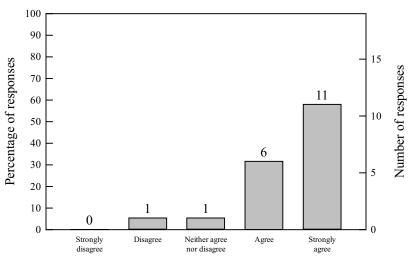
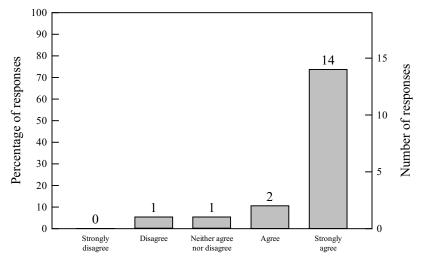
# CSCI 0200B: Math Foundations of Computing [Fall 2023] Chodrow, Philip

Number of response forms completed: 19, of 22 total students enrolled

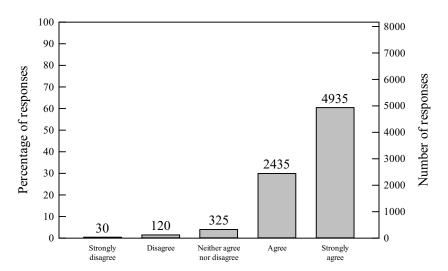


I learned a great deal in this course

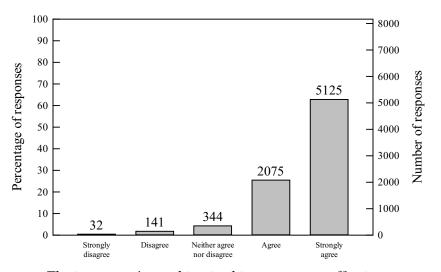


The instructor's teaching in this course was effective

# Aggregate of all courses in Fall 2023 (All Staff)



I learned a great deal in this course



The instructor's teaching in this course was effective

A lot of interesting maths concept, Im particularly into the networking lab that symbolize people's relationship through graph

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

Warm-up and video helps a lot to understand, but would be better.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

I take it becasue it is major requirement

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

Mediocre, 5h 10%

Strongly agrees with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

Professor Phil is really helpful in the office hour and ed

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

Warm-up is a slightly too much. All the others are really interesting, im particularly enjoyed the lab work

**Strongly agrees** with "The instructor's teaching in this course was effective."

I have learned a great deal in this course. I was able to learn more math outside of the applications that I have learned in the past. Learning discrete math has surprisingly been more applicable in other subjects than I thought. I believe that the way the course was built was impactful in creating a better working environment.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

I liked the flipped classroom style with readings and videos and warmups being done prior to class. Sometimes I felt that the videos were a bit slow but easily understandable. I also kind of wished there were additional practice problems that could be done after class once the warm up problems were completed. Or something such as the in-class activity. I believe labs generally reflected well what we had learned except for when scheduling of subjects overlapped and we'd study something completely different in class to what we had to complete in the labs. I liked the promotion of group work and collaboration throughout the class.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

#### Elective

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I think I generally participated to the best of my abilities however I probably could have done a bit more work using the student hours and such but was unfortunately usually busy during those hours. I also had a bit of trouble understanding what question to ask when I needed something clarified.

**Strongly agrees** with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

The instruction in this course was great

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes however the ability to complete the learning targets to 11/12 has been a bit tough. I also believe that grading from graders in labs were a bit harsh.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I believe everything was well done in terms of instructions I just feel that at times class could go a bit longer such as two 1.5 hr classes and one discussion class.



I believe this course has really helped me improve my math skills (+ confidence). I think I have much more comprehensive understanding of discrete math than when I started. This knowledge extends to logic, probability, etc.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

Since this was a flipped class, much of the work happened outside the class. I found the videos with Dr. Trefor Bazett to be really helpful. The readings were often difficult to get through, but they had helpful examples, too. Quizzes allowed me to see how I was actually doing in class, which was valuable.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

I plan to be a CS minor, so this class fulfills a requirement for that.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I did spend a lot of time on this class, but I think that I could have been more consistent. I spent about 12 hours a week. I attended about 2/3 of classes, I think.

## Agrees with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

I think Professor Phil did a good job explaining concepts, but most of that explaining happened outside of class with videos and readings.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

I think the quizzes were helpful, although I was frustrated that I was unable to get partial credit on any question, when there were so few questions. This policy was especially irritating when one of the questions was incorrect and I didn't know what to do!

