

University of Michigan

Winter 2020 Instructor Report With Comments

EECS 280-005: Prog&Data Struct

Nicole Hamilton

52 out of 145 students responded to this evaluation.

Responses to University-wide questions about the course:

	SA	A	N	D	SD	N/A	Your Median	Univ-wide Median	School/College Median
This course advanced my understanding of the subject matter. (Q1631)	28	20	3	0	0	0	4.6	4.5	4.5
My interest in the subject has increased because of this course. (Q1632)	22	24	4	0	1	0	4.4	4.2	4.1
I knew what was expected of me in this course.(Q1633)	25	19	6	1	0	0	4.5	4.5	4.4
Overall, this was an excellent course.(Q1)	22	23	5	1	0	0	4.3	4.3	4.2
I had a strong desire to take this course.(Q4)	24	21	6	0	0	0	4.4	4.1	4.0
As compared with other courses of equal credit, the workload for this course was (SA=Much Lighter, A=Lighter, N=Typical, D=Heavier, SD=Much Heavier). (Q891)	2	1	18	21	9	0	2.3	3.0	2.6
How did the unexpected change to remote course format affect your learning experience in this course this term? (SA=Very Positively Affected, A=Somewhat Positively Affected, N=No Effect, D=Somewhat Negatively Affected, SD=Very Negatively Affected) (Q1840)*	4	5	23	15	4	0	2.8	2.4	2.4

Responses to University-wide questions about the instructor:

	SA	A	N	D	SD	N/A	Your Median	Univ-wide Median	School/College Median
Overall, Nicole Hamilton was an excellent teacher.(Q2)	18	15	10	1	0	7	4.2	4.6	4.5
Nicole Hamilton seemed well prepared for class meetings.(Q230)	25	17	3	0	0	6	4.6	4.8	4.7
Nicole Hamilton explained material clearly.(Q199)	18	17	9	1	0	6	4.2	4.7	4.5
Nicole Hamilton treated students with respect.(Q217)	25	15	4	0	0	6	4.6	4.8	4.8

Responses to questions about the course:

	SA	A	N	D	SD	N/A	Your Median	University-Wide Median
Prerequisites provided adequate preparation for this course. (Q61)	20	22	5	2	0	2	4.3	4.3
The textbook made a valuable contribution to the course. (Q64)	14	4	12	2	3	16	3.6	3.6
The laboratory was a valuable part of this course. (Q331)	18	18	9	2	1	3	4.2	4.4
Laboratory assignments required a reasonable amount of time and effort. (Q336)	19	20	6	2	1	2	4.3	4.2
Laboratory assignments were relevant to what was presented in class. (Q337)	26	20	2	1	0	2	4.6	4.4
I developed confidence in my abilities as an engineer. (Q1769)	18	26	4	0	0	2	4.3	4.1
I developed the ability to solve real world engineering problems. (Q1770)	18	20	9	1	0	2	4.2	4.1

The medians are calculated from Winter 2020 data. University-wide medians are based on all UM classes in which an item was used. The school/college medians in this report are based on classes that are lower division with enrollment of 75 or greater in College of Engineering.

Written Comments

This course advanced my understanding of the subject matter.(Q1631) (Comments)

Comment

- Significantly.

I knew what was expected of me in this course.(Q1633) (Comments)

Comment

- That's pretty difficult to do in a class designed on projects that solve problems you've never seen before.

Overall, Nicole Hamilton was an excellent teacher.(Q2) (Comments)

Comment

- I attended Beaumont's lectures. He is an excellent teacher.

-

Nicole Hamilton seemed well prepared for class meetings.(Q230) (Comments)

Comment

- I attended Beaumont's lectures, he was almost always prepared.

-

Nicole Hamilton explained material clearly.(Q199) (Comments)

Comment

- I attended Beaumont's lectures, he frequently explained material clearly

- I often found it hard to understand concepts that I had never learned before. I understood material better in other lectures when the instructor had some more interactive exercises, such as iClicker/poll questions or "try programming this" activities. I think it could benefit the class a lot if Professor Hamilton thought about including this.

