University of Michigan
Winter 2025 Instructor Report
EECS 498-005: Special Topics
Nicole Hamilton

31 out of 38 students responded to this evaluation.

Responses to University-wide questions about the course:

	SA	A	N	D	SD	N/A	Your Median	School/College Median	Univ-Wide Median
This course advanced my understanding of the subject matter. (Q1631)	23	8	0	0	0	0	4.8	4.5	4.5
My interest in the subject has increased because of this course. (Q1632)	22	8	0	1	0	0	4.8	4.2	4.3
I knew what was expected of me in this course.(Q1633)	16	10	4	1	0	0	4.5	4.4	4.6
I had a strong desire to take this course.(Q4)	24	7	0	0	0	0	4.9	4.1	4.1
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)	0	0	9	15	7	0	2.1	2.9	3.0

Responses to University-wide questions about the instructor:

	SA	A	N	D	SD	N/A	Your Median	School/College Median	Univ-Wide Median
Nicole Hamilton seemed well prepared for class meetings.(Q230)	20	10	0	1	0	0	4.7	4.7	4.8
Nicole Hamilton explained material clearly.(Q199)	17	12	1	1	0	0	4.6	4.6	4.7
Nicole Hamilton treated students with respect.(Q217)	20	9	2	0	0	0	4.7	4.8	4.8

Responses to questions about the course:

	SA	A	N	D	SD	N/A	Your Median
Overall, this was an excellent course. (Q1)	22	9	0	0	0	0	4.8
I felt included and valued when working with other students. (Q253)	21	7	2	0	0	0	4.8

Responses to questions about the instructor:

	SA	A	N	D	SD	N/A	Your Median
Overall, Nicole Hamilton was an excellent teacher. (Q2)	21	8	2	0	0	0	4.8

I think this class may help me help me get a job.

(custom question added by the instructor)

SA	A	N	D	SD	N/A	Your Median
22	7	2	0	0	0	4.8

Working on a team of 6 or 7 was a great experience and not like other classes.

(custom question added by the instructor)

SA	A	N	D	SD	N/A	Your Median
18	12	0	0	1	0	4.6

This class caused me to think about graduate school and the career I would like.

(custom question added by the instructor)

SA	A	N	SD	D	N/A	Your Median
16	11	4	0	0	0	4.5

The medians are calculated from Winter 2025 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 upper division with enrollment of 16 to 74 in College of Engineering.

Written Comments

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

Comments
Fantastic – she explains things in an intuitive way using unique slides. she doesn't just give the theoretical but talks about the practical implementation.
Deliberately hands–off, I feel, but lectures were helpful and informative –– niche information that was hard to find online. Hamilton's expertise in the subject showed.
Super cool teacher, good content
Prof. Hamilton is very flexible and accommodating. Her lectures are pretty interesting.
professor hamilton brings a lot of energy to each class. I always look forward to lectures.
Prof. Hamilton was very knowledgeable (unsurprising given her background at Bing) and delivered us all the information we needed to do well on the project in a clear manner.
Ms. Hamilton is an excellent teacher and instructor. I mean truly, I have told many people about how rewarding it is to learn something from someone who has contributed to that field so significantly in real life. I learned so much
I think Nicole is an okay lecturer(for my learning style which is very unique) but I think where she strikes gold is a mentor for your search engine which is much more important and you usually learn most of the course material from other people in your group. It's like one large study group. I love how interactive she is but I do wish that her slides were more like James Juett's in the sense where she would present problems and ask students to solve them within 5 minutes during lecture time . I also think her code style can be hard to read since it's very C–esque.
Professor Hamilton was very lenient and understanding of deadlines, and always willing to help.
good
This was a unique and valuable course. Nicole Hamilton is an expert in the subject and advanced my understanding of system design.
Excellent lectures, even those that did not directly apply to the project, or the ones on ethics, negotiation, etc. were very engaging and useful in everyday life.
amazing
Good overall instruction quality. A few hiccups along the way, but ultimately quite good.
The quality of instruction was great!
Pretty good!
Hamilton earnestly wants all students to succeed. If your team needs more time on an assignment, or has a question, she's pretty much always willing to accomodate because she cares about what your team can create in the end. She's very opinionated, but in a way that shows she cares about the material and also the quality of your team's search engine.
Nicole hamilton was a great professor.
Hamilton was a fantastic and very entertaining teacher. More than just being informative, she kept the class engaged and fostered more of a community than most other classes I've had.

What were the strengths of the course ? (Q953)

Comments
having a teacher who worked on a search engine is a big win!
One of the only classes where you work on an actual complex project for a long time rather than bursts of two three weeks
The ability to work in a larger team and designing a system from the ground up. I liked going from a string implementation to a full working search engine.
Getting pushed to build a search engine is a nice project
The project is interesting and the assignments help with building the overall project. I thought all the assignments were relevant to the overarching project, which is nice compared to other courses where some of the assignments can feel pointless.
The project is very hands on and teaches us lessons about scalability, working on a team, and making design decisions that are rare to come by in other courses.
The semester–long project is of a greater scope than that of any other class I've taken, and also is much cooler. I have a lot of good experience and interview fodder because of this class.
Figuring out all these aspects of the search engine.
The fact that you're on a team of 6 is not like any other class. It's also very interesting using functions and programming stuff from scratch like the ranker and the constraint solver. The homeworks definitely helped but meeting with a team and making design choices is nothing like any other class I've been in, except for maybe 482 which is on a much smaller scale.
The course is well–designed. Homework helps us build the final project.
Good sized teams, helpful assignments and lectures, and of course an incredibly complicated, interesting and engaging project that can easily occupy six people for an entire semester.
The core project is at a scale unlike any other course I've taken. It's quite enthralling seeing it all come together
The main strength of this course was the professor being very knowledgable and really caring about the students understanding of the course material and success in the future.
The breadth of topics covered.
unique, learning a lot, applying everything learned
The course's concept is really cool, it definitely stands out among other EECS classes. Having freedom to work on a team but also learn more about the inner workings of a search engine and other systems was very interesting, even if I couldn't quite understand or retain all of it by the end.
The content and the opportunity to do a "real" project.
An open yet clear course direction and end goal for our semester project