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I think Professor Phil did a good job of making everyone feel like they can do challenging mathematics. He did make many typos which made my life much harder (in labs, warmups, and quizzes).



Mathematical logic, coding, probability, set theory, graph theory

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

The warmups and practice in class were very effective

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

I am a CS minor

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I worked for 2 hours a week outside of class

**Strongly agrees** with "I learned a great deal in this course."

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INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

Extremely effective

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes, always

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

The course structure was my favorite that I've had at Middlebury



I've learned how to write proofs for probability, set theory, recursion, and other related topics for computer science.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

Homeworks were helpful for understanding the work we do in class. Labs were also helpful for learning the topics more in depth.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

This course is required to take higher level courses in the computer science department.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I am happy with my performance in this course. I would estimate I spent about 7-8 hours a week on work outside of class. I attended nearly every class.

## **Agrees** with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

Good. His examples in class were both informative and entertaining. My favorite example was the one explaining the Monty Hall problem, where he told the story of Marilyn Vos Savant's story in proving the mathematicians wrong.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

Maybe warm ups do not need to be required - as long as students understand the material, it should be fine. A lot of the times, I'm very busy and cannot make every warm up.

# **Strongly agrees** with "The instructor's teaching in this course was effective."

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Knowledge about discrete mathematics, latex, and so on.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

The warmup helped a lot in terms of understanding new concepts and providing chances for practice. However the warmup is pretty much enough to get an A for this class that the lecture becomes not that helpful anymore (this is a flip class so understandable, but it makes me want to skip class often, because the test content is easy).

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

For requirement. potential major.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

Quite well. 5-6 hour per week? attended 70%.

# Neither agrees nor disagrees with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

pretty much effective but still the warmup makes everything pretty much enough for learning.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I think flip class format is not really a good idea for this class in particular, especially since people have learned many things in warmup, and since the content of this class is not hard, that makes people unwilling to attend lectures anymore. Also, lowkey feeling the course content is a bit repetitive.

# Neither agrees nor disagrees with "The instructor's teaching in this course was effective."



This course has greatly expanded my knowledge of logic, proofs, counting problems, graphs, and probability. I am also able to collaborate with others on math problems easier than I could before.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

The warmups and practice in class helped me learn the best. I found the quizzes difficult, but agree that grading based on fully reaching a learning target at some point is more representative of our abilities than the standard averaging quizzes with partial credit.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

I took this course to satisfy a requirement.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I attended almost every class and did all assignments. The amount of time spent on this course varied based on the difficulty of the labs and warmups. I would guess around 8-10 hours outside of class per week.

Strongly agrees with "I learned a great deal in this course."

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INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

Professor Chodrow is a great instructor and is very intentional about how the course is run and graded. I found him easy to follow, and always willing to offer a lot of extra support on concepts I didn't yet understand.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

The grading scheme was confusing at first but started to make sense after the first couple of weeks. I like the idea of tracking our learning by completion of goals rather than scored representing what we knew at a given point in time being averaged together.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

Thank you!

Strongly agrees with "The instructor's teaching in this course was effective."

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I have learned about math foundations such as graphing, calculating probability, sets, and proofs. Learning probability was especially interesting as it applies to almost all facets of life. We can use probability in order to calculate the likelihood of rolling heads a certain number of times and many other things.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

We were given homework assignments which included readings, videos and practice problems, labs, and quizzes. The homework assignments varied with how effective they could be, I am more of a visual learner so I preferred the videos, however there were times when reading would take over and then I would often be left confused. Once we were actually in a lecture by the end I would understand the topic more, however there were still times where I found certain things difficult such as proofs. The quizzes were fine, I did struggle a lot with them however because I do not test well. The labs did help strengthen our understanding and it was nice working with groups.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

It is my major.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I feel like I could have done a lot better, perhaps because math isn't my strongest subject but I found myself struggling more than I would like. It depended on the week but with

lab weeks I would say that i spent around 8-9 hours each week. The homework assignments could take from 1-2 ours and we were given one each other day.

**Strongly agrees** with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

The instructor did pretty well in explaining new concepts and allowed us to develop our skills. Whenever we would learn something new on the homework he would set aside time to teach it to us during class, however usually not for the entire period. Generally whenever I went to his office hours I would understand the concept a lot more.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

I didn't really like the testing system too much as I am a terrible test taker. The tests were pretty harsh as if you got one part of the problem wrong, the entire thing would be incorrect so there were many times in which I had gotten extremely close but the problem counted for nothing. The standards of evaluation for the tests were clear but I heavily struggled to catch up compared to the rest of my peers despite putting effort into it.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I am not really a fan of the flipped learning structure of the class, I found myself investing the most amount of hours compared to any other class I had taken this term by far. Overall I did like the teacher's method of teaching but the flipped structure really put me for a loop. Additionally, I feel as though this class needs more support when it comes to peer tutors, I could not attend an of the hours provided and thus I felt a lack of support for the first half of the year. The professor did come to talk to me about it and eventually I ended up getting more support but compared to the other computer science classes, this one was very difficult to get help in.