-

Nicole Hamilton treated students with respect.(Q217) (Comments)

Comment
- I attended Beaumont's lectures, He always treated students with respect.
-

What teaching methods worked well? [e.g. videoconferencing; asynchronous interaction; etc.] (Q1841)*

Comments
280 was one of the easiest classes (for me) in transitioning online. Before the move to online, I watched the lectures online anyway, so this didn't make much of a difference.
Lecture recordings were useful to be able to learn the material at my own pace
Asynchronous interaction worked well after it went online.
The online lectures still worked well. Professor Hamilton was always willing to slow down and answer questions, which was helpful.
I really appreciate that Professor Beaumont showed video of himself presenting the lectures, it is far more engaging than just a voice and screen share.
The online lectures worked surprisingly well. I felt that they were definitely on par with watching recordings.
virtual office hours. SCREEN SHARING WAS HUGE.
Video lectures helped, we used BlueJeans which allowed us to type questions in the chat (I felt that this feature was helpful). Office hours being held online too actually made it easier for me to attend them instead of having to travel to a library and set up my computer at a table.
The online lectures were pretty well handled.
Asynchronous interaction worked significantly better than live stream.
having recordings of the lectures works great for me. the way i like to take notes takes a bit more time, so its nice to be able to pause and catch up
Allowing us to watch lectures whenever we wanted works well.
idk
rapid fire office hours
Online Videos. Office Hours
The online lectures didn't differ too much from the ones that were being done in person, sans a couple less questions being asked, but more or less ran the same, and were just as comprehensive
I liked the helpful supplemental notes they gave you.
Office hours queue was great
videoconferencing
Videoconferencing.
Piazza posts, recorded lectures
Discussion
Projects
lab

What were your greatest challenges in remote learning for this course? [e.g. internet connectivity; personal motivation; managing life stresses; etc.] (Q1842)*

Comments
Remote exams were very difficult for me as I was in a weird environment for test taking and was almost more stressed about turning in the exams correctly than taking them.
Office hour overflow before the class went online.
One challenge I had with this class was focusing during lectures. Because it was remote, I sometimes felt less engaged with the material as I might be in class. But the resources, such as practice exams, helped me practice the material, which helped me recognize areas I might have missed in lecture so I could then go back and review.
I stopped going to office hours.
I had a more difficult time managing my time for projects— for project 4, I was preoccupied with dorm-related issues so I was scrambling to finish work for other classes and started project 4 late. For project 5, I didn't do a good job managing my time again and didn't allocate enough time so I could start the project earlier.
I couldn't meet up with my partner for projects.
My greatest challenge was finding quiet places to study since there are 4 people in the house that I live in.
Paying attention in lecture, as now I had more distractions due to using my computer.
Managing being sick and working through all of my classes.
motivation
Personal motivation was hard and staying on top of my coursework.
Dry lectures. Some of the project specs were very very hard to understand (project 4 api).
motivation and time management
starting projects as soon as possible
I lived in a very noisy environment and was embarrassed to go and talk to any IA's vocally and I think it hurt me in my motivation to go to office hours.
for assignments, not being able to directly collaborate with my partner and work on our code side by side, and run our ideas by each other, or see what's happening on their machine, made it a lot harder to do work efficiently because all communication felt like it was being done through a barrier.
Nothing honestly
personal motivation
Remote learning was pretty seamless.
sometimes internet connectivity, but otherwise I did not experience much difficulty in remote learning for this course.
We didn't have any activity that engaged with the class or the material; all we had were labs and projects which was very difficult.
motivation
overloaded by work
internet

Comment on the quality of instruction in this course. (Q900)

Comments
For how large of a course 280 is, this is the most organized and well-run course I have taken here. Keep up the great work!
The instructors were very knowledgeable and explained things well
Very strong especially the note abbreviations.
This course was taught very well. Lectures were taught well because for every new concept, they always provided one or more examples to demonstrate how I would actually code with that new information. Additionally, the labs complemented what we were learning to aid in my understanding.
The instruction was good in this class. If I didn't tune out so much of the time it would probably be very good.
I could tell that Professor Hamilton knew her stuff but I often had a difficult time following her explanations. If I were to describe her teaching style to someone else, I would say that she seems to expect or believe that you already know much of the content and will gloss over more of the basics and use her experience in the industry to talk about it in depth. However, it was difficult for me to follow the in-depth discussions because I was still shaky on the basics. I think Professor Hamilton would be a very interesting lecturer if I had more background in the topic, but she can be a little confusing otherwise.
the lecture notes were very useful.
The quality of instruction was pretty good. I assume because I'm new to computer science (no prior experience except 183) it was somewhat difficult to grasp some of the material. The most useful materials in this course for me were the lecture notes that further explained the materials and the projects.
The course was pretty well structured. Projects were challenging and required a decent amount of time to do well on them, but were not impossible. I do think lectures could be a bit better, especially with engagement. Coming from EECS183, we had iClicker polls that were fairly easy and didn't count much towards our grade, but it really helped.
It was very good.
very quality, nicole hamilton did a great job, answered all questions and answered them very clearly
The instruction was generally good and easy to follow.
i stopped listening to hamilton lectues and went to beaumont bc i found them more interactive
It was good.
I think Professor Hamilton did a great job with her instruction for this course, every lecture was comprehensive and understandable, and always made sure to answer, and even encourage, questions to make sure that the comprehension of the class was as good as it could be, and made the information enjoyable and interesting.
Amazing
Very high
Great.
Project support in OH was great, as well as quick response on Piazza. But in general, the projects themselves were very well crafted and the specifications were not too vague. I really enjoyed working on some of these projects (namely euchre and machine learning), and the lecture notes as well as lab code really made a difference in my ability to do well on these projects.
excellent