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

Comments
the only thing, and this is very small, the professor occasionally begins speaking before the students finish their question. and sometimes we have to clarify the question.
Having the instructor be more hands–on, especially at the beginning, might've been helpful with overall design.
Add some sort of checkpoints so groups can have an idea of where they should be at
I think the policy of not using the stl and coding everything ourselves is becoming outdated. In order to make the best possible engine, we should be able to use all the tools at our disposal.
Having an IA/GSI would probably be helpful, because its a big course with a lot of questions to be had.
The diversity recommendations below. I also think having more IA's would help, but obviously nobody could IA this class since it was the first time its been offered in years.
The midterm or final could be replaced with an oral exam? Some of the midterm questions feel similar to interview questions and it would be interesting to present answers orally. However, ensuring fair grading might be more difficult, so this is just a preliminary suggestion to consider.
Add the unfinished assignments, hire IAs if possible,
I think more regular check–ins with groups during lectures would be helpful for gauging how well my team was progressing.
Make it so people start crawling earlier!
more teaching examples
I think there could be more structure to the assignments. Sometimes they wouldn't quite line up with lecture topics
Make groups smaller, with groups of 6/7 some individuals will take all the work
A clearer description of what will be on the exam

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

Comments
n/a
It feels inclusive.
I never got the impression that "diverse students" (I assume you mean non White male) students were treated any differently.
I don't think there are any issues there.
I don't like how lines of code are compared and teams are compared. I think there should be some sort of percentage weighting of contributions within a team but not lines of code(although I know you said people dont hard–count the lines of code for individual members and do percentage splits). I feel like comparing other teams sort of makes it cutthroat. Especially since the team in front of us(the magnificient six or whatever) started working on the engine over winter break, before our team was even formed since I was a standalone member. I do feel like that is pretty unfair and it doesn't seem attractive to students, especially when there are classes like 497 that are easy A's. I also think the class should be an A based on if you get the engine done because it's no small feat.
N/A
NA, Hamilton's very friendly.
Smaller group sizes

Was this class what you expected? Did anything surprise you?

Comments
it was better than expected! a great MDE
This was about what I expected from the class.
It was harder than expected to integrate the different chunks of code written by different people together. For other classes where I coded in groups (482 for example), we always wrote code together but in a larger group this is impossible so we split things up. Writing interfaces for other people to use was surprisingly difficult.
It was pretty much what I expected, which I am thankful for. What surprised me was the general ban on using the C++ standard library, so we spent some extra time implementing things like string and vector, which felt like a bit of a waste. I know Prof. Hamilton has her reasons for this, but most students (including me) were not too happy about it.
It surprised me how much we learned and how it really forces you to learn about all parts of the search engine.
Yes. I was surprised by how smooth working with 6 people would go, I thought I'd need to go to her office hours a lot more but it didn't turn out that way. It was fun!
I was surprised just how much we had to write ourselves, including strings, vectors, and hashtables.
I was surprised by how barebones the staff was.
Better than expected
It was definitely a lot more work than I expected
This class was roughly what I expected in terms of topics, but it went into much more detail and topics than I initially anticipated, and was much more in the details. I learned much more than I expected to

What will your memories be of this class?

Comments
I feel like the experience of working in a larger group, and how to handle all of that, might be more prominent to me than the technical details.
Staying up late to work on the engine and seeing it work at 4AM
I like the music professor hamilton plays at the beginning of classes.
The funny jokes and cohesion between the people in the class
A class that taught me how to work with a large scale team where you have to split up the work. Before in classes like 280 or 485, it was 3 people you would regularly meet with. Now you meet with 3 people still, but you need to communicate with the other 3 as well even though you're not meeting with them. That is very unique. This is 100% a class that should be offered every semester. The MDE/capstone options in Michigan computer science are extremely lackluster given how "prestigious" our program is, with the only worthwhile ones being 470 and 494 which are super niche. This is a MDE that should interest anyone that still wants something very applicable(not architecture or a game under unity) and will get them a job. The other MDE classes are a joke and it would be a shame if this is not offered anymore due to how garbage the selections are. Classes like 497 where you can put up 300 lines of code and 99% get an A are not major design experiences, they are blowoffs.
It was a joy when our search engine finally worked – one of the highlights of my college experience.
I'll remember spending time with my teammates, especially the time where we all went out for dinner together earlier in the semester. I'll remember some of the tricky and complicated problems that we spent a long time brainstorming and arguing about.
I'll remember the hours–long team meetings in the library trying to get everything put together
My main memories of the class will be working on the project with my team.
Coding for 100000000 hours
working with my group late at night
I'll always remember fighting with Google Cloud and its quotas.
Trying to wrap my head around how all the pieces could fit together
Building a really cool product
A fantastic instructor, impressive project, and a great group