**Strongly agrees** with "The instructor's teaching in this course was effective."

I learned a great deal about various math topics in this course. We have covered proofs, inductions, probability, and many other topics that will be helpful in future computer science courses. We practiced analyzing different problems and thinking of solutions to the problems, some of which seemed unconventional at times. Through this class, I feel that I grew stronger with my analytical abilities and deepened my critical thinking skills.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

Most of the learning was done in the warmups before class where we were given videos to watch and practice problems. We then reviewed the material in class and worked through more practice problems as a class. This was a very different model than I was used to, but I thought it was quite helpful as I was able to learn at my own pace and then was able to review with others during class to make sure I understood the topics. Every Friday we had a lab, which gave us a good opportunity to put the skills we had learned into practice.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

I took this course because it was required for my major.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I feel like I did pretty well in this course. I spent about five hours doing work outside of class and attended all of the classes.

Strongly agrees with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

The instructor was very helpful in explaining the new concepts and giving us lots of review and practice problems to help make sure we fully understood the topics. While many of the in class examples were very difficult, they made sure we had a deep understanding of the course material. Throughout the course, Phil was very flexible and receptive to questions and feedback, which allowed us to learn in a way that worked for each of us.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

I thought the quizzes provided a proper opportunity to convey the learning expected and the standards of evaluation were very clear. We had multiple chances to try and complete each learning target and were given plenty of feedback and resources so we could better prepare for the next quiz.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I feel that Phil did an excellent job with this course and I appreciated his flexibility throughout the course. I thought the flipped classroom and completion based grading worked very well for me and I thought it was conducive to a proper understanding of the material. The only thing I would have changed was that the labs were all done on google colab. While the platform worked fine during the labs, it never rendered properly when trying to print to PDF which was very frustrating when trying to turn in a lab.

**Strongly agrees** with "The instructor's teaching in this course was effective."

Math foundations. I also learned how to work better in groups.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

Working in groups. I also liked the flip classroom structure.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

I choose to take this course because it is a requirement for my major.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I think my participation was well. 12-15 hours a week outside of class.

#### **Agrees** with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

Very efficient.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes but wish we had on more test.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I think that the professor could have more student-hour options. Smith is not very helpful to me.



COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

I took this course because it is required for my major.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I did pretty well in this course. I spent about 3 hours outside of class per week to work on this class.

Strongly agrees with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

Very effective. Professor Chodrow utilizes real-life examples to explain concepts. For example, to teach us proof techniques he introduced the concept of gradient descent in machine learning.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes. I like the learning target scheme because I clearly know what I know and don't know in this class.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I would suggest ditching the idea of flipped classroom because it makes attending lectures unnecessary (you learn everything beforehand). I also don't like the grading of labs because they were very random. Sometimes my lab partners and I did the same thing but got different grades.

**No response** to "The instructor's teaching in this course was effective."

i got a lot better at proofs and logic. most of the content was entirely new to me so I learned a lot.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

videos were far more effective than the readings, although I was not a big fan of trevor bazette (i just didn't enjoy his teaching style). in class practice problems were effective.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

required for major.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

i put in maximum effort into this course. i spent about 8 hours per week on classwork and attended 95% of classes.

Strongly agrees with "I learned a great deal in this course."

□□□□■

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

very effective, which is why I was kinda frustrated that prof chodrow was not the primary course instructor! i'd much much much rather learn from you than trevor bazette! in the future i'd prefer that if you are to use this same flipped classroom set up, that the content we watch for homework is your content/your own recordings.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

yes, i was a big fan of the learning targets grading method. standards of evaluation were always crystal clear.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.



Professor Chodrow opened the learning experience to pursuing the material in many ways which I thought deepened my critical and analytical abilities, factual knowledge, understanding of concepts, creativity, communication skills, and ability to pursue further work in the subject.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

It was a good mix of tasks perfectly balanced. Lectures, readings, problem sets, labs, drills, and group work were organized in a manner helpful in the learning experience.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

Both, but primarily for the major minor req. I thought the class was incredibly interesting.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I don't know. A good amount of time for sure. maybe 12 hours?

