rather than reading his prepared notes. Dr. O'Neill was easy to speak to outside of class and always provided help.

Very well versed professor, always prepared to class, posts all notes, does his job very well.

one of my favorite courses+instructor in my college career. I plan on keeping the lecture notes even past college as I prefer them as a quick reference. I had no issue with hearing Dr. O'Neill however I sat near the front, one day I had to sit towards the back and it was actually impossible to hear due to how deep that classroom was. I feel that in future classes setting up a microphone would significantly help the back of the class to hear you.

Any additional comments about the course.

Aerodynamics absolutely needs to be taught more than twice a week. It's too much information to process each class, and there's not enough class time to teach it all if it's just Tuesday-Thursday

Also, I feel that his notes could be trimmed down to reflect what is the most important material. There is a lot of gratuitous theory that confuses more than enlightens.

At first the homeworks took up too much time. I have other classes too. They got better throughout the semester though.

Interesting course! Maybe my favorite class ive had so far, except for my grade.

By far the best AEM course this semester.

Course is very difficult. Tests are too long for the time constraints

Dr. Oneill was very well prepared for class. His notes were very well written and easy to understand. (as easy to understand aerodynamics calculus as possible ha) However his actual lecturing could use some work. I sat 5 rows back from the front and 4 rows from the last row so very near the middle, and it was very hard to hear him a lot of times. He seemed to speak up and be very communicative while directly correlating with his well pr-written notes, but if he veered off his notes to you know lecture and teach on the subject at hand. He seemed to quiet down and mumble a little. Honestly it probably wouldn't have been that bad except for the room having the major obstacles in the middle. In conclusion I found Dr. Oneill a very smart man who can also teach this subject. He wanted the best for his students and was willing to help as much as needed. This class is probably one of the top most difficult classes at the University with a lot of material to teach and I think he did as well as anyone could.

Any additional comments about the course.

Great course, good choice on textbook.

I feel like the multiple choice portion of the tests favored good test takers (I know that sounds obvious, but hear me out). There were several cases where I was perfect or nearly perfect in the free response and peers of mine with very high multiple choice scores would be basically clueless on free response. Tactful test takers were able to get by on multiple choice with a weaker overall understanding of the material. This bothered me and I believe it can be improved upon in future classes.

I think this course covers a large amount of material extremely fast and I wish we were able to spend more time on each topic so I could better understand everything.

Overall the material in this class was informative and helpful. It is very important to have qualified instructors in this course (Dr. O'Neill included). This course would be near impossible without an instructor as available as him outside of class.

Tenure Dr. O'Neill!!!!!

Tests were fair and homework was good for learning the material. I benefited most from homework practice and the glider project. Class website was organized and was very helpful for reference and receiving assignments.

The class was difficult but I liked that we had a hands-on project which was really a first for me since AEM 121.

The course is an excellent course and valuable course.

The only thing I can think of that I would change is that I wouldn't have "none of the above" as an answer choice on every question. It can lead to a lot of second guessing on many of the questions, especially questions with a numerical answer. For example, if one of the answers is 1, and I get 1.02, do I pick "none of the above" or 1?

The set up of the class room is terrible. some people have to sit behind columns. unable to see the professor and it is very difficult to hear him.

This has been my favorite course so far, and I also learned more than I have in any other course. The format was great and very well taught by Dr. O'Neill. From a scheduling standpoint, it would have been much better if it were not immediately following AEM 341. That was a long time to sit an listen to lectures, and not fair to Dr. O'Neill to have to try to engage an audience that had just been sedated by over an hour of structures. The glider project was awesome. My education would be so much more valuable, useful and enjoyable if every class could have some sort of project like that, because you learn so much more if you have to actually design a real world system. Great class 10/10 would highly recommend.

Tough course but very interesting

Very tough course, but I feel like the material was conveyed fairly effectively.

Also, please do away with the multiple choice questions with multiple possible answers, or at least give partial credit if possible.

We covered a lot of material, and I think it was a little too much. The class was very face paced and sometimes I missed some of the important concepts that I later picked up on when reading the chapter. It would have been beneficial to me if he did a better job emphasizing what was the most important information and what was more of a side note.

nope