How might the class climate be made more inclusive of diverse students? (Q910)

Comments
I don't think the class climate would change, but I think being more inclusive to all students is always a good thing!
I thought it was inclusive of everyone
Office hours being completely online in the future would help those who cannot be on north campus in the afternoons.
I think the coaching groups this semester was a great addition because it was a nice was to find a group to collaborate with in the class. Outside of continuing this, I would recommend for the first few projects having a slideshow presentation or a google document with tips on how to approach them. I think for people with little coding background it could be overwhelming to start such large projects, so having more tricks to break the sections down more might be helpful.
Having a group of IAs with diverse personalities and perspectives helps make classes feel more inclusive. Asking students what their names are during office hours could make the class seem more inclusive and humanized, which is kind of missing since it's a 1200 person class.
Not sure how to answer this.
I'm not sure, I felt that the climate was pretty inclusive.
I think it is very inclusive as of right now. People of different demographics are encouraged to go into the CS path.
Be more open about the lack of diversity in the program.
idk man
I think the fact that Hamilton is NRA certified isolated a lot of students.
hamilton does good w this
appeal to more eecs183 students
I do not think much needs to be added.
I never really encountered or saw a situation in which this class wasn't being inclusive towards any type of student, the community always seemed very collaborative and welcoming from what I could see.
Nothing, great class
n/a
Promote collaboration among students
I am not sure.
N/A
encourage discussion

What were the strengths of the course ? (Q953)

Comments
Instructors knew the material inside and out and could answer any question. Piazza was extremely helpful, being able to post a question and receiving an answer in usually less than 30 min. Projects 2–5 were interesting (this might be a controversial opinion, but I really liked project 3).
The projects were very interesting and I felt like I did something real when I finished them
Its rigor and the critical thinking skills it requires.
The instructors are an asset of this course. Professor Nicole Hamilton and all the IAs were extremely approachable and willing to help. Additionally, the exam prep worksheets, the labs, and the practice exams were all useful resources that enabled me to practice the information I gained in lecture.
I like the poll questions in lectures. The lecture notes on the website are what saved my first midterm, I read over them over spring break and a lot of things made sense for the first time.
I really enjoyed the projects and I also felt that I understood more about the topics after we did them.
office hours. being able to partner up and learn how to code with another person. Its very frustrating but extremely important.
Holding office hours from 2–8 in the afternoons most days was helpful (easier to remember and easy to attend). I also felt that the lab instruction was helpful along with being able to ask the lab gsi any questions we had while working.
The course expectations were very detailed and the course offers a breadth of different opportunities for students to get help.
The projects.
everything just made sense. the labs were helpful and usually corresponded to work that would be done on the projects. the projects were difficult, but ultimately helped to reinforce things i had already learned
I like the fact that she went slowly.
this class stressed me out, good lab people i guess ??
The projects
Labs did a great job on helping me understand concepts that gave me the ability to complete projects.
I think lecture was really valuable to actually learning the material, and then lab did a great job of taking what we learned in lecture, and assessing if we understood that, plus just a little more, which then led into the projects which assessed how we could apply what we learned in class, and so everything had a nice flow and was very conducive to learning.
Everything – office hours were amazing
Project based learning
The laboratory
Breadth of topics.
Project support, detailed lecture notes, guided lab work
medium

What suggestions would you make for improving the course ? (Q955)