### **Agrees** with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

He is amazing, always took feedback and incorporated it. I wished he explained even more.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

100% yes

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I wish the course reading was done after the class.

**Strongly agrees** with "The instructor's teaching in this course was effective."



LEARNING: What have you learned from this course? Consider how the course deepened your critical or analytical abilities, factual knowledge, understanding of concepts, creativity, communication skills, and ability to pursue further work in the subject. Give concrete examples.
A lot, from theories to formulas to coding.
COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem se films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.
It helped a lot.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

Interesting

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

Good

Strongly agrees with "I learned a great deal in this course." □□□□■

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

Very

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes and yes.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

n/a

I have learned alot about how math is integrated and in the background of computer science. For example, I am able to perform better proofs as well as understand why and how things are defined such as an even or odd number.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

### Strongly agrees with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

My concluding remarks will be on the learning targets, I believe we can find a better way to assess understanding of the materials,



LEARNING: What have you learned from this course? Consider how the course deepened your critical or analytical abilities, factual knowledge, understanding communication skills, and ability to pursue further work in the subject. Give concrete examples.	of concepts, creativity,
COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writifilms, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.	ing assignments, problem sets,
COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?	
YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Esthat you attended.	stimate the percentage of classes
<b>Disagrees</b> with "I learned a great deal in this course."	0 = 0 0 0
INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enamaterial and its significance? Provide examples.	bling you to understand the course
	bling you to understand the course
material and its significance? Provide examples.	
material and its significance? Provide examples.	valuation clear?
material and its significance? Provide examples.  ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of examples.  CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Concerns the course content and/or the instructor's methods of teaching?	valuation clear?

I have learned about math theory and its importance to computing.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

The videos and warmups helped me learn initial, and the lectures and labs helped me solidify my understanding of the concepts ahead of our quizzes.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

It was a requirement for my minor, and it seemed like a good time to take this course.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I think I did very well in this course. I spent 3 hours a week working outside of class, and I attended all but two classes this semester.

## **Agrees** with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

I think Phil did a great job of teaching the class. He spent ample time having us work on examples in class, working on labs, and reviewing important concepts.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

I felt that they did, and the ability to revise labs and retry quiz questions was nice. The standards of evaluation were very clear.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I think the course was very well taught throughout the semester. I think Prof Phil has made good changes throughout the semester and I hope for future students that he teaches this course again.



I have learned a lot from Math Foundations including Recursion, Counting, and Induction which I feel are important to learn for computer science.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

The flipped classroom work very well for me in how I like to get my work done so I enjoyed that aspect of the class. Along with the labs and quizzes I enjoyed this version of the class and found it very helpful.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

I took this course cause this is my major.

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I went to most lectures in this class and was attentive. I spent about 8 hours a week outside of class.

# Strongly agrees with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

The professor was very helpful in this course and I thought he was very organized with all that we did.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

It was clear what the goal was of the class was and there were opportunities spanning from labs to quizzes to show this.

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

This class was very well structured and I think this professor taught this course very well for how challenging the material is.



I learned various proof methods to prove simple or more complex theorems/hypothesis. Also, became familiar with python coding and Jupyter writing.

COURSE CONTENT & FORMAT: How did the various components of the course contribute to your learning? Consider, as appropriate, lectures, readings, writing assignments, problem sets, films, labs, drills, studio work, debates, discussions, presentations, field work, or group work. Be specific.

The reverse classroom concept was very effective for me. Learning on my own than asking questions and working through problems during classtime was helpful. Labs were useful to wrap up topics and get extra practice.

COURSE CHOICE: Why did you take this course? Was it an elective or taken to satisfy a requirement? Is it in your major?

#### Major

YOUR PARTICIPATION: How would you assess your own performance in the course? Approximately how many hours per week outside of class did you work? Estimate the percentage of classes that you attended.

I spent approximatively 5-8 hours a week outside the class, and attended almost every class.

## Agrees with "I learned a great deal in this course."

INSTRUCTION: How effective was the instructor in explaining new concepts, in facilitating the development of skills, in raising issues for discussion, and in enabling you to understand the course material and its significance? Provide examples.

Prof. Chodrow was very effective in explaining, answering questions, and providing the opportunity to learn from our mistakes.

ASSESSMENT: Did test/paper assignments and/or projects provide you adequate opportunity to convey the learning expected in the course? Were standards of evaluation clear?

Yes everything was clear

CONCLUDING REMARKS: What comments would you make about maintaining or changing the course content and/or the instructor's methods of teaching? Comment on any aspects of the course, modes of teaching, or impact on your education that are not covered by the preceding questions.

I would maintain the reverse class room format and grading method.