Comments
Merge some of the smaller lectures (container adt 1 and 2, iterators and functors, the first two lectures, exceptions and containers of pointers, dynamic memory and managing dynamic memory). I think the amount of content per lecture varies quite a lot in 280, and merging many of these smaller topics into fewer more content-rich lectures will keep students more engaged and also free up a few more lectures to talk about more data structures / concepts that are directly relevant to 281.
The exam questions seem entirely different than the labs and projects
Keep the office hours completely online it is far more efficient than they were previously.
I would recommend having the IAs for lab sections be allowed create a google document that they could share with those attending their sections with the exam preparation worksheet and the solutions the group generated together. I often felt that I was rushing to write down the answers for these worksheets (since they aren't available on the course website) instead of focusing on understanding the concepts and tips my IA was discussing.
My own experience with office hours was negative. I only went for help debugging and quickly realized that office hours were much more suited towards explaining basic concepts than programming help. I found no matter whose office hours I went to (including private messages on piazza) I was met with skepticism when I explained the problem and what I thought the root cause was.
As someone who struggles with theory but doesn't realize it until getting an unexpected exam grade, I would like to have some more multiple choice practice throughout the semester. I felt like the labs were very light in workload, so I think having weekly multiple choice quizzes could be helpful in making sure we also understand how the code works instead of just guessing-and-checking until it works. I wouldn't have wanted it to affect my grade, but it would be extremely helpful to have some more multiple choice questions that I could check my understanding with outside of lecture.
provide more incentive for going to class. I went to Beaumont's class but I really learned the subject on my own.
Later in the course they implemented these study groups which I took advantage of. I felt that these were extremely, if not the most, helpful thing in improving my understanding and I wish they had offered these in the beginning of the course. We went over test questions and I felt that by working through test questions in a smaller group it was easier for me to identify places that I struggled and pushed me to ask questions where in lecture I probably wouldn't know exactly where I struggled or didn't ask questions (didn't feel comfortable to do so in a larger group setting). Also on the projects I found that it was somewhat difficult to manage the time I had. If there was a general layout of the intended amount of time each portion of a project took or a short timeline of which parts of a project would take longer or be the shortest would've helped me in planning out my weeks working on them.
Perhaps have zybooks assignments like EECS18; these were helpful but not too hard to make them annoying.
offer more help to get machines set up it was a confusing process.
none really
I think its good!
more help in dude OH
tone down euchre a bit
Make the labs more challenging.
I think maybe a little more in depth exam review session could help sharpen the skills of students before their exams.
nothing
Not many
I'm not sure.
Having some weekly assignment aside from labs to encourage students to study the content more throughout the week.
no idea

Among the courses you have already taken, which proved the most (or least) effective in preparing you for this course, and why? (Q1098)

Comments
I took ENG 151, and I'd say it was a pretty good preparation. Most of 151 focused on Matlab (which I was not a fan of nor was useful for 280), but the C++ portion of 151 was a good preparation for 280. I'd say (except for pointers) the first ~6-7 lectures seemed like a review from 151.
AP Comp Sci gave me the best introduction to memory structures and recursion
AP CS in high school was my only pre-req
EECS 183 was the most effective course because before that class I had not programmed, so it gave me the skills in C++ that I needed to succeed on projects and labs in this class.
ENGR101 is the only coding class I've taken, and it was pretty good in preparation. I think there was enough time in 101 to have introduced pointers at a very basic level and that may have helped.
EECS 183 was an excellent course for preparing to take 280. I learned to code in C++ and I was able to get a better grasp on other programming concepts and more theoretical aspects of programming.
183. it was the intro. calc 2 prepared me for studying for the exams because those were much harder than 183 exams.
I've only taken EECS 183 and I'm currently taking EECS 203. I'd say 183 was very helpful and 280 picked up right where 183 left off (the transition was fairly smooth). I didn't see much connection between 203 and 280 for most of the year except near the end when talking about the efficiency of a program.
EECS183. Pretty much an intro course to take before 280.
EECS 183 it was a prerequisite.
enr 101, never programmed before that class
ENGR 101
i guess ENG150 bc it taught me c++
Although I was taking EECS 203 at the same time as this course I wanted to comment that this was probably the worse course I have ever taken in my entire college career so far. This class did not help me at all in terms of my approach to problem solving and really hurt my confidence in my ability to solve problems. If I did not take this class at the same time as 280. I would have been much more academically proficient. 280 was an amazing course that could've been perfect, had I not taken 203 with it.
EECS 183 was by far the most relevant and helpful as it directly led into the concepts that we would pick up and learn in this class
EECS 183 was the closest and only computer science class.
Enr151 gave me knowledge of vectors and recursion when other classes didn't
Not really many
EECS 183.
EECS 101 did a good job teaching the fundamentals of programming that I should have used (but forgot most of it because I took it two years before taking this class).
engineering 101 was not effective in preparing me for this course, as it did not give me a strong foundation in c++ and I felt as though I had a disadvantage coming into this class compared to other students.
280 interesting

* Due to the unexpected shift to remote instruction, questions 1840, 1841, and 1842 were added to all end-of-term Winter 2020 teaching evaluations.